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TB CARE II

**DIGITAL HEALTH TECHNOLOGIES FOR TUBERCULOSIS
INNOVATIVE PLATFORMS FOR SCALE-UP**

ETHICS, INFORMATION TECHNOLOGY AND TB

**JULY 24-26, 2018
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Ethics and Health Information Technology

- Software engineering
- Privacy, confidentiality and consent
- Appropriate uses and users
- Decision support systems
- Big Data
- Artificial Intelligence
- Universal Health Care



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Software Engineering

- Annotation
- Version control
- Provenance
- Fitness for purpose
- Reproducibility
- Conflicts of interest



Privacy, confidentiality, consent

- Privacy as a right – and sometimes an unnecessary impediment
- Cf. “right to benefit from science”
- “Latent” and “tacit” consent for data use
- Myth of “secondary use”
- TB surveillance and treatment – but machine mediated directly observed therapy



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Nikshay, Web-based TB Monitoring





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Appropriate Uses and Users

- Public health vs. profit
- Support vs. discrimination (e.g., health insurance)
- Role of intentions in ethics
- Need for ongoing ethics education and review
- Governance
- Education



Decision Support Systems

- Automatic TB diagnosis from imaging
- Reliability, accuracy, error management
- Accountability, responsibility
- Appropriate role for humans, experts
- Analysis and regulation
- Probabilistic decisions; decisions under uncertainty
- Clinical and public health decision support systems



Big Data

- Quality and curation
- Reliability, accuracy, error management
- Accountability and responsibility
- Appropriate uses, users
- Security
- But cf. citizen science and citizen users



Artificial Intelligence

- Machine learning, knowledge discovery in databases
- Value of – need for? – humans
- But AI role in reducing disparities and fostering universal health coverage
- AI as “leap-frog” technology
- Appropriate uses and users



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Universal Health Care

- TB management, reduction as key goal
- Disparities are inherently unethical and evidence of human failure
- Public access to TB, other health resources
- Must privacy be traded for access to quality care?
- Moral obligation to help under-served and under-resourced populations



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Thank You

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