



MPE06 The development of advanced QA protocols for testing radiological devices

Agenda

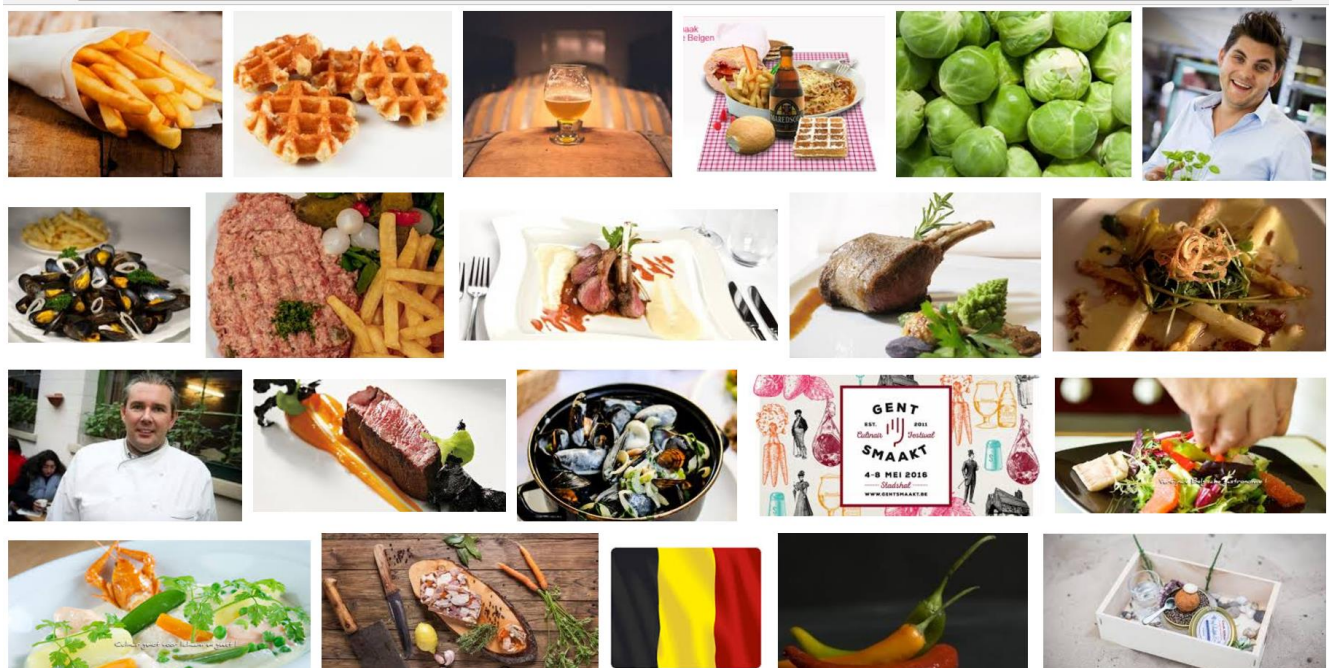
Monday, November 13, 2017

- 8.30-9.00h : Welcome & participants introduce themselves
H. Bosmans & R. Oyen
- 9.00-10.00h : QA Programme Results and Imperatives from Radiation Protection Culture
J. Malone
- 10.00-11.00h: QA and Acceptability Criteria: the perspective of the equipment manufacturers
R. Klausz
- 11.00-11.20h: [Coffee break](#)
- 11.20-12.20h: [Panel discussion](#) with radiologists, starting from clinical cases. What is Quality?
W. De Wever, M. Smet, C. Van Ongeval
- 12.20-13.00h: Set the scene: Quality Assurance, an important task of the MPE
H. Bosmans
- 13.00-14.00h: [Lunch break](#)
- 14.00-15.30h: [See QA at work in the University Hospital of Leuven:](#)
 - Patient Dose Monitoring & DRLs, **J. Binst**
 - Well organized QA and sharing our input files, **L. Vancoillie**
 - The development of phantoms for performance testing: a practical example for breast tomosynthesis, **L. Cockmartin**
- 15.30-16.00h: [Coffee break](#) (Demonstrations of dose and quality monitoring platforms)
- 16.00-17.30h: [See QA at work in the University Hospital of Leuven:](#)
 - Remote QC of mammography systems and monitors, **J. Binst**
 - QA of digital mammography: what you always wanted to ask (in the mammography room), **K. Lemmens, N. Marshall**
 - Mean Values, Outliers and Questions trigger new initiatives in QA, **H. Bosmans**
- 17.30-18.00h: [Tour of the radiology department](#), **R. Oyen** (head of the department)
- 20.00-22.00h: [Social activity: Guided walk of the city and a drink on the 'Oude Markt'](#)



Tuesday, November 14, 2017

- 9.00-10.00h : Designing quality into X-ray systems from the beginning
J. Horrocks
- 10.00-10.45h: Understanding the components of the X-ray chain
N. Marshall
- 10.45-11.15h: **Coffee break**
- 11.15-12.00h: **Your questions** about the material on the online platform
H. Bosmans & N. Marshall
- 12.00-13.00h: Typical QA protocols following IPEM 32 & RP91: the theoretical basics, practical implementation, shortcomings and perspectives
N. Marshall
- 13.00-14.00h: **Lunch break**
- 14.00-14.45h: From basic QC to advanced QA. A worked-out example
H. Bosmans
- 14.45-18.00h: **Workshops in 3 groups: 'Compilation of a QA protocol beyond the basics'**
 - Group 1: pediatric cardiology or hybrid nuclear medicine - RX devices, **K. Bacher**
 - Group 2: contrast enhanced spectral mammography, **N. Marshall**
 - Group 3: CT in the operation theatre, **H. Bosmans**
- 19.15-22.00h: **Social activity: Group dinner**



Google on 'Belgian Gastronomy'

Wednesday, November 15, 2017

- 9.00-9.30h : Actual dosimeters for QA in radiology
H. Bosmans
- 9.30-10.15h : Why is patient dosimetry in radiology important? Beyond dosimetry !
(J. Schillebeeckx, radiologist, to be confirmed)
- 10.15-10.45h: New dose metrics, such as SSDE, CTDICBCT, exposure index, skin dose, and life attributable risk (LAR)
A. Stratis
- 10.45-11.15h: Coffee break
- 11.15-11.45h: Patient dosimetry packages for daily use in QA
A. Dedulle
- 11.45-12.30h: Complete your QA tasks with patient dosimetry and/or anthropomorphic test objects
N. Marshall
- 12.30-13.00h: Dosimetry in our QA report: DAP and DAK explored
H. Bosmans
- 13.00-14.00h: Lunch break
- 14.00-14.45h: Detector tests vs system tests, including grid and automatic exposure controller
N. Marshall
- 14.45-15.45h: Contrast-detail testing: 4 AFC versus 'free-response' test objects
N. Marshall
- 15.45-16.00h: Coffee break
- 16.00-18.00h: Practical of choice:
 - Option 1: MTF&DQE measurements, calculations and the use of software packages,
N. Marshall
 - Option 2: Contrast detail: reading and processing the scores. A link to the NPWE d' and model observers, **H. Bosmans**
- 18.40-20.30h: Social activity: Visit to the brewery of AB InBev (Stella Artois)



Thursday, November 16, 2017

- 9.00-10.00h : Complete your QA protocol with patient dose evaluation (group tasks)
- 10.00-11.15h: Present your new protocol to the other groups
- 11.15-12.00h: Coffee break
- 12.00-13.00h: Practical of choice:
 - Option 1: How to organize ROC reading, visual grading & clinical image quality evaluation with radiologists, **L. Cockmartin**
 - Option 2: How will the XR27 'access to raw data in fluoroscopy' change the life of the physicists in QA? A remote interview with **Steve Balter** (New York)
- 13.00-14.00h: Lunch break
- 14.00-14.45h: Investigating the complete imaging chain with ROC based observer performance tests
F. Zanca
- 14.45-16.00h: Competition: find the best 'hint and trick' for QA
Moderator: **H. Bosmans**
- 16.00-16.30h: Coffee break
- 16.30-17.30h: How to assure quality. Benchmarking. Challenges and Solutions. Workshop
 - Practical examples (team members & participants present their difficult cases)
 - Last chance for your cases and questions
- 17.30-18.00u: Preparing the examination and conclusion
H. Bosmans

Friday, November 17, 2017

- 09:00-13:00 : Free to prepare for the examination
- 13.00-17.00h: Examination

