

Tracking and Assessing the Risk from Antibiotic Resistant Genes using Chip

Technology in Surface Water Ecosystems







TRACE Water JPI Workshop

Thursday 29th of June 2017

Moore auditorium, University College Dublin, Belfield, Dublin 4

Final Schedule

09.00 – 09.30: Registration (Tea/coffee)

09.30 – 09.45: Welcome and Opening - Enda Cummins (UCD, Ireland)

- Prof. Orla Feely (UCD Vice-President for Research, Innovation and Impact)

09.45 - 11.00: Session 1- Detection and Monitoring

Chair: Matthew Crowe (EPA, Ireland)

- Wolfgang Fritzsche (IPHT, Germany): Plasmonic Microarray-Chip for Multiplex Detection of Water-borne Pathogens.
- **Pedro Baptista (FFCT/UNL, Portugal):** Au-nanoprobes coupled to isothermal amplification for screening ARGs in environmental water towards on-site assay.
- **Giuseppe Spoto (UniCT/INBB, Italy):** Nanoparticle-enhanced surface plasmon resonance imaging: a tool for the highly sensitive detection of non-amplified genomic DNA.

11.00 – 11.30: Break/ Poster presentation/ Networking

11.30 – 13.00: Session 2- Environment, Agriculture and Health

Chair: Enda Cummins (UCD, Ireland)

- **Martin Cormican (NUIG, Ireland):** *Tracking Antibiotic Resistance Genes The Clinical Interface.*
- Barry McMahon (UCD, Ireland): Antimicrobial resistance in wildlife: should we care?
- Carles Borrego (ICRA, Spain): Occurrence and persistence of antibiotic resistance genes in two European rivers (Saale River and Ter River) impacted by wastewater treatment plant discharges.
 - **Séamus Fanning (UCD, Ireland):** Molecular characterization of antimicrobial resistance-encoding genes from Salmonella species of food-producing animal origin.

13.00 – 14.00: Lunch/Poster presentation/ Networking

14.00 - 16.00: Session 3- Technologies and Risk

Chair: Wolfgang Fritzsche (IPHT, Germany)

- Angelo Solimini (UniRoma, Italy): Quantification of antibiotic resistant E. coli in two river systems of Central Italy and the potential risk for beach goers: preliminary results from the TRACE project.
- **Eithne O'Flaherty (UCD, Ireland):** Characterising UV influences on AR E. coli using modelling techniques as part of a risk assessment model.
- **Patrick Dunlop (UU, Northern Ireland)**: Photocatalytic Disinfection of Antibiotic Resistant Bacteria and Assessment of Antibiotic Resistance Gene Transfer in Wastewater.
- Alice Wemaere / Margaret Keegan (EPA, Ireland): Water JPI & EPA funding activities
- Padraic Larkin (Co-chair Water JPI): Joint Programming and Water JPI initiatives

Close and wrap up of workshop- Assoc. Prof. Enda Cummins

For more information about the TRACE project please go to the TRACE website http://jpi-trace.eu/news.html and TRACE LinkedIn page https://www.linkedin.com/groups/8385238

To register go to https://www.eventbrite.com/e/tracking-and-assessing-the-risk-from-antibiotic-resistant-genes-using-chip-technology-in-surface-tickets-32593739753 or contact eithne.o-flaherty@ucdconnect.ie for more information about the event.