Track 6 - Disaster Public Health & Healthcare Informatics in the Pandemic

The COVID-19 pandemic places renewed focus on informatics-based approaches for healthcare systems responding to crises. The domain of disaster healthcare informatics is unique in that it involves multiple medical subdisciplines ranging from global/emergency medicine to primary care. Public health infrastructure, from community engagement to laboratory services also play a pivotal role in responding to major health crises. Health systems also must interface effectively with joint emergency operations centers often at multiple levels of government. These systems rely heavily on physicians, nurses, and EMT practitioners, and concern both population level and individual patient level data. Given these factors, data fusion/integration, data security and privacy, and the legal and ethical implications of information systems designed to support healthcare systems in crisis are of particular importance. Areas of significant innovation in disaster health informatics are occurring in part because of the complexity of the current pandemic, but also more broadly in the field. Areas of particular interest for the track include computational epidemiology, hotspotting, community situated case management, contact tracing, automated/autonomous/robotic clinical systems, human-machine collaboration, and disaster mortuary.

TRACK FORMAT

Traditional conference track format (20 min presentation + 10 minutes discussion for core papers / 15 min presentation + 5 minutes discussion for work in progress papers).

TRACK TOPICS

Possible topics of interest for this track include the following:

- Pandemic data management, analysis and visualization
- Computational epidemiology
- Digital contact tracing strategies
- Autonomous/robotic clinical systems
- Virtual / eVisits in healthcare
- Healthcare worker’s experiences with technology supported work
- Healthcare/public health data fusion in crisis events
- Public health laboratories
- Sentinel events and superspreaders
- Simulation of healthcare processes, Covid-19 spread and responses
- Hotspot detection
- Disaster eHealth
- eTriage
- Health related mapping and geographical information
- Disaster mortuary
- Healthcare transformation through crisis learning
- Human-machine collaborative systems for crisis

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