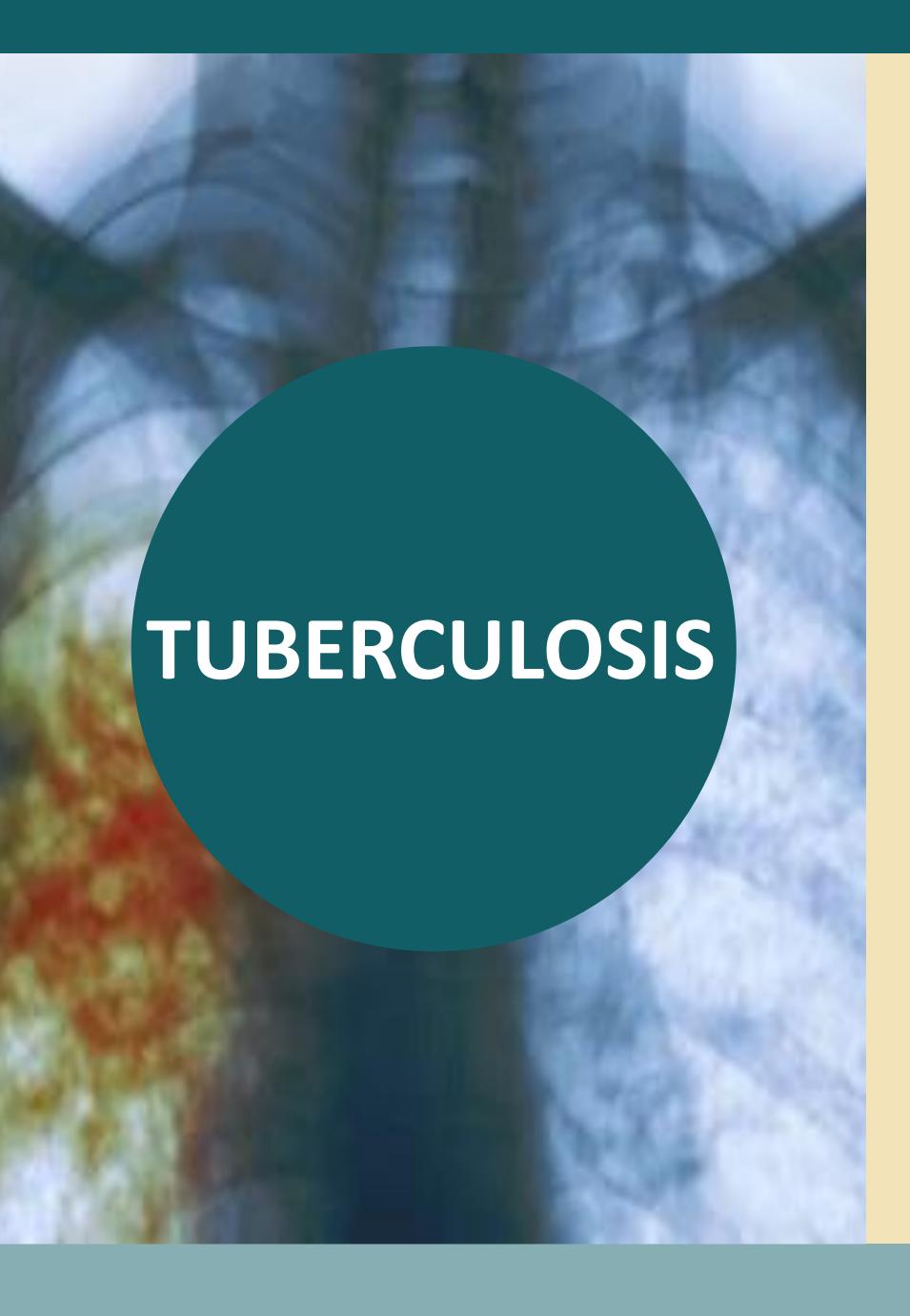
ANTWERP

MYCOBACTERIOLOGY UNIT

- RESEARCH TOPICS -

Bouke de Jong, head of unit Leen Rigouts, senior scientific expert





MYCOBACTERIUM TUBERCULOSIS

Global prevalence

ca. 10 Mio in 2020

Challenges

"The world's leading infectious killer" – emergence of drug resistance

Research topics at ITM

- Improved (new) drug-susceptbility testing Phenotypic microbiological methods
- New treatment /prophylaxis regimens Clinical trials
- Improved storage and transport conditions Molecular diagnostics (DNA/RNA-based)

MYCOBACTERIUM LEPRAE

Global prevalence

133 802, mainly in endemic pockets

Challenges

Non-culturable organism – long latency – ongoing transmission

Research topics at ITM

- Investigation of transmission chains Genotyping, NGS
- Optimal control in hyperendemic areas Chemoprophylaxis
- New diagnostics to detect viable bacteria RNA-based viability assays





BELGIAN COORDINATED COLLECTIONS OF MICROORGANISMS

- > Identification of unknown mycobacterial species
- <u>Phenotypic</u>
- Biochemical essays growth conditions
- Colony morphology, pigmentation
- Genotypic
- Whole genome sequencing
- Phylogenetic trees





Contact
Lena Kraußer
Ikrausser@ext.itg.be
Isabel Cuella
icuella@itg.be