



# SYMPOSIUM ON

# ARTIFICIAL INTELLIGENCE IN HEALTHCARE

12. & 13. November 2021 in Munich, Germany

At Biomedical Center LMU | Großhaderner Str. 9 | 82152 Planegg And via ZOOM

# Symposium Booklet



Friday, November 12, 2021		
3:00 - 3:15 pm	AIM Team Welcome	On-site
3:15 - 5:15 pm	Introduction	
3:15 - 3:45 pm	Prof. Christian Hinske	On-site
3:45 - 4:15 pm	Dr. Franz Pfister	On-site
4:15 - 4:45 pm	Prof. Frederick Klauschen	On-site
4:45 - 5:15 pm	Dr. Andre Esteva	Virtual
5:15 - 5:45 pm	Break	
5:45 - 6:45 pm	Medical Al I	
5:45 - 6:15pm	Prof. Sumit Chopra	Virtual
6:15 - 6:45 pm	Prof. Krzysztof Geras	Virtual
6:45 pm	Evening Reception	On-site

Saturday, November 13, 2021		
9:00 - 9:15 am	AIM Team Welcome	On-site
9:15 - 11:15 am	Medical Al II	
9:15 - 9:45 am	Prof. Nassir Navab	On-site
9:45 - 10:15 am	Prof. Anne-Laure Boulesteix	On-site
10:15 - 10:45 am	PD. Dr. Bastian Sabel	On-site
10:45 - 11:15 am	Dr. Carsten Marr	Virtual
11:15 - 11:45 am	Break	
11:45 am - 12:45 pm	Medical Al III	
11:45 am - 12:15 pm	Tobias Seraphin	Virtual
12:15 - 12:45 pm	Dr. Enise Lauterbach	Virtual
12:45 - 2:00 pm	Lunchbreak	
2:00 - 4:00 pm	Ethics and Economy	
2:00 - 2:30 pm	Dr. Peter Körte	On-site
2:30 - 3:00 pm	Theresa Willem	Virtual
3:00 - 3:30 pm	Jan Brauner	Virtual
3:30 - 4:00 pm	Tariq Rashid	Virtual
4:00 - 4:30 pm	Break	
4:30 - 5:30 pm	Start-Up Booth I	
4:30 - 4:45 pm	Viktor Matyas, Aignostics	On-site
4:45 - 5:00 pm	Dr. Simon Sonntag, Virtonomy	On-site
5:00 - 5:15 pm	Julia Rackerseder, ImFusion	On-site
5:15 - 5:30 pm	Konstantin Mehl, Kaia Health	On-site
5:30 - 5:45 pm	Break	
5:45 - 6:45 pm	Start-Up Booth II	
5:45 - 6:00 pm	Nico Meissner, Ada Health	On-site
6:00 - 6:15 pm	Dr. Sebastian Krammer, Avelios Medical	On-site
6:15 - 6:30 pm	Nils Krüger, cognote.ai	On-site
6:30 - 6:45 pm	Prof. Alexander Leber, iATROS	On-site
6:45 - 7:00 pm	Dr. Nicole Humble	On-site
6:45 pm	Closing Ceremony and Evening Reception	On-site

#### Friday, 3:15 - 3:45pm

#### Al in Healthcare – Gamechanger & Lifesaver?



Prof. Dr. Christian Hinske, M.Sc.

- Since 2021: Editorial Board Member at PLOS Digital Health
- Since 2020: Professor of Medical Informatics at LMU
- Since 2009: Anesthesiologist at LMU University Hospital
- 2009: M.Sc. Biomedical Informatics at MIT
- 2007: Doctorate at LMU
- 2007: M.D. at LMU

Friday, 3:45 - 4:15pm

#### **Translating AI into Clinical Value – Can Data Save Lives?**



Dr. Franz Pfister, M.D., M.B.A., M.Sc.

- Since 2019: Co-Founder and CEO at deepc
- Since 2021: Co-Founder at Orbit Health
- 2017-2019: Founding Team and Board Member at Ocean Protocol
- 2019: M.Sc. Data Science at LMU
- 2017: M.B.A. Healthcare Management at Munich Business School
- 2014: Doctorate at LMU
- 2013: M.D. at LMU

Friday, 4:15 - 4:45pm

## Al in Cancer Research and Diagnostics



Prof. Dr. Frederick Klauschen, M.D.

- Since 2021: Professor of Pathology and Director of the Institute of Pathology at LMU
- Since 2020: Co-Founder and Chief Medical Advisor of Aignostics
- Since 2019: Deputy Director of the Institute of Pathology at Charité Berlin
- Since 2009: Research Group Leader and Physician at Pathology Department at Charité Berlin
- 2004-2009: Post-doctoral Researcher at National Institute of Health in Bethesda
- 2005: Doctorate at University of Lubeck
- 2005: M.D. and Diploma in Physics at Hamburg University

Friday, 4:45 - 5:15pm

# Medical AI – Precision Medicine and Healthcare Workflow Optimization



Andre Esteva, Ph.D.

- Since 2019: Head of Medical AI at Salesforce
- Since 2015: Positions at various Venture Capital Firms
- 2017: Ph.D. Electrical Engineering at Stanford
- 2014: M.S. Electrical Engineering at Stanford
- 2011: B.Sc. Engineering at University of Texas at Austin

#### Friday, 5:45 - 6:15pm

#### **Representation Learning in Medical Imaging**



#### Prof. Sumit Chopra, Ph.D.

- Since 2021: Associate Professor at New York University
- 2017-2020: Co-Founder and Vice President of AI at Imagen Technologies
- 2007-2016: Co-Founder at AVAC Ltd.
- 2008-2014: Researcher at AT&T Labs
- 2008: Ph.D. Computer Science and Machine Learning at New York University
- 2003: B.Sc. Computer Science at University of Delhi

Friday, 6:15 - 6:45pm

# **Towards Solving Breast Cancer Diagnosis with Deep Learning**



#### Prof. Krzysztof Geras, Ph.D.

- Since 2018: Assistant Professor at New York University
- 2016-2018: Post-doctoral Researcher at New York University
- 2016: Ph.D. Informatics at University of Edinburgh
- 2011: M.Sc. Computer Science at University of Warsaw

#### Saturday, 9:15 - 9:45pm

#### **Machine Learning for Computer Assisted Interventions**



#### Prof. Nassir Navab, Ph.D.

- Over 45350 citations and h-index of 96
- 2021: MICCAI Enduring Impact Award
- 2015: IEEE ISMAR 10 Years Lasting Impact Award
- Secondary faculty appointment at TUM Medical School
- Since 2012: Adjunct Professor at John Hopkins University
- Since 2012: Fellow of the MICCAI Society
- Since 2003: Full Professor and Director of the Laboratories for Computer Aided Medical Procedures (CAMP) at TUM
- 1993: Ph.D. at INRIA

#### Saturday, 9:45 - 10:15pm

#### A Replication Crisis in Machine Learning?



#### Prof. Anne-Laure Boulesteix, Ph.D.

- Since 2012: Professor of Biometry at LMU
- 2008-2012: Visiting and Assistant Professor at LMU
- 2005-2007: Post-doctoral Researcher at TUM
- 2005: Ph.D. in Statistics at LMU
- 2001: Diploma in Mathematics at University of Stuttgart
- 1996-2000: Studies of Mathematics and Engineering in Paris

#### Saturday, 10:15 - 10:45pm Al Applications in CT and X-Ray Imaging



#### PD. Dr. Bastian Sabel, M.D.

- Since 2018: Attending Physician, Dpt. of Radiology at LMU
- 2013-2018: Resident Physician, Dpt. of Radiology at LMU
- 2011: Research Fellow at Massachusetts General Hospital, Harvard Medical School
- 2010: Research Fellow at German Cancer Research Center, Division of Medical Physics in Radiology

#### Saturday, 10:45 - 11:15pm Al for Hematologic Disease Diagnostics



#### Carsten Marr, Ph.D.

- Since 2021: Director at the Institute of AI for Health (AIH), Helmholtz Zentrum Munich
- 2013-2021: Group Leader at Institute of Computational Biology (ICB), Helmholtz Zentrum Munich
- 2008-2013: Post-doctoral Researcher at Helmholtz Zentrum Munich and University of Edinburgh
- 2007: Ph.D. Dynamical Processes on Graphs and Biological Networks at TU Darmstadt
- 2002: Diploma in General Physics at TUM

#### Saturday, 11:45 - 12:15pm Al in Hepatology and Gastroenterology



#### Tobias Seraphin, M.D.

- Since 2021: Member of the Computational Oncology Working Group at RWTH University Hospital, Aachen
- Since 2020: Research Fellow and Resident Doctor at Dpt. of Gastroenterology, Hepatology and Infectious Diseases, University Hospital Dusseldorf
- 2020: Research Stay at Nuffield Dpt. for Population Health at Oxford University
- Since 2017: Dissertation on Epidemiology of Cancer in Sub-Saharan Africa, Dpt. of Epidemiology at Martin Luther University Halle-Wittenberg
- 2019: M.D. at University of Erlangen-Nuremberg and University of Leipzig

#### Saturday, 12:15 - 12:45pm Use of Al in Cardiology – Benefits and Challenges



#### Dr. Enise Lauterbach, M.D.

- Since 2019: Founder & CEO of Digital Health Hub Trier and LEMOA medical GmbH
- 2018-2019: Chief Physician at ZAR Nanz Medico, Trier
- 2012-2018: Cardiologist at Barmherzige Brüder, Trier
- 2004-2012: Resident Doctor at various Hospitals in Mainz, Frankfurt, and Trier
- 2004: M.D. at University Mainz

#### Saturday, 2:00 - 2:30pm

#### Al in Healthcare – Revolution or Evolution?



#### Peter Koerte, Ph.D.

- Since 2020: CSO and CTO at Siemens
- 2011-2020: Vice President and President Positions at Siemens Healthineers
- 2007-2011: Corporate Strategy at Siemens
- 2001-2007: Consultant at Boston Consulting Group
- 2015: General Management Program at Harvard Business School
- 2006: Ph.D. Business Strategy and International Trade at WHU - Otto Beisheim School of Management
- 2001: M.Sc. Industrial Engineering, Karlsruhe Institute of Technology

#### Saturday, 2:30 - 3:00pm

# Embedding Ethics in Medical AI – a Dermatological Case Study



#### Theresa Willem, M.A.

- Since 2019: Consultant in Digital Health
- Since 2019: Research Associate at Institute of History and Ethics in Medicine at TUM
- 2016-2019: Project Management at Flying Health
- Since 2020: PhD. at School for Social Sciences and Technology, Dpt. for Science, Technology and Society at TUM
- 2018: M.A. Media Science at Humboldt University of Berlin
- 2015: B.A. Media Science at University of Regensburg

#### Saturday, 3:00 - 3:30pm

#### **Hot Takes on Bayesian Modelling of COVID-19**



#### Jan Brauner, M.D., M.S.

- Research on Non-Pharmaceutical Interventions against COVID-19 Presented at Africa CDC, UK SAGE, Dutch House of Representative
- Since 2019: Ph.D. Candidate at University of Oxford, OATML lab, Machine Learning
- 2019: M.S. at University of Edinburgh, Focus on Machine Learning
- 2018: M.D. at University of Erlangen-Nuremberg

Saturday, 3:30 - 4:00pm

#### **Ensuring AI is Safe, Fair and Ethical**



#### **Tariq Rashid**

- Since 2019: Founder at Digital Dynamics
- 2012-2017: Positions at Government of the United Kingdom
- 2003: M.S. Artificial Intelligence at University of Bristol
- 2000: M.S. Natural Sciences at University of Cambridge

#### Saturday, 4:30 - 4:45pm

#### **Start-Up Pitch – Aignostics**



#### Viktor Matyas, M.B.A., M.Sc.

- Since 2019: Co-founder and CEO at Aignostics
- 2016-2019: Senior Associate at Bridgepoint Germany
- 2012-2016: Junior Engagement Manager at McKinsey
- 2015: M.B.A. at INSEAD
- 2012: M.Sc. at London Business School
- 2011: B.Sc. at WU Vienna

#### **Aignostics**

- Objectives: Al-powered precision diagnostics for pathology
- Founders: Prof. Frederik Klauschen, Prof. Klaus-Robert Müller, Viktor Matyas, Dr. Maximilian Alber
- Founding: 2018

#### Saturday, 4:45 - 5:00pm

#### **Start-Up Pitch – Virtonomy**



#### Simon Sonntag, Ph.D.

- Since 2019: Co-Founder and CEO at Virtonomy
- Since 2020: Task Force Leader Avicenna Alliance
- Since 2016: Governor European Society of Artificial Organs
- 2014-2019: COO at enmodes
- 2015-2016: Co-Founder and CEO ensagreen
- 2014: Ph.D. at Dpt. for Cardiovascular Engineering at RWTH Aachen

#### Virtonomy

- Objectives: Data driven clinical trials on virtual patients
- Founders: Dr. Simon Sonntag, Wen-Yang Chu
- Founding: 2019

#### Saturday, 5:00 - 5:15pm

#### Start-Up Pitch – ImFusion



#### Julia Rackerseder, M.Sc.

- Since 2021: Technical Product Manager at ImFusion GmbH
- Since 2015: Co-Founder at MedInnovate
- 2019-2020: Use Case Researcher Digital Healthcare & Precision Medicine at Konica Minolta Global R&D
- 2015-2019: Ph.D. Student at the Chair for Computer Aided Medical Procedures at TUM
- 2015: M.Sc. Bioinformatics at TUM and LMU



#### **ImFusion**

- Objectives: Software solutions for medical image processing and computer vision
- Founders: Dr. Wolfgang Wein, Dr. Alexander Ladikos
- Founding: 2012

#### Saturday, 3:35 - 5:30pm

#### Start-Up Pitch - Kaia Health

#### Konstantin Mehl, M.Sc.

- Since 2016: CEO and Founder of Kaia Health
- 2013-2015: CEO and Founder of Foodora
- Dual Masters at Columbia University
- Honors Degree at CDTM
- B.Sc. Chemistry and Finance at TUM

#### Kaia Health

- Objective: Digital therapeutics company creating evidencebased treatments for musculoskeletal conditions, COPD, and others; empowering individuals to take control and selfmanage their condition with effective, non-pharmacological, digital alternatives at low costs
- Founders: Konstantin Mehl
- Founding: 2016

#### Saturday, 5:45 - 6:00pm

## Start-Up Pitch – Ada Health



#### Nico Meissner, M.D.

- Since 2021: Backlog Owner of one of three Medical Teams at Ada Health
- 2020-2021: Full-time Medical Knowledge Engineer at Ada Health
- 2016-2019: Medical Knowledge Engineer as Medical Student at Ada Health
- 2015-2016: Medical Editor as Medical Student at medx
- 2019: M.D. at Charité Berlin
- Since 2016: Dissertation on Early Detection of Post-Stroke Depression, Dpt. of Experimental Neurology at Charité Berlin

#### Ada Health

- Objectives: End-user self-assessment app
- Founders: Prof. Martin Christian Hirsch, Dr. Claire Novorol, Daniel Nathrath
- Founding: 2011

#### Saturday, 6:00 - 6:15pm

#### Start-Up Pitch – Avelios Medical



#### Dr. Sebastian Krammer, M.D.

- Since 2019: Co-Founder Avelios Medical
- Since 2018: Research Group Leader, Dpt. of Dermatology at LMU
- 2018-2021: Resident Physician, Dpt. of Dermatology at LMU
- 2019: Doctorate at LMU
- 2018: M.D. at LMU

#### **Avelios Medial**

- Objectives: Modular clinic platform that digitizes and optimizes clinical processes
- Founders: Dr. Sebastian Krammer, Nicolas Jakob, Christian Albrecht
- Founding: 2019

#### Saturday, 6:15 - 6:30pm

#### Start-Up Pitch – cognote.ai



### Nils Krüger, M.D.

- Since 2020: Co-Founder of cognote.ai
- 2019: Visiting Student at ETH Zürich, Harvard University, and Cornell University
- 2016-2021: CMO and Research Assistant at MeCuM Mentor at LMU
- 2021: M.D. at LMU

#### cognote.ai

- Objectives: Vertical AI assistant automating medical documentation for physicians; voice recognition for summarizing patient visits and supporting medical decisions; relieving doctors in their daily workflows and helping them focus on what matters most
  - Founders: Currently in stealth mode
  - Founding: Currently in stealth mode

#### Saturday, 6:30 - 6:45pm

cognote.ai

#### Start-Up Pitch – iATROS



#### Prof. Dr. Alexander Leber, M.D.

- Since 2019: CEO and Founder of iATROS
- Since 2008: Director at Isar Heart Center, Munich
- 2004-2005: Research Fellow at Icahn School of Medicine at Mount Sinai, New York
- 1998-2008: Academic Career at LMU Munich
- 1998: M.D. at University of Erlangen-Nuremberg

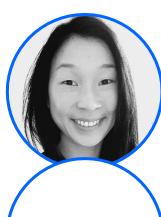


#### **iATROS**

- Objectives: App based solutions for secondary prevention and telemonitoring of cardiovascular patients; modern data analysis approach using AI algorithms; direct feedback to attending doctors via video calls
- Founders: Prof. Alexander Leber
- Founding: 2019

#### Saturday, 6:45 - 7:00pm

## Start-Up Pitch – deepc



#### Nicole Humble, Ph.D.

- Since 2021: Senior Product Owner at deepc
- 2018-2021: Product Owner, Digital Identity and Security at
- 2014-2018: Product Manager, Radiosurgery Treatment Planning at Brainlab
- 2014: Ph.D. Physics at TUM
- 2009: M.Sc. Radiobiology at University College London
- 2007: B.Sc. Medical Radiation Physics at University of Wollongong

#### deepc

- Objectives: Diagnostics operating system to facilitate the fast deployment of medical AI technology into clinical workflows such as in radiology
- Founders: Dr. Franz Pfister, Julia Moosbauer, Paul Mayer, Michael Meyerhoff
- Founding: 2019; CE certification and launch in March 2021



# **Organized by**

# LMU - AI in Medicine



**Tim Wiegand**Tim.Wiegand@med.lmu.de



**Matthias Hehr**Matthias.Hehr@med.lmu.de



Gergana Lishkova
G.Lishkova@med.lmu.de



**Laura Velezmoro**L.Velezmoro@med.lmu.de



Konstantin Pusl
Konstantin.Pusl@campus.lmu.de



Linus Kruk
Linus.Kruk@campus.lmu.de



Felix Wimbauer
Felix.Wimbauer@tum.de

## Visit our website to stay tuned for future events:

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# **Send questions to:**

info@lmu-aim.de





