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Training Workshop on the use of digital PCR for GMO analysis

organized under the
“Better Training for Safer Food”
(BTSF) initiative
in collaboration with



23-25 January 2018
National Institute of Biology (NIB)
Ljubljana, Slovenia

**The European Commission's
science and knowledge service**

Joint Research Centre

Joint
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Centre

Training Workshop on the use of digital PCR for GMO analysis

Tuesday, 23 January 2018

- 08:45 Arrival & registration
- 09:00 Opening comments, objectives and introduction
(**Maddalena Querci, Jana Žel**)
- 09:30 Basic concepts of dPCR (**David Dobnik**)
- 10:15 dPCR principles, chemistries & platforms (**Mojca Milavec**)
- 11:00 *Coffee break*
- 11:30 Overview on hands-on QX100/QX200 (**Alexandra Bogožalec Košir**)
- 12:00 Experiment setup QX100/QX200
(**Alexandra Bogožalec Košir, Mojca Milavec, Tina Demšar**)
- 13:00 *Lunch break*
- 14:00 Hands-on QX100/QX200
(**Alexandra Bogožalec Košir, Tina Demšar, Dejan Štebih, David Dobnik, Arijana Filipić, Tjaša Jakomin**)
- 17:00 *Coffee break*
- 17:30 Wrap-up and planning for day2 (**David Dobnik**)

Wednesday, 24 January 2018

- | | Group 1 | Group 2 |
|-------|--|--|
| 09:00 | Introduction to data analysis QX100/QX200
(Alexandra Bogožalec Košir) | Experiment setup BioMark
(Tina Demšar, Mojca Milavec) |
| 09:30 | Practical work:
Data analysis and interpretation
(Alexandra Bogožalec Košir, Dejan Štebih, David Dobnik, Katja Fric, Tina Leskošek) | Hands on BioMark, analysis-demo
(Tina Demšar, Mojca Milavec) |
| 11:00 | <i>Coffee break</i> | |
| 11:30 | Experiences of the participants I | |
| 13:00 | <i>Lunch break</i> | |

23-25 January 2018

Wednesday, 24 January 2018 (afternoon)

- | | Group 1 | Group 2 |
|-------|--|---|
| 14:00 | Experiment setup BioMark
(Tina Demšar, Mojca Milavec) | Introduction to data analysis QX100/QX200
(Alexandra Bogožalec Košir) |
| 14:30 | Hands on BioMark, analysis-demo
(Tina Demšar, Mojca Milavec) | Practical work: Data analysis and interpretation
(Alexandra Bogožalec Košir, Dejan Štebih, David Dobnik, Katja Fric, Tina Leskošek) |
| 16:00 | <i>Coffee break</i> | |
| 16:30 | Summary of results and Wrap-up (David Dobnik) | |
| 19:30 | <i>Dinner at Castle</i> | |

Thursday, 25 January 2018

- 09:00 Transfer of assays from qPCR to dPCR and associated method performances (**Dafni Kagkli**)
- 09:45 Copy number determination using dPCR - a practical example (**Dafni Kagkli**)
- 10:15 Naica vs QX100/200: our experience with crystal dPCR
(**Alexandra Bogožalec Košir**)
- 10:30 *Coffee break*
- 11:00 Multiplexing in digital PCR (**David Dobnik**)
- 11:30 Experiences of the participants II
- 12:30 *Lunch break*
- 14:00 Round table discussion: new methodologies in GMO detection and their implementation to routine testing
- 15:00 *Coffee break*
- 15:30 Round table discussion: new breeding techniques and challenges of detection
- 16:30 Wrap-up (**David Dobnik, Maddalena Querci**)