

SPEAKERS AND CHAIRS, PART I

Tim Beißbarth (Institute of Medical Bioinformatics, UMG)

Melanie Börries (Department for Biometry, Epidemiology and Medical Bioinformatics, Albert-Ludwigs-Universität Freiburg, Germany)

Christian Dullin (Department of Diagnostic and Interventional Radiology, University Medical Center Göttingen, Germany)

Rami El Shafie (Clinic for Radiotherapy and Radiation Oncology, University Medical Center Göttingen, Germany)

Friedrich Feuerhake (Institute of Pathology, Hannover Medical School, Germany)

Francesca Finotello (Institute of Molecular Biology & Digital Science Center, University Innsbruck, Austria)

Nils-Claudius Gellrich (Department of Oral and Maxillofacial Surgery, Hannover Medical School, Germany)

Michael Ghadimi (Department of General, Visceral and Pediatric Surgery, University Medical Center Göttingen, Germany)

Niels Grabe (Institute of Pathology, University Medical Center Göttingen, Germany)

Pascal Grosse (Charité, Berlin, Germany)

Horst Hahn (Institute for Digital Medicine, Fraunhofer Institute for Digital Medicine MEVIS, Bremen, Germany)

Anne-Christin Hauschild (Department of Medical Informatics, University Medical Center Göttingen, Germany)

Michael Heuser (Department of Hematology, Hemostasis, Oncology, and Stem Cell Transplantation, Hannover Medical School, Germany)

Peter Hillemanns (Department of Gynecology and Obstetrics, Hannover Medical School, Germany)

Tim Kacprowski (Peter L. Reichertz Institute for Medical Informatics of TU Braunschweig and MHH)

Jack Kuipers (ETH Zurich, Switzerland)

Michal Matyjas (Department of Neurology and Experimental Neurology, Charité, Berlin, Germany)

SPEAKERS AND CHAIRS, PART II

Michael Menden (Computational Biomedicine, Helmholtz Institute Munich, Germany)

Moritz Middeke (Department of Internal Medicine I, University Hospital Dresden & Else Kröner Fresenius Center for Digital Health Dresden, Germany)

Steffen Oeltze-Jafra (Peter L. Reichertz Institute for Medical Informatics, Hannover Medical School, Germany)

Alexander Oeser (Innovation Center for Computer-Assisted Surgery, Leipzig University, Germany)

Florian Putz (Radiation Clinic, Universitätsklinikum Erlangen, Germany)

Renata Raidou (Institute of Visual Computing & Human-Centered Technology, Technical University Vienna, Austria)

Stefan Rieken (Clinic for Radiotherapy and Radiation Oncology, University Medical Center Göttingen, Germany)

Kristina Ringe (Department for Diagnostic and Interventional Radiology, Hannover Medical School, Germany)

Sabine Salloch (Institute for Ethics, History and Philosophy of Medicine, Hannover Medical School, Germany)

Ulrich Sax (Department of Medical Informatics, University Medical Center Göttingen, Germany)

Tilman Schlick (Intuitive Surgery, Da Vinci Robotic Surgery)

Günter Schneider (Department of General, Visceral and Pediatric Surgery, University Medical Center Göttingen, Germany)

Peter Schöffler (Computational Pathology, Technical University of Munich, Germany)

Martin Wagner (Department of General, Visceral and Transplantation Surgery, Heidelberg University Hospital; Department of Visceral, Thoracic and Vascular Surgery, University Hospital Carl Gustav Carus, Dresden, Germany)

Eva Winkler (Heidelberg University Hospital (UKHD), NCT Heidelberg, Germany)

Jeroen van Laak (Computational Pathology, Radboud, Nijmegen, Netherlands)

VENUE



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DIGITAL ONCOLOGY CONFERENCE



A CCC-N and Else Kröner Symposium

HANNOVER FAIR, HALL 19,
CONFERENCE ROOM NEW YORK
March 15 and 16, 2023



ABOUT THE CONFERENCE

Big data in cancer research, artificial intelligence in diagnostics, or planning virtual tumor boards for interdisciplinary treatment – digital innovations have had a massive impact on oncology in recent years and are indispensable in everyday medical practice. The Digital Oncology Conference 2023 is a scientific symposium and networking platform for digital oncology research. Invited speakers will provide an overview on the latest research findings and promote discussions on potentials and challenges of implementing digital approaches in cancer research and health care.

ORGANISATION

VENUE

Hannover Fair, Hall 19
30521 Hannover

ORGANISER

Comprehensive Cancer Center Niedersachsen (CCC-N)
Translational Research Team
www.ccc-niedersachsen.eu

SCIENTIFIC DIRECTION

Michael Heuser

Department of Hematology, Hemostasis, Oncology, and Stem Cell Transplantation, Hannover Medical School, Germany

Günter Schneider

Department of General, Visceral and Pediatric Surgery, University Medical Center Göttingen, Germany

REGISTRATION

A registration for this in person conference is required and open now:



s.gwdg.de/CgywDn

ABSTRACTS

All scientists are welcome to submit an abstract online via the conference website. **Deadline for abstract submission:** February 5th, 2023. A scientific committee will select abstracts for poster or oral presentation.

CERTIFICATION

Points for continuing medical education for this event have been requested at the Ärztekammer.

DAY 1 | MARCH 15, 2023

11:30 **Welcome Lunch**
12:20 **Welcome**
Conference Chairs: Michael Heuser, Hannover
Günter Schneider, Göttingen

SESSION I: Digital and Computational Histopathology
Chairs: Friedrich Feuerhake, Hannover
Niels Grabe, Göttingen

12:30 **Computer Vision and Deep Learning for improved diagnostics of myeloid malignancies**
Moritz Middeke, Dresden

12:55 **Making sense of pathology images**
Peter Schöffler, Munich

13:20 **Use cases for computational pathology with high potential for clinical implementation and diagnostic decision support**
Jeroen van Laak, Nijmegen

13:45 **Integration of computational pathology algorithms with established conventional diagnostic workflows**
Friedrich Feuerhake, Hannover

14:10 **Presentation from Abstracts**

14:25 **Coffee & Cake**

SESSION II: AI to Advance Cancer Imaging
Chairs: Kristina Ringe, Hannover
Christian Dullin, Göttingen

15:00 **AI and Digitization in Radiation Oncology: Status quo and quo vadis**
Rami El Shafie, Göttingen

15:25 **Integrating clinical and imaging data in oncology**
Horst Hahn, Bremen

15:50 **How can AI improve radiotherapy?**
Florian Putz, Erlangen

16:15 **Can virtual histology replace histopathology?**
Christian Dullin, Göttingen

16:40 **Presentation from Abstracts**

16:55-18:30 **Poster Session & Get Together**

DAY 2, PART I | MARCH 16, 2023

SESSION III: Machine Learning and Visualization Techniques for Clinical Decision Support in Oncology
Chairs: Steffen Oeltze-Jafra, Hannover
Anne-Christin Hauschild, Göttingen

09:00 **Systems medicine approach to support clinical decisions in oncology**
Melanie Börries, Freiburg

09:20 **Take a leap: New Algorithms and Multi-Omics Data to Support Clinical Decision in Oncology**
Anne-Christin Hauschild, Göttingen

09:40 **Visual Analytics for Digital Radiotherapy**
Renata Raidou, Vienna

10:00 **In-Silico Modeling of Therapeutic Outcomes to Support Decision-Making in Oncology**
Alexander Oeser, Leipzig

10:20 **Discussion Session III**

10:40 **Presentation from Abstracts**

10:55 **Coffee & Cake**

SESSION IV: Digital Surgery

Chairs: Peter Hillemanns, Hannover
Michael Ghadimi, Göttingen

11:25 **Innovating for a better future**
Tilman Schlick, Da Vinci Robotic Surgery

11:50 **From Surgical Data Science to AI-Assisted Surgery – Clinical Translation of Machine Learning in Surgical Oncology**
Martin Wagner, Heidelberg/Dresden

12:15 **The power of digital technologies for craniomaxillofacial tumor surgery and postablative reconstruction**
Nils-Claudius Gellrich, Hannover

12:40 **Establishing digital surgery at a German university hospital**
Michael Ghadimi, Göttingen

13:05 **Digital Infrastructure for Support of Clinical Trials**
Stefan Rieken, Göttingen

13:20-14:05 **Lunch**

DAY 2, PART II | MARCH 16, 2023

SESSION V: Building Trust in Artificial Intelligence Models and Digital Methods in Medical Education
Chairs: Sabine Salloch, Hannover
Ulrich Sax, Göttingen

14:05 **Debate: AI will replace ethics committees: Yes**
Sabine Salloch, Hannover

14:30 **Debate: AI will replace ethics committees: No**
Eva Winkler, Heidelberg

14:55 **New Digital Resources to Improve Medical Education**
Michal Matyjas/Pascal Grosse, Berlin

15:20 **Training the next generation in Digital Medicine: Experience from the DigiStrucMed Graduate Program**
Michael Heuser, Hannover

15:40 **Presentation from Abstracts**

15:55 **Coffee & Cake**

SESSION VI: AI and Machine Learning Techniques Improving Cancer Research

Chairs: Tim Kacprowski, Braunschweig/Hannover
Tim Reißbarth, Göttingen

16:25 **Modelling immunotherapies in silico**
Francesca Finotello, Innsbruck

16:50 **Understanding tumor evolution with statistical machine learning**
Jack Kuipers, Zurich

17:15 **A Vision of Computational Translational Pharmacogenomics**
Michael Menden, Munich

17:40 **How can we make sense of the data overload in cancer research?**
Tim Reißbarth, Göttingen

18:05 **Presentation from Abstracts**

18:20 **Young Scientist Digital Oncology Poster Award**

18:25-18:30 **Concluding Remarks**