

ISMRM Workshop on Breast MRI: Advancing the State of the Art



In Affiliation with the
Society of Breast Imaging (SBI) & European Society of Breast Imaging (EUSOBI)



Preliminary Workshop Programme

Registration & Setup

Monday, September 10, 2018

- 15:00** **Registration & Speaker Upload available until 18:00**
- 18:00** **Welcome Cocktails**
- 18:00** **Remembrance of Werner Kaiser**
Clemens Kaiser, Mannheim/DE

Day 1

Tuesday, September 11, 2018

- 06:55** **Registration & Speaker Upload available**
- 07:55** **Welcome**
Elizabeth Morris, Nola Hylton, Francesco Sardanelli
- 08:00** **Session 1: Clinical Breast MRI (2017 Uses)**
Moderator: Elizabeth Morris, New York/US
- 08:15** **Screening with MRI**
Christiane K. Kuhl, Aachen/DE
- 08:15** **Preoperative MRI: Myths and facts**
Francesco Sardanelli, Milan/IT
- 08:30** **Neoadjuvant therapy**
Fiona J. Gilbert, Cambridge/UK
- 08:45** **B3 lesions: MRI for less surgery**
Simone Schradang, Aachen/DE
- 09:00** **Reporting BIRADS vs Tree & Report Integration**
Katja Pinker-Domenig, New York/US
- 09:15** **MRI after equivocal imaging**
Linda Moy, New York/US
- 09:30** **Panel discussion**
- 10:00** *Break*
- 10:30** **Session 2: Clinical breast MRI (Protocols)**
Moderator: Ileana Hancu, Niskayuna/US
- 10:30** **Non-contrast techniques - T2: Fat-sat, non-fat-sat or STIR**
Bruce L. Daniel, Stanford/US
- 10:40** **T2 mapping**
Catherine J. Moran, Stanford/US

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- 10:50 **Fast protocols: Which is better?**
Elizabeth J. Sutton, New York/US
- 11:00 **Are you sure that 3T better than 1.5?**
Brian A. Hargreaves, Stanford/US
- 11:10 **How many channels have your coils?**
Walter F. Block, Madison/US
- 11:20 **Multiparametric MRI**
Thomas Helbich, Vienna/AT
- 11:30 **Hybrid imaging: GRASP & MR reconstruction**
Linda Moy, New York/US
- 11:40 **Panel discussion**
- 13:00 *Lunch*
- 14:00 **Session 3: Proffered Papers**
Chair: Julia Camps Herrero, Alzira/ES
- 16:00 *Break*
- 16:30 **Session 4: Intervention & Spectroscopy**
Moderator: Robert E. Lenkinski, Dallas/US
- 16:30 **A radiologist's guide to practical use of DWI for breast MRI interpretation and/or real-time biopsy & cryoablation of breast tumors: Possibilities & limitations**
Fred Kelcz, Madison/US
- 16:40 **MRS: Choline, fat, something else?**
Patrick J. Bolan, Minneapolis/US
- 16:50 **Non-proton MRS: did you forget ^{31}P & ^{23}Na ?**
Dennis W.J. Klomp, Utrecht/NL
- 17:00 **C hyperpolarized MRI**
Fiona J. Gilbert, Cambridge/UK
- 17:10 **MR biopsy innovations**
Ileana Hancu, Niskayuna/US
- 17:20 **MR-guided therapy (MRgFUS and other)**
Federica Pediconi, Rome/IT
- 17:30 **APT Imaging**
Dennis W.J. Klomp, Utrecht/NL
- 17:40 **CEST Imaging**
Michael T. McMahon, Baltimore/US
- 17:50 **What can partial differential equations tell us about breast cancer?**
Thomas E. Yankeelov, Austin/US
- 18:00 **Panel discussion**

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Day 2

Wednesday, September 12, 2018

- 07:00** **Registration & Speaker Upload available**
- 08:00** **Session 5: Non-routine breast MRI Techniques**
Moderator: Thomas Helbich, Vienna/AT
- 08:00 **Ultrafast imaging**
Masako Kataoka, Kyoto/JP
- 08:15 **DTI**
Hadassa Degani, Rehovot/IL
- 08:30 **DWI & IVIM**
Savannah Partridge, Seattle/US
- 08:45 **Supine pre-op & ultrashort TE**
Roberta Strigel, Madison/US
- 09:00 **High & ultrahigh MR**
Dennis W.J. Klomp, Utrecht/NL
- 09:15 **PET/MR & PET tracers**
Amy Fowler, Madison/US
- 09:30 **Panel discussion**
- 10:00 *Break & Posters*
- 10:30** **Session 6: Proffered Papers**
Moderator: Kristine Glunde, Baltimore/US
- 12:00 *Lunch*
- 13:00** **Session 7: Breast MRI biomarkers**
Moderator: Christiane K. Kuhl, Aachen/DE
- 13:00 **Quantitative imaging (Quantify/Optimize/Standardize)**
Pete Gibbs, New York/US
- 13:15 **QIBA/QIN**
Nola Hylton, San Francisco/US
- 13:30 **MRI biomarkers: Risk stratification/prediction/prognosis**
Julia Camps Herrero, Alzira/ES
- 13:45 **Background parenchymal enhancement**
Bas van der Velden, Utrecht/NL
- 14:00 **DWI/ADC**
Denis Le Bihan, Gif-sur-Yvette/FR
- 14:15 **Vascularization/Hypoxia/DCE voxel analysis**
Pascal Balzer, Vienna/AT

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- 14:30 **Biomarkers of NAC response**
Nola Hylton, San Francisco/US
- 14:40 **NIST Breast Phantom Efforts/QIBA**
Kathryn Keenan, Boulder/US
- 14:55 **Panel discussion**
- 15:15 *Break & Posters*
- 16:00 **Session 8: Radiomics/Radiogenomics/Tumor Microenvironment/Habitat Imaging**
Moderator: Nola Hylton, San Francisco/US
- 16:00 **Radiogenomics**
Elissa Price, San Francisco/US
- 16:15 **Habitat Imaging**
Robert J. Gillies, Tampa/US
- 16:30 **Tumor microenvironment (collagen)**
Zaver M. Bhujwalla, Baltimore/US
- 16:45 **Fatty acid composition, DCE markers & IVIM**
Sungheon Gene Kim, New York/US
- 17:00 **Quantitative proton MR spectroscopy assessment of lipid metabolism: Breast cancer diagnosis & differentiation of subtypes**
Sunitha B. Thakur, New York/US
- 17:10 **Session 9: Risk models/Risk assessment/Risk-adjusted screening**
Moderator: Katja Pinker-Domenig, New York/US
- 17:10 **Progress in breast MRI**
Ritse M. Mann, Nijmegen/NL
- 17:20 **High risk prediction & personalized screening**
Elizabeth Morris, New York/US
- 17:30 **Gad retention in the brain: Should we care?**
Robert E. Lenkinski, Dallas/US
- 17:40 **Panel discussion**

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Day 3

Thursday, September 13, 2018

- 07:00** **Registration & Speaker Upload available**
- 08:00** **Session 10: Clinical trials**
Moderator: Gabor Forrai, Budapest/HU
- 08:00 **Trial design for radiologists**
Constance D. Lehman, Boston/US
- 08:10 **How to manage big data**
Robert J. Gillies, Tampa/US
- 08:20** **Session 11: Looking into the future of breast MRI & its competitors**
Moderator: Francesco Sardanelli, Milan/IT
- 08:20 **Ultrasound computer tomography**
Clemens Kaiser, Mannheim/GE
- 08:30 **DBT & CEDM**
Wendy DeMartini, Stanford/US
- 08:40 **Automated breast US**
Gabor Forrai, Budapest/HU
- 08:50 **Optical imaging**
Kristine Glunde, Baltimore/US
- 9:00 **Panel discussion**
- 09:30** **Session 12: Vendor solutions: DWI challenge**
Moderator: Denis Le Bihan, Gif-sur-Yvette/FR
- 09:30 **ADC quantification**
Pascal Baltzer, Vienna/AT
- 09:40 **Multicenter ADC quantification/Gradient correction/Reproducibility of ADC**
David C. Newitt, San Francisco/US
- 09:50 **Commercial solutions for advanced quantification**
Michael A. Jacobs, Baltimore/US
- 10:00 *Break & Posters*
- 10:30** **Session 13: What can AI & machine learning do for breast MRI?**
Moderator: Linda Moy, New York/US
- 10:30 Breast composition determination & lesion classification
Despina Kontos, Philadelphia/US
- 10:40 Technical perspectives presentation
Kevin Lyman, San Francisco/US
- 10:50 Technical perspectives presentation

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- 11:00 Tanveer Syeda-Mahmood, San Jose/US
Technical perspectives presentation
Michael C. Muelly, Mountain View/US
- 11:10 The future of MRI
Michael A. Jacobs, Baltimore/US
- 11:20 Closing statements**
- 11:20 Final wrap-up & Q&A**
Elizabeth Morris, Nola Hylton, Francesco Sardanelli
- 12:00 *Lunch & departure*