INSTITUTE OF TROPICAL MEDICINE ANTWERP

INSTITUTIONAL POLICY PLAN

2025 2030

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INSTITUTE OF TROPICAL MEDICINE ANTWERP

SCIENTIFIC EXCELLENCE AND TRANSFORMATIVE PARTNERSHIPS FOR SUSTAINABLE HEALTH

2025 2030

EXECUTIVE SUMMARY

The Institute of Tropical Medicine (ITM) was established in 1906 as a postgraduate training centre and has since grown into a renowned academic institution respected worldwide for its research and education and commitment to improving health. Our unique position stems from our focus on tropical infectious diseases and the combination of groundbreaking laboratory research, clinical excellence, and expertise in global health challenges.

Our mission, as set out in its statutes, is to conduct and promote scientific research, professional and academic education as well as scientific and social service in the field of tropical diseases and global health, with a particular focus on low- and middle-income countries (LMIC). Our vision is equal chances at a healthy life for all and we are guided by core values of excellence, relevance, integrity, fairness, inclusion, respect and sustainability.

Successful Achievements in the Period 2019-2024

Between 2019 and 2024, ITM reached key milestones, particularly in governance, education, research, and international collaboration.

The organisation reformed its governance structure, promoted transparency and leadership, and established essential support services. ITM played a crucial role during the Covid-19 pandemic and mpox outbreaks, contributing to research, clinical response, and supporting health policy in Flanders, Belgium, and globally.

In education, ITM expanded its offerings by introducing new master's programmes, enhancing digital learning, and strengthening global partnerships. The three master's programmes were evaluated as excellent during the VLHUR review in 2024 and received new NVAO accreditation until 2030.

Research activities focused on emerging infectious diseases, antimicrobial resistance, health system strengthening, and disease elimination, leading to remarkable progress in areas such as tuberculosis, HIV, antibiotic resistance diagnosis, emerging infectious diseases with pandemic potential, and vector-borne diseases like malaria and dengue fever. Our research has delivered excellent results, resulting in measurable impact.

Our medical services received more than 40,000 patients annually, and our doctors shared their expertise with colleagues and governments, as well as contributed to pandemic responses both in word and deed.

ITM's longstanding partnerships with LMIC institutions have led to notable success stories, which have also contributed to the international reputation of Flanders and Belgium.

Given our expertise in tropical medicine and international public health, our experts were frequently called upon to contribute to national and international health policies.

The consecutive evaluations in 2024 of our research, education, service delivery, and management demonstrated that ITM has fulfilled its mission with distinction.

Policy plan 2026-2030, with extension 2025

ITM operates in a world with a new geopolitical landscape, rapidly evolving health challenges, and successive pandemic threats. These growing international health challenges only increase ITM's relevance. The need for essential innovations with global applications is more significant than ever.

By 2035, ITM aims to be one of the most reliable and innovative academic institutions in the field of tropical medicine and public health, driven by groundbreaking research, world-class medical services, excellent education, and an unwavering commitment to equitable partnerships.

Strategic objectives

Ambition

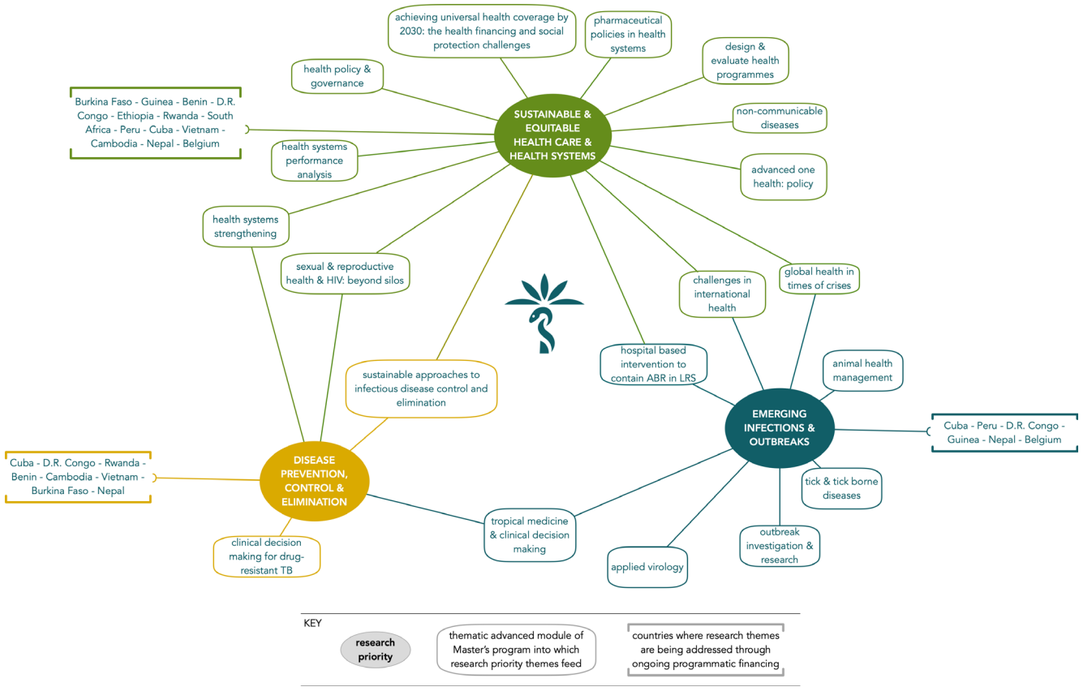
The institutional strategic objectives we aim to achieve for the next policy period (2026-2030, with extension 2025) are:

- SO1 - To excel in **research**, pushing the boundaries of knowledge and innovation, leading to cutting-edge **innovations** that can be translated into products and outcomes that directly benefit the health and lives of those in need and contribute to resilient health systems. For this, early involvement of stakeholders (e.g. communities, policymakers) is essential. Our research will have a profound impact on **health policies globally**.
- SO2 – To thrive as an open global campus for students, teachers, alumni, professionals, and researchers and to serve as a **hub for advanced academic education**. Our academic programmes, online, in-person or hybrid, will be sought after by students from around the world, and our graduates will be at the forefront of driving change in global public health.
- SO3 - To establish our **medical services** and **reference laboratories** as an unequivocal global benchmark for tropical diseases and travel medicine. We will steadfastly pursue **excellence in patient care** and cutting-edge **laboratory diagnostics** in the specialised realm of tropical infectious diseases.
- SO4 - To amplify the influence of our collective expertise and knowledge with partners, we will foster increased **scientific exchange and forge synergistic partnerships.** Our focus is on building a shared academic reputation within our global network. Central to our approach is the commitment to equitable partnerships, where collaborations with public and private institutions worldwide are marked by mutual respect, shared objectives, and a dedication to addressing health disparities.
- SO5 - To strengthen the overall coherence, **efficiency and effectiveness** of ITM's policy by investing in the organisation's research and management platforms or by strategic partnerships.

Thematic Priorities

The institutional thematic priorities are **Sustainable and Equitable Healthcare and Health Systems; Disease Prevention, Control, and Elimination** (such as malaria and tuberculosis); and **Emerging Infections and Outbreaks** (such as mpox). **Antimicrobial resistance** (AMR) remains a critical cross-cutting theme.

The institutional strategic themes are firmly incorporated in research, education, capacity strengthening and service delivery, as shown in the figure below.



How Do We Achieve Our Ambitions?

To realise our ambitions, we focus on **four building blocks** that support our core activities (education, research, and service delivery): (1) three strong departments, (2) the P³ programme, (3) transformative partnerships, and (4) valorisation.

Building Block 1: Three Strong Scientific Departments

In the next policy period, we will leverage the interdisciplinary expertise of the three scientific departments to adopt a systemic approach to global health challenges: the ITM Science Cycle.

* including 19 countries with institutional partners and 11 countries home to at least one institution that collaborated on over 30 research publications in the previous policy period, total 30 countries over all continents.

We deepen our understanding of complex health issues through cutting-edge research into pathogens, patients, and populations. This knowledge forms the foundation for co-creating, developing, and evaluating innovations with our stakeholders, including communities. We test these innovations where they are most needed and adapt them to local contexts for optimal integration into global healthcare systems. In collaboration with all relevant stakeholders, we translate research findings into policy and practice. We remain vigilant to shifting health trends and formulate new research hypotheses based on our observations.

Building block 2. Institutional P³ programmes

Our **integrated research by the three departments on pathogens, patients and populations (i.e. P³)** is a unique opportunity to address health challenges and provides a solid foundation for our systems approach. Over the past five years, ITM has strategically **strengthened its research capabilities** by refocusing the priorities of existing units and establishing new units focused on understanding and combating emerging infectious diseases. Establishing an **Outbreak Research Team** (ORT) was a tangible example. There were also **strategic investments in research platforms** such as the Clinical Trial Site, the insectarium, immunology laboratories and the Population Science Data Hub.
This strategy is the driving force behind our growing research portfolio, especially in emerging diseases. We are ready to mark ITM as a global Centre of Excellence in ***Emerging viruses and epidemic preparedness***.

We strongly believe there is potential for more P³ centres at ITM in collaboration with other Flemish, Belgian and international partners.

Building block 3: Transformative partnerships

ITM's fundamental strength lies in its sustainable and trusted partnerships with communities, institutions and governments, enabling joint innovation and knowledge sharing. In today's global health landscape, major shifts in power and knowledge dynamics are taking place, changing the roles and capacities of partners across the board. We embrace these shifts and see them as opportunities to strengthen our collaboration with new perspectives and an honest exchange of ideas. In this spirit, ITM proactively recalibrates and strengthens its position within this adaptive network.

To address global challenges such as climate change, ITM collaborates with the Global North and Global South and encourages excellent research and innovation to shape a future where collective ingenuity overcomes shared challenges to health and well-being. Therefore, ITM will strengthen strategic partnerships on two fronts:

1. ITM will actively participate in the Flemish and European research agenda with its relevant actors (policy, networks, other research institutions, industrial partners) to create through complementary research innovation that guarantees global impact;
2. In its collaboration with LMIC partners, ITM aims to promote equitable research partnerships aligned with LMIC's ambitions.

Building block 4: Valorisation: a path to impact

ITM is launching Health Innovations for All (HI4A) in 2025 to catalyse societal and technological impact starting from the ITM science cycle, with its partnerships and P³ story.
The goal of HI4A is to transform research and scientific breakthroughs into inclusive health innovations that are accessible, affordable, relevant and scalable, in order to promote global health equity. HI4A will operate at two levels to meet different valorisation needs:

(1) Co-Creation Innovation & Impact (I&I) Policy & Practice and (2) Knowledge Valorisation.
HI4A's twin-track strategy establishes a direct link between policy development and knowledge valorisation, provides a dynamic model to ensure that R&I policy remains aligned with the latest scientific developments and changing societal needs. This dynamic framework provides policymakers with the adaptability needed to navigate a rapidly changing society.

Financial plan 2025-2030

For the next policy period, ITM calls for a substantial improvement in its financial framework and status so that it can continue carrying out its core missions for the various governments to the highest quality standards.

STRENGTHENING CORE FUNDING FROM DEPARTMENT OF EDUCATION AND TRAINING

Since 1995, ITM has received core funding (budgeted at 12.7 million euros for 2024) from the Flemish government for its mission of ***'providing post-initial education, conducting scientific research and providing scientific services in the field of tropical diseases and global health, with a particular focus on low- and middle-income countries'*** (Article II.21c of the Codex Higher Education of 11 October 2013). Under this article, for the purpose of carrying out that mission, ITM is considered a university.

ITM requests a consolidation in the annual allowance to implement its core missions set out in Art. 2.1 of the Management Agreement between ITM and the Flemish Government and fund its academic staff.

For the investment funds, ITM requests an increase in the investment allowance to 1.1 million euros per year (currently 711,000 euros) to meet the challenges of the existing infrastructure (housed in two heritage buildings). These adjustments to the management agreement should ensure that ITM can continue to fulfil its core missions.

STRENGTHENING EXCELLENCE THROUGH INCREASED RESEARCH FUNDING

ITM requests an increase in its research subsidy in line with other domain-specific research institutes to develop its research qualitatively and with high societal impact.

Scientific research at ITM has been awarded a structural grant from the Department of Work, Economy Science, Innovation & Social Economy (WEWIS) since 2007, an important driver of research innovation and excellence at ITM. This grant amounted to €1.75 million per year for 2008-2012 and slowly increased to €5.5 million in 2024. To carry out its research ambitions, ITM requests a significant but necessary increase in its annual research grant to €15 million to maintain and strengthen its competitive edge as a centre of excellence in light of the global challenges outlined earlier.

With a larger research budget:

- ITM will fully position itself within European partnerships for research relevant to its areas of expertise, such as the partnership for collaboration with Africa on clinical research (EDCTP3), the partnerships in preparation for pandemic preparedness (Be Ready, HERA), One Health AMR, etc.;
- ITM will be able to play a more prominent role in the clinical trials network that the EU wants to set up as part of pandemic preparedness;
- ITM will be part of an ecosystem around pandemic preparedness in Flanders that will gain international prestige for ITM around tropical diseases and interaction with low- and middle-income countries (LMIC);
- ITM will, in addition to research on classical tropical diseases, invest in research programmes on pathogens posing a potential pandemic threat, as determined by WHO;
- ITM is fully committed to P³ – a groundbreaking research model that integrates pathogens, patients and populations into a single framework for sustainable impact. This approach links laboratory breakthroughs, clinical expertise and population-level insights, translating science into solutions and innovations for people in Flanders and worldwide. This makes ITM an important player in the Grand Challenges programme alongside or in collaboration with the VIB and other partners at national and international level with a strong focus on translational research;
- ITM will attract research talent thanks to structural support funding of the research units and the upgrading of the research platforms (high-security, insectaria, bioinformatics, data hub, etc.);
- ITM's state-of-the-art research infrastructure and platforms can be deployed in (inter)national research programmes (including excellence programmes such as EDCTP3 Global Health, HORIZON-EUROPE, HERA, CEPI ...);
- ITM will fully invest in 'societal' and 'technological' innovation and impact projects with its valorisation unit Health Innovation for All.

ITM requests support for its Masterplan Buildings, including both the innovation plans (laboratories and insectaria) and the renovation plans (iconic Art Deco building), so that the ITM buildings are ready for the next generation of researchers, students, patients, and staff.

Added value for Flanders and Belgium

ITM has evolved over the past years into a full-fledged research institute with the ambition to be one of the most trusted and innovative academic institutions in the field of tropical medicine and public health, driven by our pioneering research, world-class medical services, excellent education, and unwavering commitment to equitable partnerships. As such, ITM contributed, within the quadruple helix of knowledge institutions, industry, governments and citizens, to the ambition of the Flemish government to belong to the top 5 innovative knowledge regions in Europe.

Nowadays ITM is a unique institution in Belgium with significant relevance and impact on Flemish, national and global levels. Our unique position follows from our specific focus on tropical infectious diseases and the combination of cutting-edge research, clinical excellence and expertise on global health challenges. During epidemics such as Ebola, zika and more recently the Covid-19 pandemic and mpox outbreaks, ITM takes the lead in Belgium and worldwide.

We also make a difference through our diagnostic innovations, through the training of health professionals, and through our (inter)national partnerships. We daily strive for quality and patient-centered care in a third-line centre where the most complex cases within our disciplines (infectiology and microbiology) can be managed. We are building on an expertise of more than 100 years in infectious diseases and with the largest pool of clinical infectiologists in Belgium, we continue to prepare for the clinical challenges in the global world.

Through ITM, Flanders plays a leading role in addressing global health challenges in a world that is evolving due to climate change, globalisation, and migration. In the coming policy period, we will strengthen global partnerships through the P³ programme, which will enhance ITM's reputation and strengthen Flanders and Belgium's international image in Global Health. The clinical centre, the largest travel clinic in Belgium, is part of global networks (Geosentinel and TropNet), and will act as an important sentinel centre for Flanders and Belgium.

By focusing on innovation and impact projects (HI4A), we respond to Flanders' expectations to valorise ITM's knowledge for broad societal applications worldwide. As HI4A innovations gain ground, they will increase Flanders' visibility on the international stage, foster global partnerships, and position Flanders as a leading centre of excellence in global health, building on ITM's rich legacy.

We strengthen the Flemish ecosystem to participate in global pandemic preparedness networks (Be Ready, ECRAID, ONE-HEALTH-AMR, ONE-HEALTH, ...) and increase Flanders' status as a hub for research in this domain.

At the higher education level, ITM takes within Flanders an exceptional position by providing a unique offer of continuous professional development, international postgraduate and doctoral training in its specific field of expertise. Part of ITMs student population are Flemish doctors, health care workers, researchers and paramedics that are trained in a broad range of topics in the field of tropical medicine and international public health. At the same time, ITMs open and global campus offers within Flanders a unique ecosystem for Flemish health care professionals and researchers to study in an international setting. Within ITMs educational model, agents of change are trained in the field of health, often resulting into alumni reaching influential positions at national and international level. Herewith ITM will continue to contribute to the strengthening of increasingly needed competencies at the Flemish, national and global level.

Through our public outreach and communication channels, we inspire the general public and Flemish youth to pursue science and innovation, thus contributing to achieving the Flemish government's STEM (Science, Technology, Engineering, and mathematics) objectives.

2025 2030

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Introduction

1. Vision, Mission, and Values

The Institute of Tropical Medicine (ITM) was established in 1906 as a postgraduate training centre for medical doctors and paramedics who were sent to Central Africa.

Today, ITM is recognised by decree as an independent academic institution for research, education and service delivery in tropical medicine and public health with a focus on low- and middle-income countries (LMIC).

Our vision is ***Equal chances at a healthy life for all.***

ITM's mission is laid down in its statutes* (art. 3) and the Flemish Higher Education Codex:

The selfless purpose of the Institute of Tropical Medicine is to conduct and promote scientific research and innovation, professional and academic education as well as scientific and societal services, including medical services, in the field of tropical diseases and global healthcare.

The purpose is advanced, inter alia, through transformative and strategic partnerships with particular attention to underserved populations worldwide. ITM is authorised to take all initiatives and to carry out all activities to achieve its intended disinterested purpose.

Our **values** are:

- **Excellence and Relevance**: We strive to stand at the international forefront in key scientific domains. We pursue the highest quality in research, education, and service delivery to find solutions for global health problems.
- **Integrity**: We comply with international ethical standards and aim for critical sense, honesty, integrity and transparency in all our activities.
- **Fairness and inclusion:** We commit to equity, diversity, and solidarity with an active, intentional, and ongoing global engagement.
- **Respect:** We believe in an open, transparent, and respectful attitude contributing to the well-being of patients, students, employees, and partners.
- **Sustainability**: We aim for long-term progress without compromising the ability of future generations to meet their own needs.

ITM has endorsed:

- The European Code of Conduct for Research Integrity (revised edition 2023)
- The Singapore Statement on Research Integrity
- The TRUST Code A Global Code of Conduct for Equitable Research Partnerships.

* Subject to approval of the change of purpose currently being prepared

2. Guiding Principles

The guiding principles are grounded in ITM's values and address specific aspects that are critical and essential to guiding our decision-making toward achieving the ambitions and objectives for 2025-30.

Within ITM, the guiding principles guide all staff and students to ensure that their actions align with the policy priorities and objectives.

Outside ITM, the guiding principles are a means of sharing our blueprint for action with the world and being transparent about the parameters underpinning our policies and decision processes.

1. **Guiding principle 1**: We strive to enable societies to cope with the realities of the 'Anthropocene' and its impact on health. We recognise that the most significant impacts of climate change, reduction of biodiversity, food insecurity, demographic shifts, and urbanisation will be felt by people in vulnerable settings worldwide.
2. **Guiding principle 2**: We continuously reflect on the global impact and significance of our actions and strive towards the highest standard of codesign and ownership by our partners.
3. **Guiding principle 3**: We embrace systems thinking, which is reflected in approaches such as One Health, Eco Health, and Planetary Health.[1] We recognise that applying these in our academic triad of research, education and capacity sharing is essential to ensure sustainable health.
4. **Guiding principle 4**: We affirm the importance of inclusion and equitable representation in all our actions.

3. Governance and organisation

a. Charter of good governance

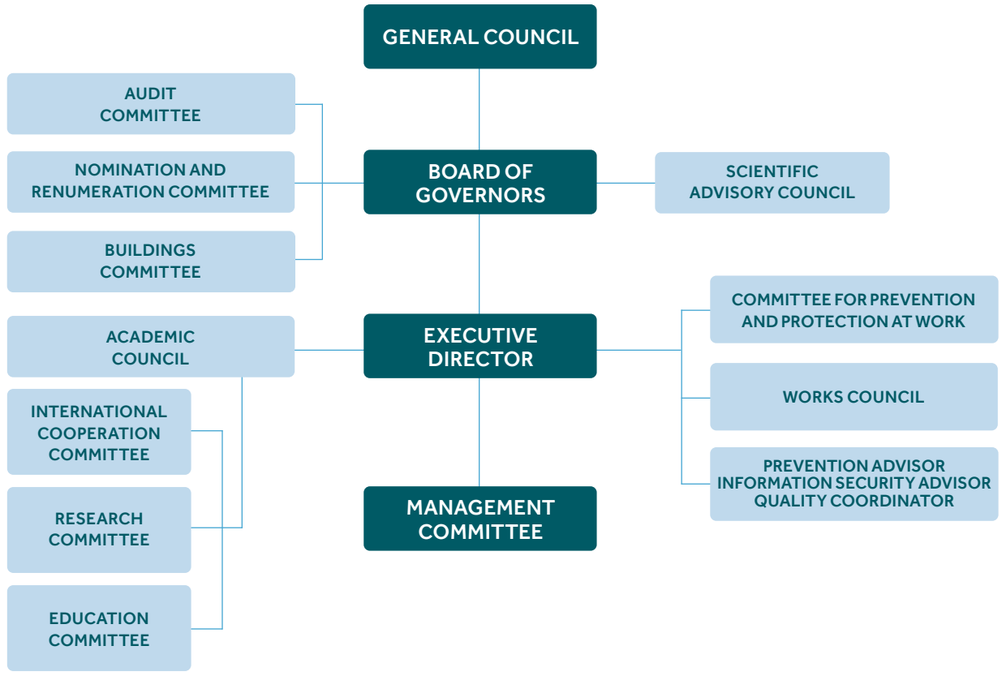
ITM lays down decision-making principles and methods in a Charter of Good Governance. ITM complies with the recommendations for Good Governance in Flemish Universities. The Charter is published on the ITM website and is accessible to all stakeholders and other interested parties.

b. Overview of consultative and management bodies

Legally, ITM is a Foundation of Public Utility according to private law. The **statutes**, the Charter of Good Governance and the internal regulations ensure academic values within a private law framework. Following the introduction of the new Code of Companies and Associations, the Board of Governors approved revised statutes on 03/07/2023. The statutes were completely rewritten, simplified, and renumbered. The foundation's name was also shortened to "Institute for Tropical Medicine," dropping "Prince Leopold."

The organisation chart below shows how ITM's policy and advisory bodies are structured for decision-making and advisory matters.

1 We adopt the definition of the quadripartite UN organisations, following the One Health High-Level Panel (OHHLEP) (Adisasmito, W.K. et al 2022). ITM recognises that this definition reinforces the overall aims of the related concepts of Eco Health (highlighting the ecocentric versus anthropocentric scope) and Planetary Health (acknowledging the relevance of environmental/ecosystem health)



General Council

The General Council is a statutory body that ensures that policies, governance and management of ITM are consistent with its purpose, identity and integrity. The Council consists of various stakeholders with voting rights, specifically the various granting authorities, local authorities, universities, staff, alumni, students and additional members co-opted by the General Council (such as partners). Members of the Board of Governors and the Government Commissioner are non-voting members. A list of the current members of the General Council can be found on our website.

The General Council oversees an independent Board of Governors and can appoint and dismiss its members, except for the director (appointed and dismissed by the Board of Governors). It evaluates annually the quality of the work the Board of Governors delivers. In case of serious deficiencies, it may suspend or dismiss one or more governors with a reasoned decision.

The General Council meets at least twice yearly but may organise additional sessions. The statutes provide more information on the General Council.

Board of Governors

ITM is managed by a Board of Governors, which delegates day-to-day management to the Director. The Director is accountable to the Board of Governors for all managerial actions. The Board of Governors has full powers, even though some decisions require the General Council's prior advice.

The Board of Governors is composed of at least three and a maximum of 12 members, appointed by the General Council (with the exception of the Director). The mandate of the members of the Board of Governors lasts for four years and is renewable. The Director is an ex-officio member of the Board of Governors but cannot be chair or vice-chair. A list of the current members of the Board of Governors can be found on our website.

The Board of Governors meets at least four times a year and as often as the interests of ITM require.

The Board of Governors is supported by three advisory committees, namely the Audit Committee (with advisory powers on finance and risk management), the Nomination and Remuneration Committee (with advisory powers on executive appointments, remuneration and selection of governors), and the Buildings Committee (with advisory powers on ITM's building assets).

Director

The Board of Governors decided to adopt a dual leadership model, making both the Director and General Manager directly accountable to the Board for daily management. Implementing this model will require further amendments to the statutes and internal regulations. This statute revision marks the culmination of ITM's ongoing efforts to transform its governance.

Management Committee

The Management Committee assists the Director in the day-to-day management of ITM. The composition, functioning and powers of the committee are laid down in the Management Regulations. In principle, the members of the Management Committee meet fortnightly.

Academic Council

The Academic Council is a consultative body outside the hierarchical line in which ideas are exchanged on academic matters across unit and department boundaries. Members decide autonomously on the agenda, and opinions are given independently of the hierarchical line. These opinions are not binding but do provide direction. The Academic Council meets monthly.

Works council

The Works Council is a consultative body in which the Director informs and consults employee representatives. The Works Council can make decisions on some matters and has supervisory powers on others. The Council's powers include employment and work organisation, working conditions and remuneration, private life and new technologies, events or decisions that could change the organisation of work and working conditions. The Works Council meets monthly.

Committee for Prevention and Protection at Work

The Prevention and Protection at Work Committee is a statutory consultative body composed of appointed employer representatives and elected employee representatives as members of the Safety, Safety and Environment unit (SHE). The Committee has advisory powers, and its main mission is to formulate proposals that promote workers' safety and welfare in their work performance. The Committee meets monthly.

Scientific Advisory Council

ITM's Scientific Advisory Council, with up to 12 international experts, advises on the institute's scientific strategy, meeting biennially and virtually as needed.

c. Overview of ITM organisational structure

ITM's organisational structure outlines the hierarchy and relationships among its departments and central services. The three scientific departments—Biomedical Sciences, Clinical Sciences, and Public Health—focus on Pathogens, Patients, and Populations, respectively, contributing to ITM's core tasks: research, education and service delivery (including medical service delivery, international cooperation with a focus on LMIC, and scientific service delivery). The term "department" is henceforth reserved for clustering scientific services and departmental management and administrative services.

Central support is divided between **policy services** reporting to the Director and **general management services** reporting to the General Manager**.**

Since late 2020, ITM has had a central office in the Democratic Republic of Congo (DRC). The **'ITM-DRC Office'** is headed by the ITM-DRC representative and coordinates the operation of ITM activities in DRC. This office monitors the policy and management aspects of ITM in DRC. A new statute (Accord de Siège) of ITM in the DRC was signed in November 2021.

- **Department of Biomedical Sciences**: Comprises ten research units several of which are recognised globally as leading experts in some of the most important and often neglected pathogens (i.e. parasites, mycobacteria and viruses) and vectors that are of global public health interest and can lead to outbreaks.
- **Department of Public Health**: Comprises ten research units that perform research with high scientific and societal value in the field of Health Systems and Health Policy, Sexual & Reproductive Health, Tropical Infectious Diseases and EcoHealth. Collaborates with partners to co-design and generate evidence for effective and sustainable health interventions, services, systems and policies, especially for vulnerable populations.
- **Department of Clinical Sciences**: Comprises currently nine research units where the patient is central to the research carried out. The field of work includes diagnostics, treatment and prevention in the individual patient, focusing on tropical and infectious diseases including zoonoses, HIV/AIDS and tuberculosis. The medical services are embedded in the Department of Clinical Sciences.
- **Central Policy Services**:
  - Communication Unit
  - Research Office (including the Library)
  - Education Office (including Student Support and Administration)
  - International Cooperation Office
  - ITM-DRC Office
- **General Management Services**:
  - Human Resources Management
  - Safety, Health and Environment
  - Technical Management
  - Financial Management (including Accounting, Purchasing & Shipping, and Contracts & Reporting)
  - IT Service (including ICT infrastructure and helpdesk)
  - Quality Assurance
  - The Applied Technology and Production Service
  - General Management Office (including Directory Secretariat,
  - Process Management Office and General Counsel and Company Secretary)

Presentation of the ITM organisational structure

DIRECTOR
Özge Tunçalp

GENERAL MANAGER
Ann Peters

CENTRAL POLICY OFFICES

COMMUNICATIONS
Nico Van Aerde
- Content
  Ildikó Bokros
- Events,Fundsraising and Outreach
  Bojan Cerovic

RESEARCH COORDINATION
Ann Verlinden
- Library
  Eva Nijs

INTERNATIONAL COOPERATION
Wouter Boesman
- ITM -DRC Office
  Raquel Inocencio Da Luz a.i.

EDUCATION
Bruno Broucker
- Student support
  Helga Bodges

APPLIED TECHNOLOGY AND PRODUCTION
Caroline Rombouts

PUBLIC HEALTH
Raffaella Ravinetto

HEALTH SYSTEMS AND HEALTH POLICY
- Health Policy
  Gorik Ooms
- Pharmaceutical Public Health
  Raffaella Ravinetto

SEXUAL AND REPRODUCTIVE HEALTH
- Sexual Health including HIV
  Bernadette Hensen
- Reproductive and Maternal Health
  Lenka Beňová

TROPICAL INFECTIOUS DISEASES
- Mycobacterial Diseases and Neglected Tropical Diseases
  Epco Hasker
- Emerging Infectious Diseases
  Katharina Kreppel

ECOHEALTH
- Complexity and Health
  Bruno Marchal
- Socio-Ecological Health Research
  Koen Peeters
- Eco-epidemiology
  Katja Polman

MANAGEMENT PUBLIC HEALTH
- Department Manager
  Jan Boeynaems
- Education coordination Public Health
  Veerle Vanlerberghe

BIOMEDICAL SCIENCES
Kevin Ariën

- Entomology
  Ruth Müller
- Experimental Immunology
  Maria Luisa Simões
- Experimental Parasitology
  Małgorzata Domagalska
- Helminthology
  Ciaran McCoy
- Malariology
  Anna Rosanas Urgell
- Molecular Parasitology
  Jean-Claude Dujardin
- Mycobacteriology
  Bouke de Jong
- Trypanosoma
  Jan Van Den Abbeele
- Virology
  Kevin Ariën
- Virus Ecology
  Joachim Mariën

MANAGEMENT BIOMEDICAL SCIENCES
- Department Manager
  Nadine Van Peer
- Departemental Laboratory Coordinator
  Evi Pockelé
- Education coordination Biomedical Sciences
  Mieke Stevens

CLINICAL SCIENCES
Johan van Griensven

CLINICAL TROPICAL MEDICINE
- Clinical Trial Centre
  Yven Van Herrewege
- Tropical Medicine
  Emmanuel Bottieau
- HIV and Tuberculosis
  Tom Decroo
- Sexually Transmitted Infections
  Chris Kenyon
- Neglected Tropical Diseases
  Johan van Griensven
- Travel Medicine
  Patrick Soentjens
- Clinical Emerging Infectious Diseases
  Laurens Liesenborghs

TROPICAL LABORATORY MEDICINE
- Tropical Bacteriology
  Liselotte Hardy
- Clinical Virology
  Koen Vercauteren
- Clinical Immunology
  Wim Adriaensen

MEDICAL SERVICES
- Polyclinic
  Patrick Soentjens
  - Management Polyclinic
    Isabel Demuynck
  - Travel Advice
    Ula Maniewski-Kelner
  - Tropical Infectious Diseases
    Steven Van Den Broucke
  - HIV
    Jelle Visser
  - STI
    Ludwig Apers a.i.
  - Clinical Nurses and Research Support
    Ludwig Apers
- Clinical Reference Laboratory
  Marjan Van Esbroeck & Dorien Van den Bossche

MANAGEMENT CLINICAL SCIENCES
- Department Manager
  Filip De Keulenaer
- Education coordination Clinical Sciences
  Maria Zolfo

GENERAL MANAGEMENT OFFICE
Ann Peters

HUMAN RESOURCES OFFICE
Martine Praet
- Compensation and Benefits
  Ken Caessens
- Business Partners
  TBD

SAFETY, HEALTH & ENVIRONMENT
Liesbet De Graef

FACILITY MANAGEMENT
Peter Van Eyndhoven

FINANCIAL MANAGEMENT
Liesbeth Kempeneers
- Accounting
  Hanne Rheinhard
- Purchasing and Logistics
  Martine Wolfaert
- R&D Contracts and Reports
  Katrien Kolf a.i.

INFORMATION TECHNOLOGY
Tim Wouters
- ICT Infrastructure and Service Desk
  Davy Hendriks

QUALITY
Tijs Van Poucke

GENERAL MANAGEMENT
- Process Management Office
  TBD
- Legal Office
  Frederik Lecok
- Management Office

Achievements and Lessons Learned

2

1. Achievements

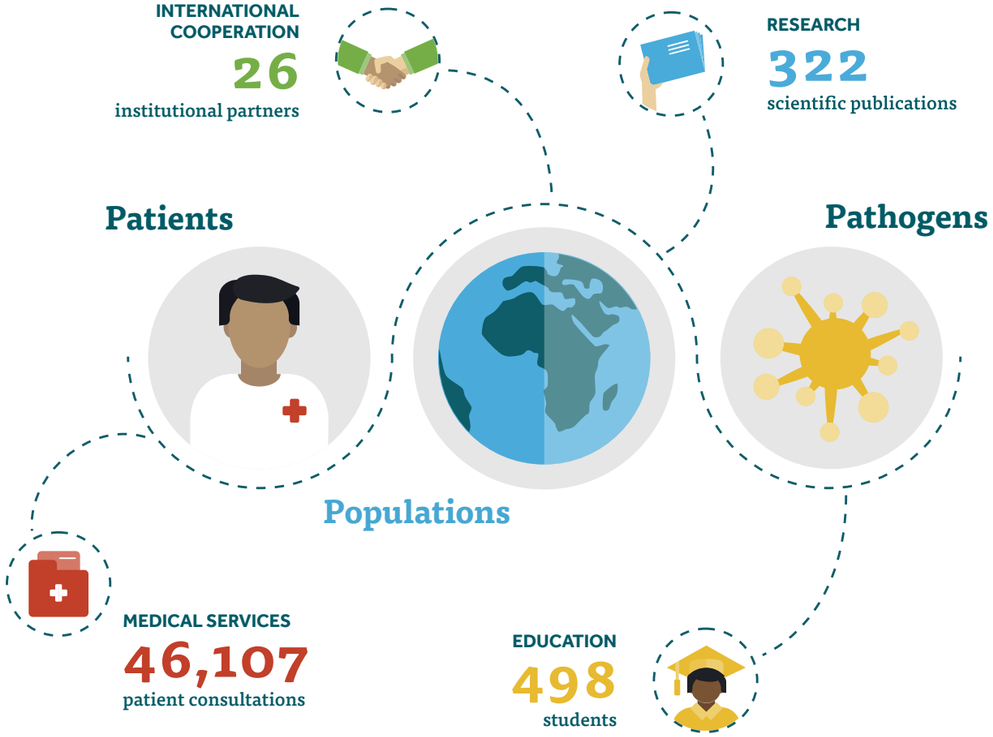
ITM consolidated its top position as an international reference centre in the field of global health for research, education and scientific and societal service delivery (medical services, scientific service delivery, and international cooperation with a focus on LMIC).

ITM has demonstrated its capacity to deal flexibly and appropriately with local and global health challenges – most recently, those surrounding COVID-19. The organisation has also seized opportunities to contribute to services around and research on COVID-19 and mpox. This demonstrates a well-organised, resilient structure and a positive organisational culture befitting the mission of ITM.

The synergy and cohesion between the three core tasks (education, research and service delivery) are well established. Research priority themes were chosen, and ZAP (Zelfstandig Academisch Personeel, head of units - professors) plans were executed accordingly. In search of sufficient critical mass, ITM encourages interdepartmental complementarity and collaboration on institutional research priorities, and funding instruments are used to achieve that aim.

The facilitation of the core tasks was enhanced by strengthening or creation of several support and policy services (IT, project management, research office, education office and international cooperation office).

ITM's overall impact in 2023



a. The Governance and management

Over the past years, ITM has made great strides in the governance of the organisation.

The organisation's structure has been reformed. The mandates, roles and tasks of the General Council, Board of Governors and Management Committee are made explicit and balanced. Employees experience transparency in decision-making and consultation processes. The General Council has been consulted on the new institutional policy plan and on the change of bylaws.

The Board of Governors (BoG) decided to bring the statutes of the foundation in line with the new rules of the Code of Companies and Associations.

A new financial manager was appointed in January 2020, and a new general manager was appointed in March 2020.

ITM has had two successive director changes in the past policy period. The search for a new director started in July 2023, and a new director was appointed in January 2025. The BoG, together with an international search bureau, have looked for candidates who combine sound academic expertise with a good alignment with the "DNA" of the organisation, as expressed in its missions and values, e.g. to pursue not only scientific excellence, but also to have an impact in local communities, both in Flanders and especially in the Global South. One of the lessons learned is the need for a precise task division between the general manager and the director. In 2023, the BoG approved the decision to establish a co-leadership, with a general manager and director appointed by and reporting to the BoG. This will require a change of the statutes and an adaptation of internal regulations and procedures. In 2022 two new heads of department (HoD) were appointed in the Departments of Clinical Sciences and Biomedical Sciences, following the end of the mandates of the previous HoD. In the Department of Public Health, a new HoD was appointed in 2023, following the retirement of the previous HoD.

The Scientific Advisory Council was renewed in 2021, and they conducted a first review in 2022, and were involved in consultative meetings concerning the policy plan.

The central education and research offices were strengthened with additional staff and as of 2024 a valorisation cell was added to the research office.

ITM established an International Cooperation Office in 2019, and a new function (monitoring and evaluation) was created to monitor the quality of development cooperation activities. An additional staff member was recruited to explore other funding opportunities for international cooperation alongside the Belgian Directorate General for Development Cooperation (DGD).

In late 2020, ITM set up a separate office in Kinshasa, DRC. The "ITM-DRC Office" is led by the ITM DRC representative. The office supports the ITM activities (research, education and capacity enhancement) in DRC.

An important milestone was the launch of a Process Management Office. The PMO is a separate service under general management, no longer within IT, and from there plays a central role in the follow-up of institutional projects, supported by the PMO Task Force consisting of the managers, the Head of Quality Service and the Head of IT.

Several critical processes were examined and improved, such as the purchase process, the upgrade of the ERP, the Student Life Cycle Management, the travel process, the document management system (Zenya from Infoland), electronic signatures and the further roll-out of the Electronic Lab Notebook.

In 2020, the launch of the Masterplan Buildings was approved with a broad discussion on the needs analysis in various working groups. Various internal and external stakeholders took the time to think about the future of ITM. The Masterplan Buildings aims to respond to the major challenges ITM has been seeking to address for years, both in terms of preserving historical heritage, making the existing heritage energy efficient and expanding with new laboratories adapted to the new regulations and standards. As of mid-2024 the Masterplan Buildings is ready to be submitted for funding via various channels.

In 2023, the medical services went through an important transition and reform process to build a stronger clinic structure. The two clinics were merged into one large clinic with a separate management board. The chief medical officer reports to the head of the department of clinical sciences. Investment in a good functional clinical structure is important not only for quality reference care but also to grab opportunities for scientific research and education. In this way, the entire ITM will reap the benefits of this thorough reform which has been completed.

HR

A new salary and remuneration policy was developed and implemented in the past policy period. The job descriptions or job descriptions are generically captured in an integrated function architecture consisting of a number of "function families". All staff members are "allocated" in one of the function families and levels and are evaluated and possibly promoted on this basis. The system also includes the possibility of upward or lateral mobility within and between function families. A new salary system has been developed based on market conformity (Hay scale) based on competences and performance rather than seniority and thus deviating from the university pay scales, which was introduced on 1 January 2023.

ITM wants to attract talent both from its own sector and beyond. In order to retain the talent, ITM must remain sufficiently competitive in the labour market. The goal is to attract and retain employees who consciously choose ITM for the sake of the mission and the organisation's mission and agree to a remuneration that is neither above nor below the market. The introduction of the new wage policy is therefore an important step in the reform of ITM's integrated remuneration policy. ITM obtained the possibility to apply the expat status to incoming staff from abroad, which also contributes to this objective.

In 2023, ITM decided to move to a new social secretariat in 2024. This allows us to make the human resources administration and reporting of personnel data more appropriate. The new social secretariat also offers more contemporary employee self-service.

On a regular basis, ITM monitors the physical and mental well-being of the employees based on the well-being survey. The responses were processed, discussed in detail in various working groups and led to the following results and conclusions:

- Well-being indicators: overall, the ITM staff are highly motivated for their work. The stress indicators remain within limits, but stress, combined with the strong motivation within ITM, is a potential risk that needs to be further monitored.
- Undesirable behaviour at work: The vast majority of staff did not experience unwanted behaviour in the past year. Yet there are also enough cases that cause us concerns about bullying, aggression and discrimination. We started an additional qualitative in-depth study to further investigate this so that we can take appropriate actions.
- Psychosocial risks: Participants of the qualitative in-depth study were also able to assess psychosocial risks linked to work content, organisation, terms, conditions and interpersonal relations.

Based on the well-being Survey and the input from the above-mentioned working groups, a concrete action plan was drawn up.

ZAP recruitment and evaluation procedures were revised following the recommendation to critically examine ZAP plans and their need to comply with the overall institutional priorities.

Steps have been taken to diversify the staff; over 500 staff members come from 36 countries.

Financial

To support the departments' greater autonomy, a new financial allocation model was developed in 2020 as a basis for the multi-annual budget 2021-2025. The latest financial allocation model shifted from a need-based model to a multi-annual model based on responsibility. With the new allocation model, it is emphasised that each department should contribute to the triad of education, research, and services. The evaluations of the ZAP also focus on the academic triad.

The current multi-annual budget for 2021-2025 can be seen as a significant 'clean-up effort,' where costs are allocated to various funding streams clearly and logically. During this period, our focus was on attracting and harnessing additional income while also striving to use existing personnel and resources more efficiently for the future, including promoting internal mobility. This approach provided crucial leverage to maintain and strengthen ITM's position as a strong brand. Moreover, this multi-annual financial plan reflects a shift towards greater transparency in ITM's policies, strategic choices, ambitions, and operational objectives.

Communication

ITM has also heavily invested in open science and science communication. An example is the launch of the podcast 'Transmission', which won the Best Belgian Podcast award in the science and technology category and the BOCA award. Other examples of reaching out to larger stakeholder groups include the travel advice website and app 'Wanda', visited over a million times a year, the development of EduBoxes for secondary school students and teachers, the participation in science festivals like Nerdland festival and Dag van de Wetenschap, the organisation of, and participation in, exhibitions and other outreach events, and hosting interactive science tours for secondary and higher education students.

b. Education

In 2019, ITM made its vision on education explicit in a vision text:

> *"ITM is a **global open campus** that offers science-driven and societally relevant **postgraduate** training in the field of tropical medicine and international public health. Studying at ITM means benefitting from an international and diverse setting where students, alumni and staff co-develop **participatory learning**. ITM's student population is highly qualified, eager to contribute to **societal development**, and coached towards scientific discovery and applying acquired competencies in their respective **contexts**.*
>
> *ITM is a higher education institution that fosters **lifelong learning** and employs teaching and learning methods adapted to the needs and expectations of its students at any point in their career: flexible and blended learning, mobility and tailored student support are critical characteristics of ITM's education. With its **alumni**, ITM aims to play a prominent role in tropical medicine and international public health."*

In the spirit of that vision, the policy period 2019-2024 was characterised by reforms in the educational portfolio, further positioning ITM's education internationally, and taking steps forward in providing a relevant offer based on adult learning teaching methods.

First, to provide an adapted offer to the needs of health professionals and scientists in the field of international public health and tropical medicine, ITM's **educational offer** has undergone significant changes (in size and content) during the last management agreement: one new Master's programme (in Tropical Medicine) has been introduced, in the Master of Science (MSc) in Public Health the original orientations were merged to give students more study and content flexibility, and the MSc in Tropical Animal Health has been given a new name, which better suits the content of the programme and the needs of the target audience: MSc in Global One Health: Diseases at the Human-Animal Interface.

The high quality of ITM's master programmes was reconfirmed by the external evaluation panel commissioned by the Flemish Higher Education Council in 2024, and in July 2024, the NVAO issued a renewal of the accreditation for the three ITM master programmes until September 2030.

The postgraduate programmes have also been reformed with a greater emphasis on health in low-resource settings and vulnerable populations worldwide, resulting in 4 different English postgraduate programmes (and 2 French) with sufficient flexibility for students to put together a curriculum that suits their needs. Apart from that, the offer of short courses has been expanded and adapted for new areas of expertise at ITM and emerging needs in the field. Each short course is now part of at least one master's programme at ITM.

Second, exchange and synergistic **partnerships** are fundamental to ITM in general and its education. About half of ITM's current educational portfolio is organised between departments and between different research units, and ITM alumni and partners play a significant role in ITM's educational offer. In the last policy period, ITM has further positioned itself as an **international campus** to create impact with the academic programmes offered. The manifold collaborations (via the MSc Global One Health, the Alliance, the Alumni network, tropEd, Erasmus+) have been confirmed to contribute to the richness of ITMs education and its high quality. It is an undeniable vehicle to enrich ITM's educational quality, increase its impact, and maintain relevance. At the individual and organisational level (students and organisations and their employees), Syspons concluded in a large impact study (published in 2021) that ITM's teaching offer delivers excellent student satisfaction and has relevance, effectiveness and impact on the work of individuals, the performance of organisations and the career paths of alumni. In 2021, at the institutional level, ITM obtained the Erasmus Charter for Higher Education (ECHE) for 2021-2027. The ECHE was a prerequisite to securing learning mobility grants for learning mobility grants of individuals and cooperation for innovation and good functioning under Erasmus+. Under the Erasmus+ framework, the project 'Health Information and Technology for Improved Health Education in Southeast Asia (HITIHE)'/Wikitropica was finalised in October 2023. In that same year, the Capstone project (under Erasmus+, with ITM as a partner) was launched, which aims to address the urgent need to educate and develop a health workforce that can respond to the steady increase in non-communicable diseases (NCDs) in sub-Saharan African countries. Finally, ITM has created an alumni community platform with about 2,300 registered alumni. This platform is used to engage the alumni of ITM and to disseminate information, highlights and course ads, among other things.

Third, ITM has adapted its teaching methods to evolving needs. Significant progress towards **digitalisation** in education was accomplished. Investments have been made in ITM's infrastructure to enable more online and hybrid teaching activities to complement face-to-face

interaction. Students can now take online courses if they cannot travel to ITM due to force majeure, while other courses have expanded the online modality. The evening courses at ITM are now taught online, and external lecturers/committee members for theses examination no longer need to travel to ITM for a short teaching assignment because they can now give their course remotely. This contributes to reducing the environmental footprint of ITM and to increasing the accessibility of ITM's courses. We have further invested in the development of Wikitropica (see also above) as an open access platform for tropical infectious diseases, providing e-learning tools and information that can be used worldwide by students, staff, and healthcare professionals. In the same direction of digitalisation, ITM has developed an internal student information system that can capture students' entire life cycle and cover the programme's entire administration. On top of this system, a data warehouse has been built that aims to simplify educational data reporting.

All KPIs for education stipulated in the ITM and Flemish government management agreement exceeded the set targets.

c. Research and Innovation Landscape

ITM has evolved over the past years into a full-fledged research institute with the ambition to be one of the most trusted and innovative academic institutions in the field of tropical medicine and public health, driven by our pioneering research, world-class medical services, excellent education, and unwavering commitment to equitable partnerships. As such, ITM contributed, within the quadruple helix of knowledge institutions, industry, governments and citizens, to the ambition of the Flemish government to belong to the top 5 innovative knowledge regions in Europe.

The research groups were consolidated into three disciplinary departments. They jointly succeeded in meeting the targets stipulated in the WEWIS covenant by focusing on the four strategic themes put forward in ITM's policy plan 2020-2024: Emerging and re-emerging diseases and outbreaks, Sustainable health systems and strategies, Disease control and elimination, and antimicrobial resistance.

Research instruments funded by WEWIS have been set up to foster interdepartmental collaborations: SOFI, CTU, ORT, insectary, Datahub, Clinical Trial Site, Immunology laboratories, and research ZAPs in the field of emerging infections.

An institution-wide ZAP succession plan is in place, with sufficient overlap between new and retiring ZAPs to ensure the capacity to attract external funding and PhD students is maintained.

The choice of strategic thematic priorities has proven to be highly effective, with many impactful contributions realised in the past policy period. Here, we present some highlights to illustrate our activities in the different research priorities.

Research priority 1. Emerging and re-emerging diseases and outbreaks

ITM staff stood their ground during COVID-19

ITM translated its broad global health vision into impactful action during the pandemic, both in Belgium and internationally. ITM experts, including physicians, infectious disease specialists, virologists and laboratory staff, played a key role in the COVID-19 response. Swift and sound review from the Institutional Review Board and Data Access Committee enabled rapid research initiation. The Outbreak Research Team collaborated globally to map the epidemic, investigate treatments, and produce evidence-based guidelines. An ITM professor chaired Belgium 's COVID-19 treatment task force for two years. ITM also contributed to BelCoVac, ensuring coordinated vaccine research and providing crucial virus-neutralising antibody testing. ITM's policy support to Belgium, DRC, and others was highly valued.

Mpox- experience in the DRC, a highly frequented sexual health clinic at ITM and WEWIS-funded metagenomic research led to groundbreaking research findings of international importance, leverage for a newly funded EDCTP-grant

In 2022, a global mpox (formerly monkeypox) outbreak led to over 85,000 infections, with Belgium reporting over 780 cases. ITM played a vital role in the response, leveraging its sexual health clinic and experience with mpox in the DRC. The first Belgian mpox case was diagnosed at ITM in May 2022. ITM researchers discovered asymptomatic infections during STI testing, with findings published in *Nature Medicine*. The MPX-ASSESS study revealed that the virus can be transmitted before symptoms appear. ITM also trained other centres in intradermal vaccination, maximising the use of the limited vaccine supply. Ongoing research projects continue in collaboration with Congolese and Belgian partners. ITM and Institut National de Recherche Biomédicale (INRB), our partner in DRC, documented a new outbreak of mpox in South Kivu with a potentially more lethal variant, prone to launch a new global outbreak. This led to a successful grant application under the emergency EDCTP call end of June 2024, allowing ITM to continue this groundbreaking research on mpox in the DRC, together with INRB and the University of Antwerp. Research findings will also impact the response in Belgium after the WHO declaration (August 2024) that mpox is again a Public Health Emergency of International Concern.

Monitoring exotic mosquitoes and new Arthropod Containment Level-3 (ACL-3) laboratory

ITM and the Belgian public health institute Sciensano have successfully involved citizens in reporting tiger mosquitoes via the new website MuggenSurveillance.be. In 2023, the tiger mosquito was identified in 25 localities, and 16 new locations were identified with the help of citizens. The federal and regional governments fund the citizen science project, part of the MEMO+ project through the National Environmental Health Action Plan (NEHAP). The ITM entomologists demonstrated that the exotic mosquito *Aedes albopictus* successfully passed the winter at two locations in Belgium. To better understand the current adaptation of dengue vectors to thermal stress and the adaptive potential for forthcoming climatic changes, we currently explore the interactions of dengue-associated biodiversity and health at the nexus of climate change in a hotspot of global warming. The insectary was recently expanded with a new module. The latest high-security laboratory allows the institute to understand the relationship between insects and pathogens better and to expand its expertise on the impact of climate change on infectious diseases.

Research priority 2. Sustainable health systems and strategies

Maternal and perinatal health in the context of rapid urbanisation in Africa

Two-thirds of the world's population will live in urban areas by 2050, and nearly 90% of these additional 2.5 billion urban residents will be concentrated in Africa and Asia. Understanding maternal and perinatal health in African cities has been critical to our work. Analysing data from recent Demographic and Health Surveys, ITM researchers and African partners examined how nearly 20,000 women living in 22 large African cities used maternal care services. The proposed typology of best- and worst-performing cities can provide a starting point for extracting lessons learnt and addressing critical gaps in maternal health in rapidly urbanising contexts. An FWO post-doctoral grant, an FWO project and an EDCTP project were obtained in this domain.

PrEP studies in Belgium and West Africa informing health policy.

Pre-exposure prophylaxis (PrEP) reduces the risk of acquiring HIV infection and shows great promise in reducing new HIV infections at the population level. However, the potential of PrEP has not yet been realised as not everyone who could benefit from PrEP has been reached. In the large-scale PROMISE study (FWO), ITM and the University of Antwerp investigated how PrEP care could be optimised for maximum impact on the HIV epidemic in Belgium. Interviews, focus group discussions, and surveys with men who have sex with men (MSM), individuals with a migration background, sex workers, and healthcare providers revealed a high demand for accessible and differentiated PrEP care. The results of the PROMISE study informed Belgian medical practice. As of 2023, within the framework of an FWO TBM project, ITM will be among the first to investigate the feasibility of injectable PrEP, a novel formulation of PrEP, in Belgium.

Research priority 3. Disease control and elimination

New diagnostics and new approaches for sleeping sickness elimination

For years, ITM has led the fight against human African trypanosomiasis (HAT) or sleeping sickness, collaborating with Congolese and international partners to significantly reduce cases in DRC and achieve WHO targets. The goal is to eliminate disease transmission by 2030 by interrupting the parasite's cycle between tsetse flies and humans. Funded by Belgian Development Cooperation and the Bill & Melinda Gates Foundation, ITM has developed advanced diagnostics, including a new gambiense-iELISA test. This new test has a higher throughput, is less hazardous and does not require the use of rats and mice. Major progress has been made in the development of new molecular tests which will be essential for the endgame. ITM innovations in screening, digitalisation, and remote diagnostics have shaped WHO's HAT policies. ITM is also exploring expanding treatment to serological HAT suspects, making use of new low-toxicity oral drugs.

Anti-malarial drug effective against schistosomiasis

ITM, together with Senegalese research partners (IRESSEF), discovered in a proof-of-concept trial that an antimalarial combination therapy, artesunate-mefloquine, is also effective against schistosomiasis, another major but neglected parasitic disease in sub-Saharan Africa. In a trial involving 718 school-age children in northern Senegal, the combination was found to be safe and as effective as praziquantel, the current (and only) standard of care. The trial (funded by WEWIS/SOFI and supported by ITM's Clinical Trial Unit) also demonstrated that additional courses of artesunate-mefloquine (at 6-week intervals) substantially increased the cure rate, with only a marginal increase of adverse events. This opens perspectives for further large trials evaluating artesunate-mefloquine as an integrated seasonal chemoprevention against both malaria and schistosomiasis. These findings were published in *Nature Medicine* in December 2023.

Research priority 4. Antimicrobial resistance

Better adapted diagnostics for bloodstream infections in sub-Saharan Africa

The ITM-led SIMBLE project is an EDCTP-funded capacity sharing project combining the development of a field-adapted blood culture bottle reading system and the installation of a local manufacturing plant of bacteriological culture media (Bactinsight) in Cotonou, Benin, West Africa. It is unique by its aspects of reverse innovation – coming from and led by scientists from resource-limited settings – and by its ability to shape interests in local production or in-vitro diagnostics. Bactinsight was rolled out in June 2023 in Benin (field sites Cotonou and Boko) and in December 2023 in Ouagadougou, Burkina Faso.

Leishmaniasis and drug tolerance

The deadly *Leishmania* parasite is notorious for adapting to drugs through mutations and drug resistance. Molecular parasitologists from ITM discovered a second way it evades drug attacks: drug tolerance. This can result in serious complications. Notably, each year the *Leishmania* parasite causes a lethal or stigmatising disease in 300,000 individuals all over the world, including in many countries of Southern Europe. The research findings have been published in the esteemed journal *Frontiers in Cellular and Infection Microbiology*.

Multi drug-resistant tuberculosis and the problem of false resistance unveiled by PhD student from Rwanda

With around 1.5 million deaths a year, tuberculosis (TB) is the world's deadliest infectious disease. Drug resistance is increasing, and timely detection of resistance is essential to select the most appropriate treatment. A Rwandan PhD student, Claude Semuto, exposed a serious problem of false rifampicin resistance. Based on his findings, published in *Lancet Microbe*, the National TB Programme in Rwanda changed its diagnostic algorithm, and patients now receive proper care. Post-PhD, his institution, the Rwanda Biomedical Centre, joined the fifth framework agreement of ITM and the DGD and secured Rwanda's membership in the EDCTP association. Joining the EDCTP is a significant achievement for the country's health research capacity, and in 2025, Rwanda is set to organise the EDCTP forum. Since 2022, Claude has served as the technical advisor of Rwanda to the EDCTP; he is a Health Scientific Innovation Analyst at the Rwanda Biomedical Centre and, since July 2024, an ITM postdoctoral trainee.

Monitoring the emergence of drug resistance in leprosy in the Comoros

As of May 2022, no resistance to anti-leprosy drugs have been reported, but there are no nationally representative data in the Comoros. Post-exposure prophylaxis (PEP) with rifampicin is offered to contacts of patients with leprosy. ITM researchers conducted a countrywide drug resistance survey in the Comoros and investigated whether PEP led to the emergence of drug resistance in patients with leprosy. The results demonstrated that *Mycobacterium leprae* remains fully susceptible to rifampicin, fluoroquinolones, and dapsone in the Comoros. For the first time, ITM researchers showed the applicability of targeted sequencing directly on skin biopsies from patients with either paucibacillary or multibacillary leprosy. As leprosy is still associated with stigma, the involvement of social scientists has been essential in this project. These findings were published in *Lancet Microbe*.

Rising problem of resistance in sexually transmitted infections

There is an increasing need for alternatives to antibiotics to prevent the transmission of sexually transmitted infections such as gonorrhoea, chlamydia and syphilis. In the FWO-funded Preventing Resistance in Gonorrhoea (PReGo) study, researchers aimed to test novel strategies to prevent the emergence of antimicrobial resistance in *Neisseria gonorrhoea*. In papers published in *The Lancet Infectious Diseases* and *Sexually Transmitted Diseases*, ITM researchers concluded that Listerine and chlorhexidine mouthwashes cannot treat and prevent pharyngeal gonorrhoea. The research is ongoing to find bacteriophages and bacteriocins that can eradicate *N. gonorrhoea*. ITM has also led a randomised controlled trial in 5 centres in Belgium that found that screening for *N. gonorrhoea* and *C. trachomatis* in men who have sex with men on HIV pre-exposure prophylaxis does more harm than good. The results of this study published in *Lancet HIV* have led to the Belgian HIV PrEP guidelines changing their approach to screening for these infections.

d. Service delivery

Medical reference care for and prevention of tropical and infectious diseases and import pathology, domestic and/or international

The ITM medical services, composed of the outpatient travel and HIV/STI clinics and the clinical reference laboratory, have extensive and long-lasting expertise in pre- and post-travel medicine, emerging infectious diseases, sexually transmitted infections, and HIV. They host the largest group of certified infectious disease specialists in Belgium and provide advice to several (inter) national organisations and governments.

Building on the legacy of ITM's longstanding expertise in tropical and infectious diseases, the medical services played essential roles in Flanders, Belgium and internationally during the two pandemics, Covid-19 and mpox.

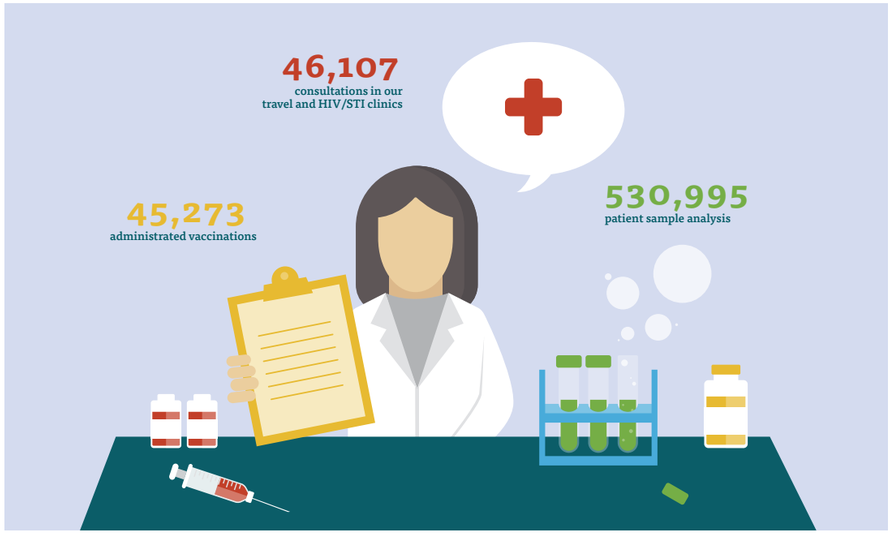
In 2020 ITM physicians, infectious disease specialists, virologists and laboratory staff were involved in the immediate clinical response to the unfolding Covid-19 pandemic. ITM physicians were deployed to the University Hospital Antwerp to cope with the clinical work and took the lead in the Covid-19 clinical guideline development for Belgium.

In 2022, there was another outbreak where the ITM outpatient clinic and clinical laboratory really made the difference: monkeypox (later renamed mpox by the WHO). Given the ongoing research into mpox in the DRC and our experience with outbreaks, both in the field of medical care and research, our experts in tropical medicine and STDs confirmed the first mpox patient in Belgium in May and developed timely diagnostic capacity in the reference laboratories. ITM researchers were one of the first to publish the virus sequence determination and showed that an mpox patient does not always show symptoms and that the virus can be grown from samples from an mpox patient before symptoms occur. The laboratory of ITM was designated as the technical reference centre for mpox in Belgium, and our clinic was a pioneer in administering vaccinations to at-risk patients.

A new clinic organisation structure was developed in early 2023. The main changes concern the evolution of two clinics (travel clinic and HIV/STI clinic) to one clinic, given the high interconnectedness between activities and people. This resulted in a strong structure with sufficient responsible positions to address the future challenges of medical services and maintain and strengthen the specific expertise in our niche domains (travel advice, tropical infectious diseases, and HIV/STI).

The outpatient clinic conducts around 45,000 medical consultations annually and provides multidisciplinary care to specific groups, such as HIV patients. The clinical laboratory also carries out numerous national reference activities and performs over 500,000 analyses each year, half for clinical laboratories nationwide.

ITM's Medical services overall impact in 2023



International cooperation: strengthening health care and scientific capacity in low- and -middle-income countries

ITM's international cooperation activities are primarily funded under the ITM DGD Multiyear Programme (2022-2026), which currently includes (1) institutional capacity strengthening programmes with 24 partner institutions in 12 LMICs, (2) a scholarships programme, (3) policy support to mainly Belgian development actors, including the Belgian ministry of foreign affairs and (4) synergy activities with other institutions of higher education. We developed a joint strategic framework (JSF HES4SD: Higher Education and Science for Sustainable Development) with VLIR-UOS and ARES, other academic actors within the Belgian development cooperation. Through our institutional strengthening, we support our partners to become active drivers of change and have an impact on society.

The partnerships and scholarships made possible by the Belgian government's long-standing support have rendered specific results, some of which are captured in the sections on education and research above. Contributing to the partners' individual and institutional capabilities makes the impact more sustainable.

The framework agreement with the Belgian Federal Government also unlocks the scientific knowledge of ITM for policy makers at regional, national and multilateral government levels thus amplifying the impact of the research implemented at ITM.

A second programme is supported by the Flemish Ministry of Foreign Affairs (2018-2023) in Mozambique. The third phase of the BICMINS (Building Institutional Capacity in Mozambique, INS) programme ended in December 2023. Some highlights of the collaboration include a highly successful SORT-IT course, 2 promising pre-doctoral students who followed a track at ITM and 2 INS staff who graduated as master's in public health. We also laid the foundations for solid AMR surveillance. The Flemish government decided to continue the support to Mozambique through a fourth phase of the project.

We successfully diversified the funding base for international cooperation projects in the past policy period. Support from the European Union (INTPA, ECHO), ENABEL and EDCTP will allow ITM to respond to existing but still unmet needs for capacity strengthening of partners and to develop new approaches of equal scientific partnerships. We incorporated an approach to partnerships as a 'trajectory' while creating the ongoing framework agreement (FA5 2022-2026) with DGD. The trajectory implies that cooperation funding should gradually evolve from funds with a development cooperation finality to more research-oriented financing.

The combination of research and capacity strengthening is also the model followed by EDCTP and in which ITM has taken on an advisory role for the Flemish and Federal authorities since the inception of this programme in 2003. The European Commission recognises Belgium as a role model for seeking synergetic cooperation between capacity strengthening and research, such as being operationalised by ITM in research cooperation with institutional partners in the global south. The ITM's experience serves as a European model for achieving collaboration between education, research and capacity building in a natural (in our DNA) and efficient way.

SOME HIGHLIGHTS OF INTERNATIONAL COOPERATION ARE:

Human African Trypanosomiasis

ITM has a long history of fighting human African trypanosomiasis (HATg or sleeping sickness) in the DRC. This intervention contributes to Belgium's international commitment to help eradicate sleeping sickness by 2030, in collaboration with the Bill & Melinda Gates Foundation (BMGF). Due to a combination of progress in treatment, diagnostics, vector control, screening strategies and data management, the number of cases is currently historically low. More targeted and diverse screening approaches and their digitalisation increase the chances of detecting remaining outbreaks of infection and treating all prevalent cases. ITM's partnerships with the National Programme of the DRC, international donors and private companies generated an evidence-based approach that directly informs WHO policies. The partnership between Belgium and BMGF was also renewed in October 2023 by the signing of a new Memorandum of Understanding.

Impact: evolving partnerships

The impact of our long-term partnerships in LMIC is illustrated by the evolution of some of our partner institutions in low-and middle-income countries.

In Burkina Faso, the Clinical Research Centre Nanoro (CRUN) was established by Prof Halidou Tinto, a former PhD student of ITM, supported by a small post-doctoral re-entry grant after his PhD (2008). The CRUN became an institutional partner of ITM in 2017 and is now a large West-African research centre with more than 400 collaborators. Halidou Tinto was listed by *Nature* among the Top-10 scientists in 2023 for his groundbreaking research on malaria treatment and vaccines.

In the DRC, the INRB, under the leadership of Prof JJ Muyembe, is an ITM partner for more than 25 years. INRB researchers have supported ITM research on multiple outbreaks and other health challenges. The collaborative work and experience with Ebola and mpox have also influenced the way outbreaks in Belgium have been managed.

With our institutional partner in Cape Town, South Africa, the University of Western Cape, our past collaboration on pharmaceutical public health resulted in a new joint INTPA-funded project to develop a Centre of Excellence on pharmacovigilance in Southern Africa. These partnerships improve ITM's reputation and enhance the image of Flanders and Belgium in Global Health.

These examples of the impact of sustained institutional partnerships drive the revisioning of international partnerships towards transformative partnerships and differentiation between modalities depending on the partners' needs and ITM's potential contribution.

Networks

In parallel with research and educational collaboration, mutual learning and advocacy are proven methods to contribute to effective and performant health systems—including the support mechanisms for international partnerships. Therefore, ITM has a tradition of facilitating networks of health experts at the individual and organisational levels.

Since 2004, ITM has hosted Be-cause Health, a pluralistic open platform and network for Belgian non-profit actors in the global health sector. This network facilitates the exchange and growth of knowledge and expertise, calls for a more effective Belgian contribution to global health policy and for an international policy debate based on the right to health and care for all. Be-cause Health encourages mutual trust, understanding and cooperation between its 43 member organisations and 289 individual members who are involved in the Belgian development cooperation and in global health.

During the 2020-2024 policy period, the Emerging Voices for Global Health Initiative & Network (EV4GH) celebrated its 10th anniversary. EV4GH started as an initiative at ITM, with the aim of strengthening the voice of health researchers from the South and providing a platform. Initially, it provided intensive skills training and facilitated researchers' participation in world health conferences. Gradually, Emerging Voices grew into a renowned alumni network. The network also received recognition as a technical working group of the Health Systems Global conference, one of the most important conferences on health systems worldwide. Several alumni are now leading in their field and contribute to the development of new research agendas and policies at local, national, regional and even global levels. So far, the programme has trained and supervised more than 400 researchers from more than 70 countries.

Scientific service delivery

Reference and accredited laboratories

ITM hosts several reference laboratories which are recognized both at national level (by the Belgian Government, Sciensano…) and at international level (by organisations like the WHO, WOAH and FAO). They are closely integrated with scientific research and expertise in tropical medicine, and their work is geared towards supporting healthcare locally and globally. The analyses conducted in our laboratories consistently meet the highest quality standards (ISO and other applicable standards), and our organisation is widely recognised and valued for its scientific expertise and advisory capabilities. The ITM National Reference Laboratory for Tropical and Infectious Diseases is the only laboratory in Belgium authorised to diagnose level 4 risk pathogens (e.g. Ebola, Lassa).

Diagnostics

ITM produces diagnostics for neglected tropical diseases, particularly for the detection of Human African Trypanosomiasis (HAT) or sleeping sickness (CATT t.b. Gambiense and VSG production), surra in animals (CATT t.evansi production) and Leishmaniasis (DAT/VL production). The causative agent of sleeping sickness is trypanosoma b. gambiense, a parasite transmitted by the tsetse fly. Early detection is crucial in combating sleeping sickness, and this can be achieved using the CATT (Card Agglutination Test for Trypanosomiasis), a test developed by ITM in the late 1970s,

which is widely used in West and Central Africa. Additionally, a CATT test has been developed to detect infections in animals caused by Trypanosoma evansi, the causative agent of surra disease.

Because the CATT production is labour-intensive and commercially less attractive, there is little global interest in the development and production of these diagnostics. Therefore, their availability depends on ITM's production. Over the past five years, a total of 10,350,000 tests for CATT *T.b. gambiense* and 465,000 tests for CATT *T. evansi* have been produced.

Biobank and BCCM

The ITM Biobank contains human and animal material, as well as isolates (such as bacteria and viruses). All human biological material used for scientific research at ITM must be registered in the ITM Biobank for human samples according to legal requirements and can only be used for research after formal approval. Although not required by law, non-human material is also registered in ITM's biobank.

ITM has made considerable progress in enhancing the professional management and centralization of biobank samples. During the recent policy period, the biobank received accreditation from FAGG. A comprehensive biobank policy was formulated and approved, and in 2023, the integration with both the Belgian and international biobank ecosystems was successfully established.

With its collection of mycobacterial strains, ITM is part of the consortium of the Belgian Culture Collection of Microorganisms (BCCM). The BCCM/ITM collection, housed in the secure ITM laboratories, includes around 400 strains of non-tuberculosis mycobacteria. However, its main strength lies in the diversity of over 600 tuberculosis (TB) strains, representing a global variety of TB variants and strains with (a combination of) resistance to both common and new antibiotics.

Between 2020 and 2023, the ITM collection was significantly expanded to include TB strains resistant to new antibiotics such as bedaquiline, linezolid, delamanid, and pretomanid. This expansion encompasses clinical isolates and experimentally mutated strains from various continents. During this period, over 1.132 cultures or their derivatives were distributed to more than 50 external customers across Europe, America, and Africa.

Since January 2024, ITM has been a member of the Belgian research consortium DiSSCo, which manages historical collections, including unique collections of parasites and viruses.

Expert advice in Flanders, Belgium and internationally

In the midst of unprecedented global health crises and the threat of climate change, ITM's expertise in challenge-driven health research and innovation, particularly by the public sector, is increasingly being used. Long-established, ongoing policy advice to the DGD, and expert advice to WHO, and the Belgian and Flemish policymakers, particularly on issues related to international health policies, are highly valued and appreciated. The policy advice offered builds on ITM's research and is strongly enriched by the partnerships of ITM with institutions from LMICs – allowing it to provide policy support grounded in field experience and deep knowledge of the context in which the health emergencies occur.

ITM's researchers and experts are also repeatedly asked to share their expertise with national and international governments and organisations (control of antibiotic resistance, equitable access to essential medical products, quality of essential medicines and diagnostic tests, advice on the list of essential diagnostic tests, etc.)

The research office, the international cooperation office and ITM researchers have had a prominent role in assisting the ITM's subsidising authorities in preparing the Belgian European Presidency of 2024. Some themes of the Belgian Presidency were fully in line with the research topics of ITM, namely equitable access to medical products, pandemic preparedness and universal health coverage. There too, ITM was frequently asked by Flemish, Federal and European bodies to contribute to agenda setting for the meetings to inform European policies.

With the support of the Flemish Ministry of Research and the Belgian Directorate-General for Development Cooperation, Belgium again became a member of the EDCTP Association, which now manages the Global Health EDCTP3 partnership with the European Commission. This African-European Infectious Disease Research Partnership is the successor of the European and Developing Countries Clinical Trials Partnership programmes 1 & 2. ITM played a leading role in this renewed membership in the context of the Flemish/Belgian life sciences ecosystem and has taken on the expert role for Belgium in the General Assembly of the EDCTP Association, advising the Belgian delegation of the EDCTP Association on the programming and governance of the Global Health EDCTP3 partnership.
ITM has also been selected as a Global Health EDCTP3 Stakeholder Group member.

The research and innovation (R&I) policy cluster advises on transforming R&I-Related policies and programming, integrating research, education, and capacity building.

Because of our reputation, ITM's experts are often invited to participate as external lecturers in international courses.

2. SWOT Analysis

Evaluations by different subsidising governmental bodies and external reviews have led to thorough introspection and have shaped the content of the next IPP 2025-2030. We summarise them in our institutional SWOT analysis.

a. Strengths

- ITM consolidated its top position as an international reference centre in the field of tropical medicine and international public health
- ITM has solid contacts and partnerships with partner organisations in the Global South. This deep-rooted and enduring relationship with actors in the Global South is unique and contributes significantly to the realisation of ITM's ambitions. ITM is valued because of the respectful and equal manner in which collaborations are established. ITM's long tradition in reaching out to vulnerable populations in the Global South is increasingly becoming a unique asset because of the parallels with reaching out to vulnerable populations in Flanders and Europe (e.g. during the Covid-19 pandemic and the mpox outbreak).
- ITM's alumni network is powerful. A characteristic feature of the partnerships mentioned is that many of them arise from personal contacts during their study or research period at ITM. Once they return to their country of origin, individuals from the ITM network regularly hold important policy or advisory positions in the Global South. This can be considered a form of (indirect) societal impact of ITM.
- Researchers, other staff, members of the Board of Governors, the General Council, and other (governance) bodies are highly committed to ITM and its goal of making a difference. This was illustrated by the involvement of staff and consultative bodies in co-creating the draft 2025-2030 policy plan, which called for substantial involvement and input from staff at different job levels and seniority.
- There is a broad consensus that the organisational structure with the three departments, is well suited to ITM's different missions and provides sufficient opportunities for collaboration between different areas of expertise and departments. The P³ structure (pathogens, patients, populations) is seen as a strength where these three Ps can reinforce each other and are necessary in addressing global health challenges.
- ITM has been increasingly successful in attracting external funding through competitive programmes, at Flemish, European and international level.
- ITM is a trusted advisor to governments and funders in Flanders, Belgium, Europe and at global agencies such as the World Health Organisation (WHO). In doing so, ITM scientists provide expert advice and insights and actively participate in various networks they are involved in (EDCTP3, One Health, etc.).

b. Weaknesses

- Despite efforts, interdisciplinarity in research could be further expanded. The lack of a specific substantial funding instrument within ITM for interdisciplinary research may partly explain the untapped potential of 'interdisciplinarity under one roof'.
- The ageing infrastructure and the financial needs to modernise it are significant. ITM is located on a historical heritage site, which limits the opportunities to modernise the buildings. This ageing infrastructure also affects ITM's attractiveness as an employer in the international 'war for talent' and is a major concern for staff and other stakeholders.
- The lack of structural funding, especially staffing for research purposes and for supporting research activities, is a concern for ITM. This lack of funding forces senior researchers to spend too much time on administrative matters instead of being able to devote this time to conducting research.
- In some areas, ITM lacks critical mass. It needs to ensure that key research themes are adequately covered, that partnerships crucial for the institute are prioritised, and that overhead costs, for example for ICT or communications, are covered by a sufficiently large budget. The current budget is very tight in this respect.
- The economic valorisation of knowledge and research results is both an opportunity and a weakness, given the relative inexperience and limited expertise internally. The experiences of benchmark organisations or other research institutions in Flanders may be helpful in this context.

c. Opportunities

- The WEWIS Department's expectations of ITM in terms of the research mission are in line with the ambitions expressed by ITM in its ex-ante policy plan 2025-2030 in terms of thematic priorities (pandemic preparedness, antimicrobial resistance, One Health, etc.) and reflects the increased importance of ITM's societal impact.
- Given the complex health challenges that require an interdisciplinary approach, there is scope to expand the interdisciplinary nature of research within the "P³ framework." Establishing stronger links between global warming, the migratory flows it generates, and the health impact could provide an opportunity for ITM to gain more visibility and enhance its positive impact on global health.

- Efforts are currently being made to strengthen the valorisation of research, a promising avenue. An important caveat is that this is not limited to valorisation projects with possible economic gains but also involves projects with more societal added value. Several positive experiences can serve as models to replicate or expand.
- Policymakers in Flanders and beyond increasingly need to prepare for pandemics. ITM has proven to be a crucial partner in this context, especially during the Covid-19 pandemic and during the fight against mpox, Ebola and other diseases. By permanently putting pandemic preparedness on the (political) agenda, ITM can emphasise its crucial role. ITM can also become a key player in health challenges caused by climate change and increased mobility.
- ITM has had access to funding opportunities from the FWO since 2015. There is an opportunity to make even better use of existing funding opportunities while expanding the funding instruments it can access, e.g. Hercules. Health initiatives at European level (on pandemic preparedness, AMR, One Health) could become a more important source of external funding for ITM.
- There remains an untapped potential to explore synergies not only with Flemish universities, but also with strategic research centres (SOCs, e.g. VIB) and other knowledge institutions. This applies in several areas, such as sharing infrastructure, research themes or activities. The "technology transfer offices" (TTOs) at the universities and the SOCs can also partner with ITM when further rolling out the HI4A valorisation initiative.
- The appointment of a new director at the beginning of the next policy period creates opportunities for ITM to have a fresh look at the organisation and expand the network.

d. Threats

- ITM will appoint a new director in 2025. ITM is a complex organisation. At this pivotal moment in ITM's life cycle, it is essential that the director plays a strong ambassador role and acts as the face of ITM.
- Some ZAPs with excellent academic credentials are about to retire, while (senior) researchers are staying within the same organisation for a shorter time compared to the past. Research output risks falling back if suitable successors are not found at both levels.
- The changes to the salary and benefits package are relatively new, and it remains unclear whether these changes will be enough to make ITM competitive against similar organisations in Europe and the rest of the world in terms of attracting top talent.
- ITM is neither a strategic research centre (SOC) nor a university but is equated with a university in certain respects. It receives funding from various sources from the Flemish and Federal governments, reflecting ITM's central role in addressing global health problems and promoting research in tropical medicine. Yet, it does not receive the same support and recognition as the aforementioned research institutes. Indeed, as a post-initial (postgraduate) higher education institution, ITM does not have access to certain research funding channels open to universities, and this may hamper ITM's ability to fully realise its mission and potential impact on pandemic preparedness and global health. ITM is not a PhD-awarding institution.
- Finally, a thorough and costly renovation and upgrade of infrastructure is on the table in the Masterplan Buildings. It is currently unclear who will bear the cost and in what form, which could jeopardise ITM's long-term prospects.

Figure SWOT (Source IDEA consult, WEWIS final report and our self-evaluation report)

STRENGTHS

- International institute with world-renowned expertise
- Solid contacts and cooperation with partner organisations in the Global South
- Strong alumni network
- Strong involvement of staff and stakeholders
- Organisational structure with the "three Ps"
- Attracting alternative sources of funding organisation-wide
- Reliable policy advisor in Flanders, Belgium, Europe and internationally

WEAKNESSES

- Interdisciplinary research through ITM's existing funding instruments
- Infrastructure is outdated and not easy to renovate due to the heritage status of some buildings
- Insufficient structural support for researchers
- Fragmentation of research across many research units and research themes
- Inexperience regarding technology transfer and economic valorisation

OPPORTUNITIES

- Alignment between the Flemish vision on the role of ITM and ITM's ambitions
- Expanding the interdisciplinary nature of ITM's research
- Strengthen the economic and societal valorisation of research
- Being prepared for pandemics and health challenges due to climate change
- Further expand financing opportunities from competitive funding in Flanders and beyond
- Explore synergy with other Flemish knowledge institutions and research centres
- Appointment of a new executive director with fresh ideas and a broad network

THREATS

- Appointment of new executive director during pivotal moment in ITM's life cycle
- Possible declining research output upon departure of renowned ZAPs
- Uncertainty about the attractiveness of the salary and benefits package in the international labour market
- Compared to other Strategic research centres in Flanders, ITM receives limited funding
- Certain research funding channels are not accessible to postgraduate education institutions like ITM
- Insufficient funds for the realisation of the Masterplan Buildings and for investment in state-of-the-art research infrastructure

Ambitions & Objectives for 2025-2030

3

1. Context

ITM operates in a world where powerful forces are transforming the global landscape of research, education and service delivery in global health. The Covid-19 pandemic disrupted progress towards achieving the Sustainable Development Goals and led to a significant shift in the international context. This evolving global scenario, characterised by a new geopolitical landscape and rapidly changing health challenges, has heightened the need for research that can drive essential innovations. As a response, publicly funded research and development (R&D) initiatives are shifting their focus towards societal challenge-oriented research, which demonstrates concrete 'Pathways to Impact' and fosters cross-sectoral synergies (e.g. health knowledge and development).

Major threats to global health in the 21st century are **climate change, environmental degradation and antimicrobial resistance**. These global issues directly impact health, nutrition, mental and social well-being, and intertwine with other worldwide concerns such as urbanisation, migration and displacement. Groups and populations in vulnerable situations are disproportionately affected, highlighting the urgency of addressing these challenges.

Considering these unprecedented complexities, the broad **adoption of systems thinking approaches** in health research becomes paramount. This involves inter- and transdisciplinary collaboration, including community stakeholders as in the "One Health" approach, which is increasingly acknowledged globally as essential to investigate the links between human, animal, and environmental health. However, translating these concepts into practical actions and subsequent policies remains a challenge.

Further transformations are underway that are significantly influencing the landscape and, as such are a relevant field of activity for ITM.

1. The post-Covid-19 era emphasises biomedicalisation and health security agendas, while the need for systems thinking and health systems strengthening is higher than ever in the context of pandemic preparedness.
2. Growing inequalities, weak health systems, exponentially changing demographics and urbanisation trigger considerations on the delicate balance between global policy recommendations/initiatives and tailored localised solutions.
3. A new global health order is emerging where African multilateral institutions, in particular, take on a more prominent role as partner and with growing private sector involvement. Africa's goal of establishing self-reliant health systems requires extraordinary efforts and partnerships. These endeavours aim to address various challenges, including obstacles to local R&D, manufacturing, and ensuring fair access to high-quality health products that meet the continent's needs.
4. Digital technology, including artificial intelligence, plays an increasingly important role in reshaping health research, and has major potential to transform health care delivery, research and education, but also poses serious challenges in terms of exclusion and inequality.
5. As health moves to a critical economic and security issue, opportunities emerge to push for strategic international cooperation on health.

In this dynamic landscape, ITM's research, education and international cooperation strategies must adapt to evolving global health priorities, including its engagement with the African research and innovation ecosystem. In leveraging a longstanding trust relationship with partners in the Global South and a global network of alumni driving change in public health, ITM is uniquely positioned. Years of capacity strengthening, guided by "Switching the poles" principles, have cultivated mutual trust and respect. This allows us to collectively play a pivotal role in shaping policy worldwide. With equitable partnerships and expertise in interdisciplinary research, we guide progress towards universal health coverage, aiming for Health for All.

2. Our Ambition for 2035

What do we want to achieve by the end of the next two policy periods?

By 2035, we aspire to be one of the most trusted and innovative academic institutions in the field of tropical medicine and public health, driven by our pioneering research, world-class medical services, excellent education, and unwavering commitment to equitable partnerships. Our research, education and service delivery in the field of tropical and emerging infectious diseases and health systems are rooted in a deep understanding of the health problems afflicting underserved populations and their contexts. In the run-up to the end of the sustainable development goals agenda in 2030, our work will keep on significantly contributing to Sustainable Development Goal 3, to ensure healthy lives and promote well-being for all at all ages, in particular SDG 3.1 (Maternal Mortality), SDG3.2 (Neonatal and Child Mortality), SDG3.3 (Infectious Diseases), SDG3.4 (Non-communicable Diseases), SDG3.7 (Sexual and Reproductive Health) and SDG3.8 (Universal Health Coverage) and SDG3.9 (Environmental Health).

Our contributions to global public health will be acknowledged and respected worldwide. As a knowledge hub on tropical diseases, our expertise will also be highly relevant for traditionally more temperate regions that will be increasingly confronted with tropical and emerging infectious diseases because of climate change, globalisation and mass migration.

Our journey towards this ambition involves several pillars, which are summarised in our strategic objectives in the following policy period.

3. Institutional Strategic Objectives 2025-2030

SO1 - To excel in **research,** pushing the boundaries of knowledge and innovation, leading to cutting-edge **innovations** that can be translated into products and outcomes that directly benefit the health and lives of those in need and contribute to resilient health systems. For this, early involvement of stakeholders (e.g. communities, policymakers) is essential. Our research will have a profound impact on **health policies globally**.

SO2 – To thrive as an open global campus for students, teachers, alumni, professionals, and researchers and to serve as a **hub for advanced academic education.** Our academic programmes, online, in-person or hybrid, will be sought after by students from around the world, and our graduates will be at the forefront of driving change in global public health.

SO3 - To establish our **medical services** and **reference laboratories** as an unequivocal global benchmark for tropical diseases and travel medicine. We will steadfastly pursue **excellence in patient care** and cutting-edge **laboratory diagnostics** in the specialised realm of tropical infectious diseases.

SO4 - To amplify the influence of our collective expertise and knowledge with partners, we will foster increased **scientific exchange and forge synergistic partnerships**. Our focus is on building a shared academic reputation within our global network. Central to our approach is the commitment to equitable partnerships, where collaborations with public and private institutions worldwide are marked by mutual respect, shared objectives, and a dedication to addressing health disparities.

SO5 - To strengthen the overall coherence**, efficiency and effectiveness** of ITM's policy by investing in research- and management platforms within the organisation or by strategic partnerships.

4. Institutional/Strategic Themes

Building on the Self-Evaluation and the SWOT analysis, we have refined our institutional strategic themes. These themes are based on our renowned expertise, deeply rooted in our historical niche of tropical medicine and public health. We are building upon long-term partnerships, fostering a high level of interdisciplinarity, utilising strong innovative technological platforms, and reference laboratories/services. Additionally, our commitment is shaped by our responsiveness to new global challenges and the needs expressed by our stakeholders. We hereby commit to the following institutional (strategic) themes:

a. Sustainable and Equitable Health Care and Health Systems

'Sustainable and equitable health care and health systems' is an approach seeking to organise health systems that respond to the needs of current and future generations while minimising negative impacts on the environment. It aims at improved health outcomes at the individual and collective level. This includes ensuring universal, equitable access to affordable, high-quality care and effective health promotion and prevention. In such systems, health actors also respond to societal challenges, including global warming, antimicrobial resistance, emerging infectious diseases, urbanisation, conflicts and migration, and their effects on the health and well-being of individuals and communities. They adapt and transform their systems through adaptive governance and intersectoral collaboration. Adopting complex systems approaches to health and building on its multidisciplinary research capacity, ITM has the potential to contribute to improving current health systems while developing innovative research on the current global challenges.

b. Disease Prevention, Control, and Elimination

'Disease prevention, control and elimination' focuses on developing, implementing and evaluating interventions to prevent or reduce the burden of infectious and non-communicable diseases and, in some cases, eliminate them in specific geographical areas or populations. This requires an in-depth understanding of pathogen biology and interaction with its ecosystem, disease transmission dynamics, interaction with non-communicable diseases, understanding of local biological and non-biological determinants, and characteristics of high-risk populations, situations and behaviours. It also requires developing, implementing and evaluating novel diagnostic and surveillance tools for early detection and monitoring. Based on the knowledge of drivers of immune response, antimicrobial resistance of different pathogens, and gene drive research in mosquitoes, identification and testing of vaccine candidates and new or repurposed treatments or vector control measures can be done. Effective tools and strategies need to be conceptualised, considering their applicability in real-world settings (impact, feasibility, acceptability, and sustainability). Once available, they should be continuously evaluated during deployment.

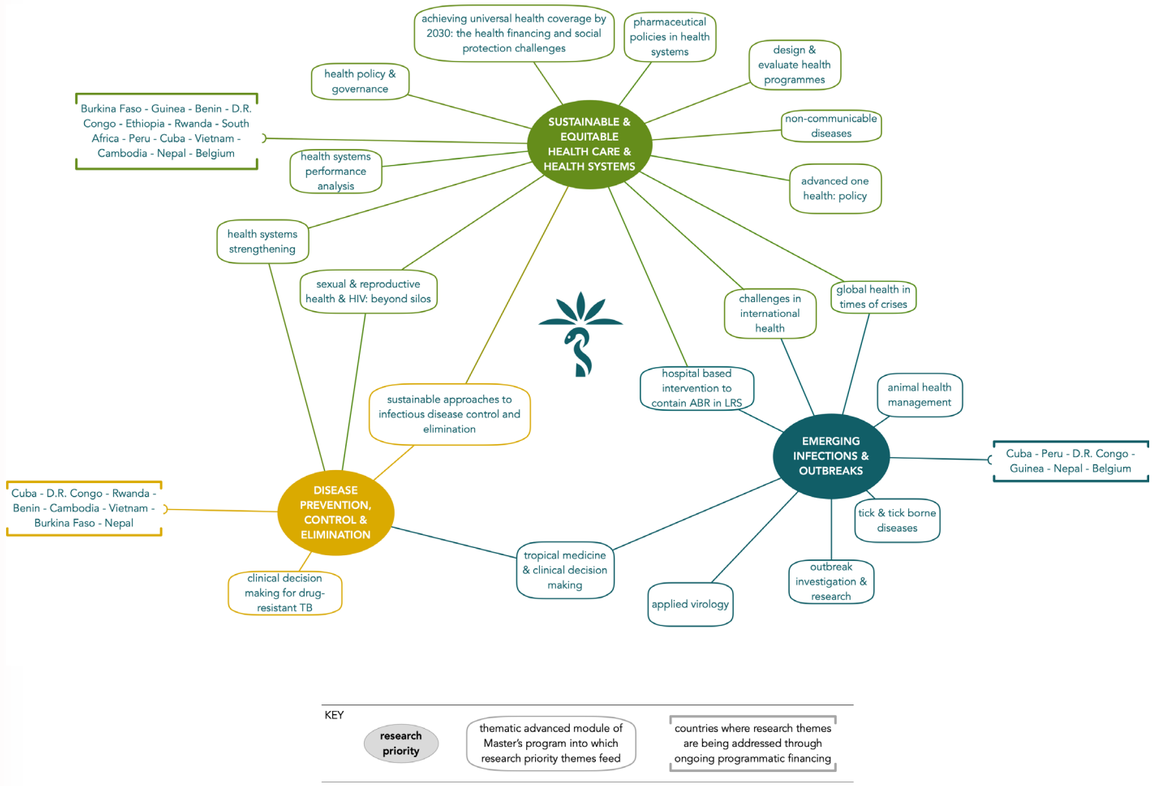
c. Emerging Infections and Outbreaks

'Emerging infections and outbreaks' focus on new or re-emerging infectious diseases with epidemic potential. It involves a robust partnership with the local health system, for characterising the causative pathogen and unravelling the drivers of its emergence using a One Health approach; conducting disease and risk surveillance to monitor dynamics and impact on epidemiology and clinical manifestations of other diseases; engaging with the communities from the early stage of an outbreak to build mutual dialogue and foster trust ex-ante. It encompasses Global Outbreak Preparedness, i.e. the development of strategies to prevent, control, and mitigate the impact of outbreaks, as well as strengthening surveillance capacities throughout the entire health system, resilience of health systems in emergency preparedness and response, fair data and sample sharing, R&D of countermeasures, timely deployment of countermeasures through the local health systems. It is essential to plan, from inception, actions on risk communication strategies, including countering mis- and disinformation, to continuously engage with communities, and to evaluate the acceptability and effectiveness of (novel) interventions during health crises.

d. A note on Antimicrobial Resistance (AMR)

AMR is a universal health crisis relevant to most health problems that ITM is addressing, such as (myco)bacterial infections, leishmaniasis, malaria, tuberculosis, and HIV. AMR deserves and will get even more attention in the next policy period. However, AMR cannot be tackled in isolation, and therefore, we have embedded AMR research in the three main institutional themes in which ITM aims to excel in for the coming years.

The institutional strategic themes are firmly incorporated in research, education, capacity strengthening and service delivery, as shown in the figure below.



Research & Innovation

4

Institutional SO1 – To excel in **research**, pushing the boundaries of knowledge and innovation, leading to cutting-edge **innovations** that can be translated into products and outcomes that directly benefit the health and lives of those in need and contribute to resilient health systems. For this, early involvement of stakeholders (e.g. communities, policy makers) is essential. Our research will have a profound impact on **health policies globally**.

1. Collaborative Excellence: ITM's Scientific Departments

ITM is home to **three scientific departments** with specific disciplinary expertise, focusing on **patients** (Department of Clinical Sciences), **pathogens** (Department of Biomedical Sciences) and **populations** (Department of Public Health).

The scientific pillars of ITM are the academic units headed by a professor (ZAP). Hiring high-quality and high-potential unit heads is key. The institutional ZAP plan foresees ten academic units for every department (see annexes 1-3 for more details). The choice to have three equally strong departments follows the need for an integrated and systemic approach to global health challenges. Interdepartmental research centres will create critical mass on priority research themes.

Scientific departments	Biomedical Sciences (BMS)	Clinical Sciences (DCS)	Public Health (DPH)
Focus	Pathogens	Patients	Populations
Core facilities	Insectary BSL-3 and Reference laboratories	Medical Services Reference laboratories Clinical Trial Unit & Clinical Trial Site	Datahub Geospatial Health Research
Education	MSc Global One Health	MSc Tropical Medicine	MSc Public Health
Research Units	Virology (Head of Department)	Neglected Tropical Diseases (Head of Department)	Pharmaceutical Public Health (Head of Department)
	Molecular Parasitology	Travel Medicine (Head of Medical Services)	Health Policy
	Trypanosoma	Tropical Diseases	Socio-Ecological Health Research
	Mycobacteriology	Sexually Transmitted Diseases	Reproductive and Maternal Health
	Malariology	HIV & Tuberculosis	Equity and Health
	Entomology	Clinical Emerging Infectious Diseases	Complexity and Health
	Experimental Immunology	Clinical Virology	Mycobacterial Diseases and NTD
	Virus Ecology	Clinical Immunology	Sexual Health including HIV
	(Helminthology)	Tropical Bacteriology	Eco-Epidemiology
	(Experimental Parasitology)	TBD	Emerging Infectious Diseases

Core facilities are shared over several units and departments. Each department is taking the lead in one of the **MSc programmes**, with a strong interdepartmental approach to teaching.

At ITM, every department is dedicated to advancing our **institutional research priorities**: Sustainable and Equitable Health Care and Health Systems, Disease Control and Elimination, and Emerging Infections and Outbreaks.

Embodying the **academic triad**, our departments uphold a shared philosophy, recognising that the synergy of excellence and relevance in research is achieved through robust **collaboration**, comprehensive training, education, capacity sharing, and the dynamic staff exchange between ITM and our esteemed partner institutions. These valued partnerships extend across LMICs in Africa, Latin America, and Asia, as well as Flanders, Belgium, Europe, the US, and Australia, underscoring our commitment to fostering a worldwide network for impactful and inclusive research, education and service delivery.

a. Department of Biomedical Sciences (see Annexe 1)

The **Department of Biomedical Sciences** performs **world-class biomedical research on diverse pathogens of concern to global public health and the diseases they cause**. They generate fundamental insights in pathogen-host-vector interactions, study patterns and drivers of pathogen and vector adaptation to changing macro- and micro-environments, and develop innovative tools to improve diagnosis, surveillance, prevention, treatment, and control of infectious diseases. Their comparative advantage to classical academic research groups consists of combining rigorous lab-based experimental research using advanced state-of-the-art methods and approaches along with strong field-based epidemiological and ecological research.

They specifically focus on vector-borne protozoan **parasites** (such as *Leishmania*, *Trypanosoma* and *Plasmodium*), **(myco)bacteria** (in particular *M. tuberculosis*, *M leprae* and *M ulcerans*), **viruses** (predominantly arthropod-borne viruses and haemorrhagic fever viruses) and their **vectors** (among which *Anopheles*, *Aedes* and *Culex* mosquitoes, tsetse flies and sand flies).

The different research units converge around research themes such as:

- Generating an in-depth understanding of pathogen-host-vector interactions;
- Deciphering (molecular) mechanisms and drivers of pathogen/vector adaptation in response to changing environments (such as drug pressure, immune evasion, co-infection and interactions with new hosts, the impact of climate change, changes in land use etc.);
- R&D on innovative tools to improve the diagnosis, surveillance, prevention, treatment and control of (neglected) pathogens and (re-)emerging pathogens of public health concern, and the taxonomic identification, surveillance, prevention and control of vector species.

b. Department of Clinical Sciences (see Annexe 2)

The research of the **Department of Clinical Sciences focuses on improving preventive, diagnostic and treatment practices of tropical and (re)emerging global infections** both in LMIC and in Belgium/Europe. The comparative advantage of this department lies with the multidisciplinary **clinical and laboratory expertise** putting them in a unique position in the clinical care research setting. The research topics are inspired by the clinical work at ITM and their strong link with scientific partners in LMIC, as was exemplified by the latest mpox outbreak in Belgium and DRC.

In addition, the department is home to the **Clinical Trials Unit** and a newly established **Clinical Trials Site**, the medical services, the **national reference laboratory** for the diagnosis of **infectious and tropical diseases**, an **AIDS reference laboratory** and several national reference centres, including for Arboviruses and Sexually Transmitted Infections.

Their **research** converges around central topics such as:

- Improving vaccination for tropical and (re)emerging global pathogens
- Reaching the Sustainable Development Goals (SDG) of several neglected tropical diseases such as leishmaniasis, rabies, schistosomiasis
- Tackling clinical surveillance of, and research on, acute febrile illness and outbreaks of emerging infectious diseases (such as haemorrhagic fevers and mpox)
- Addressing the evolving resistance of tuberculosis and malaria
- Invasive bacterial infections: (antimicrobial resistance) epidemiology and diagnostics
- Advancing travel medicine and HIV/STI care

c. Department of Public Health (see Annexe 3)

The **Department of Public Health** performs scientifically excellent research. It achieves a high societal impact, promoting universal health coverage in the fields of Health Systems and Health Policy, Sexual & Reproductive Health, Tropical Infectious Diseases and EcoHealth. The research is done in collaboration with communities, policymakers and other relevant stakeholders to get research results into policy and practice (GRIPP). It focuses on **methodological innovations** (e.g., in spatial analysis, the impact of artificial intelligence on research methodology, realist evaluation, digital surveillance analysis, integrated outbreak analytics, secondary data use including data curation and ethics challenges, adaptation of pharmaceutical policy research methods to conflict settings, etc.), and on **understanding and addressing concrete health problems**. Disease-specific challenges are framed in their social and ecological context (e.g., through EcoHealth and One Health approaches). The department coordinates the WEWIS-funded **Population Data Science Hub**, which aims to unlock and share expertise in qualitative and quantitative data, including AI or big data, with specific attention to contextual determinants of ethical access to and use of data and for preventing inequities in decision-making. It also coordinates a new research infrastructure for interdepartmental work using geospatial modelling to support **Geospatial Health Research** and to further develop, apply, and teach geospatial research methods.

The department holds the ambition:

1. To improve the understanding of the interlinked biological, social, ecological, political and health system-related determinants of health at population level
2. To develop, implement and evaluate policies, programmes and interventions that support and strengthen the health of individuals and communities
3. To co-create knowledge and capacity to contextualise, prevent, and detect health problems, and to develop effective responses to local and global health challenges and threats.

2. The ITM Science Cycle for Policy and Society

The departments' activities can be mapped on a circular framework representing an expansive and inclusive academic ecosystem. Synergistically underpinned by research, education, service delivery, and policy support, the ITM Science Cycle reflects a steadfast commitment to excellence, innovation and collaboration, working towards sustainable health for all. For the next policy period, we will increase our focus on innovation and valorisation (in line with the Flemish government's expectations in its science and innovation policy) and actively involve stakeholders worldwide. With this open innovation mentality, we expect to increase excellence institution-wide and respond to the expectations of Flanders in terms of valorisation of ITM's knowledge base for broad (societal) applications worldwide.

ITM Science Cycle (P^3): We deepen our understanding of health complexities through top-notch research on pathogens, patients, and populations. This knowledge forms the foundation for co-creating, developing, and evaluating innovations with our stakeholders, including communities. We test these innovations where they are most needed, adapting them to local contexts for optimal integration into global healthcare systems. Working with all relevant stakeholders, we translate evidence into policies and practices. We stay alert to changing health trends, formulating new research hypotheses based on our observations.

FROM RESEARCH TO HEALTH PRACTICE & POLICY

the ITM Science Cycle

* including 19 countries with institutional partners and 11 countries home to at least one institution that collaborated on over 30 research publications in the previous policy period, total 30 countries over all continents.

Basic Research is the exploration of the **underlying reasons behind observed phenomena**. Within ITM, this is viewed through two distinct lenses:
Adaptation and Resilience: We delve into the fundamental mechanisms that govern the adaptive and resilient capacities of various elements such as pathogens, vectors, patients, populations and health systems.
Interaction in the Ecosystem: Probing molecular and cellular interactions within the vector-pathogen-human-animal environment at the micro level, and examining the interplay between individuals, health issues, health systems, and the broader social-ecological context at the macro level. We employ comprehensive systems approaches, including the eco-health approach, realist evaluation, and other complexity-sensitive methods to enhance our understanding of health system performance, resilience, and sustainability.

Applied Research deals with the **practical application of insights** derived from basic research, whether generated within ITM or externally. We invest in:
Social & Technological Innovations: Developing and designing innovations for health systems, as well as introducing new technologies and adapting existing ones for prevention, surveillance and disease control.
Trials & Interventions: Researching un- or under-tested interventions and ensuring that the generated evidence is effectively translated into recommendations and policies for implementation.

Operational and Implementation Research focuses on **optimising interventions and innovations for real-world**, local contexts. It encompasses research into the requirements for successful local adoption and integration into local health systems, practices and policies.

Tailoring to Local Conditions: Research how interventions, whether already implemented or recommended elsewhere or globally, or products, processes, and methods requiring adaptation, can be effectively implemented in diverse contexts and/or made sustainable.
Health Systems & Policy Research & Disease Surveillance: Studies to uncover trends in clinical disease presentation, health system functionality, health itineraries, and the impact of improved interventions. Additionally, we collaborate with health organisations implementing surveillance innovations to identify changing trends in pathogen population characteristics, population immunity, the role of subclinical infections and disease epidemiology.

3. Our Research Approach: P³

Each ITM department has a well-defined but interconnected expertise. The interdisciplinarity "under one roof" has always been considered a significant asset of ITM. Our **integrated research on pathogens, patients and populations (i.e. P³)** is a unique opportunity to address health challenges, and forms a rock-solid foundation for our systems approach. P³ is already encouraged through interdepartmental funding programmes, e.g. for outbreak research and through country and thematic programmes within the DGD framework agreement (2022-2026). The P³ approach will be further leveraged in the policy period 2025-2030.

a. The History of the P³ Approach

Historically, the robust P³ approach has been instrumental in establishing ITM as a leader in research on TB, malaria, HIV, and neglected tropical diseases. The same interdisciplinarity allowed us to set up a clinical trial in Guinea, during the 2014-2016 Ebola outbreak in West Africa. This trial, published in the *New England Journal of Medicine*, highlighted the ITM-coordinated approach including transversal skills such as anthropology and research ethics, confirmed the need for dedicated interdisciplinary support for outbreaks and outbreak preparedness, and resulted in funding for the **Outbreak Research Team** (ORT). This multidisciplinary ORT was again successfully leveraged during Covid-19 pandemic and the mpox outbreak in 2022.

- Over the past five years, ITM has strategically **strengthened its research capabilities**, reorienting the priorities of existing units and establishing new ones dedicated to understanding and combatting emerging infectious diseases.

- The **Institutional Review Board** (IRB) has been strengthened in terms of administrative support, to allow for maintaining the in-depth, but rapid review of emergency research (within 4 working days).
- There were additional, **strategic investments in research platforms** like the Clinical Trial Site, the insectary, the immunology laboratories, and the Population Science Data Hub.

This strategy currently drives our expanding research portfolio, particularly on emerging diseases. We are ready to mark ITM as a global centre of excellence in the critical field of ***emerging viruses and epidemic preparedness***.

b. Example: Applying the ITM Science Cycle to the P³ of Emerging Viruses and Epidemic Preparedness

What is the challenge?

The challenge lies in those emerging infectious diseases that have the potential to cause epidemics and pandemics. This threat is on the rise due to factors like climate change, urbanisation, and environmental degradation. It poses a significant risk to global health security, particularly in resource-constrained settings, necessitating robust preparation for future outbreaks. This preparation includes the ability to swiftly undertake four essential actions during an outbreak:

(i) build from the start an equitable partnership with local (health and non-health) stakeholders and communities
(ii) gather real-time clinical and biomedical insights using newly developed tools,
(iii) stimulate/accelerate the development and deployment of knowledge and countermeasures for patient care, and
(iv) advise partners and health authorities on how to effectively contain outbreaks to mitigate both health and other societal impacts.

[biobank - insectary - ORT - IRB- CTU - BSL3 - population data hub - DAC - NRC Tropical Infectious Diseases - NRC Arboviruses]
#Vaccines #ChildHealth #AMR #Travel #ClimateChange #Zoonosis #OneHealth #Access

c. Creating Critical Mass for the P³ of Emerging Viruses and Epidemic Preparedness

Ten units at ITM are currently working on the P³ of Emerging Viruses and Epidemic Preparedness. The expertise of this multidisciplinary group positions ITM as a key player in Belgium and Europe in managing high-risk pathogens:

- The Units of Virology (BMS) and Clinical Virology (DCS) focus on enhancing the diagnosis and understanding of the biology of viral pathogens. They are actively involved in developing innovative diagnostic tools and surveillance methods using advanced technologies like plasmonic nanoparticle sensors and microfluidic lab-on-a-chip applications.
- The Unit of Entomology (BMS) explores the intricate relationships between vectors and pathogens. Taking a holistic approach, this unit studies coinfections in vectors, particularly in regions like Latin America and sub-Saharan Africa, shedding light on how multiple pathogens interact within the same vector. These insights hold the key to developing innovative strategies for controlling vector-borne diseases.
- The Unit of Emerging Infectious Diseases (DPH), and the Unit of Virus Ecology (BMS), spearhead interdisciplinary investigations into arboviruses and rodent-borne diseases. They study the impact of human mobility patterns on the re-emergence of infectious diseases in LMIC. By combining genomic and epidemiological studies, the team aims to identify strategic intervention sites and quantify zoonotic transmission risks associated with human behaviour and environmental factors.
- The Unit of Clinical Emerging Infectious Diseases (DCS) plays a critical role in outbreak management. Specialising in studying emerging pathogens in sub-Saharan African countries, the unit contributes valuable insights into transmission patterns, clinical presentation, treatment, and containment strategies.
- The Unit of Clinical Immunology (DCS) has established immunosurveillance platforms that are available for emerging infectious diseases research across the various units and is currently leading a CEPI-funded large project comparing various booster vaccinations for Ebola Virus Disease.
- The Units of Health Policy (DPH), Pharmaceutical Policy (DPH), Health and Complexity (DPH) and Socio-Ecological Health Research (DPH) conduct research to support the implementation and delivery of newly-developed diagnostics, preventive and curative tools and interventions, thanks to their combined expertise in analysing the impact of international health policies on local access, understanding local systems resilience, studying communities' trust including hesitancy toward health interventions and GRIPP.

This integrated effort showcases ITM's commitment to advancing our understanding of emerging infectious diseases and vectors. Through cutting-edge research, diagnostic innovations, and multidisciplinary collaboration, ITM stands at the forefront of the global fight against the ever-evolving landscape of infectious diseases.

d. P³ Themes In the Future

We strongly believe that there is potential for more P³ themes within ITM. A selection of possible themes are Tuberculosis and Leprosy, Leishmaniasis, Malaria, Sexual Health and HIV, Sustainable and Resilient Health Systems, etc. If successful, they may evolve into institutional research centres on priority themes. The management committee of ITM will strategically launch calls for proposals that feed into the need to increase critical mass on priority research themes. The research excellence funding instruments of WEWIS will be instrumentalised to address these P³ or grand challenges ambitions. The criteria that will be used are critical mass, the added value of interdisciplinarity, global partnerships, including those in the Flemish and European ecosystems, etc. If the P³ approach is successful, this may lead to a new organisational set-up where researchers belong to larger interdisciplinary groups working on priority themes rather than to disciplinary departments.

4. Leveraging Evolving Partnerships for Research Excellence

ITM's fundamental strength lies in its enduring and trusted partnerships with communities, institutions, and governments, enabling collaborative innovation and knowledge sharing. Today's global health landscape is experiencing seismic shifts in power and knowledge dynamics, reshaping partner roles and capacities across the board. We embrace these shifts, recognising them as opportunities to invigorate our collaborations with fresh perspectives and equitable idea exchange. In this spirit, ITM is proactively recalibrating and strenghtening its position within this adaptive network.

Aligned with the ITM Science Cycle, we will pursue the following priorities in our transformative partnerships:

- **Synergistic Research and Capacity Sharing**: Championing the integration of research and capacity sharing, nurturing the next generation of global health leaders.
- **System approaches (e.g. One Health):** Transcending disciplinary divides, we harness ITM's interdisciplinary human health expertise (with P³ centres discussed above) and seek complementary expertise from partner institutions to confront complex health challenges.
- **Pathways to Contextualised Innovation**: Collaborating with a broad spectrum of stakeholders to co-create tailored solutions that respond effectively to the specific health needs of various communities.

Specifically, ITM will strategically enhance its role and partnerships:

1. Innovating for Preparedness and Climate Resilience in Flanders and Europe:

- Strengthen research collaborations to align with regional preparedness and climate resilience strategies.
- Enhance Flanders' status as a nexus for preparedness research and innovation.
- Actively co-create responsive research, innovation, and health policies to tackle emerging health challenges swiftly.
- Collaborate with local and national policymakers, change agents, and industry to translate research into solutions that are adaptable globally yet tailored for local implementation.
- Participate actively in the Flemish ecosystem and Global and European networks for pandemic preparedness (Be Ready, ECRAID, ONE-HEALTH-AMR, ONE-HEALTH, ...)
- Participate with our research infrastructure in the European Strategy Forum on Research Infrastructure (ESFRI), such as ECRIN, EATRIS, BBMRI, etc.

2. Embracing the Changing Narrative in the Global South:

- Foster equitable research partnerships attuned to LMICs' research excellence and self-sufficiency aspirations.
- Support South-South collaborations to strengthen regional health innovation.
- Engage with digital platforms and initiatives that empower local researchers in remote settings, which align with the drive for self-sufficiency.
- Elevate the global significance of local research outcomes through ITM's international perspective.
- Take an active role in the EDCTP3 association and Team Europe initiatives on Public Health capacity in Sub-Saharan Africa (SSA), sexual and reproductive health and rights in SSA, Manufacturing and Access to Vaccines, Medicines, and health technology products in Africa, and Sustainable Health Security in Africa.

To confront global challenges like climate change, ITM synergises North and South, driving research and innovation to deliver solutions. We channel excellence into action, shaping a future where collective ingenuity overcomes shared challenges to health and well-being.

5. Valorisation: a pathway to impact

ITM is launching Health Innovations for All (HI4A) in 2025 to catalyse societal and technological impact, advancing the ITM Science Cycle. HI4A's objective is to transform research and scientific breakthroughs into inclusive health innovations that are accessible, affordable, relevant, and scalable, thereby advancing global health equity. HI4A will operate on two pivotal levels to meet distinct valorisation needs:

Co-Creation Innovation & Impact (I&I) Policy & Practices: HI4A will contribute to shaping public I&I policies by championing a holistic approach integrating research, education, and capacity sharing. It will focus on identifying, advocating for, and operationalising synergies across funding streams, emphasising that research, innovation and capacity sharing achieve greater impact when they are mutually reinforcing. This includes providing strategic advice to key global health actors like the EDCTP Association, Team Europe initiatives, and other national and regional R&I programs. As Belgium's Technical Advisor in the EDCTP General Assembly and a member of the EDCTP working group on aligning in-kind national contributions, HI4A actively identifies opportunities and mechanisms to align European research efforts and optimise collective investments in global health.

In alignment with the EU Knowledge Valorisation guidelines, HI4A will foster valorisation practices tailored to impact-driven research by (i) promoting entrepreneurship not just as an act of starting a business, but as a mindset for creating sustainable and social change, and (ii) managing all intellectual assets emerging from research, beyond traditional IP. This inclusive approach focuses on transforming patentable IP, as well as non-patentable IP like data, know-how, methodologies, processes and any other type of research result into sustainable products, services, solutions, and policies that deliver both societal and economic value. By promoting and educating these practices, HI4A aims to embed innovation deeply within ITM's culture and support other impact-driven research entities by sharing evidence-based strategies, tools, and best practices for valorising intellectual assets to achieve broader societal benefits.

ITM Knowledge Valorisation operations: HI4A will be initiated within the research office and will evolve into a fully-fledged programme managed by a dedicated Innovation & Impact (I&I) unit by 2029. This unit will serve as the primary innovation partner for ITM's three research departments. Candidate valorisation assets will undergo a comprehensive evaluation process to assess alignment with ITM's strategic objectives and resources. Selected intellectual assets will enter tailored innovation pathways that address all steps necessary to achieve the intended impact. These efforts will focus on developing innovations that address real-world challenges, ensuring that ITM's research outputs are translated into contextually relevant solutions and benefits for society.

The I&I unit will consist of a transdisciplinary team consisting of three core profiles:

1. **Research Impact Officer:** Works closely with researchers to co-create impact-driven pathways, engage stakeholders early, and secure their commitment, thereby enhancing the competitiveness of ITM research proposals. Monitors and evaluates the impact potential of research outcomes, supports knowledge translation into policy briefs and/or transition into innovation pathways, and raises visibility of ITM's research impact.
2. **Innovation Developer:** Co-creates innovation pathways for selected research outputs together with the relevant research team and manages the institutional innovation portfolio, including funding instruments and external partnerships. Oversees intellectual asset strategies, sustainable technology transfer, and community training in innovation management, ensuring that ITM's assets are accessible and effectively licensed.
3. **Lead Innovation & Impact (Senior Innovation Policy Expert):** Shapes a comprehensive I&I strategy that integrates research, innovation, education, and capacity building. Coordinates HI4A activities, attracts additional programmatic funding, and positions ITM as a leader in inclusive innovations within the Flemish and EU ecosystems. Responsibilities also include forming strategic partnerships with other actors in the impact-driven innovation space and advising on I&I policy internally and externally.

ITM's Innovation Advisory Council (IAC), composed of international experts, will further provide strategic guidance to ensure the alignment of HI4A's frameworks and innovation pathways with global health impact goals.

Policy Instruments: To achieve its innovation and impact goals, HI4A will develop a comprehensive Global Access & Impact policy, replacing the outdated IP policy and integrating related data access and open science policies. Two internal programs will be launched: (i) the **Moonshot Program**, which sets bold, long-term transformative innovation targets aligned with ITM's strategic priorities through co-creation with diverse partners; and (ii) **the Bridge Program**, which offers flexible funding for high-potential, short-term innovation projects that may not align with Moonshot objectives but still hold promise for significant societal impact.

By 2035 ITM's I&I unit aspires to be recognised in Belgium and beyond as a leader in translating intellectual assets into sustainable health products, services, solutions, and policies. Guided by a pioneering valorisation policy prioritising both access and impact, the unit will have developed strategies and networks to manage diverse intellectual assets, ensuring benefits reach vulnerable populations globally.

Value of HI4A for Flanders

HI4A is positioned to strengthen Flanders' leadership in health innovation by filling a crucial gap in the current innovation landscape—valorising research results that offer substantial societal benefits but do not align with traditional economic return on investment models. This approach will complement the existing Flemish innovation ecosystem, where institutions like VIB and potentially other research centres can leverage the HI4A framework to maximise the impact of their research with high societal value. In return, the advanced business development expertise in conventional valorisation pathways available at these institutions provides a reciprocal opportunity to support ITM in translating economically viable research outputs into solutions relevant for high-income countries.

Additionally, these Flemish synergies can extend to local production of health products in low- and middle-income countries (LMICs). For example, VIB's innovation in biotechnology production processes could be coupled with HI4A's efforts to develop cost-effective diagnostics manufacturing, focusing on process simplification and accessibility. By fostering such collaborative efforts, HI4A can act as a catalyst, ensuring that Flemish research outputs with significant societal impact do not go unvalorised.

Leveraging ITM's global networks and multidisciplinary expertise, HI4A will attract global talent and elevate the region's scientific reputation. The focus on the sustainability of innovations will also attract further investments, reinforcing Flanders' status as a prime hub for the biotech and health tech industries. Moreover, HI4A's health solutions will directly benefit the well-being of Flanders' residents, enhancing care for chronic conditions and developing tools to manage emerging infections linked to climate change.

HI4A's dual-track strategy, which establishes a direct link between policy development and knowledge valorisation, provides a dynamic model to ensure that R&I policies stay aligned with the latest scientific developments and evolving societal needs. This dynamic framework will provide policymakers with the adaptability required to navigate a rapidly changing society.

As HI4A's innovations gain traction, they will enhance Flanders' visibility on the international stage, fostering global partnerships and strengthening its reputation as a centre of excellence in global health, building on the legacy that ITM has cultivated over the years.

6. Strategic & Operational Objectives for Research & Key Performance Indicators

Below are the strategic and operational objectives for research and a proposal for Key Performance Indicators (KPIs) to measure progress on the set objectives. The indicators will be measured either annually or at the 2030 review. In the annual assessment, we will use 3-year average values (from the year of assessment and the two previous years) to smooth the effects of positive and negative outliers. The results of the multi-year measurement will feed into the 5-year assessment in 2030. A mid-term evaluation will be held with ITM's Scientific Advisory Council, and based on the results of this midterm review, the targets below can be adjusted.

Further, performance for each objective is also examined qualitatively (Qualitative Indicators-QIs). Lastly, a number of additional indicators—both quantitative and qualitative—are monitored annually (Monitoring Indicators - MIs). All indicators are assessed according to the Key Performance Areas (KPA). These are the result areas based on the objectives of the Flemish government regarding innovation and science policy.

Summary table Research ambitions

SD1 - Pursuing excellence and relevance in ITM research [IDEAS]

Scientific excellence, Valorisation, Entrepreneurship, Financial leverage, Infrastructure

OD1: The ITM's institutional research plan is operational and results in high-quality research with scientific impact

Scientific excellence

Qualitative indicators

- Examples of ITM research published in top journals with reference to press releases. We aim to publish original research articles in top journals every year and bring the results to the attention of the general public.
- Progress with ITM's 'publication and dissemination policy'. Impact factors are a traditional measure of a journal's 'importance', but they can be limited in assessing the impact of an individual publication. Among other things, the emergence of open access has led to discussion about how best to measure the impact of research. ITM is keeping a close eye on this discussion and is translating developments into an appropriate 'publication and dissemination policy' that it will also share with other partners in the Flemish and international ecosystem.
- Illustration of how the 'state-of-the-art research infrastructure' has contributed to scientific excellence.

Quantitative KPI	Target value
Proportion of publications in Q1 journals. In order to measure the scientific excellence of ITM publications, we aim to publish at least 50% of ITM publications in Q1 *(first quartile)* journals, which are the top 25% of journals in the subject category in which the peer-reviewed journal is classified. We also aim to publish no fewer than 300 scientific publications per year in total. If the publication and dissemination policy (see above) shows that the indicators and target values are no longer in line with the current debate and developments, they will be adjusted.	At least 50% of all ITM publications; At least 300 scientific publications per year
Percentage of peer-reviewed publications with a CNCI (Category Normalised Citation Impact) of at least 1.5, i.e. they are cited 1.5 times more than the global average of all publications of the same type, published in the same year and in the same scientific field. To measure scientific impact, we use the 'Category Citation Impact' (CNCI), an indicator that can be used for any publication indexed in the Web of Science via Clarivate Services. The CNCI is a neutral indicator that allows the scientific impact of a publication to be measured in the year of publication and normalised for discipline and document type. If the publication and dissemination policy (see above) shows that the CNCI or the target values for the CNCI are no longer in line with the current debate and developments, the indicator and the target values will be adjusted. s	At least 20% of all ITM publications have a CNCI of at least 1.5.

OD2: The conversion of research and innovation results into benefits for society is maximised ('knowledge valorisation').

Valorisation

Qualitative indicators

- Progress reporting on the evolution from an 'IP policy' to a 'Global Access & Impact Policy': a policy that ensures that knowledge and innovations are available at an affordable price to those who need them, particularly vulnerable populations worldwide. With this policy, ITM aims to play a pioneering role in the Flemish and international ecosystem.
- We strive to proactively screen the ITM research portfolio for innovation potential within the framework of 'Health Innovations for All' (HI4A).
- Illustrations of ITM advice to global health-related organisations (e.g. EDCTP3, Teams Europe, WHO, HERA) or exemplary examples of policy documents and/or guidelines based on ITM research.
- Science communication: illustration and follow-up of files demonstrating how the scientific and societal added value of ITM research is communicated to the general public and policymakers.
- Monitoring of collaborations with non-academic partners (NGOs, companies) and the results of the collaboration.
- Progress of P^3 – a new groundbreaking multi-perspective research model that integrates pathogens, patients and populations into a single framework for sustainable impact. This approach links breakthroughs in laboratories, clinical expertise and population-level insights, translating science into solutions and innovations for people in Flanders and worldwide.
- Description of the long-term impact stories (at the final evaluation, cf. Long-term qualitative indicator).

Quantitative KPI	Target value
Number of national, regional and global policy documents/memos/ guidelines based on ITM research	Baseline 15 per year, increasing to 30 in 2030
Proportion of co-authorships with non-academic partners in peer-reviewed journals We monitor the number of co-authorships with non-academic partners because we assume that if we publish together, the results of the research will be disseminated and implemented more quickly by the non-academic partners. We aim to have 50% of our publications published with non-academic partners.	50% van alle publicaties

OD3: The research results and data are shared fairly with researchers and society in general, but always taking into account research ethics and integrity, data protection and confidentiality, intellectual property and benefit sharing requirements ('Open Science').

Valorisation

Qualitative indicators

- Monitoring of the activities of the ITM *data access committee*.

Quantitative KPIs

- As they will be determined within the framework of the Flemish Open Science policy.

OD4: The leverage effect of the research subsidy from the Flemish government results in the allocation of competitive research funding.

Financial leverage

Qualitative indicators

- Overview and number of competitive research proposals awarded and currently running by external funding agencies (e.g. Horizon Europe, FWO, EDCTP3, etc.).

Quantitative KPI	Target value
Acquisition of external competitive research funding This also includes the funds acquired from the 2nd, 3rd and 4th funding streams,as well as the equivalent funding from FWO PhD fellows/postdocs.	The reported figure must be at least €17.4 million in 2026, €19.1 million in 2027, €20.8 million in 2028 and €22.6 million in 2029 and 2030.

SD2 - Attracting and nurturing excellent researchers [PEOPLE]

Talent, Scientific excellence, Infrastructure

OD5: Investing in attracting, circulating and nurturing talent

Scientific excellence, Talent, Infrastructure

Qualitative indicators

- Reporting on the recruitment of professors in line with the 'ZAP follow-up plan'.
- Description of progress in the context of the Gender Equality & Inclusion Action Plan 2025-2030.
- Mapping the career paths of ITM graduates (including PhD holders) with a view to creating a 'research, innovation and impact' network (at the final evaluation, cf. Long-term qualitative indicator).

Quantitative KPI	Target value
Number of ongoing (cumulative) competitively acquired 'research career' mandates. These include, for example, FWO aspirant mandates, FWO postdocs, MSCA PhD fellows doctoral training networks, MSCA postdoctoral fellowships, HFSP, EMBO, ERC grants, seal of excellence, visiting doctoral fellowships, etc.	Base 20/year, increasing by at least 2 every 2 years to 30 in 2030
Number of doctorates awarded to PhD students who have conducted their research in collaboration with ITM	Base 15/year, increasing every 2 years by at least 2 to 19 in 2030. Minimum of 85 doctorates completed in the period 2026-2030

MIs

Doctoral completion rates and duration of doctorates

SD3 - Entering into and strengthening synergistic partnerships [CONNECTION]

Collaboration, infrastructure

OD6: Foster and develop synergistic research collaborations/programmes within the ITM and with Flemish, Belgian, European and international partners

Collaboration

Qualitative indicators

- Collaboration within Flanders and worldwide in the context of P^3 – a new groundbreaking multi-perspective research model that integrates pathogens, patients and populations into a single framework for sustainable impact.

Quantitative KPI	Target value
A 'productive' collaboration is defined as a minimum of 10 joint 'research outputs' per year with a specific partner. In addition to 'research publications', datasets, study protocols, software code and joint training of early-career scientists are also considered 'research outputs'.	With 20 partners

MIs

Number of partnerships in Flanders and worldwide (with research partners, NGOs, industry)

Education

5

Institutional SO2 – To thrive as an open global campus for students, teachers, alumni, professionals, and researchers and to serve as **a hub for advanced academic education**. Our academic programmes, online, in-person or hybrid, will be sought after by students from around the world, and our graduates will be at the forefront of driving change in global public health.

Education is one of the key activities at ITM, and it is anchored in ITM's scientific expertise. As a result of that, ITM's education and ambitions for the next policy period are contextualised within the institutional strategic goals.

In the policy period 2025-2030, Education at ITM will further build on the principles of the educational vision that was established in 2019 (see also previous achievements). The hereunder vision is a slight adaptation of that 2019 vision: while the 2019 vision emphasised the overall goal, the 2025 vision very much stresses the position of ITM as an institute for postgraduate education.

> *"ITM is an inclusive **global open campus** that offers science-driven and societally relevant **postgraduate** training, in the field of tropical medicine and international public health. Studying at ITM means benefitting from an international and divers setting where students, alumni and staff co-develop **participatory learning**. ITM's student population is highly diverse, qualified, eager to contribute to **societal development**, and coached towards scientific discovery and the application of acquired competencies in their respective **contexts**.*
>
> *ITM is a higher education institution that fosters **lifelong** learning and employs teaching and learning methods that are adapted to the needs and expectations of its students, at any point in their career: flexible and blended learning, mobility and tailored student support are key characteristics of ITM's education. With its **alumni**, ITM aims to play a prominent role in tropical medicine and international public health."*

Important regarding this vision are the core underlying principles that ITM applies across its educational activities. ITM is a centre of excellence and a highly international campus. The terms 'global', 'inclusiveness' and 'openness' imply that ITM aims to be a global **point of reference** for students, alumni and professionals eager to develop their expertise in tropical medicine and international public health. ITM welcomes students and lecturers worldwide and involves alumni and partners in its education programmes: master programmes, postgraduate certificate programmes, (post)doctoral training, short courses, evening courses and internships. ITM is an '**open'** campus, meaning that it is an inclusive institution that operates within a network of discipline-related organisations and higher education institutions.

At ITM, students receive and appreciate the **flexibility** to spread their studies over time, to build a study plan that fits their needs and where distance learning is one of the modalities in ITM's educational portfolio. Every programme provides this study flexibility and considers the student's disciplinary and professional background, study possibilities and competencies in that respect. This also implies that alumni regularly re-enrol at ITM as students for further competency development. Apart from the possibility of including courses from different ITM programmes, students can include courses from other higher education institutions in their curricula as well. While the tropEd network has been a catalyst in the past to do so, in the next policy period **efforts to allow student and staff mobility will be increased** (e.g. via Erasmus+), together with the further exploration of the development of **joint educational activities**, both internationally as well within the Flemish higher education landscape.

As said, the student population at ITM is international and consists mainly of graduates, professionals and researchers in the field of tropical medicine and international public health. In the programmes students are considered as partners in the learning process: they bring in their scientific and personal background, professional expertise, share their experiences with the international student audience and discuss with lecturers the contextual diversity in approaches. This participatory approach enriches the study experience at ITM for both students and lecturers and is a core principle of education at ITM: not only is the course offer intricately linked to ITM's scientific niche, but it is also complemented through the international experience of students and staff. This fosters lifelong learning and allows a **contextualised** approach in the content of the courses.

The abovementioned flexibility and the participatory nature of the learning process imply that studying at ITM is **student-centred**. A consequence of that is that ITM needs to continuously adapt its **teaching methods** and **content offer** to its audience and to developments in the field of teaching and learning. To do so, ITM will further develop a **structured staff professionalisation offer** for teaching and learning.

ITM has always been a centre of **lifelong learning**: not only does ITM attract a diverse pool of students in its formal credit bearing educational offer, but also students and professionals in PhD-training, evening seminars for continuous professional development, individual trainings for students aiming to gain specific competencies, and interns from other higher education institutions. In the next policy period ITM aims to develop a more sound and structured policy that gives more **formal, preferably ECTS credit bearing, recognition** to those diverse educational activities. That recognition for students not only fits the European recommendation regarding the development of micro-credentials, but it also allows to give more explicit recognition for the highly appreciated teaching activities conducted by ITM staff.

The breadth of ITM's dedication in education is extensive, with a strong interconnection across the academic triad (education, research and capacity building). This policy plan aims to focus for the next policy period on 4 strategic objectives and more concrete underlying operational objectives. Those objectives need to be contextualised in the hereabove vision and educational identity. In the previous policy plan 7 quantitative key performance indicators were formulated, but not all have been proven to be relevant or meaningful to give direction to ITMs education. For that reason, a more sound mix of qualitative and quantitative indicators is presented below for the next period.

Educational Strategic Objectives (E-SO):

E-SO1 – To maintain the excellence and relevance of ITM's educational portfolio

In the policy period 2019-2024 major reforms have taken place in ITM's educational portfolio, the portfolio itself has expanded significantly and the high quality of ITM's master programmes has been reconfirmed by the external evaluation panel commissioned by the Flemish Higher Education Council. As a result, all three master programmes are reaccredited until 30 September 2030. The next policy period 2025-2030 will focus on maintaining and consolidating implemented reforms and the excellence of ITM's educational portfolio.

'Maintaining and consolidating' doesn't mean to become inert, but means **(1) to strengthen and consolidate the reforms that have taken place, (2) to adapt or adopt educational initiatives that further reinforce the portfolio according to evolving research expertise and societal needs, and (3) to structurally develop the current demand-driven, but non-formal education**

at ITM (evening seminars, individual students learning trajectories) into a coherent lifelong learning portfolio of micro-credentials. The latter fits the European recommendations regarding the development of micro-credentials and is a structural answer to and valorisation of the many lifelong learning activities that are taking place at ITM.

This leads to the following operational objectives for ITM's educational portfolio:

1. OO1. To build on the self-assessment and recommendations for further developing ITM's re-accredited master programmes.
2. OO2. To successfully advance the implementation of the reformed postgraduate certificate programmes.
3. OO3. To fine-tune the educational portfolio according to evolving expertise and needs.
4. OO4. To develop a coherent micro-credential policy and offer.

As stated in the introduction, key performance indicators need to monitor, on the one hand, ITM's progress regarding the operational objectives, and on the other hand, provide sufficient information to report back on ITM's educational efforts. The success of OO1, OO2 and OO3 depends, among others, on three important indicators: the quality of education, the correspondence of the portfolio with ITM's expertise, and the number of student enrolments. The number of enrolments, as an input indicator, will be introduced under strategic objective 3. Regarding the development of the portfolio and educational quality, the following KPIs are proposed:

- **Qualitative:** Educational portfolio evolution
  - Provide a description of new initiatives and major changes in the existing portfolio. This KPI also reflects the development of the micro-credential policy, the extent to which ITM's expertise is translated into education, and how it evolves with identified needs.

- **KPI1:** Satisfaction of students and alumni with ITMs education
  - Target: At least 90% of master's and postgraduate students are willing to recommend the programme to others.
  - Target: At least 90% of master's and postgraduate students indicate that what they have learned in the programme is relevant to their current or future professional activities.
  - Recent alumni of the master's and postgraduate programmes indicate one year after graduation that their acquired competencies have helped them to impact the field they are working in (target: an average score above 3/5 on a 5-point Likert scale).

E-SO2 - To further strengthen our educational offer by building on collaborations

Exchange and synergistic partnerships are fundamental to ITM. At the moment education is already conceived to a large extent in that sense: about half of ITMs current educational portfolio is organised between ITM departments and/or between different research units; ITM alumni and global partners play a significant role in ITM's educational offer; the MSc in Global One Health is a collaborative degree; via the "Alliance for Education in Tropical Medicine and International Public Health" and tropEd, educational collaborations are established with international partners; student and staff mobility, also via Erasmus+, play an important role in that respect. The manifold collaborations have been confirmed to contribute to the richness of ITM's education and its high quality. It is an undeniable vehicle to enrich ITM's educational quality, to increase its impact and to maintain its relevance. And this has been confirmed by several external evaluations. Currently, several ITM ZAP hold 10% positions at Belgian Universities. Their education portfolio at the

universities could benefit our students as well. We will explore in the next policy period to develop formal joint courses, where the course component can also become part of ITM's educational portfolio.

In line with ITM's research ambitions, translating collaborative (multidisciplinary) research into collaborative (interdisciplinary) educational activities will be further strengthened where desired and needed. **The strategic development of educational activities must fit into the broader institutional and educational portfolio, have demonstrable added value to ITM's existing offer, and reply to emerging needs and priorities in global health. The emphasis on collaborative interdisciplinarity is intended to strengthen bridges between educational programmes (within ITM and between ITM and its partners) and that educational activities are based on inter- or multidisciplinary expertise.** However, this also implies that interdisciplinarity or educational collaboration is not seen as an end but a means to contribute to ITM's education in a spirit of mutual benefit. While in the previous plan, growth in the number of collaborative educational activities was emphasised as a KPI, such a KPI in the current situation doesn't seem relevant simply because ITM's educational quality is already closely linked to individual or institutional collaborations. The same goes for the number of alumni: an increase in number is not an end in itself; it's the network's quality, impact and sustainability that will allow and contribute to partnerships. In sum, new initiatives are built when considered suitable and relevant, without needing to grow in that offer.

Translated into operational objectives, this results in the following:

1. OO5. To nurture and develop mutually beneficial partnerships for education within ITM and with Flemish, Belgian, European and International partners.
2. OO6. To strategically develop diverse collaborative educational activities aligned with evolving research expertise and societal needs.

Quantifying OO5 and OO6 is not meaningful. ITM's aim is not to develop its portfolio for growth but for relevance and (evolving) needs. A strategy that allows well-considered collaborations and collaborative educational activities seems more appropriate for monitoring to what extent collaborations are indeed mutually beneficial and correspond to multidisciplinarity.

- **Qualitative:** Evolution of educational collaborations
  - Description of the evolution and nature of educational collaborations.

E-SO3 - To attract students with the potential to impact health

Several recent evaluations have demonstrated the societal, scientific and individual impact of ITM's education. This is a strength to be maintained. **ITM aims to be a niche institution, training a well-considered and diverse number of students with the explicit objective to achieve the highest possible impact on health and/or build a research career with impact in the field of international public health and tropical medicine.** The impact of ITM's students and alumni cannot be underestimated: as agents of change, they contribute to health in many different ways, grow towards higher level positions in influential health and health governance organisations or become long term partners for research collaborations. The return on investment, for ITM and at a global scale, is significant. To continuously achieve this impact, ITM needs to attract a diverse pool of high-quality applicants to its courses, including geographical, gender and background diversity. That is also the reason why a growth in student numbers needs to be strategic, balanced, inclusive, and without compromising the educational quality ITM has

achieved over the last decades. At the same time, aiming explicitly for diversity (geographical, gender, background) has become more important: the impact of global challenges, such as major outbreaks, climate change or urbanisation, will be felt by people worldwide. For that particular reason ITM aims to train global students, as their competencies will be needed across the globe. Hence, two operational objectives are identified where OO7 is instrumental to OO8:

1. OO7. To increase the visibility of ITM's education in Belgium, Europe and across the globe.
2. OO8. To increase the diversity of the pool of applicants

- **KPI2:** Number and diversity (gender and geographical) of ITMs student population.
  - Target: on average 70 new students enrol per academic year for all master programmes and calculated as rolling average over three academic years.
  - Target: at least 50 postgraduate certificate students per academic year, with a targeted yearly growth of 10%. This is the same baseline as the previous policy period, while the targeted growth needs to measure, among others, the success of OO7.
  - Target: in all master programmes together a gender balance with a maximum of 70% of the same gender.
  - Target: in each master programme students from at least three different continents with a minimum of 10% of students from each of these continents.

- **KPI3:** Number of awarded certificates
  - This KPI is a traditional output indicator for education, which provides insight into the number of graduates.

E-SO4- To provide a lifelong learning environment that fits the learning needs of professionals

ITM is committed to **being a campus where a learning experience is provided that meets the needs of its specific student population, consisting of highly qualified national and international graduates, early and mid-career professionals** in international public health and tropical medicine. This requires flexibility in the curriculum, a tailored student support and the use of pedagogical methods appropriate to adult learning. Those well appreciated elements will be maintained. **The mix of learning methods will be further elaborated**: a combination of face-to-face, hybrid, blended and online learning methods will be nurtured and developed where suitable, and innovative methods will be tested where needed. These methods will help to facilitate exchanges and collaboration between staff and students from different places and at different locations. At the same time ITM will build on the conditions that allow the learning needs of professionals to be met. In that respect the competency development of ITMs teaching staff is a prerequisite: well-trained staff ensures an appropriate learning experience with pedagogical methods that are up-to-date and corresponding to evolutions in the educational science field. In order to support this, a structured professionalisation offer will be developed for internal and external teaching staff. At the same time the further professionalisation of the education and student support back office that provides the conditions for optimal learning facilities and circumstances for all students is a continuous necessity.

1. OO9. To invest strategically in innovative teaching and learning methods
2. OO10. To develop a structural professionalisation policy and offer for teaching staff
3. OO11. To further strengthen the administrative back-office(s) for education

- **Qualitative:** a narrative description of the most important changes and steps forward will provide the necessary information about the progress on the three domains.

Summary table Educational ambitions

E-SO1 – To maintain the excellence and relevance of ITM's educational portfolio	
OO1. To build on the self-assessment and received recommendations for the further development of ITM's re-accredited master programmes	
QI: Description of new initiatives and changes in the existing portfolio.	
KPI: Student satisfaction	Target: At least 90% of master students are willing to recommend the programme to others
OO2. To successfully advance the implementation of the reformed postgraduate certificate programmes.	
KPI: Student Satisfaction	Target: At least 90% of postgraduate students are willing to recommend the programme to others
OO3. To fine-tune the educational portfolio according to evolving expertise and needs.	
QI: Description of new initiatives and changes in the existing portfolio.	
KPI: Alumni Satisfaction	Target: At least 90% of master's and postgraduate alumni indicate that what they have learned in the programme is relevant to their current or future professional activities.
KPI: Study impact for recent alumni	Target: an average score above 3/5 on a 5-point Likert scale, demonstrating that alumni indicate one year after graduation that their acquired competencies have helped them to impact the field they are working in.
OO4. To develop a coherent micro-credential policy and offer.	
QI: description of policy development	
E-SO2 - To further strengthen our educational offer by building on collaborations	
OO5. To nurture and develop mutually beneficial partnerships for education within ITM and with Flemish, Belgian, European and International partners.	
MI: Number of educational collaborations	
OO6. To strategically develop a diversity of collaborative educational activities aligned with evolving research expertise and societal needs	
QI: Description of new educational collaborations.	
E-SO3 - To attract students with the potential to impact health	
OO7. To increase the visibility of ITM's education in Belgium, Europe and across the globe.	
KPI: ITM's student population	Target: On average, 70 new students enrol per academic year for all master programmes, calculated as a rolling average over three academic years.
	Target: At least 50 postgraduate certificate students per academic year, with a targeted yearly growth of 10%.
MI: Number of awarded certificates	

OO8. To increase the diversity of the pool of applicants	
KPI: Diversity in ITMs student population	Target: in all master programmes together a gender balance with a maximum of 70% of the same gender.
	Target: in each MSc. students from at least 3 continents with a minimum of 10% of students from each of these.
E-SO4- To provide a lifelong learning environment that fits the learning needs of professionals	
OO9. To invest strategically in innovative teaching and learning methods	
Qualitative: a description of the most important changes and steps forward in teaching & learning practices	
OO10. To develop a structural professionalisation policy and offer for teaching staff	
Qualitative: a description of the professionalisation policy	
MI: number of teaching staff making use of the professionalisation offer	
OO11. To further strengthen the administrative back-office(s) for education	
Qualitative: a description of the most important changes and steps forward in the back-office.	

Medical & Scientific Services and International Cooperation

6

SO3 – To establish our **medical services** and **reference laboratories** as an unequivocal global benchmark for tropical diseases and travel medicine. We will steadfastly pursue **excellence in patient care** and cutting-edge **laboratory diagnostics** in the specialised realm of tropical infectious diseases.

1. Medical Services and Reference Laboratories

ITM's ambition is to offer **excellent patient care** and **laboratory diagnostics** within Belgium in the expert field of tropical infectious diseases and travel medicine. Our medical services are nationally and internationally established as an undisputed reference in their niche, and we are uniquely placed to advise national and international health authorities and organisations.

Strategic Objectives

For the coming policy period 2025-2030, we focus on four strategic objectives.

Focus on patient care

SO1: **We strive for quality and patient-centered care.**

- 1.1. We ensure the most adequate patient care every day for every patient in our medical services.
- 1.2. We are a third-line center where the most complex cases within our disciplines (infectiology and microbiology) can be followed up and we are a reference center in Belgium for general practitioners, infectiologists, clinical biologists and other specialists.
- 1.3. We offer special attention to harder-to-reach groups through innovative methods of care and translate them within the broader health care system whenever possible.

Focus on expertise

SO2: **We maintain and strengthen clinical and laboratory expertise in our niche areas of travel counseling, tropical infectious diseases, HIV/STI and outbreak management.**

- 2.1 We develop a contingency plan to monitor seniority and expertise within the outpatient and clinical laboratory staff cadre.
- 2.2 We support scientific collaboration with the academic units within ITM and encourage cross-fertilisation between research, teaching and patient care.
- 2.3 We build a sentinel function through our patient cohorts and sample bank that enables us to generate new insights and trends and graft policy accordingly.

Focus on the national and international health landscape

SO3: **We remain the undisputed reference center in travel advice, tropical infectious diseases, HIV/STI and outbreak management.**

- 3.1 We strive to continue all conventions and agreements with Flemish, federal and international actors such as RIZIV, FPS Public Health, Department of Health Care, Sciensano and WHO.
- 3.2 We continue our collaboration with UZA and actively enter into partnerships with relevant actors within the first, second- or third-line care.
- 3.3 We maintain and strengthen our collaboration with international networks of travel clinics and in the field of HIV/STI diagnostics such as Tropnet, Geonsentinel WHO and ECDC.
- 3.4 We are the preferential partner for the government and other institutions in the field of travel medicine, tropical infectious diseases, HIV & STI and outbreak management and provide support in word and deed.
- 3.5 We strengthen preparedness for outbreaks and take a leading role for infectious diseases within our niche areas in the Belgian context.
- 3.6 We respond to the need to offer expertise in clinical infectiology training, and through evening education training for primary care (travel counseling, STD, HIV, hemorrhagic fevers (FILI-I-VIX))
- 3.7 We provide regular media interpretation on current health issues.

Focus on the necessary preconditions to realise the policy plan

SO4: **We are building the right context and conditions to achieve our strategic goals**.

- 4.1 Through the Masterplan Buildings, we create a patient-friendly clinic environment with sufficient capacities and provide efficient collaboration between outpatient clinic and the clinical laboratory
- 4.2 We provide surge capacity to meet the many needs in terms of reference tasks, preparedness and academic assignments.
- 4.3 We can count on specific ICT and accounting & finance expertise for the medical services.
- 4.4 We plead with the authorities for a clearer legal status for our outpatient clinic and an adapted basic financing in order to be able to realise our activities within a healthy financial framework.
- 4.5 We implement a new electronic patient file to optimally support our care and referral activities.

Summary table for the ambitions of the Medical Services and Reference Laboratories

MS-SO1 - We strive for quality and patient-centered care.	
KPI: Patient satisfaction	Target: Based on the patient survey at least 90% of our patients would recommend our medical services to friends and relatives.
Qualitative	Description of improvements of patient care
MI	Result BELAC audit Number of complaints
MS-SO2 - We maintain and strengthen clinical and laboratory expertise in our niche areas of travel counseling, tropical infectious diseases, HIV/STI and outbreak management .	
KPI: ensure top-quality expertise	Target: for each discipline we have at least two senior national experts
MS-SO3 - We remain the undisputed reference center in travel advice, tropical infectious diseases, HIV/STI and outbreak management.	
KPI: agreements with ministries on health	Target: We maintain all five agreements with Flemish and Federal government on our medical reference roles
KPI: agreements as national reference center	Target: We maintain all four agreements with Sciensano as NRC
Qualitive	Description of major changes of our role in the (inter) national landscape
MI	Number of consultations Number of visits on the ITM website Number of visits on Wanda Number of incoming calls Number of media interventions
MS-SO4 - We are building the right context and conditions to achieve our strategic goals for the medical services.	
Qualitative	Implementation of a new Electronic Patient File for our clinic
Qualitative	Ensuring compliance with healthcare regulations
Qualitative	Development of a future-proof clinic in the new Masterplan Buildings
MI	Financial Result medical services

2. International Cooperation with focus on LMIC

Institutional SO3 – To amplify the influence of our collective expertise and knowledge with partners, we will foster increased **scientific exchange and forge synergistic partnerships**. Our focus is on building a shared academic reputation within our global network. Central to our approach is the commitment to equitable partnerships, where collaborations with public and private institutions worldwide are marked by mutual respect, shared objectives, and a dedication to addressing health disparities.

International cooperation with researchers and partner institutions from all parts of this world is an essential part of ITM's past, present and future.

ITM contributes to improving health for all, based on the provision of scientific evidence, qualitative education, service to societies, and translation of evidence into policy and practice. ITM's overall aim in international cooperation is to strengthen the scientific basis of health care systems, programmes and policies in LMICs, thus improving health policies and practices, ensuring healthier lives and well-being for all (SDG3) and ultimately contributing to the reduction of poverty and inequalities.

To achieve this, ITM establishes, as an integral part of the ITM academic triad, international partnerships with peer researchers and institutions aiming to contribute to individual, unit, and institutional-level capabilities through a capacity-sharing approach. This vision on international cooperation and capacity sharing will orient the partnerships established and the forms different partnerships will take.

ITM's contribution to society and science as well as its institutional identity is built on research and educational excellence and on long-standing partnerships with universities, public health institutes, national health programmes, reference hospitals and laboratories in LMICs.

ITM's international cooperation always follows the principles of:

- **Equity**, meaning that partnerships respond to existing institutional needs, are mutually beneficial, require sustained commitment and address inherent power imbalances,
- The ***leave no one behind*** principle, meaning that priorities identified within these partnerships reflect the needs and health challenges of populations in vulnerable settings, with specific attention for low-income countries or fragile contexts,
- **Interdisciplinarity**, meaning the involvement of multiple scientific disciplines, fostering collaboration within ITM and between ITM and its partner institutions,
- **Intersectionality,** meaning recognising and addressing the existence of age, gender and racialised disparities of the people involved in and affected by our work. Participation, structures and evidence generation will address the complex and unique combination of identities/experiences shaped by among others, power imbalances.

We recognise that high-quality academic activities and notably innovative research and education depend on individuals' skills, efficient organisational processes and structures, networks, and the wider context in which institutions function.


BAKER

Researchers, research groups, and their institutions need infrastructure, technical skills, and the capabilities to commit, act, and deliver results. To be relevant actors in society and to contribute to the overall sustainable development goals, they also need capabilities to engage, interact, adapt, self-renew, and work towards coherence in their context of work.

Based on research and education, ITM seeks to contribute to policy and practice in demonstrable ways, either in Belgium or through its partnerships in LMICs. Projects conducted in the context of international cooperation actively bridge the science-to-practice gaps, responding to the needs of policymakers and practitioners in partner countries, in Belgium, at the EU or multilateral level. Where this can be of added value, ITM also develops synergies with other Belgian and international actors within and outside of academia where and when they can contribute specific expertise.
ITM is discussing opportunities for collaboration with the recently established Health Impact Coalition, a network of NGOs working together to improve international health cooperation by strengthening health systems.

How to achieve the overall goal?

International cooperation may be project-based between academics or can be institutional and partnership-based over the longer term. Institutional partnerships are more conducive to international sustainable development. ITM's international partnerships will work on the academic triad of education, research and service delivery, and aim for longer-term impact and sustainability.

In a complex and differentiated world, where power imbalances exist in and between countries and international relations change quickly, ITM takes a differentiated approach for international cooperation that allows to respond to needs of the partners and ITM to improve in delivering the academic triad.

To achieve this, ITM will work along a partnership spectrum that differentiates between capacity sharing partnerships and sustainable academic partnerships. The type of partnership will inform the type of exchange, support and/or collaboration between ITM and the partner institution. It is the intention that each partnership is an equitable partnership that responds to the research, educational and/or institutional needs of all involved.

All institutional partnerships will have a deliberate approach towards capacity sharing. It will be built on a joint assessment that forms the basis for a capacity sharing framework that is tailored to each partnership, within which specific research or educational activities are developed and to which they contribute. Such support will always be linked to shared scientific ambitions and needs that ITM and its partners define together.

ITM takes an inclusive approach to capacity sharing, encompassing support to: infrastructure, facilities and equipment, research management aspects, administrative and other support services, human resources development, training and networking activities and knowledge translation. As such, multiple types of capabilities can be strengthened throughout the partnership, evolving along the needs of the partners and the possibilities for ITM to share, support, learn with the partner.

This is based on a co-created understanding of the optimal institutional capacity required to conduct an academic, scientific or service activity. Capacity sharing can therefore be a mix of individual and institutional capacity strengthening for both the partner and ITM – designed from the shared scientific objectives while taking into account the multiple challenges researchers and their institutions face to deliver results and to bridge the science-society gaps.

capacity sharing partnerships build cooperation around shared scientific goals in research, education or the science-society interface and include capacity sharing at individual and institutional level. Capacity sharing will be designed collaboratively in a programmatic approach, starting from the partner's identified needs on how to deliver more effective research or education activities in the given context and matched with the interests and possibilities that ITM can bring to the partnership.

sustainable academic partnerships are first and foremost oriented towards the research and education agenda with an impact on society, with priority for the most vulnerable. Getting Research into Practice and Policies completes the academic triad in these partnerships. In these partnerships ITM will seek to learn and improve its research, education and services to society in Belgium and beyond.

These sustainable academic partnerships have a specific scientific and/or educational focus, to which capacity sharing activities still are an add-on, directly linked to the academic activities (i.e. policies, or getting research into practice and policy). These partnerships might consist of South-South or triangular collaborations, which are supported by and not necessarily led by ITM. Furthermore, these partnerships may have a regional scope, enhancing the applicability and replicability of co-created results. ITM will strive to leverage the knowledge of strong partner institutions in the region, possibly through triangular cooperation approaches, learning networks or networks of excellence between expert institutions.

ITM considers its partnerships as a dynamic process, and wants to remain open to new institutional partners. Therefore entry-strategies will be developed to jointly explore the scope, timing, approach to the partnerships. These strategies will be checked against the core values of the ITM vision on international cooperation to guarantee that new partnerships align with and contribute to these.

Strategic Objectives:

SO1 To foster equitable partnerships through long-term institutional cooperation that are based on a capacity-sharing strategy

- **KPI 1:** We leverage opportunities for cooperation in research, education, and service to society with institutional partners from LMIC.

Yearly progress monitoring:

- Mi-1.1: Proportion of institutional partnerships with capacity sharing strategy that is on-track.
- Mi-1.2: Proportion of institutional partnerships in fragile and conflict affected countries on total capacity sharing partnerships (X/X)
- Mi-1.3: Number of joint scientific publications with first or last authorship from an institutional partner from LMICs.
- Mi-1.4 : Number of new projects submitted in partnership with institutional partners from LMIC

SO2 To enhance the societal impact of international cooperation

- **KPI 2:** We invest in future generations of scientists from LMICs

- **KPI 3:** ITM and partners' expertise informs Flanders', Belgian, EU and national policies in LMICs on Health and international cooperation.

Yearly progress monitoring

- Mi-2.1: Number of study and research grants that allowed the recipient (from LMIC) to complete the course, training or research project successfully (masters, PhD, short courses).
- MI-3.1: Number of inputs by ITM experts to requests for policy advice from Belgian and EU government institutions.
- MI-3.2: Number of LMICs where institutional partners actively engage with policymakers and practitioners

Summary table for the ambitions for International Cooperation with LMICs

IC-SO1 - To foster equitable partnerships through long-term institutional cooperation that are based on a capacity sharing strategy.		
OO1. We leverage opportunities for cooperation on research, education and service to society with institutional partners.		
MI-1.1: Partnerships with on-track capacity sharing MI-1.2: Partnerships in fragile contexts MI-1.3: Joint publications with LMIC First/last author MI-1.4: New projects with LMIC partners		
KPI: Collaborative opportunities with institutional partners	2030	Number of partners from LMIC that contribute to the Productive partnerships (KPI8) doubled over five years. (Baseline : 2)
IC-SO2 - To enhance the societal impact of international cooperation.		
OO2. We invest in future generations of scientists from LMICs		
MI-2.1: Completed grants by LMIC recipients		
KPI: Investing in future LMIC scientists	Yearly	Access and scholarships to ITM education for future generation scientists from LMIC guaranteed minimally at the same level, evolves with the education offer. (baseline : 5-year average 140/year with current education offer.
OO3. ITM and partners' expertise informs Flanders', Belgian, EU and national policies in LMICs on Health and international cooperation.		
MI-3.1: ITM expert inputs for policy advice MI-3.2: LMICs with partner policy engagement		
KPI: Expertise impacting health and cooperation policies in LMICs	Yearly	Qualitative reporting of most impactful policy work in partner countries and/or multilateral policy processes

3. Scientific service delivery

Institutional SO1 – To excel in **research**, pushing the boundaries of knowledge and innovation, leading to cutting-edge innovations that can be translated into products and outcomes that directly benefit the health and lives of those in need and which contribute to resilient health systems. For this, early involvement of stakeholders (communities, policymakers) is essential. Our research will have a profound impact on **health policies globally**.

Reference and accredited laboratories

ITM hosts both reference and accredited laboratories that are recognised nationally and internationally (e.g., by the government, Sciensano, WHO, WOAH). These reference laboratories are integral to our scientific research and expertise in tropical medicine, providing crucial support to local and global healthcare. Our laboratory analyses consistently meet the highest quality standards, earning ITM a strong reputation for scientific expertise and advisory services.

Reference laboratories	Recognized by
BCCM/ITM Mycobacteria Collection.	BCCM
TB Supranational Reference Laboratory - Coordination centre	WHO
Reference Laboratory for surra	WOAH
Collaborative Centre for Research on and Training in Diagnosis of African Trypanosomiasis	WGO
National Reference Centre for Parasites (Trichinellosis, Echinococcosis and Anisakiasis)	FAVV
Reference Centre for Animal Trypanosomiasis and its Vectors	FAO
National Reference Centre (NRC) for Arboviruses	Sciensano
National Reference Centre (NRC) for Sexually Transmitted Diseases (Treponema pallidum, Chlamydia trachomatis, Neisseria gonorrhoeae, Mycoplasma genitalium)	Sciensano
National Reference Centre (NRC) for Rickettsia and Anaplasma (Consortium with Queen Astrid Military Hospital)	Sciensano
National Reference Centre (NRC) for Coxiella burnetii and Bartonella (Consortium with ULC-Saint Luc and CODA)	Sciensano
National AIDS Reference Laboratory	By Royal decree
WHO Collaborating Centre for Diagnostic and Laboratory Support of HIV/AIDS	WHO
WHO Test Laboratory	WHO
National Reference Centre (NRC) for Tropical and Infectious Diseases	By Royal decree

ITM is committed to maintain and enhance these recognitions in alignment with our strategic objectives. Our clinical laboratories conduct extensive analyses under accreditation granted by BELAC. Our laboratories hold various ISO accreditations: ISO 15189 for patient sample analyses, ISO 17025 for the evaluation of HIV/STI diagnostic tests and animal sample analyses (surra and trichinosis), and ISO 17043 for organising ring tests on trichinosis for the FASFC. Additionally, our National Reference Laboratory for Tropical and Infectious Diseases is the only facility in Belgium authorised to diagnose level 4 risk pathogens such as Ebola and Lassa.

ITM aims not only to maintain the accreditation but to continuously strive to optimise our tests according to the newest scientific advancements, ensuring alignment with our strategic goals and reinforcing our leadership in global health diagnostics.

Diagnostics

The Applied Technology and Production Service (AT&P) has long supported ITM's mission of making diagnostic tests accessible for neglected tropical diseases (NTDs) in low- and middle-income countries (LMICs). As the pharmaceutical industry shows little interest due to limited commercial benefits, ITM continues to bear this responsibility.

AT&P develops diagnostic kits for diseases like Human African Trypanosomiasis (HAT, sleeping sickness), surra (*trypanosoma evansi)* in animals and leishmaniasis in both humans and animals, including the renowned Card Agglutination Test for Trypanosomiasis (CATT) and Direct Agglutination Test for Visceral Leishmaniasis (DAT/VL). Additionally, the unit serves as the reference laboratory for surra detection (CATT/T.evansi test and micoscopy) in animals under the commission of the World Organisation for Animal Health (WOAH). The unit also produces native variable surface glycoprotein (VSG) antigens for companies developing Rapid Diagnostic Tests (RDTs) and (inhibition) ELISA's for sleeping sickness.

The deployment of these diagnostic kits in detection and treatment campaigns has significantly reduced the number of new sleeping sickness cases to fewer than 2000 annually, primarily in central and western Africa, especially the DRC. Initially, it was anticipated that demand for these tests would decrease due to this reduction, leading to diminished investment in AT&P in recent years. However, continuous monitoring remains crucial to prevent any resurgence. Supported by the federal government and the Bill & Melinda Gates Foundation, ITM and its partners are committed to eliminate the transmission of the disease entirely by 2030. The CATT test will continue to play an important role for several years, although demand is expected to decline.

The decreasing incidence of sleeping sickness presents new challenges, requiring a shift in diagnostic strategies. A transition from active to passive screening and surveillance, combined with the use of newly developed tests, is necessary. In addition, the new 2017/746 legislation on *in vitro* diagnostic medical devices places regulatory pressure on the activities of AT&P. These evolving needs compelAT&P to adapt strategies and operations that have remained consistent for years.

Therefore, ITM will aim to further identify gaps in the landscape for IVDs for (neglected) tropical diseases. In this context, it will be carefully considered what tasks the AT&P unit can fulfil and which partnerships with companies can be established in the development and distribution of tests to those regions where they are needed. As such, ITM will continue to play an important role in ensuring global access to IVDs.

Biobank and BCCM

In addition to what was mentioned on page 30 the ITM Biobank will participate in European biobank bodies to help create European guidelines on the open access to valuable strains of public health importance. In the upcoming policy period, we will fully implement **the ITM Biobank policy** and procedures, while actively pursuing ISO accreditation to establish our biobank as a benchmark of excellence and quality in the field.

With its collection of mycobacterial strains, ITM is part of the **Belgian Culture Collection of Microorganisms (BCCM)** consortium, established by the federal government in 1983 to coordinate microorganism collections across Belgian institutions.

The BCCM/ITM collection, housed in secure ITM laboratories, includes 400 strains of non-tuberculosis mycobacteria and over 600 TB strains, representing a global diversity of variants and antibiotic-resistant strains. In 2013, the World Health Organization (WHO) entrusted BCCM/ITM with managing the largest public research collection of TB strains—a significant recognition of ITM's scientific expertise. Given TB's status as the leading deadly infectious disease worldwide, this collection is crucial for global research efforts to understand the disease, develop new drugs, and create diagnostic tests. The activities of BCCM are ISO 9001 certified.

As part of the BCCM consortium, the main **objectives** for the ITM mycobacterial strain collection are:

- Strengthen BCCM's Role in Global Research and Innovation by optimising and expanding the mycobacterial strain collection and deepening knowledge of biological materials, storage techniques and new technologies.
- Being part of the enhancement of BCCM's Visibility and Partnerships by targeting industries, by showcasing resources and expertise and by forming partnerships with national and international organisations.
- Strengthen BCCM's position as a "Biological Resource Centre" by enhancing external communication and fostering cooperation and synergies with other Belgian biobanking initiatives.
- Ensure BCCM's Sustainability and Efficiency by improving operational efficiency and maintaining the ISO9001 certification.

4. Expert advice in Flanders, Belgium and internationally

Institutional SO1 – To excel in **research**, pushing the boundaries of knowledge and innovation, leading to cutting-edge innovations that can be translated into products and outcomes that directly benefit the health and lives of those in need and which contribute to resilient health systems. For this, early involvement of stakeholders (communities, policymakers) is essential. Our research will have a profound impact on **health policies globally**.

ITM will continue to be a trusted partner that provides expert advice to Flemish, federal, and international organisations and governments.

The medical services are the preferential partner for the government and other institutions in travel medicine, tropical infectious diseases, HIV & STI, and outbreak management. They provide support in word and deed and take a leading role in expert advice on infectious diseases in the Belgian context.

Long-established, ongoing policy advice to the DGD and expert advice to WHO and Belgian and Flemish policymakers, particularly on issues related to international health policies, will continue to build on ITM's research. This is strongly enriched by ITM's partnerships with institutions from LMICs, allowing it to provide policy support grounded in field experience and deep knowledge of the context in which health emergencies occur. ITM will be the trusted source for information for national and international governments in the field of antibiotic resistance, equitable access to essential medical products, quality of essential medicines and diagnostic tests, advice on the list of essential diagnostic tests, etc.

Our experts are regularly invited to participate as external lecturers at national and international levels.

ITM continues to take an active role in the EDCTP3 association and Team Europe initiatives on Public Health capacity in SSA, sexual and reproductive health and rights in SSA, Manufacturing and Access to Vaccines, Medicines, and health technology products in Africa, and Sustainable Health Security in Africa.

We will strengthen our commitment to participate in the Flemish ecosystem and Global and European networks for pandemic preparedness (Be Ready, ECRAID, ONE-HEALTH-AMR, ONE-HEALTH, ...).

The innovation & impact unit (see 4.5) advises on transforming R&I-related policies and programming, integrating research, education, and capacity building.

Scientific service activities and expert advice are monitored through the indicators under the section research ambitions (cfr. R-KPI 3 and KPI-4).

7

Management & Organisation

Institutional SO5: To strengthen the overall coherence, efficiency and effectiveness of ITM's policy, by investing in research- and management platforms within the organisation or by strategic partnerships.

1. Governance and organisation of ITM

OO1: To strengthen professional and effective management. In this, we set ourselves the ambition to provide consistently professional and effective services to support the ITM core tasks at different levels within the organisation.

In the introduction the governance and organisation structure of ITM is explained in a comprehensive manner. ITM has made great strides with regard to the governance of the organisation in the past policy period. By the start of the new policy period, this organisation is on point, roles and tasks are made explicit and balanced. Employees experience transparency in decision-making and consultation processes. There is also a positive organisational culture appropriate to the mission organisation. ITM is in a complex configuration with obligations/ missions and accountabilities, towards many different stakeholders. The multiplicity of core tasks and stakeholders can put pressure on internal communication and collaboration between and within services and departments. Collaboration is always work in progress and asks for continued effort from all involved.

To enhance collaboration between these structures, ITM will establish cross-departmental working groups and regular inter-departmental meetings. These initiatives aim to enhance communication, streamline processes, and align objectives across the organisation.

2. Our people shape the organisation

OO2: To create an inspiring, motivational and safe environment for each individual that allows them to flourish and to contribute to ITM's vision, mission and objectives.

Therefore we foster a culture of respect, ensuring transparent communication with our 'people' being the staff population, our students and patients. We implement streamlined processes for their support.

a. ITM's staff population

ITM aims to create an inspiring, motivational and safe environment for it's staff population enabling to strive for excellence in all aspects of its core activities. This will be tackled in the ITM's people sustainability strategy.

During the previous policy periods, ITM's objectives were to cultivate a diverse, professional, open and safe working environment based on trust, integrity and transparency in an atmosphere of mutual respect. This we want to continue and have it strengthened in the coming years. Due to the diversity of staff (amongst others), a Gender Equality and Diversity Policy Plan (GEP) was developed, and a Commission on Decolonisation (CODECO) was set up. The main psychosocial risks were identified via a well-being survey in 2022, and an action plan was drawn up.

To further strengthen these objectives, during the following policy period, the main focus will be on enhancing ITM's people sustainability strategy via:

Developing onboarding and retention strategies: ITM recognises that human capital is a key differentiator for success. Therefore, during this policy period, retention strategies will be implemented to attract and retain talented employees and foster long-term engagements. These strategies will create an environment where employees feel valued, supported, and motivated/ committed.

Empowering staff for personal growth by actively **supporting career development** and competence-building initiatives via the introduction of a learning management system.

A leadership training programme for all members of the hierarchal line. In the pursuit of scientific excellence, ITM strongly believes in the pivotal role of excellent people-oriented leadership. It is strong leadership that is crucial to achieving success, to fostering an environment where ideas flourish, people get inspired, and teams thrive. The ITM Leadership programme, was set up in 2023 and made mandatory and available for both established leaders, young leaders and for new leaders entering the ITM organisation. The comprehensive training, which includes a 360° feedback exercise and an individual coaching session, focuses on the use of the inspirational, coaching and participative leadership styles, as well as on the establishment of a continuous feedback culture and ethical decision making. The programme will remain a constant and a fundamental building block in the training curriculum of every leader within the organisation.

Cultivating a positive and continuous feedback culture: As feedback is a cornerstone for employee engagement, ITM will aim to create an open and transparent environment where employees feel supported through regular communication and constructive feedback. We will create a framework for positive feedback to promote a culture of continuous improvement and personal growth.

Creating a code of conduct across the full value chain: to serve as a framework for ethical behaviour, fairness, mutual respect and inclusivity, to build a trustworthy and safe environment and to promote employees' well-being.

ITM has developed an actualised Gender, Equality and Diversity Policy Plan (GEP 2025 - 2030) and has set targets for diversity, equity and inclusiveness targets in consultation with our stakeholders. With the implementation of this plan ITM wants to emphasise the value of an inclusive work environment that respects and appreciates differences.

b. ITM's student population

The cultural diversity and variety of professional backgrounds within our group of students allow for rich exchange, comparative analysis and the confrontation of ideas. The diversity of students, their varied backgrounds, and the range of training programs present a challenge for ITM in maintaining high-quality support. ITM places strong emphasis on quality student support, both before and during studies. Biannual participation meetings with internal stakeholders allow students to express their opinions, concerns, and suggestions. Key areas of support include:

- **Administrative Support and Housing:** Assistance with visas, residence permits, health insurance, travel, housing, and bank accounts. Students receive a "Welcome to Antwerp" booklet, and ITM collaborates with the City of Antwerp for smooth registration. ITM provides housing that fosters a cohesive student community, with shared kitchens to encourage social interaction.

- **Social Support:** Student Support organises socio-cultural activities throughout the year, fostering a global campus environment. Activities are open to all students, promoting networking and cultural exchange. Students can purchase a "Sportsticker" for access to free sports activities and lessons.
- **Psycho-Social and Medical Coordination:** Students facing mental health challenges can contact Student Support, which connects them with trained professionals at ITM or the Antwerp Student Association's "Psy-Team" for further assistance.
- **Communication:** Student Support sends out two types of newsletters: a monthly one covering cultural events and Belgian customs, and a weekly one with weekend plans, bank holidays, transport strikes, and other relevant news.

KPI – satisfaction surveys for student support (target > 90%).

Monitoring KPI: number of reports to the student ombudsperson

c. ITM's patient population

ITM's medical services comprise a specialised outpatient clinic and clinical laboratory, both dedicated to tropical and sexually transmitted infections. The clinic provides multidisciplinary care to specific groups, such as HIV patients, and conducts pre- and post-travel consultations, serving around 40.000 patients annually.

ITM is committed to delivering the highest quality of care. To continuously improve, we actively seek feedback from patients who have visited our polyclinic. Whether patients have compliments, complaints, or suggestions for improvement, their input is invaluable in helping us understand our strengths and identify areas for enhancement. Should our services, quality, availability, or environment fall short of the expectations of patients, we will take prompt and thorough action to prevent future issues.

ITM strives to ensure a patient-friendly clinical environment with sufficient capacity, while prioritising the safety and well-being of ITM's patients.

3. Efficient, sustainable and effective resource management

OO3: to create an optimal environment for the core activities at ITM through efficient, sustainable and effective management of our resources

a. From (financial) governance to (financial) guidance

We are committed to coherent and lean financial process management:

- We always start from the ITM strategy to guide our focus and priorities. We have an eye for the international context.
- We evolve from pure input to process monitoring by focusing on (generative) automation, interoperability and connectivity in the tools, systems and processes.
- We want to prioritise elegance, simplicity & simplicity as a starting point for greater efficiency, focusing on an (internal) customer focus, learning networks, and high business alignment & partnering. Contemporary digitalisation is a means, not an end. Most processes should be captured by standard flows (and no exceptions).
- We evolve towards a (financially) efficient change management process, being an active (strategic) partner in organisational growth. We start from a business case with a clear cost-benefit balance and healthy resource management.
- We also look at the organisational situation and capacity. We aim for pragmatic and employee-feasible changes and solutions ('workable work': ABC model: autonomy, commitment & connectedness, competence).

We remain committed to financial transparency, compliance & ethics. Areas we focus on include:

- Public Procurement Act and increased government reporting i.f. transparency.
- E-invoicing obligations.
- Risk analysis of projects and partners.
- Ethics in our financial processes, including a sustainable investment policy, deontological code for suppliers, active partners in energy management.
- Logistics and exports: contract terms, warehouse management, security without compromise.
- Internal checks and balances in our financial processes.
- Management reporting with an eye on cost-allocations guiding management. Commitment to a business intelligence (data-driven) approach is an important starting point in this. Financial monitoring and adjustment remains an essential cornerstone. Financial health and strength is an absolute top priority and awareness.
- An (independent) controlling function and dedicated cash management will lead to more professionalisation.


INSTITUTE OF TROPICAL MEDICINE
WikiTropica

b. Infrastructure

Current infrastructure

ITM has approximately 20.000 m² of classrooms, laboratories, offices, consultation rooms and meeting rooms in five buildings close to each other on the 'Zuid' in Antwerp. Effective management of these buildings is essential to ensure that users can function safely, sustainably, comfortably and efficiently. Their proper management contributes to minimising operational costs, ensuring safety and reducing ecological impact. During this policy period, ITM was confronted with the financial and logistical consequences of the energy crisis. Rising energy costs had an immense negative impact on the budget. The plans of ITM's energy working group will remain a priority in our goal to reduce carbon emissions as much as possible.

With the increasing technical installations at ITM, the technical office needs to be reorganised, and to be strengthened with technical staff with expertise in measurement and control technology.

Masterplan Buildings

ITM has been housed in an Art Deco building in the centre of Antwerp since 1933. This building was supplemented with laboratories in the 1970s, for which the historic garden on Sint-Rochusstraat had to make way. In 2001, the 17th-century monastery in Sint-Rochusstraat was added to the building heritage. Located on the axis between Antwerp's historical centre and the renovated Museum of Fine Arts, ITM has been a fixture in the cityscape for almost a hundred years.

To be future-proof, ITM needs more space. In addition, the two current campuses have limitations and are rarely accessible to the public, as all core activities (research, patient care, teaching) take place in these buildings, and it is difficult to separate the public and operations. Moreover, the existing building stock needs to be thoroughly renovated. Therefore, we started drawing up a Masterplan Buildings, a concrete vision of the future to prepare our building heritage for two challenges:

- Sustainable scientific innovation | A building patrimony that meets current activities and future ambitions and provides sufficient space to carry out these activities in Antwerp (research, laboratory and clinical activities);
- Sustainable heritage management | A building heritage that respects the heritage value, is functionally used and at the same time open to the general public and enhances the reputation of ITM, the city and Flanders.

Within the Masterplan Buildings, we foresee two pathways that are closely intertwined, an innovation pathway and a renovation pathway.

Innovation track: The Provincial Institute of Hygiene (PIH) is currently housed in the plot next to ITM. The PIH will leave this site by 2028. Together with the City of Antwerp, we opted to anchor ITM at its current location and to bundle all the laboratory activities of ITM, including the BSL3 (Bio Safety Level 3) laboratories and the insectarium, in the adjacent PIH building. The existing plinth of the PIH building will be partly rebuilt for this purpose. A connection will be provided between the outpatient clinic in the historical building and the laboratories in the renovated PIH building to safely transport patient samples. The innovation project can start in 2028.

Renovation project: Bringing the laboratory functions to this high-performance new building will allow us to reorganise the heritage section, optimising our operations. In this renovation project, the valuable 1933 heritage will be restored and made accessible to the general public. This consists of a clinic building and the main building, both parts of the historic Art Deco building. The clinic building is a very active component in which some 40,000 consultations take place per year, focusing on traveller medicine, infectious diseases and sexually transmitted diseases. The building underwent many modifications which currently lack coherence. Circulation flows need to be addressed and the building needs major energy improvements. The main building contains most of the original and well-preserved art deco elements. The building needs a thorough facade cleaning and internal restoration. An integral part of the Masterplan Buildings is to concentrate public functions in the main building and open it up as much as possible. This fits in with our strategy to better communicate ITM's operations, prospects and ambitions.

We continue to work on multiple fronts to prepare for the implementation of the Masterplan. This includes creating the initial plans for the preferred scenario, detailing the technical requirements for the laboratories in the PIH tower, developing a project schedule, initiating a tender process, navigating the permit process, preparing a detailed budget estimate, creating a financial plan, and continuing ongoing negotiations. For the implementation of the Masterplan Buildings, ITM works together with several stakeholders: the City of Antwerp, the Province of Antwerp, the Flemish Government (Agency for Facility Operations, the Flemish Government Architect).

c. Creating a future-proof IT Environment

IT services and project management services have been thoroughly improved. Processes have moved from paper to electronic (docusign, EPD) which increases efficiency in administration and processes. ITM will build further on this trend.

Strategic planning is vital to maximise effective use of resources and means. The following themes have been identified as strategic:

- Rejuvenation: continue with the program to replace a qualified number of critical business applications with modern web-based alternatives to offer not only a better user experience but also allow for additional data integrations to strengthen the administrative data management, for example for the medical applications like electronic medical file, lab information systems, etc.
- Collaboration: develop and implement a strategy for the next set of collaboration tools, including developing the most optimal implementation of the ample project collaboration tools available through Windows 365 & Teams, and exchanging best practices on this topic across the institute. New "hybrid classroom" technologies are to be monitored and adopted where appropriate.
- Administrative Data Management: pursue the next phase of administrative data management to improve ITM's administrative data quality and usability. Continue with the automation efforts of data reporting in order to provide a business intelligence framework that will aggregate, transform, and orchestrate data from multiple data silos across the institute to provide an advanced search and reporting solution

Institutional IT priorities:

- The Modern Workplace: Up-to-date IT tools and equipment enhance our staff's efficiency and contribute to the institute's success.

- Information Security: continue to invest in information security efforts related to awareness, risk assessment, and operations.
- Enterprise Architecture: define and protect the adoption of an institute-wide enterprise architecture consisting of technical principles, standards, and supporting resources.
- IT Procurement and Vendor Management: continue to identify and pursue opportunities to simplify and streamline IT purchasing.
- Change Management: improve the ability to deliver projects and programs to the community through best practices and training related to change management and business process assessment.

To further enhance the organisation and management of PMO projects, this policy period will prioritise the development of the portfolio management process. This will include developing a comprehensive process flow, establishing a roles and responsibilities matrix, and refining resource and project planning. The collaboration between the PMO and IT teams will be strengthened by standardising shared working methods.

Also, reporting and dashboards for management will be further developed to monitor the institutional objectives. ITM will align sustainability-related reporting with CSRD (Corporate Social Responsibility Directive) guidelines where relevant.

4. Safety and Sustainability in Operations

OO4: To ensure a safe and sustainable working environment by integrating robust safety and security practices and promoting environmental responsibility across all operations.

a. High level biosafety infrastructure at ITM

ITM conducts high-level biosafety activities in three fully equipped, permitted suites that meet stringent regulatory standards. These activities are central to ITM's research and diagnostic services:

- **Virology BSL3 Suite:** This lab supports research on various viruses, including airborne species. An adjacent Arthropod Containment Level 3 room allows for vector studies without leaving the suite. A BSL3+ lab with a biosafety cabinet type III (glovebox) handles samples suspected of containing high-risk pathogens. The ITM Virology group's expertise and infrastructure enable diagnostics for risk group 4 organisms, such as Ebola and other hemorrhagic fever viruses.
- **Mycobacteriology Suite:** This suite includes a specialised BSL2-BK lab for Mycobacterium cultures and a connected BSL3 lab for further identification and research on Mycobacterium strains.
- **"Back-up" Suite:** This standalone BSL3 lab operates independently, ensuring continuity of key processes during interruptions in other BSL3 operations. It is also used for some Mycobacteriology activities during normal operations.

ITM's high-level biosafety infrastructure offers a unique environment for Virology and Mycobacteriology research and diagnostics, giving ITM a distinctive position. However, the infrastructure requires updates, which are planned as part of the Masterplan Buildings. Until new laboratory space is available, ITM will maintain its current labs to meet international standards set by the WHO and the US NIH/CDC.

b. Information Security and Cybersecurity

ITM advances tropical medicine and public health through research, specialised training, and the provision of medical and social services. These activities involve extensive processing of personal data, making data protection a core value. ITM's data protection policy is integral to its quality standards and culture, ensuring secure, fair, transparent, and adequate handling of personal data for patients, research participants, students, staff, and other stakeholders. This is crucial for maintaining trust and delivering quality care. Implementing our **Data Protection Policy**, attention will be given to:

- **AI Applications:** Continuously evaluate and ensure data protection in AI tools, both in procurement and Privacy-by-Design development.
- **Training and Awareness:** Further formalise data protection training for employees in their specific professional contexts, such as research, medical services, education, and HR.
- **Privacy and Transparency:** Strengthen technical and organisational measures for privacy and patient engagement under NIS-2 legislation, including the rollout of a new electronic medical record system that ensures secure data disclosure, proper access management, and transparent patient consent handling.
- **International Data Initiatives:** Participate in initiatives like the European Health Data Space, both as a data supplier and user, integrating this with ITM's scientific Open Access policy.

In line with NIS-2 legislation, ITM prioritises **cybersecurity** training for staff and students through the "Phished Academy." The rising threat of phishing, exacerbated by advanced AI and translation bots, has led to increased incidents of account and password sharing with malicious third parties. Although ITM's IT unit has prevented major breaches so far, the risk is growing. The Phished Academy provides online training, offering five-minute interactive sessions every two weeks to enhance security awareness and protect against phishing.

c. Safe and sustainable travel policies

As part of its global sustainability strategy, ITM conducted a baseline carbon footprint measurement, revealing that transportation (international mobility of employees and students, and staff commuting) is the largest contributor. This is due to the hypermobile nature of ITM's research and education activities. Reducing international flights through video conferencing and encouraging sustainable commuting, such as using public transport and electric vehicles, can significantly lower emissions.

To reduce its carbon footprint in travel and mobility, ITM will:

- Travel Policy: Since November 2020, ITM has implemented the ABC principle: 'Avoid travel' when possible, 'Book an alternative' when feasible, and 'Compensate emissions' when necessary. While international travel remains essential to ITM's mission, the impact of such travel is increasingly clear. When travel is unavoidable, ITM offsets CO_2 emissions, either on-site through CO2-saving measures or off-site by supporting reforestation projects.
- Sustainable Commuting: ITM promotes sustainable commuting through measures like third-party payer systems for public transport and bicycle allowances. As of 2018, 89.3% of ITM staff commute by walking, cycling, or using public transport, compared to 10.7% who drive alone. ITM plans to further encourage electric mobility and introduced a bike-lease programme.

ITM is also committed to ensuring safe travel for its staff. ITM's SPOC Travel and an external safety partner provide all necessary information and support to guarantee staff safety while being abroad. If an incident occurs, travellers and expats will receive the necessary support.


BOVAT

5. Quality as a common thread running through all our operations

OO5: To enhance the ITM Quality Management System and ensuring compliance with relevant legislation, regulations, and policies

The ITM Management System is an integrated system for Quality, Safety, Health and Environment and has been built out during the previous policy periods. In the next policy period, the management system will be further aligned and adapted to the specific needs that come with our core activities.

To further strengthen our objectives, the quality management system will be enhanced in the following key areas: employee training, risk management as a foundation for process improvement, and the reliability and reproducibility of (research) data, including archiving and data protection.

Employee Training: ITM has selected and recently implemented an e-learning platform, which will be fully rolled out during the next policy period with the following goals:

- Deploying the e-learning platform organisation-wide with tailored training plans aligned with employees' specific roles and responsibilities.
- Expanding the e-learning platform to include periodic training sessions and workshops for all staff, both new and existing.

Risk Management: During the previous policy period, a general risk management framework was established. This framework will now be further developed, aligning the various risk assessments conducted at different levels within the organisation (process, activity, etc.) to ensure cohesive and targeted process improvements.

Data Management: Efforts to digitise data across ITM's core activities will continue. The broader implementation of the electronic lab notebook will further reduce reliance on paper records in high-security laboratories. The focus will be on:

- Efficiency and Accessibility: The efficiency and accessibility of documents will be improved through extensive digitization efforts (including the implementation of the Electronic Laboratory Notebook). The FAIR data principles will be further implemented in line with the goals of the Flemish Open Science Board.
- System Integration: Further integration of software systems will be pursued, enabling data accessibility across different platforms through data warehouses.
- Data Security: Ensuring the secure storage and management of digital data remains a top priority (see above under Information Security).
- Archiving: ITM will improve its archiving policy focused on ensuring the availability of (electronic) data in compliance with relevant legislation and regulations.

a. Quality in research – Research Integrity

Institutional Review Board (IRB)

We consider a culture of research ethics, research integrity, and fairness in research collaboration as a primary condition for good science. To this end, ITM and all its researchers endorse the Declaration of Helsinki and the 2016 International ethical guidelines for health-related research involving humans of CIOMS. Furthermore, ITM's IRB is committed to ensure that research activities are compliant to with relevant regulations, such as the EU GDPR and the Belgian Law on Human Body Materials.

The IRB reviews all non-commercial research protocols in which ITM researchers are involved, in order to assure compliance with adequate ethics principles and requirements. As ITM is frequently involved in collaborative research projects with partner institutions in low- and middle-income countries, the IRB also verifies that ethical guidelines applicable in third countries are respected and that local regulatory and ethical approvals are secured. Moreover, the IRB reviews whether plans to engage with research communities are in place, to share the benefits of research and fairly collaborate with local researchers. They have developed a standardised template for reviewing research protocols.

The IRB works according to operating procedures that are internally approved and regularly reviewed but is up till now not a legally accredited ethics committee. During the next policy period, an assessment will be conducted to determine whether obtaining accreditation for the IRB would add value to ITM's research mission, both with reference to research efficiency and to the ITM valorisation in the Flemish research environment.

Commission for Research Integrity (CRI)

We incorporated research integrity in our policy declaration and raise awareness by offering training in research ethics and integrity to all our researchers. ITM installed a Commission on Research Integrity to promote research integrity at the institute and investigate any allegations of misconduct. ITM endorses the Flemish Commission on Scientific Integrity (VCWI = Vlaamse Commissie voor Wetenschappelijke Integriteit) as an advisory commission for second opinions. Guidelines regarding authorship in scientific publications have been installed and will be further improved during the next policy period. The composition of the CRI will be restructured due to the upcoming retirement of several members.

Open Data – Data Management in Research

ITM adheres to the European FAIR principles (Findable – Accessible – Interoperable – Reusable) and recognises that data should be "as open as possible and as closed as necessary". ITM contributes to the goals of the Flemish Open Science Board (FOSB) and has a Data Steward in place to implement the action points and to support the ITM researchers.

Since much of ITM's research data is personal, health-related or otherwise sensitive, legal as well as ethical obligations and restrictions apply. Data sharing must assure anonymity of research participants and confidentiality and comply with the European General Data Protection Regulation and legislation of the country where data is generated. Secondly, research participants must be sufficiently informed about or have consented that their anonymised or pseudonymised data might be used for further research. Lastly, the risks of stigmatisation of researched populations or communities must be avoided wherever possible.

Consequently, the approach for sharing specific datasets will depend greatly on the sensitivity of the data. Restrictions for data access will be proportionate to the sensitivity of data.

One of the main objectives of the next policy period is to expand the current Open Science software and infrastructure landscape. ITM will implement the systems in line with recommendations made by the FOSB and this for CRIS, data collaboration tools, DMP tool, data repository/fair vault, data encryption tool… The efficiency of storage and accessibility of laboratory research data will be improved through extensive digitisation efforts, including the implementation of the Electronic Laboratory Notebook. The challenge for ITM is to make the, often highly sensitive, research data as open as possible, as close as necessary.

The ITM installed a Data Access Committee for any questions about data access and data sharing.

b. Quality in education

ITM has a longstanding tradition of measuring, discussing and enhancing the quality of its courses and programmes, driven by its educational vision and characterised by a strong educational quality culture.

Assessing educational quality at ITM is realised in multiple ways, involving all relevant stakeholders through student surveys, biannual participation meetings and external assessments.

The ITM master programmes are assessed by a panel of independent experts approved by NVAO. In 2015, the MSc in Public Health and the MSc in Global One Health received positive accreditation decisions. The MSc in Tropical Medicine was initially accredited in the academic year 2020-21.

In the Spring of 2024, a panel of independent experts, under the guidance of the Flemish Higher Education Council, reviewed the master's programmes. This evaluation was necessary for the legally required re-accreditation of the degrees. The assessment report is publicly accessible[2] .

c. Quality in Reference laboratories

ITM hosts both reference and accredited laboratories that are recognised nationally and internationally (e.g., by the government, Sciensano, WHO, WOAH, FAO). These reference laboratories consistently meet the highest quality standards. ITM is committed to maintaining and enhancing these recognitions in alignment with our strategic objectives. Our laboratories hold various ISO accreditations: ISO 15189 for patient sample analyses, ISO 17025 for the evaluation of HIV/STI diagnostic tests and animal sample analyses (surra and trichinosis), and ISO 17043 for organising ring tests on trichinosis for the FASFC and on tuberculosis for the WHO.

ITM aims not only to maintain but to continuously advance the accreditation of our tests, ensuring alignment with our strategic goals and reinforcing our leadership in global health diagnostics.

d. Quality in the General Management Services and Central Policy Services

The management processes of the General Management Offices and Central Policy Offices are ISO 9001 certified, ensuring that our core activities remain compliant with relevant legislation, ISO standards, and the specific requirements of our partners and/or governments. In the upcoming policy period, these management processes will be further enhanced, and an evaluation will be conducted to determine whether alternative forms of certification, such as pillar assessments, may be more suitable. This approach aims to better support the development and consolidation of partnerships in relation to our core activities.

2 Master of Science in Public Health (master-na-master) (VL130265-24);
Master of Science in Global One Health: diseases at the human-animal interface (master-na-master) (VL131089-24);
Master of Science in Tropical Medicine (master-na-master) (VL131053-24).

Overview of Indicators for Management and Organisation

SO5 – To strengthen the overall coherence, efficiency and effectiveness of ITM's policy, by investing in research- and management platforms within the organisation or by strategic partnerships.	
OO1: To strengthen professional and effective management. In this, we set ourselves the ambition to provide consistently professional and effective services to support the ITM core tasks at different levels within the organisation.	
QI	One story each year on successful implementation of cross departmental realisation in the support of the core tasks
OO2: To create an inspiring, motivational and safe environment for each individual that allows them to flourish and to contribute to ITM's vision, mission and objectives.	
KPI	Satisfaction surveys for student support (target > 90%).
KPI	Satisfactory survey for patients (target > XX%)
KPI	All members of the hierarchy line have completed the leadership program within 18 months of being appointed to an executive position
QI	One action from the well-being action plan is highlighted annually in ITMs annual report
MI	Number of staff, diversity, (gender, nationality), turnover, cfr; legal provisions e.g. social balance sheet
MI	Number of reports to the student ombudsperson
MI	Monitoring indicators conform the well-being legislation and national quality standards (incidents, complaints, breaches,…)
OO3: To create an optimal environment for the core activities at ITM through efficient, sustainable and effective management of our resources.	
MI	Annual budgetary plan and annual financial report
QI	Yearly story on the advancement of ITM's Masterplan Buildings
QI	Two stories of successful implementation software systems and new IT developments
MI	Implementation of energy measures
MI	Carbon footprint: Implementation of energy measures and effect on $CO_{2.}$ reduction (ton/eq)
OO4: To ensure a safe and sustainable working environment by integrating robust safety and security practices and promoting environmental responsibility across all operations.	
KPI	Number of cybersecurity incidents with direct impact on the continuity of our core activities (target = 0)
MI	Modal shift (commuting ratios)
MI	Evolution of kilometers traveled by plane and effect on CO_2 emissions (ABC-principle)
KPI	Numbers of environmental/biosafety incidents with possible impact to the environment (target = 0)
OO5: To enhance the ITM Quality Management System and ensuring compliance with relevant legislation, regulations, and policies	
KPI	The number of critical audit findings that directly impact the continuity or affect the accreditation/ certification status of our core activities. (target = 0)
QI	Annually, at least one story highlighting the successful implementation of improvements in the learning environment, risk management or data management.
QI	One success story on a research project with low- and middle-income country partners that underwent IRB review to ensure ethical compliance, local approvals, community engagement, and fair collaboration.
QI	Document one success story demonstrating the added value of an accredited laboratory activity or test to ITM's research or service delivery (reference tasks).
MI	Number of CWI reports
MI	Number of IRB submissions

Financial plan

2025
2030

1. Overall Financial Plan

The financial plan 2025-2030 for the entire operation of ITM gives an overview of the income and expenditure for this period for various core tasks of ITM as defined in the management agreement with the Flemish Department of Education, and in more detail for the research task as defined in the covenant with the Flemish Department of WEWIS.

This financial plan builds on the achievements of the past five years, the realised impact of ITM in Flanders and internationally and the ambitions for the future concretised in the 5 strategic objectives. The requested increase in WEWIS-subsidy also takes into account the recommendations of the evaluation to invest more in HI4A and from WEWIS (see box) to strengthen ITM's presence in the Flemish, Belgian and European landscape of pandemic preparedness.

Extract of the vision of WEWIS on the future of ITM.

"With a more extensive research budget, ITM can maximise its presence in the European research partnerships relevant to its area of expertise, such as the partnership for clinical research collaboration with Africa (EDCTP3), the partnerships under preparation on pandemic preparedness (Be Ready, HERA), One-Health AMR, One Health—Animal Health, and any other relevant initiatives.

ITM could also play a role in the ever-warm clinical trials network the EU wants to set up as part of pandemic preparedness. We want ITM to form part of an ecosystem around pandemic preparedness in Flanders that will gain international prestige for ITM concerning tropical diseases and interaction with Low —and Middle-Income Countries (LMIC).

ITM could also set up a Grand Challenges programme alongside or in collaboration with the VIB, strongly focusing on translational research.

In addition to ITM's focus on major tropical diseases such as sleeping sickness, malaria, tuberculosis, and parasites, we propose that ITM maximises its commitment to research programmes on pathogens that pose a potential pandemic threat, as WHO identified.

To make this vision a reality, ITM can build on infrastructures already in place, which should be further expanded to mature in the various domains. These infrastructures could be/be part of the ESFRI infrastructures, such as ECRIN, EATRIS, BBMRI and others.

Table: Financial Plan 2025-2030

Income

Funding for core tasks

Management agreement with the Department of Education	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Basic allowance	12.800.000,00	12.978.000,00	13.009.000,00	13.217.000,00	13.428.000,00	13.643.000,00	13.862.000,00
Investment allowance	700.000	731.000	731.000	741.000	751.000	762.000	773.000
TOTAL	**13.500.000**	**13.709.000**	**13.740.000**	**13.958.000**	**14.179.000**	**14.405.000**	**14.635.000**
Funding for special research assignment	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
WEWIS Covenant	5.950.000	9.200.000	15.000.000	15.240.000	15.483.840	15.731.581	15.983.287
Other government funding	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
FPS PUBLIC HEALTH/ RIZIV	7.435.175	8.420.000	8.588.400	8.760.168	8.935.371	9.114.079	9.296.360
DEVELOPMENT COOPERATION DGD	15.800.000	16.116.000	16.116.000	16.116.000	16.116.000	16.116.000	16.116.000
FPS Finance (Support for R&D activities)	6.700.000	7.000.000	7.400.000	8.200.000	8.600.000	8.960.000	9.340.000
TOTAL	**29.935.175**	**31.536.000**	**32.104.400**	**33.076.168**	**33.651.371**	**34.190.079**	**34.752.360**
External funding	17.000.000	17.000.000	17.400.000	19.100.000	20.800.000	22.600.000	24.400.000
Other miscellaneous - own income	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Income from fees	4.280.000	4.365.600	4.452.912	4.541.970	4.632.810	4.725.466	4.819.975
Registration fees	1.430.000	1.573.000	1.730.300	1.903.330	2.093.663	2.303.029	2.533.332
Income from scientific services	1.700.000	1.785.000	1.874.250	1.967.963	2.066.361	2.169.679	2.278.163
Income from legacies and donations	575.000	600.000	500.000	500.000	500.000	500.000	500.000
Income from student accommodation rentals	830.000	846.600	863.532	880.803	898.419	916.387	934.715
TOTAL OTHER	**8.815.000**	**9.170.200**	**9.420.994**	**9.794.065**	**10.191.252**	**10.614.561**	**11.066.185**
TOTAL	**75.200.175**	**80.615.200**	**87.665.394**	**91.168.233**	**94.305.463**	**97.541.221**	**100.836.832**

Expenditures

EDUCATION	2024	2025	2026	2027	2028	2029	2030
Independent Academic Staff	1.237.500	1.416.690	1.445.024	1.473.924	1.503.403	1.533.471	1.564.140
Other academic staff	239.000	1.062.850	1.300.928	1.626.161	1.842.982	2.168.214	2.211.578
Educational organisation	1.482.500	1.431.800	1.480.436	1.530.045	1.580.646	1.632.259	1.684.904
Educational innovation	-	615.700	628.014	640.574	653.386	666.453	679.783
Science communication specific to education	275.000	275.000	280.500	286.110	291.832	297.669	303.622
TOTAL EDUCATION	**3.234.000**	**4.802.040**	**5.134.902**	**5.556.814**	**5.872.248**	**6.298.066**	**6.444.027**

RESEARCH	2024	2025	2026	2027	2028	2029	2030
Independent Academic Staff	2.557.500	2.608.650	2.758.650	2.813.823	2.870.099	2.927.501	2.986.051
Fundamental framework/other research personnel (Personnel and general operating costs)	5.042.750	6.440.000	8.449.100	8.652.670	8.783.050	8.913.430	9.109.000
External funding expenditure for research	15.300.000	15.300.000	15.660.000	17.190.000	18.720.000	20.340.000	21.960.000
Research platforms							
A. Research and Clinical Data Centres	1.752.500	1.989.000	2.383.500	2.431.170	2.479.793	2.529.389	2.579.977
B. Laboratory facilities	434.000	460.000	469.200	478.584	488.156	497.919	507.877
C. Groundbreaking biomedical research	935.000	752.000	1.352.600	1.379.652	1.407.245	1.435.390	1.464.098
D. Platforms for clinical research in the framework of pandemic preparedness	-	635.000	1.175.000	1.198.500	1.222.470	1.246.919	1.271.858
Institutional strategic research programmes							
A. Institutional research programmes	1.450.000	1.680.000	1.850.000	1.887.000	1.924.740	1.963.235	2.002.499
B. Health Challenges Programmes (interdisciplinary)	-	-	1.200.000	1.224.000	1.248.480	1.273.450	1.298.919
Valorisation programme	550.000	550.000	600.000	612.000	624.240	636.725	649.459
Research organisation	1.663.000	2.010.675	2.199.129	2.243.864	2.369.311	2.436.734	2.505.504
Science communication specific to research	465.000	465.000	474.300	483.786	493.462	503.331	513.398
TOTAL RESEARCH	30.149.750	32.890.325	38.571.479	40.595.049	42.631.047	44.704.023	46.848.640

SERVICE PROVISION	2024	2025	2026	2027	2028	2029	2030
Independent Academic Staff	825.000	944.460	963.349	982.616	1.002.269	1.022.314	1.042.760
Scientific Services	890.000	907.800	925.956	944.475	963.365	982.632	1.002.285
Medical Services	9.300.000	9.486.000	9.695.720	9.909.634	10.127.827	10.350.384	10.577.391
Capacity Building Activities	14.580.000	14.871.600	15.169.032	15.169.032	15.169.032	15.169.032	15.169.032
External funding expenditure for scientific services	1.700.000	1.700.000	1.740.000	1.910.000	2.080.000	2.260.000	2.440.000
TOTAL SERVICES	27.295.000	27.909.860	28.494.057	28.915.758	29.342.492	29.784.361	30.231.468

OTHER EXPENDITURE	2024	2025	2026	2027	2028	2029	2030
General Management	13.545.000	11.755.975	12.175.316	12.437.680	12.255.985	12.138.905	12.153.013
General Management (departmental)	1.600.000	1.632.000	1.664.640	2.037.933	2.078.691	2.190.866	2.334.684
Investments	700.000	700.000	700.000	700.000	700.000	700.000	700.000
Financial expenditure	925.000	925.000	925.000	925.000	1.425.000	1.725.000	2.125.000
TOTAL OTHER EXPENDITURE	**16.770.000**	**15.012.975**	**15.464.956**	**16.100.613**	**16.459.676**	**16.754.771**	**17.312.696**
TOTAL EXPENDITURE	**77.448.750**	**80.615.200**	**87.665.394**	**91.168.233**	**94.305.463**	**97.541.221**	**100.836.832**

Core tasks

Under the Management Agreement with the Department of Education, the core mission of ITM as defined in Article 2.1 is threefold:

- Provide post-initial education, post-graduate and post-graduate training to graduates of universities and colleges from home and abroad.
- Conduct scientific research.
- Provide scientific and societal services resulting from its specific scientific expertise.

The new policy plan/framework adopts the following principles:

- ZAP appointments will continue to be made in accordance with the "10/10/10-ZAP succession plan" as approved in December 2018. 'Regular ZAP (funded through the Flemish Department of Education) have an assignment in the three core missions, set at 30% teaching, 50% research, and 20% service (ratio used in the financial plan). Research Professors (funded through WEWIS) commit a minimum of 80% of their time to research, and maximum 20% to teaching/service.
- Each department and ZAP is committed to contributing to the three core missions of ITM.
- Assistant Academic staff positions (assistant and doctoral assistant) will be reinstated to strengthen ITM's core missions of teaching and research.
- The funding ITM receives through the ITM-WEWIS covenant, enables researchers to compete at the international level and to obtain a level of excellence with funding from high level funders such as FWO and ERC.
- Each ZAP has a specific assignment with clear targets for education, research and services.
- The scientific service delivery and education by the medical services forms an integral part of the Management Agreement and cannot be covered completely by the 10 ZAP in DCS.
- ITM foresees a growth trajectory for the educational programs, by deploying own staff on teaching and student supervision, engaging external teachers from the Global South, further exploring cooperation opportunities with other educational institutions, and investing in educational innovation.
- The communication projects implemented in the current period aimed at educating young people have been very successful. ITM wishes to continue its social role through these communications. In addition, ITM will also invest in policy education on tropical medicine and global public health.

For the implementation of its core missions as stipulated in Art. 2.1 of the Management Agreement between ITM and the Department of Education of the Flemish Government, ITM requests a modest increase of the annual allowance, in particular the index adjustment in line with the increases granted to recognised institutions of higher education (colleges and universities, cf. budget Flemish Government 2024) up to 15 MEURO. Also for the investment funds, ITM requests an increase of the investment allowance to 1.1 MEURO/year to meet the challenges of the existing infrastructure (housed in 2 heritage buildings).

Research

Although part of ITM's research framework is funded through the Management Agreement with the Department of Education (ZAP & Assistant Academic staff time invested in research, core laboratory technicians, core laboratory support facilities), specific institutional funding for research comes through the ITM-WEWIS covenant, complemented by external research funding, withholding tax for research and development(the so called defiscalisation income) and other funding sources.

In order for ITM to carry out its research ambitions and increase its competitive edge in the (inter) national research landscape, the ITM research environment requires substantial investments, in staff as well as in operational and investment resources. This is explained in the 'WEWIS subsidy Ambitious' section in order to achieve its ambitions and to continue to operate at an internationally competitive research level.

Operational and staff resources specifically related to ITM's research assignment are described under the 'WEWIS' section.

Other policy areas

Medical services:

- Flemish: at the request of the Flemish government, ITM assumes an important role in the prevention of travel-related diseases among Flemish people by informing them via the Wanda on travel risks and tropical infectious diseases, via the Agency for Care and Health, and by training primary health care workers and pharmacists. It will continue this mission in line with demand in the next policy period.
- Federal: ITM submitted a request to the FPS Public Health in September 2023 for an increase in its funding by 1 MEURO in order to remain performant and compliant with all e-health requirements, as well as to cope with increasing overhead. Discussions resume in preparation for the new federal government.

International Cooperation and Development Cooperation:

- Flemish: cooperation with Department of Development Cooperation and Chancellery, contributing to Flanders' international reputation through OS programs (Mozambique) and through cooperation with the Chancellery (networks).
- Federal: DGD program including strengthening partners, global networks, training students and policy information on tropical and medicine and public health at (supra-)national level.

External funding:

Flemish grants from the Departments of Education and WEWIS make it possible to attract competitive funding from other external sources. These external sources include:

- Local, regional, national funding (FWO, Belspo, Sciensano, other Flemish departments, VLAIO, ...);
- International funding, such as EC funding (Horizon Europe, EDCTP, INTPA, ...), and other funders, foundations and associations (e.g. NIH, BMGF, ...)
- Collaboration with industrial partners in life sciences and other relevant sectors.

Masterplan Buildings

In the current policy period, ITM has conducted a thorough needs analysis for its buildings, identifying a need for more space and a comprehensive approach to its existing infrastructure. ITM is located on three campuses in central Antwerp, with two of them housed in protected monuments that are neither sustainable nor energy efficient. Some laboratories are in 1970s buildings with significant structural and technical issues, making them unfit for use with only an estimated 10 years of life remaining.

To support ITM's biomedical and clinical research ambitions, an additional 7,000 m² of lab space is required for laboratories, biobanks, insectaria, and related facilities. The Masterplan includes restoring and refurbishing the Art Deco building at Nationalestraat 155, with an estimated budget of €35 million. Additionally, ITM plans to expand its laboratories on the site of the current PIH building, supported by the City and Province of Antwerp, at an estimated cost of €60 million. This expansion will align with ITM's existing heritage and contribute to a vibrant inner-city campus.

The Masterplan Buildings has been developed in consultation with the City of Antwerp, the Province of Antwerp, and the Flemish Government, and funding will be sought through extraordinary budgets in coordination with the relevant ministers.

Summary

ITM's ambition is to be one of the most trusted and innovative academic institutions in tropical medicine and public health by 2035, driven by our groundbreaking research, world-class medical services, excellent teaching and unwavering commitment to equal partnerships. We strive to have our contributions to public health recognised and respected worldwide. As a center of excellence in tropical diseases, our expertise will also be highly relevant to traditionally more temperate regions that will increasingly face tropical and emerging infectious diseases due to climate change, globalisation and mass migration.

To realise the ambitious objectives and initiatives described in this strategic plan, we propose government funding for the core missions of 15.0 M€, complemented by 1.1 M€ investment grants and 700 k€ for group insurance. In addition, ITM requests government funding of 15 MEuro for the realisation of an ambitious research policy plan to the Department of Economics, Science and Innovation.

2. WEWIS Subsidy

While the above tables showed the revenues and expenditures for "research" from the various funding sources, the table below details the various components for which the WEWIS grant will be used. We aim to fund the expenses beyond the 15 M€ WEWIS subsidy with the defiscalisation income.

WEWIS Research Subsidy, 2025-2030	Revised 2025	2026	2027	2028	2029	2030
Budget items						
SOFI 2021	170.000					
SOFI 2023	1.000.000	851.132				
SOFI 2025	617.000	700.000	700.000	700.000	100.000	
SOFI 2027			600.000	600.000	600.000	600.000
SOFI 2029					600.000	600.000
People programme(Safety net, co-funding salaries excellence programmes, FWO incentive, ...)	305.000	300.000	300.000	300.000	300.000	300.000
Matching funds to join excellence programmes/ calls (jPPP, ...)	75.000	250.000	250.000	250.000	250.000	250.000
Small/medium scale research infrastructure	200.000	300.000	300.000	300.000	300.000	300.000
P3 programme	0	700.000	1.950.000	1.950.000	1.950.000	1.950.000
Research ZAPs	397.500	405.450	413.559	421.830	430.267	438.872
ZAP envelopes (postdoc equivalent research ZAP)	290.000	373.014	380.474	388.084	395.845	403.762
ZAP envelopes (consumables/ 'operations budget')	580.000	1.500.000	1.500.000	1.500.000	1.500.000	1.500.000
Innovation & Impact (HI4A)	200.000	725.000	855.000	1.000.000	1.000.000	1.000.000
Clinical Trials Unit	800.000	918.000	936.360	955.087	974.189	993.673
Platforms for clinical research in the framework of pandemic preparedness	635.000	943.500	962.370	981.617	1.001.250	1.021.275
Ever-warm-based clinical trials network (CTS)	0	255.000	260.100	265.302	270.608	276.020
Biostatisticians	170.000	497.352	507.299	517.445	527.794	538.350
Bioinformatics hub (and AI)	610.000	405.450	413.559	421.830	430.267	438.872
Clinical Data Management	40.000	97.308	99.254	101.239	103.264	105.329
Global Population Data Sciences Hub	316.000	459.000	468.180	477.544	487.094	496.836
Biobankmanager	53.000	54.060	55.141	56.244	57.369	58.516
ORT (from 2027> P3)	600.000	600.000				
Insectary (human capital + 50K consumables)	375.000	429.420	438.008	446.769	455.704	464.818
Investment cost insectary	0	102.000	104.040	106.121	108.243	110.408
Molecular biology ('genome platform')	152.000	148.308	151.274	154.300	157.386	160.533
Investment cost genome platform	0	102.000	104.040	106.121	108.243	110.408
Imaging platform (+single cell)	0	148.308	151.274	154.300	157.386	160.533
Investment imaging platform	0	102.000	104.040	106.121	108.243	110.408
Research for high risk pathogens (BSL3)	225.000	245.616	250.528	255.539	260.650	265.863
Investment cost BSL3	0	102.000	104.040	106.121	108.243	110.408
Science Communication (25%)	232.500	237.150	241.893	246.731	251.665	256.699
Research Office & Research Management	1.568.800	1.700.000	1.734.000	1.768.680	1.804.054	1.840.135
Total expenses	9.611.800	13.651.068	14.334.435	14.637.023	14.797.764	14.861.719
Overhead 10% expenses	961.180	1.365.107	1.433.443	1.463.702	1.479.776	1.486.172
Grand Total expenses (overhead inclusive)	10.572.980	15.016.175	15.767.878	16.100.726	16.277.540	16.347.891

(i) Institutional strategic envelop (ii) Research ZAP + ZAP envelopes (iii) Innovation & Impact
(iv) Research platforms (v) Research support

In conclusion, ITM aims to maintain and further strengthen its competitive edge in research:

(i) Institutional strategic envelope:

- The most important new component is the roll-out of P3 – a groundbreaking research model that integrates pathogens, patients and populations into a single framework with a view to achieving sustainable impact. This approach links laboratory breakthroughs, clinical expertise and population-level insights, translating science into solutions for people in Flanders and worldwide.
- The budget for co-financing the excellence programmes was also increased with a view to (1) maximising the leverage effect of the WEWIS subsidy and (2) complementary collaboration based on a systems approach.

(ii) Research ZAP & ZAP envelopes:

- Funding for research professors and their research grants, which consist of the equivalent of a postdoctoral researcher's salary.
- In addition, the research grant includes an "operational budget" of 50K per research unit, which professors can use for the collection of preliminary data, publication costs, the organisation of scientific workshops, etc., depending on the needs of their research.
- The research grant acts as financial leverage for acquiring external funding.

(iii) Innovation and impact

The Innovation and Impact budget strategically allocates resources across three key areas—staff, operational costs, and internal innovation funds—to ensure the successful launch and steady growth of the HI4A program during the policy period. The budget supports HI4A's dual objectives to (i) co-create I&I policy and practices, and (ii) ITM knowledge valorisation operations:

- Core team, including the lead innovation policy expert, the innovation developer and the impact expert.
- Operational costs, including for the Innovation Advisory Board and obtaining advice from experts on intellectual property protection, market analysis and prototyping.
- Innovation financing instruments, including the Moonshot and Bridge programmes, to support transformative projects with a view to sustainable impact (P3) and flexible financing for short-term innovations.

(iv) Research platforms

Throughout the previous policy periods, ITM has set up essential research platforms using different funding sources, among which competitive project funding, philanthropy income and WEWIS funding:

- Research and clinical data platforms include the ITM Biobank, CTU, the Clinical Data Management team, the Global Population Data Science Hub, the Geospatial Health Hub, a Bioinformatics and AI Hub and a Biostatistics platform.
- ITM hosts several laboratory research platforms focusing on specific pathogen or vector research or specific techniques. The platforms cater to biomedical and clinical laboratory research units and are managed by dedicated staff to guarantee the correct and efficient use of the facilities. To assure continuity and quality of research results, an annual operational budget is foreseen for validation, regular maintenance and calibration.

- Platforms for clinical research in the context of pandemic preparedness (ECRAID, ECRIN) and the network for clinical trials based on increasingly warmer conditions (travel cohort and biobank, clinical study team, CTS)

These platforms and facilities form a cornerstone of the ITM research environment and require constant investment in personnel and equipment in order to remain state-of-the-art with a view to excellent and impactful scientific research and attracting talent. The WEWIS grant guarantees personnel support, operational budgets and investment budgets for each platform.

(v) Research support and science communication

ITM invests in research support (Research Office, departmental research managers, quality assurance) and science communication.

ITM supports the Flemish objective of science communication by promoting Flanders internationally as a leading region in science, technology and innovation. This communication reinforces ITM›s image as a leading centre in tropical medicine and global health, with a worldwide partner network built up over 120 years. The annual ITM colloquium and extensive international media coverage increase the visibility of Flemish science.

ITM translates complex research into accessible information through podcasts such as Transmission and Wetenschapje, educational initiatives such as EDUbox, and frequent contributions by ITM experts in the media on current health issues. Training in science communication ensures clear, nuanced messages.

Digital platforms such as the Wanda travel medicine website and app provide reliable, inclusive health information. The outpatient clinic publishes freely accessible reference works on tropical and infectious diseases.

In its anniversary year, new social media sections will be launched (‘medicine versus myth’, ‘human impact’, ‘what’s on your plate’) to disseminate science in an accessible way.

ITM increases social engagement with science by participating in public events such as Nerdland Festival, Science Day, Antwerp Pride and Open Monument Day, thereby promoting confidence in science as a driver of well-being.

Through school visits, internships and projects such as JINC, Baas van Morgen (Boss of Tomorrow) and Boost, ITM brings young people — including those from vulnerable backgrounds — into contact with STEM subjects and scientific professions.

Finally, ITM organises exhibitions such as Children of Care (2024) and an Ebola exhibition (2026) with educational packages for schools, bringing science closer to young people.

Expected growth in number of researchers and impact on the organisation

While writing this policy plan ITM critically reflected on the allocation of ITM staff as per the different income flows. Whereas dispersed grants and funding agreements over the previous periods have enabled ITM to initiate investments and build a research environment suited to its needs, the long-term strategy to maintain the environment operational and up-to-standard was less clear. In several cases, structural staff positions, essential for ITM to reach its research objectives, have been funded through short-term grants or funding sources with a different aim, sometimes creating uncertainty on the continuity of the concerned facility/team.

With this policy plan, we take the opportunity to clearly align staff allocation with the intrinsic goal of the relevant funding source. In the case of the WEWIS budget, this means that not all FTE included in the budget entails a net increase of ITM staff, as often these positions exist.

The net increase in research staff is expected to include initially the additional postdoc funding in the Research Allowance (35FTE), extra investments in the HI4A team (2FTE), and in a second time, additional FTE linked to ensuing increased external funding). At the secondary level, the growth in the number of researchers is expected to entail further investments in (research) support staff.

Annex Scientific Departments

1. BMS Department of Biomedical Sciences

Introduction

The **Department of Biomedical Sciences** consists of ten research units that perform **world-class biomedical research on diverse pathogens of concern to global public health and the diseases they cause**. We strive towards reducing the suffering from tropical infectious diseases around the world. We do this by generating fundamental insights in pathogen-host-vector interactions, by studying patterns and drivers of pathogen and vector adaptation to changing macro- and micro-environments, and by innovating tools to improve diagnosis, surveillance, prevention, treatment, and control of infectious diseases. We differentiate ourselves from classical academic research groups by combining rigorous lab-based experimental research using advanced state-of-the-art methods and approaches along with strong field-based epidemiological and ecological research. Furthermore, we share the philosophy to closely **connect the excellence and relevance of basic and applied research via collaboration and capacity strengthening through training, education and staff mobility between ITM and our partner institutions** in low- and middle-income countries across Africa, South America and Asia.

The research performed in the department supports ITM's global research priorities on (1) Sustainable Health Care and Health Systems, (2) Disease Control and Elimination, and (3) Emerging Infections and Outbreaks.

Within the department, we specifically focus on vector-borne protozoan **parasites** (such as *Leishmania*, *Trypanosoma* and *Plasmodium*), **(myco)bacteria** (in particular *M. tuberculosis*, *M. leprae* and *M. ulcerans*), **viruses** (predominantly arthropod-borne viruses and haemorrhagic fever viruses) and their **vectors** (among which *Anopheles*, *Aedes* and *Culex* mosquitoes, tsetse flies and sand flies).

Our different research units converge around a number of **well-defined cutting edge and pressing research themes.**

In the field of **mycobacteria**, we will investigate Mtb protein interactions, folding, and virulence in relation to TB drug pressure and resistance; the impact of Mtb heteroresistance on TB drug efficacy and M. leprae drug resistance; identify host genetic risk factors for leprosy; investigate transdisciplinary TB/leprosy transmission dynamics and AMR evolution with cutting-edge phylodynamics and high-res network analysis; develop and test improved diagnostic tools for point-of-care testing, for next-generation drug resistance and advanced heteroresistance testing.

In the field of **parasitic protozoa**, we will study *P. vivax* adaptation mechanisms and infection biology; the impact of host factors and treatment on *P. falciparum* sexual conversion in endemic populations; identify *Anopheles* innate immunity factors and role in *Plasmodium* transmission; the impact of host factors and treatment on *P. falciparum* sexual conversion in endemic populations; develop and research gene-drive *Anopheles* for vector control; investigate drivers of dynamic genome plasticity, quiescence and drug resistance, and evolution of parasite adaptive skills across Trypanosomatids; study the role of *Leishmania* adaptive capacity in shaping infection evolution across vectors, mammalian hosts and humans in natural and experimental conditions; perform single-cell spatial analysis to understand host-parasite interactions; identify host protective immune responses and parasite's immune evasion strategies during intracellular survival as well as new drugable targets for future therapies; study the biology of skin-residing stages of Trypanosomes, their response to trypanocidal drugs and role in transmission, the interaction with host skin tissue and immune responses; investigate the role of animal reservoir in gHAT transmission; develop and test new and improved gHAT diagnostics fit for needs of peri- and post-elimination.

In the field of **emerging viral pathogens and their vectors**, we will investigate molecular interactions between arboviruses and vectors to understand virus transmission, immune evasion, and pathobiology; investigate the immunopathology associated with dengue and chikungunya using next-gen immune repertoire analysis; study the influence of climate change on mosquito behavior and vector competence for arboviruses; analyse the intricate interactions between vectors and co-infecting pathogens to understand how this affects vector capacity and pathogen transmission; create novel antiviral strategies based on double-stranded RNA triggering of innate immunity in arthropod vectors; develop and evaluate laboratory diagnostic and surveillance tools for emerging viruses in resource-constrained settings, including next-gen technologies.

The department is home to several (inter)national reference laboratories, in recognition of the world-class expertise and research capacity that we comprise, particularly in the field of molecular parasitology (*Leishmania* and *Trypanosoma;* WHO Collaborating Centre for Research and Training in Human African Trypanosomiasis Diagnostics; WOAH Reference Laboratory for Surra; National Reference Laboratory for Parasites (Trichinella, Echinococcus and Anisakis)), mycobacteriology (WHO TB Supranational Reference Laboratory - Coordinating Center and the world largest BCCM/ITM Mycobacteria Collection) and (tropical) virology (National Reference Centre (NRC) for Arboviruses; National Reference Laboratory for Infectious and Tropical Diseases; WHO Collaborating Centre for HIV/AIDS Diagnostics and Laboratory Support).

In **education**, we organise the international MSc Global One Health, which is offered in collaboration with the University of Pretoria (RSA), and the Department of Public Health. Furthermore, we offer several specialised short courses with a biomedical approach on health-related topics that closely align with our research expertise (e.g. Molecular Data for Infectious Diseases and Clinical Decision Making for Drug-Resistant Tuberculosis). Finally, we strongly invest in advanced education through research with PhD and postdoctoral training. In the policy period 2025-2030, we will explore new short course initiatives such as mosquitos control, molecular surveillance for malaria, and bioinformatics in infectious diseases while finetuning existing courses to better align with our research expertise.

Organogram Department of Biomedical Sciences and Succession Plan Professorships (ZAP-plan)

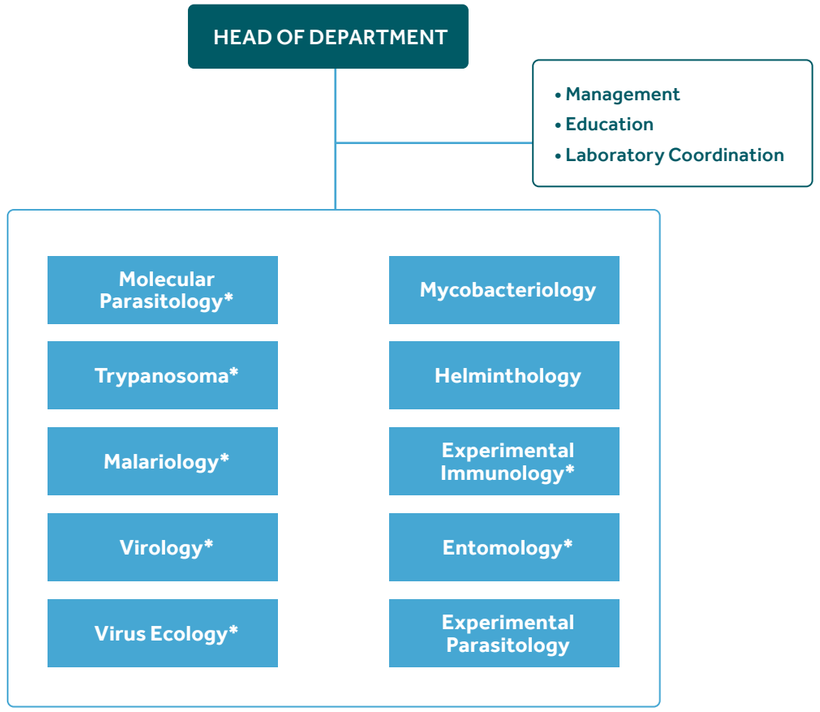
For the 2025-2030 policy period, the Department of Biomedical Sciences will consolidate and further strengthen the internationally recognised expertise in vector-borne disease (VBD) research, by further investing in new research units (headed by a professor) in the VBD domain and in state-of-the-art infrastructure and equipment that enables us to further excel in our research activities.

Our two research professorships fit entirely with our strategy to strengthen VBD-oriented research, with a Virus Ecology Unit (started in 2024) and an Experimental Immunology Unit (started in 2023) focusing on the emergence and transmission dynamics of zoonotic viruses and vector ecology, and on mosquito vector immunology, respectively. The Helminthology Unit, with a newly appointed professor (2025), aims to study interactions between parasitic nematodes,

their host(s) and their insect vector(s), as well as the impact of co-infection with other co-endemic pathogens, establishing clear thematic and methodological links with ongoing VBD-research in the department. Two of our vested senior professors will retire in 2027(Molecular Parasitology and Trypanosoma). We ensure a timely transition and follow-up plan for both, with the appointment of a professor of experimental parasitology in 2025, to maintain the world-class expertise on Leishmania that we have today, and a professorship in the field of Trypanosoma (opening in 2026). Finally, this transition plan creates the opportunity for a new research unit and professorship that will be opened in 2027 in a yet-to-be-defined research domain. This professorship could for example offer an opportunity to strategically strengthen the field of (myco)bacteriology and antimicrobial resistance across ITM departments or further expand critical mass on vector-borne diseases.

These strategic choices neatly align with complementary profiles in the Departments of Clinical Sciences and the Department of Public Health to increase multidisciplinary critical mass on VBD, NTDs, emerging diseases and parasitic helminths.

Current organogram



2. DCS - Department of Clinical Sciences

Introduction

The Department of Clinical Sciences consists of **nine academic units** centred on improved patient health for tropical and global infectious diseases. In addition, the department is home to the **Clinical Trials Unit** and a newly established **Clinical Trials Centre**. The department hosts the **Medical Services** (**Clinical Reference Laboratory, HIV/STI Clinic, the Travel Clinic).** The ITM Clinical Reference Laboratory, supporting the clinic, covers the diagnosis of viral, bacterial and parasitic pathogens. The clinical reference laboratory hosts the unique reference laboratory for **Infectious and Tropical Diseases**, an **AIDS Reference Laboratory** and several national reference centres, including for Arboviruses and Sexually Transmitted Infections. The ITM clinic sees over 20,000 travellers, 6000 post-travel visits and 12000 HIV and STI-related visits per year.

The polyclinical work and the clinical reference laboratory are strong assets for researchers from the three departments.

The researchers of the academic units work closely together with multiple research partners in Europe and LMIC.

Our research focuses on **improving preventive, diagnostic and treatment practices of tropical and (re)emerging global infections both in LMICs and in Belgium/Europe.** Our research topics are inspired by our **clinical work** at ITM, our strong link with **scientific partners in LMIC** and interaction with students and experts from around the world during our **educational activities**. Combined with the multidisciplinary clinical and laboratory expertise in our department, this provides us with a unique position in the clinical research setting.

The academic activities are organised into two research groups.

The **Clinical Tropical Medicine** group consists of six academic units, and research ranges from novel therapies and diagnostics in clinical trials and cohort studies to clinical decision-making and operational research to improve individual patient management.

The **Tropical Laboratory Medicine** group consists of three academic units whose research aims to strengthen diagnostic and disease prevention efforts. This ranges from fundamental research such as antigen discovery, immunological correlates of protection, improved pathogen identification, and metagenomics to applied research on the development and implementation of LMIC-adapted ("tropicalised") bacterial diagnostics.

Commonly, our **research** converges around central topics such as:

- Improving vaccination for tropical and (re)emerging global pathogens
- Reaching the SDG of several NTDs such as leishmaniasis, rabies, schistosomiasis
- Tackling clinical surveillance of, and research on, acute febrile illness and outbreaks of emerging infectious diseases (such as haemorrhagic fevers and monkeypox)
- Addressing the evolving resistance of tuberculosis and malaria
- Invasive bacterial infections: (antimicrobial resistance) epidemiology and diagnostics
- Advancing travel medicine and HIV/STI care

In **education**, the recently started (2020) MSc in Tropical Medicine (MTM) has the ambition to deliver knowledgeable and skilled physicians and scientists, who are ready to tackle health challenges of diagnosis and management of tropical and (re)emerging global infections and contribute to the development of innovative solutions for prevention, diagnosis and treatment of tropical and globalised infectious diseases. The MTM hosts mainly clinical and biomedical profiles, who are guided through their training by medical professionals, biomedical and public health specialists at ITM and partner institutions (Global Campus) , to reflect the multifaceted nature of health challenges in tropical regions and in vulnerable settings. MTM is constructed in a modular and flexible manner, with several sequential specialised short courses. Apart from the master and short courses, we commit to continuing professional development of general practitioners and specialists in Flanders and in Belgium with advanced specialised training.

Finally, we value partnership and collaborations with higher education institutions, non-governmental organisations, international academia and industry to leverage scientists and professionals, effectively addressing the challenges in the field of diagnosis and management of tropical and globalized (re)emerging diseases.

In the framework of the DGD-funded **capacity sharing** programs we are involved in Ethiopia, Guinea, Cuba, Benin, RDC, Burkina Faso, Rwanda and Peru. These projects build scientific capacity in research institutes focusing on TB, HIV, STI, leishmaniasis, febrile illnesses. This includes maintaining a platform of surveillance of AMR in three continents, strengthening laboratory capacities for diagnosis, and organizing a variety of trainings on different topics (on sequencing-based diagnostics & surveillance, on treatment regimes, on clinical trial techniques, on infection prevention & control, etc) within our partner institutions.

Organogram Department of Clinical Sciences and ZAP succession plan

Unit of Tropical Bacteriology: This highly successful unit is the largest in the department. A consultation process with experts from the North and South confirmed the pioneering work this unit has been done in this field. The unit is well placed to remain at the forefront. To continue to strengthen this research line across the institute, a vacancy will be launched in 2023 to replace the current (retiring) ZAP, ideally a medical microbiologist. The main research focus of the unit will be on innovations in patient-centred diagnostic bacteriology in the Global South.

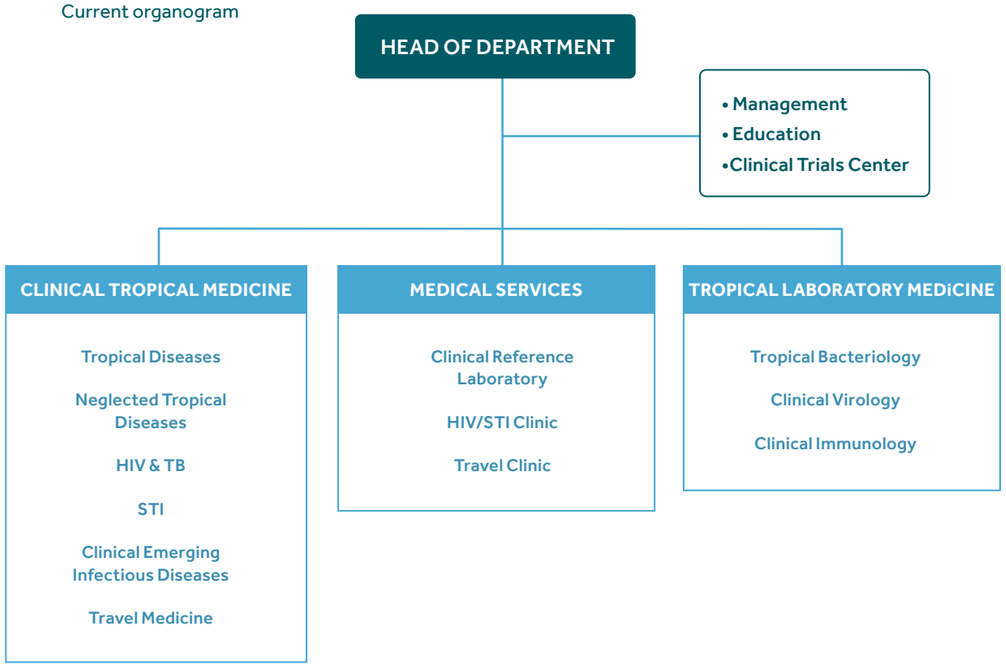
Unit of Tuberculosis & HIV: By closely working with the respective units in the other two departments, this unit has made major contributions to a strong interdepartmental research line on mycobacteriology, and also contributes to our interdepartmental research on sexual health and HIV/STI. A vacancy will be launched in 2023/early 2024 to replace the current (retiring) ZAP. Main research lines will entail clinical trials on diagnostics and treatment of (resistant) tuberculosis, clinical decision making and operational research on tuberculosis and HIV.

Unit of HIV care: This unit predominantly focussed on clinical research around the ITM HIV cohort, in a Flemish/Belgian context. The unit was launched in 2019, but the ZAP left ITM in 2022. To be able to preferentially strengthen our research on "Tropical Medicine" (malaria, helminthology, ...), and at the same time bring together all expertise on HIV & STIs in the clinical and public health department, our HIV & STI research will be strengthened via the newly established interdepartmental Sexual Health and HIV/STI Research Platform, in line with an increased desire for interdepartmental collaboration. Through this platform, which brings together five units from the two departments, who have a strong track record in past successful collaboration (https://www.ITM.be/en/research/research-themes/hiv), we will continue to play an active role in the HIV/STI field within a Flemish/Belgian and international context.

Unit of Tropical Diseases: this unit covers research on helminths (schistosomiasis, neurocysticercosis...), malaria and other acute febrile illnesses, with a strong focus on clinical decision-making. The current ZAP will retire in 2029. Considering these research areas as strongly within the "niche" of ITM, this unit will be maintained. Conditional on additional funding to be procured, we have the ambition to have two academic units covering these topics:

1. Unit of Clinical Helminthology to expand the interdepartmental research line on helminths, closely collaborating with the current unit of Eco-Epidemiology (former unit of medical helminthology) at DPH and the unit that will be launched in BMS.
2. Unit of Malaria & Other Febrile Illnesses: 1) to strengthen the ITM research line on malaria, particularly on malaria vaccines & drug-resistance; 2) clinical decision making for non-malaria acute febrile illnesses.

Current organogram



3. DPH - Department of Public Health

Introduction

The **Department of Public Health** consists of ten units that carry out research, education and capacity sharing with high scientific and societal value in the field of public health. The units come together into four research groups: Health Systems and Health Policy Research (HS&HP), Sexual & Reproductive Health (SRH), Tropical Infectious Diseases (TID), and EcoHealth.

The department aims to

1. Improve the understanding of the interlinked biological, social health system-related, political, and ecological determinants of the health of individuals and communities
2. Develop, implement and evaluate policies, programmes and interventions that support and strengthen the health of individuals and communities
3. Co-create knowledge and capacity to contextualise, prevent and detect health problems, and to develop effective responses to local and global health challenges and threats.

We aim for research that is scientifically excellent and that achieves high societal impact, including universal health coverage. We engage with scientific institutes, communities, health practitioners, policy makers and other stakeholders to produce research that is relevant for policy and practice (GRIPP). We focus on **understanding and addressing health problems in their specific context** and on **methodological innovations**. Furthermore, we highly value the academic triad, linking and mutually reinforcing research to education and capacity sharing, as well as short-term bilateral staff mobility between ITM and partner institutions.

The units and research groups co-lead the public health dimension of ITM's institutional (strategic) themes of *Sustainable Health Care and Health Systems*, *Disease Control and Elimination*, and *Emerging Infections and Outbreaks*:

- The **HS&HP** Group focuses on the intersections between people, health problems, health services and policies. Core research themes include health policy (national and international), health financing (national and international), pharmaceutical policies (national and international), health and migration, the health services/community interface, health disparities, and non-communicable diseases (NCDs) and chronic lifelong conditions. Methodological issues and approaches include but are not limited to adaptation of pharmaceutical policy research methods to conflict settings, secondary data use including data curation and ethics challenges, pharmacovigilance, research with vulnerable and minoritised groups, and the interaction between empirical findings and normative preferences. Interdepartmental research addresses (forced) migration, internal displacement and health, knowledge translation, and mixed methods approaches to epidemic preparedness.
- The **SRH** Group emphasises strengthening access to quality SRH services and products from a human rights-based approach to improve sexual, reproductive, maternal and newborn health, with a focus on vulnerable and stigmatised populations. Priority topics include understanding the burden of HIV/STIs among priority populations, including migrants and young people, developing and evaluating interventions delivering quality SRH services, understanding and strengthening maternal health in urban settings, evaluating interventions along the continuum from prevention to care for STIs, particularly HIV, and access to quality (injectable) PrEP for those at increased risk of HIV acquisition . The (new) theme of Child & Adolescent Health addresses expertise gaps in nutrition and infections in

early life. The group uses quantitative, qualitative and mixed method inter-disciplinary and participatory research approaches (e.g., epidemiology, sociology, anthropology, psychology, demography) that explain risk and vulnerability as evidence base for improving SRH health outcomes.

- The **TID** Group focuses on the prevention, control and elimination of a range of infectious diseases of relevance in tropical settings (including leishmaniasis, human African trypanosomiasis, leprosy, dengue and other vector-borne diseases, rodent-borne diseases, TB, diseases affected by AMR…), using a transdisciplinary perspective and One Health approach. Priority topics and methods include transmission studies, use of innovative tools and methods for sustainable surveillance, spatial epidemiology. The group supports implementation of the elimination efforts for human African trypanosomiasis in DRC, in close collaboration with the Trypanosoma Unit of the Department of Biomedical Sciences.
- The **EcoHealth** Group focuses on understanding and improving health in the context of social and ecological interactions. The group's work is informed by the principles of EcoHealth, such as systems thinking, interdisciplinarity, co-production, sustainability and equity. Thematic areas include climate change, urbanisation and health, planetary health, sustainable disease control and elimination, and health system resilience to local and global challenges, as well as topics such as vaccine hesitancy, and consideration for local socio-cultural contexts. The group also invests in methodological innovations to address complex interactions at the human-ecosystem interface, and allowing for the analysis of heterogeneity, syndemics, vulnerability and other relevant concepts.

The department coordinates the WEWIS-funded **Population Data Science Hub**, that aims to unlock and share expertise in qualitative and quantitative data, including Artificial Intelligence (AI) and big data, with specific attention to contextual determinants of ethical access to and use of data, and for preventing inequities in decision-making. It also coordinates a (new) research infrastructure for interdepartmental work using geospatial modelling to support **Geospatial Health Research** and to further develop, apply, and teach geospatial research methods.

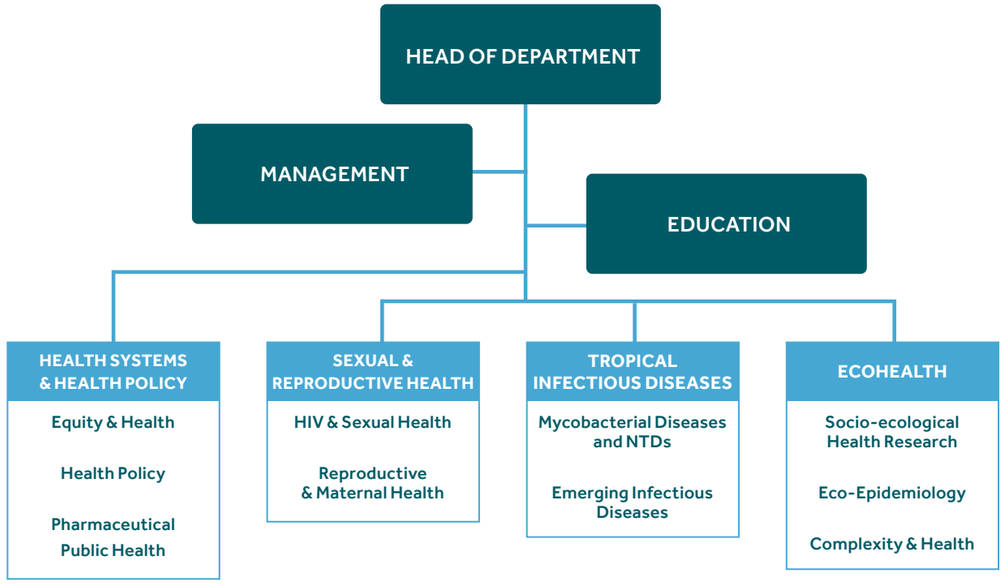
In the field of **education**, the ITM's Master of Sciences in Public Health has a world-leading reputation and attracts future global and national health leaders. Besides, the department organises a wide range of short courses in collaboration with partner institutions to strengthen educational programmes all over the world, including through adaptation for delivery in other contexts. The department is also responsible for the organisation and the co-delivery of the post-graduate education programme for recent graduates and contributes to the other MSc programmes at ITM. We aim at motivating all our students to become effective agents of change.

In terms of **capacity sharing**, the department provides policy support to the Directorate-General of Development Cooperation and Humanitarian Aid (DGD) and other Belgian agencies, NGOs, public health institutes, national regulatory agencies, universities, and bilateral and multi-lateral agencies in different fields such as NTD control, access to care, ethics/regulatory oversight, and health systems strengthening and knowledge translation. We are committed to equitable partnerships in international collaborations, where capacity sharing, knowledge transfer, and consultative processes enhance research, education and policymaking in global health.

Organogram Department of Public Health

For the period 2025-2030, the Department of Public Health will consolidate and further strengthen the four widely recognised research groups, combining health systems and disease control approaches with a strong interdisciplinary perspective and a special focus on vulnerable groups: the Health Policy and Health Systems Research (HS&HP) Group, the Tropical Infectious Disease (TID) Group, the Sexual and Reproductive Health (SRH) Group, and the Ecosystem Approaches to Health (EcoHealth) Group.

Current Organogram (September 2024)



Indicators for monitoring and follow-up

For the progress review of the achievement of objectives, a three-pronged approach is used:

1. A set of **Key Performance Indicators (KPIs)** will be established, with data required to meet a minimum threshold either annually or by the 2030 evaluation. The results of these multi-year measurements will serve as input for the five-year evaluation in 2030. To smooth out the effects of extreme positive or negative outliers, as is common practice in similar scientific institutions, three-year average values (comprising the year of evaluation and the two preceding years) will be used in the annual assessment.
2. The performance of the previous calendar year is **qualitatively assessed** (**QI's** – Qualitative Indicators) by tracking a number of best practices in research, education, and scientific, medical, and societal services throughout the policy period. The impact ITM achieves in scientific, societal, and economic terms will be reported through impact stories in the ITM annual report.
3. ITM annually monitors certain data (**MI's - Monitoring Indicators**) and reports on these in the ITM annual report, taking into account policies such as 'gender diversity,' etc. This collection of information will also be used in the five-year evaluation in 2030.
4. All indicators are assessed against the Key Performance Areas (KPA). These are the result areas based on the objectives of the Flemish government regarding innovation and science policy.

Summary table Research ambitions

SD1 - Pursuing excellence and relevance in ITM research [IDEAS]

Scientific excellence, Valorisation, Entrepreneurship, Financial leverage, Infrastructure

OD1: The ITM's institutional research plan is operational and results in high-quality research with scientific impact

Scientific excellence

Qualitative indicators

- Examples of ITM research published in top journals with reference to press releases. We aim to publish original research articles in top journals every year and bring the results to the attention of the general public.
- Progress with ITM's 'publication and dissemination policy'. Impact factors are a traditional measure of a journal's 'importance', but they can be limited in assessing the impact of an individual publication. Among other things, the emergence of open access has led to discussion about how best to measure the impact of research. ITM is keeping a close eye on this discussion and is translating developments into an appropriate 'publication and dissemination policy' that it will also share with other partners in the Flemish and international ecosystem.
- Illustration of how the 'state-of-the-art research infrastructure' has contributed to scientific excellence.

Quantitative KPI	Target value
Proportion of publications in Q1 journals. In order to measure the scientific excellence of ITM publications, we aim to publish at least 50% of ITM publications in Q1 *(first quartile)* journals, which are the top 25% of journals in the subject category in which the peer-reviewed journal is classified. We also aim to publish no fewer than 300 scientific publications per year in total. If the publication and dissemination policy (see above) shows that the indicators and target values are no longer in line with the current debate and developments, they will be adjusted.	At least 50% of all ITM publications; At least 300 scientific publications per year
Percentage of peer-reviewed publications with a CNCI (Category Normalised Citation Impact) of at least 1.5, i.e. they are cited 1.5 times more than the global average of all publications of the same type, published in the same year and in the same scientific field. To measure scientific impact, we use the 'Category Citation Impact' (CNCI), an indicator that can be used for any publication indexed in the Web of Science via Clarivate Services. The CNCI is a neutral indicator that allows the scientific impact of a publication to be measured in the year of publication and normalised for discipline and document type. If the publication and dissemination policy (see above) shows that the CNCI or the target values for the CNCI are no longer in line with the current debate and developments, the indicator and the target values will be adjusted. s	At least 20% of all ITM publications have a CNCI of at least 1.5.

OD2: The conversion of research and innovation results into benefits for society is maximised ('knowledge valorisation').

Valorisation

Qualitative indicators

- Progress reporting on the evolution from an 'IP policy' to a 'Global Access & Impact Policy': a policy that ensures that knowledge and innovations are available at an affordable price to those who need them, particularly vulnerable populations worldwide. With this policy, ITM aims to play a pioneering role in the Flemish and international ecosystem.
- We strive to proactively screen the ITM research portfolio for innovation potential within the framework of 'Health Innovations for All' (HI4A).
- Illustrations of ITM advice to global health-related organisations (e.g. EDCTP3, Teams Europe, WHO, HERA) or exemplary examples of policy documents and/or guidelines based on ITM research.
- Science communication: illustration and follow-up of files demonstrating how the scientific and societal added value of ITM research is communicated to the general public and policymakers.
- Monitoring of collaborations with non-academic partners (NGOs, companies) and the results of the collaboration.
- Progress of P^3 – a new groundbreaking multi-perspective research model that integrates pathogens, patients and populations into a single framework for sustainable impact. This approach links breakthroughs in laboratories, clinical expertise and population-level insights, translating science into solutions and innovations for people in Flanders and worldwide.
- Description of the long-term impact stories (at the final evaluation, cf. Long-term qualitative indicator).

Quantitative KPI	Target value
Number of national, regional and global policy documents/memos/ guidelines based on ITM research	Baseline 15 per year, increasing to 30 in 2030
Proportion of co-authorships with non-academic partners in peer-reviewed journals We monitor the number of co-authorships with non-academic partners because we assume that if we publish together, the results of the research will be disseminated and implemented more quickly by the non-academic partners. We aim to have 50% of our publications published with non-academic partners.	50% van alle publicaties

OD3: The research results and data are shared fairly with researchers and society in general, but always taking into account research ethics and integrity, data protection and confidentiality, intellectual property and benefit sharing requirements ('Open Science').

Valorisation

Qualitative indicators

- Monitoring of the activities of the ITM *data access committee.*

Quantitative KPIs

- As they will be determined within the framework of the Flemish Open Science policy.

OD4: The leverage effect of the research subsidy from the Flemish government results in the allocation of competitive research funding.	
Financial leverage	
Qualitative indicators - Overview and number of competitive research proposals awarded and currently running by external funding agencies (e.g. Horizon Europe, FWO, EDCTP3, etc.).	
Quantitative KPI	Target value
Acquisition of external competitive research funding This also includes the funds acquired from the 2nd, 3rd and 4th funding streams,as well as the equivalent funding from FWO PhD fellows/postdocs.	The reported figure must be at least €17.4 million in 2026, €19.1 million in 2027, €20.8 million in 2028 and €22.6 million in 2029 and 2030.

SD2 - Attracting and nurturing excellent researchers [PEOPLE]	
Talent, Scientific excellence, Infrastructure	
OD5: Investing in attracting, circulating and nurturing talent	
Scientific excellence, Talent, Infrastructure	
Qualitative indicators - Reporting on the recruitment of professors in line with the 'ZAP follow-up plan'. - Description of progress in the context of the Gender Equality & Inclusion Action Plan 2025-2030. - Mapping the career paths of ITM graduates (including PhD holders) with a view to creating a 'research, innovation and impact' network (at the final evaluation, cf. Long-term qualitative indicator).	
Quantitative KPI	Target value
Number of ongoing (cumulative) competitively acquired 'research career' mandates. These include, for example, FWO aspirant mandates, FWO postdocs, MSCA PhD fellows doctoral training networks, MSCA postdoctoral fellowships, HFSP, EMBO, ERC grants, seal of excellence, visiting doctoral fellowships, etc.	Base 20/year, increasing by at least 2 every 2 years to 30 in 2030
Number of doctorates awarded to PhD students who have conducted their research in collaboration with ITM	Base 15/year, increasing every 2 years by at least 2 to 19 in 2030. Minimum of 85 doctorates completed in the period 2026-2030
MIs Doctoral completion rates and duration of doctorates	

SD3 - Entering into and strengthening synergistic partnerships [CONNECTION]	
Collaboration, infrastructure	
OD6: Foster and develop synergistic research collaborations/programmes within the ITM and with Flemish, Belgian, European and international partners	
Collaboration	
Qualitative indicators - Collaboration within Flanders and worldwide in the context of P^3 – a new groundbreaking multi-perspective research model that integrates pathogens, patients and populations into a single framework for sustainable impact.	
Quantitative KPI	Target value
A 'productive' collaboration is defined as a minimum of 10 joint 'research outputs' per year with a specific partner. In addition to 'research publications', datasets, study protocols, software code and joint training of early-career scientists are also considered 'research outputs'.	With 20 partners
MIs Number of partnerships in Flanders and worldwide (with research partners, NGOs, industry)	

Summary table Educational ambitions

E-SO1 – To maintain the excellence and relevance of ITM's educational portfolio	
OO1. To build on the self-assessment and received recommendations for the further development of ITM's re-accredited master programmes	
QI: Description of new initiatives and changes in the existing portfolio.	
KPI: Student satisfaction	Target: At least 90% of master students are willing to recommend the programme to others
OO2. To successfully advance the implementation of the reformed postgraduate certificate programmes.	
KPI: Student Satisfaction	Target: At least 90% of postgraduate students are willing to recommend the programme to others
OO3. To fine-tune the educational portfolio according to evolving expertise and needs.	
QI: Description of new initiatives and changes in the existing portfolio.	
KPI: Alumni Satisfaction	Target: At least 90% of master's and postgraduate alumni indicate that what they have learned in the programme is relevant to their current or future professional activities.
KPI: Study impact for recent alumni	Target: an average score above 3/5 on a 5-point Likert scale, demonstrating that alumni indicate one year after graduation that their acquired competencies have helped them to impact the field they are working in.
OO4. To develop a coherent micro-credential policy and offer.	
QI: description of policy development	
E-SO2 - To further strengthen our educational offer by building on collaborations	
OO5. To nurture and develop mutually beneficial partnerships for education within ITM and with Flemish, Belgian, European and International partners.	
MI: Number of educational collaborations	
OO6. To strategically develop a diversity of collaborative educational activities aligned with evolving research expertise and societal needs	
QI: Description of new educational collaborations.	
E-SO3 - To attract students with the potential to impact health	
OO7. To increase the visibility of ITM's education in Belgium, Europe and across the globe.	
KPI: ITM's student population	Target: On average, 70 new students enrol per academic year for all master programmes, calculated as a rolling average over three academic years.
	Target: At least 50 postgraduate certificate students per academic year, with a targeted yearly growth of 10%.
MI: Number of awarded certificates	
OO8. To increase the diversity of the pool of applicants	
KPI: Diversity in ITMs student population	Target: in all master programmes together a gender balance with a maximum of 70% of the same gender.
	Target: in each MSc. students from at least 3 continents with a minimum of 10% of students from each of these.
E-SO4- To provide a lifelong learning environment that fits the learning needs of professionals	
OO9. To invest strategically in innovative teaching and learning methods	
Qualitative: a description of the most important changes and steps forward in teaching & learning practices	
OO10. To develop a structural professionalisation policy and offer for teaching staff	
Qualitative: a description of the professionalisation policy	
MI: number of teaching staff making use of the professionalisation offer	
OO11. To further strengthen the administrative back-office(s) for education	
Qualitative: a description of the most important changes and steps forward in the back-office.	

Summary table for the ambitions of the Medical Services and Reference Laboratories

MS-SO1 - We strive for quality and patient-centered care.	
KPI: Patient satisfaction	Target: Based on the patient survey at least 90% of our patients would recommend our medical services to friends and relatives.
Qualitative	Description of improvements of patient care
MI	Result BELAC audit Number of complaints (and fraction of admissible complaints, and complaints resolved after mediation).
MS-SO2 - We maintain and strengthen clinical and laboratory expertise in our niche areas of travel counseling, tropical infectious diseases, HIV/STI and outbreak management .	
KPI: ensure top-quality expertise	Target: for each discipline we have at least two senior national experts
MS-SO3 - We remain the undisputed reference center in travel advice, tropical infectious diseases, HIV/STI and outbreak management.	
KPI: agreements with ministries on health	Target: We maintain all five agreements with Flemish and Federal government on our medical reference roles
KPI: agreements as national reference center	Target: We maintain all four agreements with Sciensano as NRC
Qualitive	Description of major changes of our role in the (inter)national landscape
MI	Number of consultations Number of visits on the ITM website Number of visits on Wanda Number of incoming calls Number of media interventions
MS-SO4 - We are building the right context and conditions to achieve our strategic goals for the medical services.	
Qualitative	Implementation of a new Electronic Patient File for our clinic
Qualitative	Ensuring compliance with healthcare regulations
Qualitative	Development of a future-proof clinic in the new Masterplan Buildings
MI	Financial Result medical services

Summary table for the ambitions for International Cooperation with LMICs

IC-SO1 - To foster equitable partnerships through long-term institutional cooperation that are based on a capacity sharing strategy.		
OO1. We leverage opportunities for cooperation on research, education and service to society with institutional partners.		
MI-1.1: Partnerships with on-track capacity sharing MI-1.2: Fragile country partnerships MI-1.3: Joint publications with LMIC First/last author MI-1.4: New projects with LMIC partners		
KPI: Collaborative opportunities with institutional partners	2030	Number of partners from LMIC that contribute to the Productive partnerships (KPI8) doubled over five years. (Baseline : 2)
IC-SO2 - To enhance the societal impact of international cooperation.		
OO2. We invest in future generations of scientists from LMICs		
MI-2.1: Completed grants by LMIC recipients		
KPI: Investing in future LMIC scientists	Yearly	Access and scholarships to ITM education for future generation scientists from LMIC guaranteed minimally at the same level, evolves with the education offer. (baseline : 5-year average 140/year with current education offer.
OO3. ITM and partners' expertise informs Flanders', Belgian, EU and national policies in LMICs on Health and international cooperation.		
MI-3.1: ITM expert inputs for policy advice MI-3.2: LMICs with partner policy engagement		
KPI: Expertise impacting health and cooperation policies in LMICs	Yearly	Qualitative reporting of most impactful policy work in partner countries and/or multilateral policy processes

Overview of Indicators for Management and Organisation

SO5 – To strengthen the overall coherence, efficiency and effectiveness of ITM's policy, by investing in research- and management platforms within the organisation or by strategic partnerships.	
OO1: To strengthen professional and effective management. In this, we set ourselves the ambition to provide consistently professional and effective services to support the ITM core tasks at different levels within the organisation.	
QI	One story each year on successful implementation of cross departmental realisation in the support of the core tasks
OO2: To create an inspiring, motivational and safe environment for each individual that allows them to flourish and to contribute to ITM's vision, mission and objectives.	
KPI	Satisfaction surveys for student support (target > 90%).
KPI	Satisfactory survey for patients (target > 90%)
KPI	All members of the hierarchy line have completed the leadership program within 18 months of being appointed to an executive position
QI	One action from the well-being action plan is highlighted annually in ITMs annual report
MI	Number of staff, diversity, (gender, nationality), turnover, cfr; legal provisions e.g. social balance sheet
MI	Number of reports to the student ombudsperson
MI	Monitoring indicators conform the well-being legislation and national quality standards (incidents, complaints, breaches, ...)
OO3: to create an optimal environment for the core activities at ITM through efficient, sustainable and effective management of our resources.	
MI	Annual budgetary plan and annual financial report
QI	Yearly story on the advancement of ITM's Masterplan Buildings
QI	Two stories of successful implementation software systems and new IT developments
MI	Implementation of energy measures
MI	Carbon footprint: Implementation of energy measures and effect on CO2-reduction (ton/eq)
OO4: To ensure a safe and sustainable working environment by integrating robust safety and security practices and promoting environmental responsibility across all operations.	
KPI	Number of cybersecurity incidents with direct impact on the continuity of our core activities (target = 0)
MI	Modal shift (commuting ratios)
MI	Evolution of kilometers traveled by plane and effect on CO2 emissions (ABC-principle)
KPI	Numbers of environmental/biosafety incidents with possible impact to the environment (target = 0)
OO5: To enhance the ITM Quality Management System and ensuring compliance with relevant legislation, regulations, and policies	
KPI	The number of critical audit findings that directly impact the continuity or affect the accreditation/certification status of our core activities. (target = 0)
QI	Annually, at least one story highlighting the successful implementation of improvements in the learning environment, risk management or data management.
QI	One success story on a research project with low- and middle-income country partners that underwent IRB review to ensure ethical compliance, local approvals, community engagement, and fair collaboration.
QI	Document one success story demonstrating the added value of an accredited laboratory activity or test to ITM's research or service delivery (reference tasks).
MI	Number of CWI reports
MI	Number of IRB submissions

Contact details ITM

Özge Tunçalp, Executive Director
Ann Peters, General Manager

Institute of Tropical Medicine
Nationalestraat 155
2000 Antwerp

Tel: +32(0)33455750
e-mail: apeters@itg.be
website: www.itg.be

@ITGITMantwerp
@itmantwerp
@institute-of-tropical-medicine
@itmantwerp.bsky.social

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