



# Quantitative Microbial Risk Assessment Interdisciplinary Instructional Institute

August 4 -14, 2017

University of Washington, Seattle, Washington

## About the Program

The Quantitative Microbial Risk Assessment Interdisciplinary Instructional Institute (QMRA III) is a 10-day workshop designed for advanced graduate students, post-doctoral fellows and early career professionals to assimilate scientific data and implement computer programs towards building a risk assessment for assuring safety and health goals. Participants will gain hands-on experience with risk assessment software and work on real-world case studies. The third annual QMRA III will be held at University of Washington.



### COURSE OBJECTIVES:

- Obtain skills to perform microbial risk modeling through:
  - Attending lectures from top scientists in the QMRA field
  - Engaging in specific hands-on exercises
  - Collaborating within multidisciplinary teams to conduct a research case study under the mentorship of a program faculty member and teaching assistant.
  - Using and contributing to the QMRAWiki (<http://qmrwiki.canr.msu.edu/>)

### COURSE TOPICS:

- Statistics in risk assessment
- Probabilistic uncertainty analysis
- Use of genomics in QMRA
- Emerging pathogens and diseases of global and clinical significance
- Use of epidemiological data in QMRA
- Multiple media fate and transport models
- Environmental infectious disease transmission modeling
- Dose-response modeling
- Risk perception, communication and management
- And more...

Application period: January 15 - March 30, 2017 at: <https://events.anr.msu.edu/QMRAIII2017/>

Program Contacts: Dr. Jade Mitchell and Dr. Mark H. Weir at: [QMRAIII@anr.msu.edu](mailto:QMRAIII@anr.msu.edu)



*We assume no prior computational experience on behalf of the participants. Therefore, tutorials on computer models and applications for risk assessment (i.e. R programming, Crystal Ball, MATLAB, etc.) will be included as part of the program.*



The QMRA III is supported by the National Institute of General Medical Sciences of the National Institutes of Health under Award Number R25GM108593. The content is solely the responsibility of the QMRA III program directors and does not necessarily represent the official views of the National Institutes of Health.