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)

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)

SPEAKER 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)

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)

Tillman Schlick (Intuitive Surgery, Da Vinci Robotic Surgery)

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

Peter Schüffler (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

HANNOVER FAIR, HALL 19
CONFERENCE ROOM NEW YORK
30521 HANNOVER

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Comprehensive Cancer Center Niedersachsen

DIGITAL ONCOLOGY CONFERENCE

A CCC-N and Else Kröner Symposium

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

Else Kröner Fresenius Stiftung

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:** Febuary 5th, 2023. A scientific committee will select abstracts for poster or oral presentation.

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 malignances
Moritz Middeke, Dresden

12:55 Making sense of pathology images
Peter Schüffler, 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 from bench to bedside in radiooncology: Status quo and quo vadis
N.N.

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- Poster Session & Get Together
18:30

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 Expert-informed Baysian Networks to Support Clinical Decision-Making in Oncology
Alexander Oeser, Leipzig

10:20 Discussion Session III

10:55 Coffee & Cake

SESSION IV: Digital Surgery
Chairs: Peter Hillemanns, Hannover
Michael Ghadimi, Göttingen

11:25 Intuitive Surgery, Da Vinci Robotic Surgery
Tillman 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 Presentation from Abstracts

13:20- Lunch
14:05

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 Beißbarth, 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 Beißbarth, Göttingen

18:05 Presentation from Abstracts

18:20 Young Scientist Digital Oncology Poster Award

18:25- Concluding Remarks
18:30