

ADVANCED DIAGNOSTICS FOR NEW ZEALAND FOOD SAFETY

February 22, 2018

Jet Park Hotel & Conference Centre,
63 Westney Road, Mangere, Auckland

PROGRAMME

9:00 Registration opens

Plenary

9:30 Welcome

Nigel French, NZFSSRC, New Zealand

9:35 Rapid methods for safe food – A North American perspective

Alvin Lee, Illinois Institute of Technology, USA

Session 1. The NZ Food Safety landscape

10:05 New methods – a regulatory perspective

Andrew Pearson, Ministry for Primary Industries, New Zealand

10:20 Pros and cons of new detection technologies from an industry perspective

Helen Withers, Ministry for Primary Industries, New Zealand

10:35 Microbiological methods for the meat industry – have we reached a crossroads

John Mills, AgResearch, New Zealand

10:50 MORNING TEA

Session 2. Food Safety sensor technologies

11:05 Key note: Biosensors for food safety

Yingchun Fu, Zhejiang University, China

11:35 A biosensor to sniff out food safety pathogens?

Andrew Kralicek, Plant & Food Research, New Zealand

11:50 FoodSafe: near real time optical devices to enumerate bacteria

Frederique Vanholsbeeck, The University of Auckland, New Zealand

12:05 The possibilities of DNA sensors in food safety

Jennifer Barnes, Spot Check, New Zealand

Session 3. Current status of advanced diagnostics

12:20 Panel Q&A and discussion

12:40 LUNCH

Session 4. Novel aptamer based assays

- 1:40 Key note: Development of aptamers for bioassay of food safety hazard factors
Zhouping Wang, Jiangnan University, China
- 2:10 Proof-of-concept biosensor for the detection of Norovirus in oysters
Valeria Torok, South Australian Research and Development Institute, Australia
- 2:30 Aptamers- from bench to market
Shalen Kumar, AuramerBio, New Zealand
- 2:45 DNA-aptamer technologies for food safety at Plant & Food Research
Cyril Hamiaux, Plant & Food Research, New Zealand

3:00 AFTERNOON TEA

Session 5. Other diagnostic techniques

- 3:15 Whole genome sequencing: impacts and changes to public health microbiology
Lucy Rivas, ESR, New Zealand
- 3:30 Differentiation between Escherichia coli O26 virulence profiles by Hyperspectral Imaging
Michelle Challies, AgResearch, New Zealand
- 3:45 Rapid qPCR assays for on-site harmful algal detection in the aquaculture industry
Shauna Murray, University of Technology Sydney, Australia
- 4:00 Trialling rapid molecular methods for detection of harmful micro-algae in seawater
Lincoln MacKenzie, Cawthron Institute, New Zealand
- 4:15 The rapid Neogen test kit for paralytic shellfish toxins in bivalve molluscs
Tim Harwood, Cawthron Institute, New Zealand

Session 6. Conclusion of the day

- 4:30 Future research directions brainstorm
- 5:00 Symposium closes (bar open – pay your own tab)



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