

2020 *DeepTexas* Medical Al Symposium April 23-24, 2020

The Westin Houston Medical Center Houston, Texas

AGENDA – DAY ONE (APRIL 23, 2020) 1:00 pm - 8:00 pm

1:00-1:30 pm (30 MIN)

PARTICIPANTS ARRIVE/NETWORKING

(Snacks and Beverages)

1:30-1:40 pm (10 MIN)

WELCOME

Giuseppe N. Colasurdo, MD

President

Alkek-Williams Distinguished Chair

H. Wayne Hightower Distinguished Professor in the Medical Sciences

The University of Texas Health Science Center at Houston

CEO, UT Physicians

https://www.uth.edu/president/

1:40-2:00 pm (20 MIN)

OPENING REMARKS

Medical AI – A Texas Perspective

Jiajie Zhang, PhD

Dean

Glassell Family Foundation Distinguished Chair in Informatics Excellence

School of Biomedical Informatics

The University of Texas Health Science Center at Houston

https://sbmi.uth.edu/zhang/index.htm

2:00-3:00 pm (60 MIN)

KEYNOTE PRESENTATION

Session Chair:

Michael Blackburn, PhD

Executive Vice President and Chief Academic Officer

The University of Texas Health Science Center at Houston

William S. Kilroy, Sr. Distinguished University Chair in Pulmonary Disease

Dean, MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences

The University of Texas Health Science Center at Houston

https://www.uth.edu/evpara/welcome blackburn.htm

https://gsbs.uth.edu/about/deans-message.htm

Keynote: The State of AI and Its Implications for Medicine

Peter Szolovits, PhD

Professor of Computer Science and Engineering,

Department of Electrical Engineering and Computer Science

Professor of Health Sciences and Technology,

Institute for Medical Engineering and Science

Director of Clinical Decision Making Research Group,

Computer Science and Artificial Intelligence Laboratory

Massachusetts Institute of Technology

Member, National Academy of Medicine

Fellow, American Institute for Medical and Biological Engineering

http://imes.mit.edu/people/faculty/szolovits-peter/

3:00-3:15 pm (15 MIN)

COFFEE BREAK

3:15-4:15 pm (60 MIN)

Session 1: Medical Al Solutions Today - Part 1

(20 min each presentation, 15 min with 5 min Q&A)

Session Chair:

Robert Murphy, MD

Associate Professor and Associate Dean for Applied Informatics

School of Biomedical Informatics

Associate Professor

Division of Critical Care Medicine, Department of Internal Medicine, McGovern Medical School

University of Texas Health Science Center at Houston

https://sbmi.uth.edu/faculty-and-staff/robert-murphy.htm

Practicing Deep Learning-based Natural Language Processing (NLP) in Healthcare Hua Xu, PhD

Professor

Director, Center for Computational Biomedicine

School of Biomedical Informatics

University of Texas Health Science Center at Houston

https://sbmi.uth.edu/faculty-and-staff/hua-xu.htm

Machine Learning and Game Theory for the Prediction of Adverse Cardiovascular Events Ioannis A. Kakadiaris, PhD

Hugh Roy and Lillie Cranz Cullen University Professor of Computer Science

Founder and Director, Computational Biomedicine Laboratory

University of Houston

https://www.linkedin.com/in/ioannisakakadiaris/

Al for Clinical Phenotyping, Prediction, and Privacy Protection

Xiaoqian Jiang, PhD

Associate Professor

Dr. Doris L. Ross Professor

Director, Center for **S**ecure **A**rtificial Intelligence **F**or h**E**althcare (SAFE)

School of Biomedical Informatics

University of Texas Health Science Center at Houston

https://sbmi.uth.edu/faculty-and-staff/xiaoqian-jiang.htm

4:15-5:15 pm (1 HR)

SESSION 2: AI SOLUTIONS TODAY - PART 2

(20 min each presentation, 15 min with 5 min Q&A)

Session Chair:

Todd Johnson, PhD

Professor

School of Biomedical Informatics

University of Texas Health Science Center at Houston

https://sbmi.uth.edu/faculty-and-staff/todd-johnson.htm

Using AI to Reduce Overdiagnosis, Overtreatment, and Misdiagnosis

Stephen T. Wong, PhD, PE

John S. Dunn, Sr. Presidential Distinguished Chair in Biomedical Engineering

Founding Chair, Systems Medicine and Bioengineering

Founding Director, Center for Modeling Cancer Development

Associate Director, Biostatistics and Bioinformatics Cores, Houston Methodist Cancer Center

Founding Director, The Ting Tsung and Wei Fong Chao Center for BRAIN (Bioinformatics Research and Imaging in the Neurosciences)

Chief, Medical Physics

Houston Methodist Hospital and Weill Cornell Medical College

Professor of Radiology, Neurosciences, Pathology, and Laboratory Medicine

Cornell University

https://www.houstonmethodist.org/faculty/stephen_wong/

Learning Brain Imaging Patterns from Temporal and Spatial Differences Luca Giancardo, PhD

Assistant Professor

Core Faculty, Center for Precision Health

School of Biomedical Informatics

University of Texas Health Science Center at Houston

https://sbmi.uth.edu/faculty-and-staff/luca-giancardo.htm

Deep Learning in Radiation Oncology

Steve Jiang, PhD

Professor

Barbara Crittendon Professor in Cancer Research

Vice Chair, Department of Radiation Oncology

Director, Division of Medical Physics and Engineering

Director, MAIA (Medical Artificial Intelligence Automation) Laboratory

University of Texas Southwestern Medical Center

www.utsouthwestern.edu/labs/maia

5:15-8:00 pm

RECEPTION & DINNER

KEYNOTE - RECEPTION

The UT System's Vision for Medical AI

John M. Zerwas, MD

Executive Vice Chancellor for Health Affairs

The University of Texas System

(Former Texas State Representative and Chair of House Appropriations Committee)

https://www.utsystem.edu/offices/health-affairs/executive-vice-chancellor-health-affairs

KEYNOTE - DINNER

Medical AI Platform in the Cloud

Lisa McFerrin, PhD

Bioinformatician

Amazon Web Services

https://www.linkedin.com/in/lisa-mcferrin-9758b029/

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The Westin Houston Medical Center Houston, Texas

AGENDA - DAY TWO (APRIL 24, 2020)

8:30 am-4:30 pm

8:30-9:00 am (30 MIN)

PARTICIPANTS ARRIVE/NETWORKING

9:00-10:00 am (60 min)

KEYNOTE PRESENTATION

Session Chair:

Kent Kubie

Nutanix

(Formerly, with IBM)

https://www.linkedin.com/in/kent-kubie-933195/

Keynote: AI, Analytics, and Data in Healthcare

Tina Moen, PharmD

Senior Deputy Chief Health Officer & Chief Pharmacy Officer

IBM Watson Health

https://www.linkedin.com/in/tina-moen/

10:00-10:15 pm (15 MIN)

COFFEE BREAK

10:15-11:15 pm (60 MIN)

SESSION 3: PANEL - GRAND CLINICAL CHALLENGES FOR AI

Panel Moderator:

Elmer Bernstam, MD, MSE

Professor, Biomedical Informatics

Associate Dean for Research

Reynolds and Reynolds Professor in Clinical Informatics

School of Biomedical Informatics

Professor, Internal Medicine

McGovern Medical School

University of Texas Health Science Center at Houston

https://sbmi.uth.edu/faculty-and-staff/elmer-bernstam.htm

Panelists:

John C. Frenzel, MD, MS

Clinical Professor, Department of Anesthesiology and Perioperative Medicine

Division of Anesthesiology and Critical Care

Director, The Learning Health System

The University of Texas MD Anderson Cancer Center

https://faculty.mdanderson.org/profiles/john frenzel.html

Bela Patel, MD, DABSM, FCCP, CMQ

Distinguished Teaching Professor and Professor of Medicine

Graham Distinguished University Chair

Vice Dean Healthcare Quality

Division Director of Critical Care Medicine

McGovern Medical School

University of Texas Health Science Center at Houston

Vice Chair of Medicine, Regional Chief Medical Officer, and Executive Medical Director of Critical Care

Memorial Hermann Hospital, Texas Medical Center Campus

https://med.uth.edu/internalmedicine/faculty/bela-patel-md-cmq-fccp/

Sean Savitz, MD

Professor

Frank M. Yatsu, MD Chair in Neurology

Director, UTHealth Institute for Stroke and Cerebrovascular Disease

McGovern Medical School

University of Texas Health Science Center at Houston

https://med.uth.edu/neurology/faculty/sean-i-savitz-md/

Hardeep Singh, MD, MPH

Chief, Health Policy, Quality, and Informatics Program

Center for Innovations in Quality, Effectiveness, and Safety (IQuESt)

Michael E. DeBakey VA Medical Center

Professor, Baylor College of Medicine

Director, Houston DISCovery (Diagnosis Improvement Safety Center)

https://www.houston.hsrd.research.va.gov/bios/singh.asp

William Tierney, MD

Professor and Chair, Department of Population Health

Professor, Departments of Medicine and Oncology

Dell Medical School

Professor, Steve Hicks School of Social Work

University of Texas at Austin

https://dellmed.utexas.edu/directory/william-tierney

Randall Urban, MD

Professor

Vice President and Chief Research Officer

Vice Dean Clinical Research, School of Medicine

University of Texas Medical Branch at Galveston

https://www.utmb.edu/internalmedicine/divisions/endocrinology/faculty/randall-j-urban

11:15-12:15 pm (60 MIN)

SESSION 4: MEDICAL AI SOLUTIONS FROM INDUSTRY

(20 min each presentation, 15 min with 5 min Q&A)

Session Chair:

GQ Zhang, MS, PhD

Professor

Department of Neurology - McGovern Medical School, School of Public Health, and School of Biomedical Informatics

Vice President and Chief Data Scientist

Co-Director, Texas Institute for Restorative Neurotechnologies

University of Texas Health Science Center at Houston

https://med.uth.edu/neurology/faculty/gq-zhang-ms-phd/

Cerner's AI Platform

Jacob Geers

Product Owner, Cerner Intelligence

Cerner Corporation

https://www.linkedin.com/in/jacob-geers-90b2515/

Al for Health at Google

Dale Markowitz

Software Engineer

Google Cloud

https://www.linkedin.com/in/dale-markowitz-40a9a852/

AI for Clinical NLP at Melax

Frank Manion, PhD

VP for Innovation

Melax Technologies, Inc.

http://www.melaxtech.com/team.html

12:15-1:15 pm (60 MIN)

LUNCH & NETWORKING

1:15-2:15 pm (60 MIN)

SESSION 5: PANEL - IMPLEMENTING AI IN CLINICAL SETTINGS: CHALLENGES & OPPORTUNITIES

Panel Moderator:

Carl V. Vartian MD, MS, FACP, FIDSA

Diplomate, Clinical Informatics, ABPM
Chief Medical Officer (CMO)
HCA Houston Healthcare Clear Lake and Mainland
http://circleinformatics.org/user/carl.vartian/

Panelists:

Babatope Fatuyi, MD

Chief Medical Information Officer
UT Physicians
https://www.linkedin.com/in/babatope-fatuyi-m-d-96a4b914/

Amanda Hammel

Senior Vice President and Chief Information Officer Memorial Hermann Health System https://www.linkedin.com/in/amanda-hammel/

David Jaffray, PhD

Senior VP & Chief Technology and Digital Officer
University of Texas MD Anderson Cancer Center
https://www.mdanderson.org/newsroom/david-jaffray--ph-d---named-chief-technology-and-digital-officer.h00-159303045.html

Ashok Kurian

Director, Data & Analytics
Texas Children's Hospital
https://www.linkedin.com/in/ashok-kurian-40081022/

Karen C. Tseng, JD

Senior VP for Population Health Transformation Harris Health System Non-Resident Fellow in Health Policy Rice University Baker Institute for Public Policy https://www.linkedin.com/in/karenctseng/

Amar Yousif, MBA

Vice President, Information Technology and Chief Information Officer University of Texas Health Science Center at Houston https://www.uth.edu/president/exec_leadership/yousif

2:15-3:15 pm (60 MIN)

SESSION 6: TECHNOLOGY FOR TOMORROW'S MEDICAL AI

(20 min each presentation, 15 min with 5 min Q&A)

Session Chair:

Cui Tao, PhD

Professor

School of Biomedical Informatics

University of Texas Health Science Center at Houston

(Presidential Early Career Award for Scientists and Engineers [PECASE] Awardee)

https://sbmi.uth.edu/faculty-and-staff/cui-tao.htm

Meta-Machine Learning for Medicine

Chris Jermaine, PhD

Professor

Department of Computer Science

Rice University

https://csweb.rice.edu/christopher-jermaine

Interpretable Machine Learning and Fairness in AI

Xia "Ben" Hu, PhD

Assistant Professor and Lynn '84 and Bill Crane '83 Faculty Fellow

Director, DATA Lab

Department of Computer Science & Engineering

Texas A&M University

http://faculty.cs.tamu.edu/xiahu/

Extreme, Large Scale Deep Learning for AI Applications

Anshumali Shrivastava, PhD

Assistant Professor

Departments of Computer Science, Electrical and Computer Engineering, and Statistics Rice University

https://csweb.rice.edu/anshumali-shrivastava

3:15-3:30 pm (15 MIN)

COFFEE BREAK

3:30-4:30 pm (60 MIN)

SESSION 7: MEDICAL AI - INVESTMENT AND COMMERCIALIZATION

(15 min each presentation, 10 min with 5 min Q&A)

Session Chair:

Ananth Annapragada, PhD

Professor of Radiology, Baylor College of Medicine

Director of Basic Research, Edward B. Singleton Department of Radiology

Texas Children's Hospital

https://www.texaschildrens.org/find-a-doctor/ananth-v-annapragada-phd

The Investment Landscape for Health IT and Medical AI

Christopher McCord

Managing Director

Healthcare Growth Partners

http://www.hgp.com/about-us/who-we-are

The AI Landscape in Health

Angela Wilkins, PhD

Co-CEO and CTO

Mercury Data Science

Chief Scientist, Mercury Fund

https://www.linkedin.com/in/adwilkins/

Artificial Intelligence in Business

Paul A. Pavlou, PhD

Dean

Cullen Distinguished Chair Professor

C.T. Bauer College of Business

University of Houston

https://www.bauer.uh.edu/administration/office-of-dean/paul-pavlou.php

Startups in Medical AI and Digital Health

Emily Reiser, PhD

Senior Manager, Innovation Community Engagement

Texas Medical Center Innovation

https://www.tmc.edu/innovation/team/emily-reiser-phd/

4:30-4:40 pm (10 MIN)

CLOSING REMARKS

Jiajie Zhang, PhD

Dean

Glassell Family Foundation Distinguished Chair in Informatics Excellence

School of Biomedical Informatics

University of Texas Health Science Center at Houston

https://sbmi.uth.edu/zhang/index.htm