

HELSE NORD

TUBERCULOSIS INITIATIVE



STRATEGY DOCUMENT

2020-2025

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1 Statement from the Director

Since its establishment in 2010/11, the Helse Nord Tuberculosis Initiative (HNTI) has grown in scope and quality of research. The establishment and growth have been enabled by the core funding from the Helse Nord RHF. The HNTI is housed in the Pathology department/Microbiology unit. It is now well established and leads TB research in the University of Malawi, College of Medicine (CoM).



This strategic plan helps the HNTI to increase its influence beyond CoM to the wider sub-Saharan Africa Region and the World. In this strategic plan we outline our work in the next 5 years, starting with a launch of the HNTI as a Centre of Excellence in TB Research in 2020. This is to reflect our increased volume of work and our visibility in the University and beyond.

The growth of the HNTI allows it to be a key player in the global effort to eliminate TB in a generation. This strategic plan presents a wider spectrum of research to be carried out at the HNTI, encompassing: - evaluation/intervention studies of new TB diagnostic tests, community TB screening interventions, medical anthropology, clinical trials of new TB drug regimens, and molecular epidemiology. This will be supported by a robust training programme consisting of MScs, PhDs and Postdocs. As a centre of excellence, the HNTI will become an active participant in the global scientific conversation on the effort to END TB.

This strategy aims to strengthen our strong existing local collaborations with the Malawi-Liverpool-Wellcome Trust and the National TB control programme. Our key international scientific collaborations are with the London School of Hygiene and Tropical Medicine and the Liverpool School of Tropical Medicine. We aim to expand our local and international collaborations in the next 5 years.

The HNTI now positions itself as a true outward looking centre of excellence in infectious disease research in the region and the world.

A handwritten signature in black ink, appearing to be 'Chisomo Msefula', written in a cursive style.

Dr Chisomo Msefula

**Director Helse Nord TB Initiative and
Dean of Biomedical Sciences and Health Professions
University of Malawi, College of Medicine**

2 Abbreviations

CEO	Chief Executive Officer
CoM	University of Malawi, College of Medicine
CoMREC	College of Medicine Research Ethics Committee
CSMART	Challenging, Specific, Measurable, Achievable, Realistic and Time-bound
EDCTP	The European and Developing Countries Clinical Trials Partnership
HNTI	Helse Nord Tuberculosis Initiative
HoD	Head of Department
LMU	Ludwig Maximilian University of Munich
LSHTM	London School of Hygiene & Tropical Medicine
LSTM	Liverpool School of Tropical Medicine
MCM	Medical Council of Malawi
MLW	Malawi-Liverpool-Wellcome Trust <i>Clinical Research Programme</i>
MOU	Memorandum of Understanding
MTB	Mycobacterium Tuberculosis
NMCM	Nurses and Midwives Council of Malawi
NTP	Malawi National TB Control Program (NTP)
RHF	Northern Norway Regional Health Authority
RSC	Research Support Centre
TB	Tuberculosis
TOR	Terms of Reference
TWGs	Technical working groups
UCT	University of Cape Town
NTNU	Norwegian University of Science and Technology
UNIMA	University of Malawi

3 Executive summary

In this HNTI Strategic Plan we have provided HNTI's vision and outlined the measurable organization's objectives for the period of 2020 – 2025. For the first time, we provide a systematic approach of implementing objectives in a manner that allows easy monitoring and evaluation of project progress – where progress in our case measures HNTI's visibility, research diversity, financial management systems robustness, capacity development, strategic partnerships fostering or formulation, and social responsibility. While this document aims to provide tactics to shape the organization's focus, concepts herein outlined are flexible to learn from the dynamics in the research environment.

This document is divided into background, organogram, stakeholder analysis, environmental analysis, objectives & strategies, and the implementation & evaluation sections. The background provides the history of the organization (i.e. the rationale for forming HNTI, the leadership and the funding), our vision (i.e. what we want to become), the mission statement (plans on how to achieve our vision), and the core values (i.e. our beliefs as an organization).

To achieve our vision, we have formulated CSMART objectives and strategies. The objectives of the strategic plan are to:

- Increase HNTI's visibility in the University of Malawi and beyond
- Diversify HNTI portfolio
- Establish robust financial management systems
- Contribute towards building capacity for research in CoM—laboratory infrastructure and human resource—new programme to develop postdocs to associate professors
- Maintain existing collaborations and identify opportunities for establishing new strategic partnerships
- Improve the welfare of staff working at the HNTI

We appreciate that effective strategies can only be made if we are well-conversant with our competitors, stakeholders and indeed the entire business environment – thus the stakeholder and environmental analysis forms integral sections of this document. The last part of this document provides the implementation and evaluation plans to measure project progress objectively.

To sum it all, this document will serve as a useful tool for guiding the day-to-day decisions for running HNTI and also to mark deliverables as we aim to become a research centre of excellence in TB in the sub-Saharan region.

4 Background

The Helse Nord Tuberculosis Initiative (HNTI) was established in 2010 with core funding from the Helse Nord RHF. The Research Support Centre (RSC) of the University of Malawi, College of Medicine (CoM) played an important role in the establishment and development of HNTI at CoM. The first Group Lead of the HNTI was Dr Geoff Chipungu, who preceded Dr Tamiwe Tomoka. Both represented the Pathology department. Currently, the HNTI is being led by Associate Professor Chisomo Msefula (the current Dean of Biomedical Sciences and Health Professionals at CoM) and Professor Liz Corbett (the current Group head of HIV/TB at Malawi-Liverpool-Wellcome Trust, MLW).

***Our vision** as HNTI is to be a centre of excellence in TB Research and other infections in sub-Saharan Africa.*

***Our strategic mission** is to conduct collaborative and multidisciplinary research in TB and other infections with the long-term goal of building local scientific research capacity that is sustainable, internationally excellent, and that makes a direct contribution to local and international policies and practices.*

Our core values include teamwork, innovation, integrity, professionalism, respect, objectivity, caring environment, continuous growth and respect.

- **Teamwork:** we believe in a culture of mutual respect, recognition, effective communication, and teamwork
- **Innovation:** we aim to create an environment that nurtures idealism and creativity, and allows us to address complex research questions
- **Integrity:** we shall promote science work that provides a high level of openness, fairness, and accountability bearing in mind that dishonesty discredits study results and entire scientific enterprise
- **Professionalism:** we aim to employ skills and competencies that brings the best of what we do and how we deliver our services and shall abide by Good Clinical Practices to safeguard human subjects' rights
- **Caring environment:** We shall promote the welfare and interest of our staff and other stakeholders
- **Objectivity:** we aim to address research hypotheses using defined study designs and discourage personal activity such as beliefs, motivations, material interests that have the potential to introduce biases into work research work
- **Continuous growth:** We shall encourage career growth and professional development
- **Respect:** We shall promote diversity and encourage mutual respect amongst staff and other stakeholders: regardless of gender, religion, race, and nationality

5 Organization structure and functions

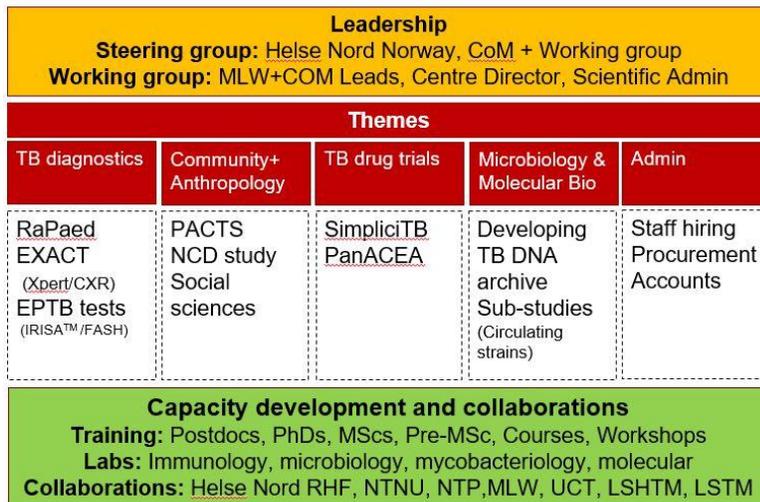


Figure 1: HNTI Organogram

The HNTI is structured into leadership and functional working themes. The leadership is provided by the Steering and the working group-Fig 1. The Steering Group, in general, is responsible for making HNTI's strategies and meets at intervals to assess the progress of the entire initiative. The current membership list of the HNTI Steering committee consists of: The Representative of Pathology Department, CoM; The Representative of the MLW; Helse Nord RHF representatives (CEO & Medical Advisor); HNTI Scientific Administrator and invited attendees which may include; RSC Director; NTNU representative and HNTI fellows. The working group provides periodic assessments of progress attained by the various functional teams (themes) and then synthesizes the results and presents them back to the Steering committee. The current composition of the working group has the HNTI Scientific administrator; HNTI fellows; CoM and MLW leads.

The working themes consist of separate research teams & the scientific administration team. The current research themes at HNTI include TB diagnostics, Community & Anthropology, TB drug trials, and microbiology and molecular biology. The research focus for the TB diagnostics team is to identify better (impact, accurate and efficient) algorithms for diagnosing TB in children and HIV individuals. Under the TB drug trials team, the aim is to identify better (short and efficient) TB drug regimens. The Community & Anthropology team aim to employ electronic system capture tools to improve TB surveillance in Malawi and understand gender dynamics that affect access to TB diagnostics and treatment. The Administration team, led by Scientific Administrator, is responsible for overseeing the HNTI's human resources and procurement needs, financial management, coordination of research activities and general administrative duties. The administration team is also responsible for managing postgraduate courses and research grants.

6 Stakeholder Analysis

Our success as an organisation depends on the input from stakeholders. A stakeholder in our case is a party that has an interest (low or high) or an influence (low or high) that can either affect or be affected by HNTI's business. We have presented strategies to meet with internal and external stakeholder's expectations in Tables 6.1 and 6.2.

Table 6.1 Internal stakeholder analysis

Stakeholder Type	Expectations and Interest	Management strategies for the next 2 years
MLW and CoM leads	<ul style="list-style-type: none"> • Organization growth • Organization's reputation • Organisation's production • Staff creativity 	<ul style="list-style-type: none"> • Individual research themes meeting set targets (deliverables) • Good communication • Commitment of staff • Creating an environment which encourages innovation
Employees	<ul style="list-style-type: none"> • Salary and benefits • Job security and satisfaction. • Career and personal development • Information about company policies and performance 	<ul style="list-style-type: none"> • Equitable treatment • Reward for good performance • Offer 2 years employment contracts • Training and development opportunity • Keep employees regularly informed about company policies and performance
College of Medicine	<ul style="list-style-type: none"> • Research excellence • College recognition • Overheads submission • Capacity development • Departmental engagement and support • Information on project progress 	<ul style="list-style-type: none"> • Conducting policy-driven research • State CoM affiliation in all publications and conference presentations • Timely submission of CoM overheads • Contribute to capacity building at CoM i.e. infrastructure development; offer professional courses & workshops; offer MSc and Ph.D. scholarships; support staff training and student teaching plus research supervision
MLW	<ul style="list-style-type: none"> • Good business relationship • Synergistic relationship • Business continuity • Honesty • Transparency, accountability, and integrity. 	<ul style="list-style-type: none"> • Fair and transparent business • Fulfil partnership obligations • Employ cost-effective processes to ensure profitability • Deliver according to contractual agreements

Table 6.2 External stakeholder analysis

Stakeholder Type	Expectations and Interest	Management strategies for the next 5 years
Main Northern partners and funders (Helse Nord RHF and EDCTP)	<ul style="list-style-type: none"> ● Research output ● Meeting contractual agreements (MOU) ● Project independence (finances) ● Good corporate governance ● Business continuity 	<ul style="list-style-type: none"> ● Keep informed through reports i.e. project progress (milestones) and finances (financial reports and audit reports). ● Demonstrate capacity of winning competitive research grants ● Diversify research portfolio and output ● Centre sustainability ● Operate legally ● Adopt cost-saving measures ● Healthy mix of investigator driven and contract research
Students	<ul style="list-style-type: none"> ● Reliability and quality delivery of courses and workshops ● Availability of funding to sponsor M.Sc. and Ph.D. studies including student's projects ● Flexible training fees to attend HNTI courses and workshops ● Delivery of programs that are relevant to student's needs 	<ul style="list-style-type: none"> ● Use skilled and professional facilitators to deliver courses and workshops ● Solicit funds (flexible grants) to sponsor student's research and postgraduate studies ● Subsidize student's registration fees for HNTI delivered courses and workshops ● Conduct students' training needs assessment (annually) ● Provision of course materials to participants attending course and workshops ● Offer MSc and Ph.D. scholarships to promising students i.e. based on academic or professional merit
Government and the Community	<ul style="list-style-type: none"> ● Submission of taxes ● Compliance to all applicable legislation ● Employment creation ● Support of SDGs ● Community engagement ● High impact research 	<ul style="list-style-type: none"> ● Remit taxes ● Comply with applicable legislation ● Fair employment practices ● Ensure environmental compliance ● Conduct public awareness campaigns (including dissemination of results) and involvement of key community leaders ● Conduct policy-driven research ● Operate in a socially responsible manner ● Community engagement in research
Regulators NMCM, MCM, CoMREC	<ul style="list-style-type: none"> ● 100 percent compliance ● Improvements to service delivery to the Malawian public 	<ul style="list-style-type: none"> ● Compliance with all the necessary rules and regulations as set from time to time ● Set quality assurance systems above minimum
Partners and suppliers (MLW, LSTM, LSHTM, UCT, LMU, NTNU, John Hopkins)	<ul style="list-style-type: none"> ● Continued business ● Good working relationship ● Information sharing ● Fair chance to participate and get business contracts from HNTI ● Non-corrupt practices and Integrity 	<ul style="list-style-type: none"> ● Give contracts openly and on merit ● Set fair and proper performance measurement criteria ● Pay them as per agreed terms and conditions ● Provide relevant information on a regular basis

7 Environmental needs assessment

To develop effective strategies, SWOT analysis was used. SWOT helps to identify strengths and weaknesses (i.e. the internal environment) and opportunities and threats (i.e. the external environment). After understanding the business environment, this section focuses on strategies that build on our strengths to eliminate weaknesses and minimizing threats and to take advantage of opportunities available to us to gain a competitive advantage over the competitors. Below is a list of strengths, weaknesses, opportunities, and threats.

Table 7.1 SWOT analysis

		How HNTI will capitalize on the strength	Plans to maintain the strength
STRENGTHS	Experienced, competent and dedicated Staff	<ul style="list-style-type: none"> • Shall help us to maintain and improve professionalism • Shall help us to conduct quality research • Shall improve the delivery of quality services i.e. workshops and courses • Shall drive innovation and help solve complex questions • Shall promote trust from stakeholders i.e. investors and collaborators 	<ul style="list-style-type: none"> • Transparent recruitment and selection process • Fair rewarding systems • Provision of resources • Provision of professional and career development opportunities
	Research centre location	<ul style="list-style-type: none"> • Shall attract more participants in HNTI offered courses or workshops because of CoM's training reputation • Shall help us build research networks and collaboration 	<ul style="list-style-type: none"> • Remit overheads to CoM • Support capacity development plans at CoM • College recognition in publication and conference presentations i.e. affiliation statement
	Availability and use of advanced TB diagnostics tools	<ul style="list-style-type: none"> • Shall allow us to address more research questions • Decrease turn round time and timely management of TB cases • Shall allow us to produce reliable results 	<ul style="list-style-type: none"> • Capital investment in modern TB diagnostic tools and laboratory infrastructure
	Teamwork	<ul style="list-style-type: none"> • Will foster creativity and peer learning • Will build trust among staff and allow as to be productive • Will help to resolve conflicts as it shall promote peace and harmony at workplace • Support and respect for each other's opinion • Shall promote a sense of belonging and ownership 	<ul style="list-style-type: none"> • Embracing team ideas • Fair and consistent application of human resource policies • Encouraging social interaction • Equal and just share of staff benefits
	Multi-disciplinary TB research themes	<ul style="list-style-type: none"> • Shall help us address multifaceted TB questions of public health importance • Will attract more funding to work on different projects • Will improve our visibility and attract more research collaborations 	<ul style="list-style-type: none"> • Recruitment of post-doctors to lead on different research themes • Win competitive grants to support the diversity plans • Offer long-term contracts to post-doctors and supporting staff

Table 7.1 SWOT analysis (continued)

		How will the weakness affect HNTI business	How we plan to address the weakness
WEAKNESSES	Lack of effective communication and advocacy plans	<ul style="list-style-type: none"> • May affect our visibility and attraction of prospective research networks 	<ul style="list-style-type: none"> • Restructuring HNTI website • Plan for community engagement • Full-time personnel assigned to oversee the HNTI website and other relevant communication channels i.e. Twitter and Research gate. • To conduct open days for stakeholders i.e. students, community, staff, etc
	Short employment contracts	<ul style="list-style-type: none"> • Staff drain to competitors • Contracts may not attract skilled candidates 	<ul style="list-style-type: none"> • Provision of long-term contracts (not less than 2 years) • Increase staff benefits • Offer staff training and make staff competent to be circulated within individual HNTI projects • Relevant staff are trained across studies.
	Less defined administration structure	<ul style="list-style-type: none"> • Poor delegation of responsibilities 	<ul style="list-style-type: none"> • Senior administrator to delineate roles among administration staff
	Limited support team within research teams	<ul style="list-style-type: none"> • Low productivity and poor succession plans 	<ul style="list-style-type: none"> • Post-docs to recruit interns from pre-MSc to Ph.D. levels and assign roles • Post-doctors to apply for competitive grants that will support human capacity development
		How HNTI will make good use of prevailing opportunities	
OPPORTUNITIES	More funding opportunities for TB research	<ul style="list-style-type: none"> • Competent Post-docs to apply for competitive grants to keep the research work at HNTI • pre-MSc, MSc and Ph.D. candidates to apply for training scholarships 	
	Develop collaborations and attract more funding	<ul style="list-style-type: none"> • To use our status as one of the largest TB research entity in the Sub-Saharan region our research has the capacity to easily influence policy i.e. national TB treatment and control policies 	
	Stable funders	<ul style="list-style-type: none"> • Will lead to the growth of HNTI and available funds to attract more strategic partnerships 	
		How HNTI will minimize threats	
THREATS	Political	<ul style="list-style-type: none"> • HNTI will ensure that it adheres to the policies as stipulated by the government to ensure quality delivery of research • HNTI will follow rules and regulations as stipulated in the University of Malawi Policy on Research and Consultancy to ensure that research is meaningful and advances knowledge and understanding 	
	Economic	<ul style="list-style-type: none"> • HNTI will diversify research portfolio to gain competitive advantage and win grants • HNTI will employ cost-cutting and control measures to reduce programme expenditure • We will establish strategic partnerships to win shared competitive grants 	
	The decline of TB burden	<ul style="list-style-type: none"> • We will diversify into other fields of infectious diseases control i.e. O&G 	
	Director's shift	<ul style="list-style-type: none"> • Have a succession plan 	
	Socio-cultural	<ul style="list-style-type: none"> • Improve on community engagement in research i.e. learn the community structure, incorporate community research priorities, develop cultural competency, build partnerships and trust, provide capacity building, and maintain a long-term commitment, disseminate research findings 	
	Technological	<ul style="list-style-type: none"> • Adopt new advanced TB diagnostic tools and electronic capture methods 	
	Legal	<ul style="list-style-type: none"> • Collaborate with RSC Risk Analyst on internal and external legal agreements • Develop plans to protect intellectual property rights 	
	Security	<ul style="list-style-type: none"> • Adopt insurance policy plans (medical, assets) and review of compensation policies 	
	New Entrants	<ul style="list-style-type: none"> • Enhance retention strategies • Conversion of competitors to partners/suppliers/allies • Periodic review of strategies to create uniqueness 	

8 Organization's objectives and strategic actions

The objectives of the 2019-2020 strategic plan are to:

- Increase HNTI's visibility in the University of Malawi and beyond
- Diversify HNTI portfolio
- Establish robust financial management systems
- Contribute towards building capacity for research in CoM—laboratory infrastructure and human resource—new programme to develop postdocs to associate professors
- Maintain existing collaborations and identify opportunities for establishing new strategic partnerships
- Improve the welfare of staff working at HNTI

The strategies to be implemented for each objective have been in the Table 8.1 below.

Table 8.1 Objectives, strategies and indicators

Objective	Strategy	Key Performance Indicators
1. To increase HNTI visibility	a) Diversify communication and marketing plans Activities under this strategy Include: <ol style="list-style-type: none"> Launch HNTI TB centre Restructuring of the HNTI website i.e. updating information, making it a user-friendly, simple to navigate, well-understood content, and give it an attractive design. Open HNTI twitter, and Research gate accounts 	<ul style="list-style-type: none"> • TB centre inaugurated • The active number of HNTI website visits (Over 10 visits per day) • At least 2 tweets per week • Active followers on twitter and Research gate (Over 200 followers in two years)
	b) Introduce project open days Activities under this strategy include: <ol style="list-style-type: none"> Laboratory tours for students and visitors Research forums for researchers, students, staff and visitors Introduce community participation programs (radio/television) 	<ul style="list-style-type: none"> • Number of open days conducted per quarter (1 open day in 6 months) • Monthly scheduled radio or television programs (twice a year)
	c) Production and sharing of promotion/marketing Materials Activities under this strategy include: <ol style="list-style-type: none"> Engaging high-quality producers of promotional materials i.e. flyers & posters Vision and mission statements displays Writing and sharing of bi-annual reports Staff business cards 	<ul style="list-style-type: none"> • Poster with vision and mission statements displayed in the HNTI office, CoM premises and HNTI website, etc • Distribution of staff business cards

Table 8.1 Objectives, strategies and indicators (Continued)

Objective	Strategy	Key Performance Indicators
<p>2. To diversify HNTI research portfolio</p>	<p>a) Introduction of Post-doctoral fellowships Activities under this strategy:</p> <ul style="list-style-type: none"> i) Recruitment of post-doctoral scientists to lead different research themes at HNTI ii) Each research theme to have a functional support structure 	<ul style="list-style-type: none"> • Each research theme to have a functional support structure i.e. one pre-MSc, MSc and PhD research fellows • Each post-doc to produce evidence for submitting more than 2 research grants/year (see funding opportunities in appendix) • Each post-doc to win at least one grant of not less than USD 150,000 per year • Each post-doc to produce research progress report every quarter • Each theme to have one publication or one major conference presentation
	<p>b) Conduct TB diagnostic trials, Drug trials, Molecular epidemiology studies, and Community – Anthropology studies. Activities under this strategy:</p> <ul style="list-style-type: none"> i. Develop concepts and protocols of studies under each theme ii. Maintain a log of different studies 	<ul style="list-style-type: none"> • There should be at least one active study per theme • Each research study under each theme to achieve set recruitment target • Themes to present on-going studies at quarterly research meetings to assess new concepts, proposals and submissions

Table 8.1 Objectives, strategies and indicators (Continued)

Objective	Strategy	Key Performance Indicators
<p>3. To establish robust financial management systems</p>	<p>a) Plan a periodic budget review Activities under this strategy:</p> <ul style="list-style-type: none"> i) Create systems to track expenditure (real time) for each study ii) Weigh expenditures vs earnings for each study 	<ul style="list-style-type: none"> • Electronic grants management system established and functional • Quarterly financial reports
	<p>b) Develop contingency plans Activities under this strategy</p> <ul style="list-style-type: none"> i) Insurance plans, flexible amounts, savings, etc 	<ul style="list-style-type: none"> • Contingency plan developed
	<p>c) Safeguarding assets Activities under this strategy</p> <ul style="list-style-type: none"> i) Periodical inventory check of assets 	<ul style="list-style-type: none"> • HNTI assets inventory check, twice a year
	<p>d) Continuous education Activities under this strategy</p> <ul style="list-style-type: none"> i) Attending financial management courses or workshops 	<ul style="list-style-type: none"> • Study leads have attended financial management training or received on-job training
	<p>e) Develop quality financial management system Activities under this strategy</p> <ul style="list-style-type: none"> i) Decentralise financial management to study level 	<ul style="list-style-type: none"> • Financial management system decentralised
	<p>f) Monitoring and evaluating financial data Activities under this strategy</p> <ul style="list-style-type: none"> i) produce quarterly financial reports ii) Involvement of external auditors 	<ul style="list-style-type: none"> • Quarterly financial reports reconciled and submitted • External auditor report submitted

Table 8.1 Objectives, strategies and indicators (Continued)

Objective	Strategy	Key Performance Indicators
<p>4. To contribute towards capacity building</p>	<p>a) Improve laboratory and research infrastructure at CoM Activities under this strategy</p> <ul style="list-style-type: none"> i. Capital investment in laboratory and research facilities ii. Establishing a robust laboratory information management system (LIMS) 	<ul style="list-style-type: none"> • The laboratory needs assessment performed yearly • Upgrading of CoM-MLW laboratories – equipment, infrastructure and LIMS
	<p>b) Scientific capacity-building Activities under this strategy</p> <ul style="list-style-type: none"> i. Offer short and intermediate professional training i.e. courses and workshops ii. Offer long-term career training i.e. M.Sc. and Ph.D.'s iii. Create concepts for a self-sponsored Ph.D. candidate iv. Strategic exchange programme or attachment 	<ul style="list-style-type: none"> • Offered courses or workshops in Clinical Research methods 1 – 3; TB Laboratory Diagnostics; Information, Literacy & Skills; Scientific Writing; Qualitative Research Methods; Diagnostics Evaluation; Grant Writing; and Clinical Trial Management. • Offered two M.Sc.'s and Ph.D.'s in relevant fields of infectious disease control i.e. Epidemiology, Clinical Trials Management, Infection Biology, Immunology, Anti-microbial Stewardship (NB: list is not exhaustive) • At least one self-sponsored MSc or PhD is supervised by HNTI fellow • At one fellow is attached to an external centre for capacity development
	<p>c) Support teaching and supervise student's projects at CoM Activities under this strategy</p> <ul style="list-style-type: none"> i) Our fellows and staff shall support Pathology/Microbiology department in teaching or supervising of student's projects ii) HNTI fellows support TB related modules for MBBS, MLS & MPH iii) Each theme should develop concepts for students 	<ul style="list-style-type: none"> • At least one CoM student supervised by HNTI research theme • TB related modules are supported by HNTI • Concepts developed

Table 8.1 Objectives, strategies and indicators (Continued)

Objective	Strategy	Key Performance Indicators
<p>5. To maintain existing collaborations and identify opportunities for establishing new strategic partnerships</p> <p>(Existing=LSHTM, LSTM, NTP, UiT, MLW etc)</p> <p>New=UCT, WHO working groups at HIV and TB department, Malawi HIV department, John Hopkins etc)</p>	<p>a) Set a common goal Activities under this strategy</p> <p>i) Put forward shared vision with new and existing partners</p> <p>ii) Outline expectations for partnerships i.e. TOR</p>	<ul style="list-style-type: none"> • TOR produced
	<p>b) Continuous communication Activities under this strategy</p> <p>i) Conduct annual TB networking meeting</p> <p>ii) Outline plans for continuous communication i.e. stakeholders' meetings, annual conferences, emails, etc.</p>	<ul style="list-style-type: none"> • Minutes/reports produced and shared • Periodic meetings and conferences • Respective TWGs attended
<p>6. Improve the welfare of staff working at HNTI</p>	<p>a) Support HNTI staff's important functions (staff's own developed fund)</p> <p>i) Staff-contributed monetary support and attendance of major functions (Weddings, birthdays, baby showers)</p> <p>ii) Monetary support and visiting staff during times of sickness and loss (Funerals of 1st degree relatives, hospital admissions)</p>	<ul style="list-style-type: none"> • Staff are supported in key events of their life
	<p>b) Establish a loans system</p> <p>i) Create a procedural document for loans</p>	<ul style="list-style-type: none"> • HNTI staff are able to access loans in line with CoM guidelines
	<p>c) Establish a bi-annual work retreat</p> <p>i) Organize team building retreats twice yearly</p>	<ul style="list-style-type: none"> • Retreats are organised
	<p>d) Staff reviews</p> <p>i) Create a log of staff contracts</p> <p>ii) Conduct bi-annual staff reviews</p> <p>iii) Observe staff welfare</p>	<ul style="list-style-type: none"> • Staff contracts management system is in place and performance appraisals are conducted

9 Funding, Implementation, Evaluation and Control

For effective implementation of the strategies above, several things will be considered.

- Funding: the main funder of this strategy is the Helse Nord RHF, maintaining the current funding flow for the duration of this strategy 2020-2024, will ensure all objectives are achieved. The funders have committed an amount of 5 million Norwegian Kroner annually to support centre activities.
- Timelines: the strategy is deliverable in the stated time. A short version of the timeline is presented in Table 9.1 (below). A detailed timeline for activities under each objective is presented in **Appendix A**.

Appendix shows a breakdown of the objectives, responsibilities of individuals or groups involved in the implementation of the objectives, as well as timelines. This will form the basis for implementation of the strategic plan. It will ensure that roles are properly divided and each section of the Centre is properly integrated.

The strategic plan will be evaluated by looking at the Key Performance Indicators (Appendix A). The timelines will also be used to control activities and each activity will be incorporated into Gantt Charts for responsible individuals. Progress reports will be presented during Bi-annual meetings in order to identify problematic areas and develop effective plans to handle such problems.

Table 9.1 Brief outline of main activities in next 5 years

Activity	Year 2020				Year 2021				Year 2022				Year 2023				Year 2024			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TB centre launch		x																		
Centre promotion activities				x		x		x		x		x		x		x		x		x
Fellowships																				
4 Postdocs	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2 MSc	x	x	x																	
4 PhDs				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Postgrad courses		x		x		x		x		x		x		x		x		x		x
Meetings																				
National TB meeting			x			x				x				x					x	
Strategic meetings			x			x				x				x					x	
Laboratory upgrades																				
New LIMS system	x	x																		
Sample Archive space				x	x															
Infrastructure upgrades						x				x				x					x	
Office refurbishment						x				x				x					x	

10 Conclusion

HNTI operates in an environment where strategies are critical in order to deliver the centre's long-term vision for the next few years. HNTI believes that implementation of this two-year strategic plan is an important step in ensuring that the group develops into a leading centre in research and teaching within the College and beyond. The strategic plan has outlined HNTI's vision, mission and measurable organization's objectives for the period of 2020 – 2024. Strategies on how to effectively achieve these objectives have also been outlined. In order to effectively measure implementation of these plans a comprehensive monitoring and evaluation plan focusing on key performance indicators have also been outlined. To ensure that these plans are implemented effectively it will be very important that all employees play an active role. HNTI will ensure that a conducive environment is developed to allow all staff at HNTI to effectively use their skills and experiences to foster HNTI's agenda.

Appendices

Appendix A: Detailed plan of implementation for the year 2020

Appendix B: Other funding opportunities for HNTI fellows to compete on

Appendix A: Detailed plan of implementation for the year 2020

Objectives and key activities		Indicators	Roles	J	F	M	A	M	J	J	A	S	O	N	D
Objective 1	Increasing HNTI visibility		SAA and ALL												
Strategy 1.1	Diversify communication and marketing plan		SAA and ALL												
Activity 1.11															
	Create a plan for logistical/infrastructural/financial arrangements necessary to establish centre	Plan created	DIRs, SA	x											
	Communicate with relevant authorities (WG, SG and CoM) regarding intention to establish Centre and acquire approval	Approval from relevant authorizes granted	LE, SA	x											
	Launch HNTI Tuberculosis Centre	TB Centre inaugurated	WG, SGSA			x									
Activity 1.12	Engage IT department to help restructure the website	IT department engaged	SAACoMIT												
	Re-structuring of HNTI website	HNTI website restructured	SAA and ALL	x											
	Core staff to create personal profiles	Personal profiles created	SAA	x											
	Create a log of all studies conducted under HNTI	Log of studies created	SAA/ALL RSP		x										
	Ensure that the website shows Real-time updates of upcoming courses, trainings and vacancies.	Real time updates shown	SAA/	x	x	x	x	x	x	x	x	x	x	x	X
Activity 1.13	Open HNTI Twitter and google scholar log	Twitter and google scholar log created	SAA	x	x	x	x	x	x	x	x	x	x	x	x
	Update Twitter and google scholar log accounts twice a week	Accounts updated At least 2 tweets a week and up to 200 followers attracted	SAA	x	x	x	x	x	x	x	x	x	x	x	x
Strategy 1.2	Introduce Project Open Days	Number of open days conducted per quarter (1 open day in 6 months)	HNTI admin												
Activity 1.21	Laboratory tours for students and visitors	Tour conducted	SA											x	
Activity 1.22	Research forums for researchers (e.g. RSC research seminars), students, staff and visitors	Research forum conducted	Theme leads, HNTI admin, and RSC											x	
Activity 1.23	Introduce community participation programmes (radio/television)	Number of programmes aired in a year	SAA, Theme leads, and, RSC			x						x			

...Continued

Detailed plan of implementation for the year 2020 (continued)

Objectives and key activities		Indicators	Roles	J	F	M	A	M	J	J	A	S	O	N	D
Objective 1 (Continued)	Increasing HNTI visibility		SAA and ALL												
Strategy 1.3	Production and sharing of promotional marketing materials	Promotional materials produced and shared	HNTI Admin												
Activity 1.31	Engaging high quality producers of promotional marketing materials (flyers, stickers, t-shirts, posters, car-logos, business cards, booths, banners, pens, flash disks, backpacks, business cards)	High quality producers of Promotional materials engaged and promotion materials produced	HNTI Admin, Mkt Agent			x									
Activity 1.32	Vision and mission statement display (COM library and labs, QECH, MLW, HNTI office)	Poster of vision and mission displayed	HNTI Admin, Mkt Agent	x											
Activity 1.33	Creating information stands at research conferences with branded materials listed above, with a poster displaying our mission and vision	Information stands created	HNTI Admin, Mkt Agent											x	
Activity 1.34	Writing and sharing of bi-annual newsletters	Number of Newsletters produced and shared	SAA, HNTI Admin and Theme leads				x							x	

...Continued

Detailed plan of implementation for the year 2020 (continued)

Objectives and key activities		Indicators	Roles	J	F	M	A	M	J	J	A	S	O	N	D
Objective 2	To diversify research portfolio														
Strategy 2.1	Introduction of Post-doctoral fellowships														
Activity 2.11	Recruitment of post-doctoral scientists to lead different research themes at HNTI	Number of post docs recruited	SAA, Directors	x											
	Active grant applications by post-docs (at least 2 research grants/year)	Number of grants applied for	SAA						x						x
	Post-docs to win at least one grant of not less than USD 150,000 per year	Number of USD150,000 grants won	Post-docs						x						
Activity 2.12	Create a functional support structure for each theme	Each theme has at least one pre-MSc, MSc & PhD	SAA, Theme leads			x									
Activity 2.13	Dissemination of research findings by each theme	one publication or one major conference presentation published or presentation made (local or international)	Theme leads								x			x	
Strategy 2.2	Conduct TB diagnostic trials, Drug trials, Molecular epidemiology studies, and Community / Anthropology studies.														
Activity 2.21	Maintain a log of different studies	Log of studies created	HNTI Admin and theme leads	x											
Activity 2.22	Develop concepts and protocols of studies under each theme	Number of concepts & protocols developed	Theme leads		x			x			x			x	
Activity 2.23	Each theme to have at least one active study and achieving recruitment targets	Number of active studies per theme	Theme leads			x									
	TB Diagnostics theme- RaPaed	Recruitment completed	Theme leads						x						
	TB Diagnostics theme- EXACT-TB	Recruitment completed	Theme leads						x						
	TB Diagnostics theme- EPTB study	Recruitment completed	Theme leads			x									
	TB Diagnostics theme- Fujifilm LAM study	Recruitment completed	Theme leads						x						
	TB Drug trials theme- support set-up for PanACEA & Simplici-TB	Support systems set-up	Theme leads											x	
	Molecular Epidemiology theme- TB DNA Archive	DNA archive system set-up	Theme leads						x						
	Community & Anthropology theme- NCD study	Recruitment completed	Theme leads						x						
	Community & Anthropology theme- Medical anthropology for TB	Recruitment completed	Theme leads											x	
	Microbiology theme- O & G diagnostic service	Study initiated	Theme leads											x	
	Microbiology theme- Systematic literature review for HIV associated pulmonary infections	Systematic review completed	Theme leads											x	
Activity 2.24	Themes to present on-going studies at quarterly research meetings to assess new concepts, proposals and submissions	Quarterly meetings conducted	Theme leads, HNTI admin	x			x			x			x		

...Continued

Detailed plan of implementation for the year 2020 (continued)

Objectives and key activities		Indicators	Roles	J	F	M	A	M	J	J	A	S	O	N	D
Objective 3	To establish robust financial management systems														
Strategy 3.1	Plan a periodic budget review														
Activity 3.11	Create systems to track expenditure (real time) for each study	Electronic grants management system established and functional	RSC-GCO and HNTI-SA	x	x	x	x	x	x	x	x	x	x	x	x
Strategy 3.2	Develop contingency plans														
Activity 3.21	Insurance plans (assets), flexible amounts, savings, etc	Contingency plan developed	HNTI-SA and Theme leads	x											
Strategy 3.3	Safeguarding assets														
Activity 3.31	Periodical inventory check of assets	HNTI assets inventory check, twice a year	HNTI-AA						x						x
Strategy 3.4	Continuous education														
Activity 3.41	Attending financial management courses or workshops	Study leads have attended financial management training or received on-job training	Theme leads and HNTI-SA				x								
Strategy 3.5	Develop quality financial management system														
Activity 3.51	Decentralize financial management to study level	Financial management system decentralized	Theme leads and HNTI-SA	x											
Strategy 3.6	Monitoring and evaluating financial data														
Activity 3.61	Produce quarterly financial reports	Quarterly financial reports reconciled and submitted	Theme leads, HNTI-SA, CoM internal auditor			x			x			x			x
Activity 3.62	Involvement of auditors	Auditor report submitted	Auditor and HNTI-SA						x						x

...Continued

Detailed plan of implementation for the year 2020 (continued)

Objectives and key activities		Indicators	Roles	J	F	M	A	M	J	J	A	S	O	N	D
Objective 4	To contribute towards capacity building														
Strategy 4.1	Improve lab and research infrastructure at CoM		HNTI-SA	x											
Activity 4.11	Capital investment in laboratory and research facilities	Upgrading of CoM-MLW laboratories –equipment, infrastructure and LIMS	SA												
	HNTI TB labs monitoring	TB labs monitored reports submitted	SA			x									
	Setting up LIMS system	LIMS system set-up	SA, ICT, Theme leads	x											
Strategy 4.2	Scientific capacity building														
Activity 4.21	Offer short (1-2 days) and intermediate (1-2 weeks) professional training	Number of courses delivered	LE, SA, Theme leads												
	Clinical Research Methods II		LE, SA, Theme leads		x										
	Clinical Research Methods III		LE, SA, Theme leads								x				
	TB laboratory diagnostics		LE, SA, Theme leads											x	
	Information literacy and skills		LE, SA, Theme leads			x									
	Scientific writing		LE, SA, Theme leads			x									
	Qualitative research methods (QRM) (with RSC)		LE, SA, Theme leads, RSC				x								
	Diagnostics evaluation		Peter, Liz, Augu, Marriott		x										
	Grant writing (with RSC)		LE, SA, Theme leads, RSC							x					
Activity 4.22	Offer long term career training - MSc and PhD	Number of MSc and PhD students	WG												
	MSc (x3)													x	
	PhD													x	
Activity 4.23	Create a concept for a self-sponsored PhD student	Concept developed	Theme leads, LE						x						
Activity 4.24	Strategic exchange programme or attachment	Number of exchange programmes	Theme leads, SA, LE												
	Germany – Berlin and Munich (RaPaed)		Robina	x											
	Mbeya/UCT - Tanzania/RSA (PanACEA)		Madalo									x			
	Saint Andrews – Scotland		Madalo				x								

...Continued

Detailed plan of implementation for the year 2020 (continued)

Objectives and key activities		Indicators	Roles	J	F	M	A	M	J	J	A	S	O	N
Objective 4 (Continued)	To contribute towards capacity building													
Strategy 4.3	Support teaching and supervise student's projects at CoM													
Activity 4.31	Each theme should develop concepts for student projects	Concepts developed	Theme leads	x	x	x								
Activity 4.32	Supervision of student projects	At least one CoM student supervised by HNTI research theme	Theme leads				x	x	x	x	x	x	x	x
Activity 4.33	HNTI fellows support TB related modules for MBBS, MLS and MPH students	TB modules supported by HNTI	Theme leads		x			x			x			x

...Continued

Detailed plan of implementation for the year 2020 (continued)

Objective 5	To maintain existing collaborations and identify opportunities for establishing new strategic partnerships																	
Strategy 5.1	Set a common goal																	
Activity 5.11	Put forward shared vision with new and existing partners	Vision outlined and shared	Directors				x											
	Existing partnerships: LSHTM, LSTM, NTP, NTNU, MLW etc.						x											
	New partnerships: UCT, Jon Hopkins, WHO working groups at HIV and TB department, Malawi HIV dept. etc.						x											
Activity 5.12	Outline expectations for partnerships i.e. TOR	TOR produced	Directors							x								
Strategy 5.2	Continuous communication																	
Activity 5.21	Conduct annual TB networking meeting	Periodic meetings and conferences, shared minutes and reports	SA, HNTI-Admin				x											
Activity 5.22	Outline plans for continuous communication i.e. stakeholder meetings, annual conferences, emails, etc.	Respective TWGs attended	SA, HNTI-Admin		x			x			x						x	
Objective 6	To establish HR systems and social welfare body within the organisation																	
Strategy 6.1	Support staff functions																	
Activity 6.11	Monetary support and attendance of major staff functions (Weddings, birthdays, baby showers)	Attendance and support of colleague-activities	All	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Activity 6.12	Monetary support and visiting staff during times of sickness and loss (Funerals of 1 st degree relatives, hospital admissions)	colleagues supported	All	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Strategy 6.2	Establish a loans system		HNTI-Admin	X														
Activity 6.21	Create a procedural document for loans	Document created	HNTI-Admin							x								
Strategy 6.3	Establish a bi-annual work retreat		All							X								X
Activity 6.31	Organize team building retreats twice yearly	Retreats attended	All						x									x
Strategy 6.4	Staff reviews																	
Activity 6.41	Create a log of staff contracts	Log created	HNTI-Admin		X													
Activity 6.42	Conduct bi-annual staff reviews	Staff reviews conducted twice yearly	SA, HNTI Admin							X								X
Activity 6.43	Observe staff welfare	Staff is well motivated and cared for	Theme leads	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Appendix B: Funding opportunities for fellows

HNTI's Pre-MSc's will be required to apply for the Masters scholarships that are spread across the upcoming year. Themes without pre-MScs will identify individuals during the open days and offer support for Masters applications. PhD candidates will also be expected to apply for at least one scholarship under HNTI.

Postdocs will have to engage in grant application while with the organisation. These can be either:

- a) Collaborative grants: as with NIH and EDCTP grants. Or
- b) Individual grants: which include post-doctoral fellowship and career development grants (see attached table below)

Table showing funding opportunities annually

Grant/Scholarship name/Month	J	F	M	A	M	J	J	A	S	O	N	D	links
Masters													
Beit Trust	X	X											http://beittrust.org.uk/beit-trust-scholarships
Commonwealth									X	X			http://cscuk.dfid.gov.uk/apply/masters-scholarships/
Chevening										X	X		https://www.chevening.org/scholarship/malawi/
Wellcome Trust			X	X	X	X	X						https://wellcome.ac.uk/funding/schemes
PhD													
Commonwealth									X	X			https://scholarshipfellow.com/uk-commonwealth-phd-scholarship-scholarships-in-uk/
Chevening										X	X		https://www.chevening.org/scholarship/malawi/
Wellcome Trust			X	X	X	X	X						https://wellcome.ac.uk/funding/schemes
MRC		X	X	X									
Skills Dvpt Fellowship		X	X	X									https://mrc.ukri.org/skills-careers/fellowships/skills-development-fellowships/
Clinical Fellowship		X	X	X									https://mrc.ukri.org/skills-careers/fellowships/clinical-fellowships/
Grants and Fellowships													
EDCTP													
Strategic actions: large scale						X	X	X	X	X	X		http://www.edctp.org/funding-opportunities/calls-for-proposals-for-funding-of-clinical-research-on-poverty-related-infectious-diseases/
CDF								X	X	X	X		http://www.edctp.org/funding-opportunities/calls-for-proposals-for-funding-of-clinical-research-on-poverty-related-infectious-diseases/
TB Reach		X	X	X									http://stoptb.org/global/awards/tbreach/
FLAIR fellowship				X	X								https://royalsociety.org/-/media/grants/schemes/
CIPHER (CDF)									X	X			https://royalsociety.org/grants-schemes-awards/grants/flair/?fbclid=IwAR0YjzdmT3x9iqolsVyzUWc_ct9Juu5Ay_9hEkxWj52LEsMFncy5da4-4
UNITAID		X	X	X									https://unitaid.org/calls/#en
NIH									X				https://grants.nih.gov/grants/guide/pa-files/PA-17-282.html
									X				https://grants.nih.gov/grants/guide/pa-files/PAR-19-357.html
MRC (CDF)		X	X	X									https://mrc.ukri.org/skills-careers/fellowships/non-clinical-fellowships/career-development-award-cda-transition-to-independence/
Wellcome Trust fellowship			X	X	X	X	X						https://wellcome.ac.uk/funding/schemes

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