

# DIGITAL HEALTH SUMMIT



## Program Agenda: January 29-30, 2026

Courtyard by Marriott Pittsburgh University Center, 100 Lytton Ave, Pittsburgh, PA, 15213, United States

### Day 1: Thursday, January 29 (Half Day)

Time	Session	Details
11:30am - 12:40pm	Registration & Poster Setup	
12:40pm - 12:45pm	Welcome & Opening Remarks	Ken Nischal
<b>Theme 1: Connected Care &amp; The Future of Virtual Health</b>		
12:45pm - 1:15pm	Keynote	Hooman Rashidi
1:15pm - 1:25pm	Local Innovation Spotlight	Rema Padman
1:25pm - 3:00pm	Abstract Presentations & Panel Discussion	Startups, Investments and Emergent Technologies   Panel: Mike Curren, Hooman Rashidi, Rema Padman, Maureen Lichtveld
3:00pm - 3:30pm	Poster Session & Coffee Break	
<b>Theme 2: Digital Health Innovation</b>		
3:30pm - 4:00pm	Keynote	Reba Schenk
4:00pm - 5:30pm	Abstract Presentations & Panel Discussion	Hybrid care models, RPM, wearables, and digital therapeutics   Panel: Paul Wallach, Kristin Ray, Leeanna McKibben, Christine Kasper
5:30pm - 5:40pm	Local Innovation Spotlight	Chris Carmody
5:40pm - 6:45pm	Poster Session & Networking Reception Sponsored by PhysicianX	

## Day 2: Friday, January 30 (Full Day)

Time	Session	Details
8:00am - 8:30am	Poster Session & Registration	
8:30am - 8:40am	Opening Remarks & Day 1 Overview	Anantha Shekhar
<b>Theme 3: The Future of Personalized Healthcare</b>		
8:45am - 9:15am	Keynote	Fawad Butt
9:15am - 10:45am	Abstract Presentations & Panel Discussion	AI and Precision Medicine   Panel: David Beck, Rob Bart, Chris Horvat, Fawad Butt
10:45am - 11:15am	Poster Session & Coffee Break	
11:15am - 11:40am	Breaking News	Real-Time Intelligence Updates in Digital Garrett Adams – Epic Ian Price – UPMC Health Plan Mark Larochelle + Kevin Talbert - Cloudera Michelle Fisher - Physician X
11:40am-12:00pm	Local Innovation Spotlight	John Houston
12:00pm - 1:10pm	Poster Session & Lunch	
<b>Theme 4: Healthcare 4.0- Data, Cybersecurity &amp; Ethics</b>		
1:15pm - 1:45pm	Keynote	Zafar Chaudry
1:45pm - 3:45pm	Abstract Presentations & Panel Discussion	HIPAA, GDPR, ethical AI, Digital Risks   Panel: Zafar Chaudry, Suresh Mulukutla, Srinivasan Suresh, Abbas Hyderi
3:45pm - 3:55pm	Local Innovation Spotlight	Terry Lewis + Bailey McKinnley
3:55pm - 4:10pm	Open Forum Discussion	Dr. Nischal - Feedback, Next Steps, Conclusion
4:10pm - 6:00pm	Poster Session & Networking Reception	

### Our generous sponsors:



**A heartfelt thank you to our Scientific Committee, Planning Committee, keynote speakers, local innovators, and the many panelists and presenters whose expertise and dedication made this agenda possible. Your collective contributions continue to elevate the Digital Health Summit and inspire meaningful progress in our field.**

**Our Scientific Committee:** Abeer Azzuqa, Rob Bart, Andrew Buchert, Mariel Garcia, Deepan Kamaraj, Whitney Lerch, Leeanna McKibben, Ken Nischal, Srinivasan Suresh

**Our Planning Committee:** Abeer Azzuqa, Mariel Garcia, Ken Nischal, Marianna Stayer

**Our Keynote Speakers:** Fawad Butt, Zafar Chaudry, Hooman Rashidi, Reba Schenk

**Our Local Innovators:** Chris Carmody, John Houston, Terry Lewis, Bailey McKinnley Varrati, Rema Padman

**Our Panelists, Moderators, and Speakers:** Garrett Adams, Abeer Azzuqa, Rob Bart, Fawad Butt, David Beck, Zafar Chaudry, Mike Curren, Chris Horvat, Abbas Hydeeri, Christine Kasper, Maureen Lichtveld, Leeanna McKibben, Suresh Mulukutla, Ken Nischal, Rema Padman, Kristin Ray, Hooman Rashidi, Anantha Shekhar, Srinivasan Suresh, Paul Wallach

## Participant Details:

### **Garrett Adams**

Lead, EpicCare Ambulatory Research & Development,  
Epic Systems Corporation

### **Abeer Azzuqa, MD**

Professor of Pediatrics,  
Clinical Director, Neonatal Intensive Care Unit, UPMC  
Children's Hospital of Pittsburgh.

Associate Vice Chair of Clinical Affairs/Telehealth,  
Department of Pediatrics.

President Elect of the Medical Staff, UPMC Children's  
Hospital of Pittsburgh.

Medical Director, Neonatal Telemedicine, UPMC  
Children's Hospital of Pittsburgh

### **Robert D. Bart, MD**

Chief Medical Information Officer, Hospital Services  
Division, UPMC

### **David C. Beck, EdD, DMSc, MPAS, PA-C, DFAAPA**

Interim Dean, Professor  
University of Pittsburgh School of Health and  
Rehabilitation Sciences

### **Fawad Butt**

Chief Executive Officer and President, Penguin Ai

### **Andrew Buchert, MD**

Interim Vice President of Medical Affairs, UPMC Children's  
Hospital of Pittsburgh

President, Pennsylvania Pediatric Health Network  
(Clinically-Integrated Network of UPMC Children's  
Hospital of Pittsburgh)

### **Christian Carmody**

Senior Vice President, UPMC Information Technology  
Division; Chief Technology Officer, UPMC

### **Zafar Chaudry, MD**

Senior Vice President, Chief Digital Officer, and Chief AI &  
Information Officer, Seattle Children's

### **Michael Curren, MD, MS**

Section Chief, Division of Cardiology at UPMC, Clinical  
Assistant Professor of Medicine, Medical Director, Provider  
Documentation and EHR Optimization

### **Mariel C. Garcia, MBA**

Sr. Director, International Business  
Sr. Director, Digital Health  
UPMC Children's Hospital of Pittsburgh

### **Abbas Hyderi, MD, MPH**

Vice Dean for Education  
Professor of Family Medicine  
University of Pittsburgh School of Medicine

### **John Houston, Esq.**

Vice President, Privacy and Information Security & Senior  
Associate Counsel  
Information Assurance Services

### **Christopher M. Horvat, MD, MHA**

Associate Professor of Critical Care Medicine, Pediatrics,  
Biomedical Informatics, and Clinical & Translational  
Sciences; Senior Director, Clinical Informatics, UPMC ICU  
Service Center and the University of Pittsburgh  
Department of Critical Care Medicine; Director, Medical  
Emergency Response Teams, UPMC Children's Hospital of  
Pittsburgh; Associate Program Director, UPMC Clinical  
Informatics Fellowship; Associate Director, Safar Center  
for Resuscitation Research, University of Pittsburgh

### **Deepan C. Kamaraj, MD, PhD**

Director, Data Analytics & Informatics  
UPMC Enterprises

### **Christine E. Kasper, PhD, RN, FAAN, FACSM**

Dean and Professor of Nursing, University of Pittsburgh  
School of Nursing

### **Whitney Lerch, PA-C**

Director of Advanced Practice  
Physician Assistant, Expert - Division of  
Hematology/Oncology  
UPMC Children's Hospital of Pittsburgh

### **Terry Lewis**

Senior Associate Counsel, Physician Services and  
Telemedicine

### **Maureen Lichtveld, MD, MPH**

Dean, University of Pittsburgh School of Public Health  
Professor, Environmental and Occupational Health  
Jonas Salk Chair in Population Health

### **Leeanna McKibben, DHA, MSN, RN, CENP**

Vice Chancellor, Health Sciences Administration  
Vice Dean, School of Medicine Administration  
Chief of Staff, Health Sciences  
Assistant Professor of Medicine  
University of Pittsburgh

### **Bailey McKinney Varrati**

Staff Attorney, UPMC

### **Suresh Mulukutla, MD**

Vice President & Chief Data and Analytics Officer, UPMC  
Health Service Division

### **Ken K. Nischal, MD, FAAP, FRCOphth**

Division Chief, Pediatric Ophthalmology and Strabismus  
Medical Director, Digital Health UPMC Children's Hospital  
of Pittsburgh  
Executive Vice Chair, Department of Ophthalmology  
Co-Executive Officer and Co-Founder, World Society of  
Pediatric Ophthalmology and Strabismus (WSPOS)

### **Rema Padman**

Trustees Professor of Management Science and  
Healthcare Informatics, Heinz College of Information  
Systems and Public Policy at Carnegie Mellon University

**Kristin Ray, MD, MS**

Associate Professor of Pediatrics  
Director, Health Systems Improvement, UPMC Children's  
Community Pediatrics  
Medical Director, Population Health, Pennsylvania  
Pediatric Health Network (a clinically integrated network)

**Hooman H. Rashidi MD, MS, FCAP**

Associate Dean of AI in Medicine; Professor & Endowed  
Chair of Experimental Pathology Research; Executive Vice  
Chair of Computational Pathology, UPMC; Adjunct  
Professor of Engineering, Carnegie Mellon University;  
Executive Director of CPACE Ai Center

**Reba Schenk**

Vice President of Partner Experience, Abridge

**Anantha Shekhar, MD, PhD**

Senior Vice Chancellor for the Health Sciences; John and  
Gertrude Petersen Dean, School of Medicine; Professor of  
Psychiatry; Professor of Clinical and Translational Science,  
University of Pittsburgh

**Marianna Stayer, LMSW**

Sr. Program Manager, Digital Health & Telemedicine  
Operations

**Srinivasan Suresh, MD, MBA, FAAP**

Vice President, Chief Information Officer & Chief Medical  
Information Officer, UPMC Children's Hospital of  
Pittsburgh; Professor of Pediatrics, University of Pittsburgh  
School of Medicine; Director, Division of Health  
Informatics, Pediatrics

**Paul M. Wallach, MD**

Vice Chancellor for Health Sciences Education, Executive  
Vice Dean for Academic Affairs, School of Medicine,  
Professor of Medicine, University of Pittsburgh

## Oral Abstract Presentations

### Session 1: Connected Care & The Future of Virtual Health

#### AI Meets Assessment: Validating Clinical Question-Answer-Explanation Sets for GenPACKS

I Made Agus Setiawan<sup>1</sup>, Maria Yuliana<sup>1</sup>, Bayu Aryoyudanta<sup>1</sup>, Bob Hua<sup>1</sup>, Haomin Hu<sup>1</sup>, Dipu Patel<sup>2</sup>, David C Beck<sup>2</sup>, Andi Saptono<sup>1</sup>, Bambang Parmanto<sup>1</sup>

<sup>1</sup>Department of Health Information Management, SHRS, University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>SHRS-Physician Assistant Studies, University of Pittsburgh, Pittsburgh, USA

#### AI Generated Metamaterial Dynamic Spinal Fusion Rods for the Prevention of Adjacent Segment Degeneration

Mehrdad Ashtari<sup>1</sup>, Zach Spears<sup>2</sup>, Nicky Don<sup>2</sup>, Ayesha Akbar Waheed<sup>3</sup>, Benjamin Carnovale<sup>2</sup>, D. Kojo Hamilton<sup>2,3,4</sup>, Nitin Agarwal<sup>2,3,4</sup>, Amir Alavi<sup>1,5,6</sup>

<sup>1</sup>Department of Civil and Environmental Engineering, University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>3</sup>Department of Neurological Surgery, University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>4</sup>Neurological Surgery, Veterans Affairs Pittsburgh Healthcare System, Pittsburgh, USA. <sup>5</sup>Department of Bioengineering, University of Pittsburgh, Pittsburgh, USA. <sup>6</sup>Department of Mechanical Engineering and Materials Science, Pittsburgh, USA

#### VineAI-KelseyBot: Pinpoint Referenced and Voice-Enhanced LLMs for In-Basket Management in Healthcare

Aaron Lu<sup>1</sup>, Andrew Bunger<sup>1</sup>, Kelsey Schweiberger<sup>2</sup>

<sup>1</sup>University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>University of Pittsburgh/UPMC, Pittsburgh, USA

#### Identifying Predictors of Success in Augmented Reality Clinical Tasks: Insights for Digital Health Education

Amogh Vellore<sup>1</sup>, Shovan Bhatia<sup>1</sup>, Michael Kann<sup>1,2</sup>, Nicolás Kass<sup>3</sup>, Regan Shanahan<sup>1</sup>, Jacquelyn Jardini<sup>1</sup>, Jayne Miner<sup>1</sup>, Sohail Daulat<sup>1</sup>, Griffin Hurt<sup>4</sup>, Rishi Basdeo<sup>5</sup>, Nicole Don<sup>1</sup>, Jacob Biehl<sup>4</sup>, Edward Andrews<sup>1</sup>

<sup>1</sup>Department of Neurological Surgery, University of Pittsburgh Medical Center, Pittsburgh, USA. <sup>2</sup>Department of Orthopedic Surgery, University of Pittsburgh Medical Center, Pittsburgh, USA. <sup>3</sup>Department of Plastic Surgery, University of Pittsburgh Medical Center, Pittsburgh, USA. <sup>4</sup>Department of Computer Science, University of Pittsburgh School of Computing and Information Sciences, Pittsburgh, USA. <sup>5</sup>Department of Mechanical Engineering, Carnegie Mellon University, Pittsburgh, USA

#### Leveraging Machine Learning to Establish a Point-of-Care Diagnostic Tool for Rare Conditions

Michael Hernandez<sup>1</sup>, Tobi Somorin<sup>1</sup>, Wenzheng Tao<sup>2</sup>, Tiffany Jeong<sup>1</sup>, Janina Kueper<sup>1</sup>, Nawazish Khan<sup>2</sup>, Jake Wagoner<sup>2</sup>, Ross Whitaker<sup>2</sup>, Shireen Elhabian<sup>2</sup>, Jesse Goldstein<sup>1</sup>, Alzbeta Novotna<sup>1</sup>

<sup>1</sup>University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>University of Utah, Utah, USA

## **Session 2: Digital Health Innovation**

### **AI Scribes in Behavioral Health: Lessons from a Pilot Implementation on a Multisite Consultation-Liaison Psychiatry Service**

Patrick Buckley, Priya Gopalan

UPMC Western Psychiatric Hospital, Pittsburgh, USA

### **Using Machine Learning in EHRs to Prevent Opioid Overdose: Two Real-World Trials**

Walid Gellad, Wei-Hsuan Jenny Lo-Ciganic, Courtney Kuza, Stephanie Fedro-Byrom, Jonathan Arnold, Yi-Fan Chen, Qingnan Yang

University of Pittsburgh, Pittsburgh, USA

### **Trust in AI vs. Physician-Authored Content Among Pregnant and Postpartum Women**

Shaila Fye<sup>1</sup>, Kelsey Schweiberger<sup>2</sup>, Tamar Krishnamurthi<sup>3</sup>

<sup>1</sup>University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>2</sup>Department of Pediatrics, University of Pittsburgh School of Medicine, UPMC Children's Hospital of Pittsburgh, Pittsburgh, USA. <sup>3</sup>Division of General Internal Medicine, Department of Medicine, University of Pittsburgh, Pittsburgh, USA

### **Relevance Over Volume: Enhancing RAG Responses for Individual with Newly Acquired SCI**

Maria Yuliana, Bayu Aryoyudanta, I Made Agus Setiawan, Brad Dicianno, Ankita Atode, Ammulakshmi Sindhu, Andi Saptono, Bambang Parmanto

University of Pittsburgh, Pittsburgh, USA

### **Intensive Lifestyle Medicine (ITLM) Combined with AI Traditional Chinese Medicine (TCM) advice for Root-Cause Relief of Chronic Insomnia through Telemedicine**

Yue( Yolanda) Wang<sup>1,2</sup>, Michele Thompson<sup>3</sup>

<sup>1</sup>Department of Pathology, Pittsburgh, USA. <sup>2</sup>Hillman Cancer Center, Pittsburgh, USA. <sup>3</sup>UPMCLifestyle Medicine Program, Pittsburgh, USA

### **A Financially-Sustainable, Digital-First Strategy to Provide Evidence-Based Integrated Behavioral Health Treatments in Routine Primary Care**

Bruce Rollman, Amy Anderson, Bea Herbeck Belnap, Adam Kramer, Gary Fischer

Department of Medicine, University of Pittsburgh School of Medicine, Pittsburgh, USA

### **CareWise: An AI Co-Pilot for Dementia Caregiving**

Yong Choi, Yuxuan Zhou, Bayu Bayu Aryoyudanta, Haomin Hu, Andi Saptono, Bambang Parmanto

University of Pittsburgh, USA

### **Session 3: The Future of Personalized Healthcare**

#### **Novel Systemic Associations of Idiopathic Epiretinal Membrane Identified via Machine Learning**

Jessica Jiang<sup>1</sup>, Ethan Wu<sup>1</sup>, Nasiq Hasan<sup>2</sup>, Katherine Du<sup>1</sup>, Michelle Zhang<sup>1</sup>, Kiran Kumar Vupparaboina<sup>2</sup>, Sandeep Chandra Bollepalli<sup>2</sup>, Jose-Alain Sahel<sup>2</sup>, Jay Chhablani<sup>2</sup>

<sup>1</sup>University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>2</sup>UPMC Vision Institute, Pittsburgh, USA

#### **Investigating the Role of Social Determinants of Health in Age-related Macular Degeneration Using Machine Learning**

Michelle Zhang<sup>1</sup>, Joanna Yao<sup>1</sup>, Jessica Jiang<sup>1</sup>, Ethan Wu<sup>1</sup>, Katherine Du<sup>1</sup>, Nasiq Hasan<sup>1</sup>, Jose Alain Sahel<sup>2</sup>, Jay Chhablani<sup>2</sup>

<sup>1</sup>University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>2</sup>UPMC Department of Ophthalmology, Pittsburgh, USA

#### **Machine Learning-Based Prediction of Idiopathic Pulmonary Fibrosis Using the All of Us Dataset**

Brian Woolley, Ethan Wu, Hayley Walter, Melanie Koenigshoff, Corrine Kliment

University of Pittsburgh, Pittsburgh, USA

#### **Deep Learning-Enabled Acceleration of Submillimeter Imaging at 7T Ultra-High Field MRI**

Jinghang Li, Andrea Sajewski, Tales Santini, Tamer Ibrahim

University of Pittsburgh, Pittsburgh, USA

#### **Predicting post-diagnostic cognitive impairment in patients with schizophrenia using interpretable machine learning algorithms**

Devante Kerr, Ethan Wu, Melanie Grubisha

University of Pittsburgh, Pittsburgh, USA

#### **Pioneering the Era of Female Digital Health Twins and Agentic AI for Global Health Equity**

Vanathi Gopalakrishnan

University of Pittsburgh, Pittsburgh, USA

#### **Use of AI Models to Identify Commonalities and Risk Factors for Edentulism in a Dental School Patient Population**

Leila Sears<sup>1</sup>, Remya Ramachandran<sup>2</sup>, Stavroula Antonopoulou<sup>1</sup>, Cortino Sukotjo<sup>1</sup>

<sup>1</sup>University of Pittsburgh School of Dental Medicine, Pittsburgh, USA. <sup>2</sup>Kansas State University, Olathe, USA

#### **Session 4: Healthcare 4.0- Data, Cybersecurity & Ethics**

##### **The Eyes are the Windows to Diagnosis: Development of a Novel Diagnostic Tool for Post-Traumatic Stress Disorder using Ocular Metrics**

Katherine Beavis<sup>1,2</sup>, Tony Dutcher<sup>3</sup>, Veronica Choi<sup>3</sup>, Caitlin Limonciello<sup>3</sup>, Meg Parmenter<sup>2</sup>, Drew Teer<sup>2</sup>, Kaloyan Tanev<sup>2</sup>

<sup>1</sup>University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>2</sup>Home Base Program, Massachusetts General Hospital, Boston, USA. <sup>3</sup>Senseye, Inc., Austin, USA

##### **A Multilayered Defense against Bots, Malicious Actors, and Ethical Loopholes in a Novel Large-Scale Remote Emergency Department Study**

Victor Wu, John Gianakas, Evan Gu, Maiza Pereira Lobo, Chunyan Wang, Alexandra Weissman, Anthony Fabio, Maria Pacella-LaBarbara

University of Pittsburgh, Pittsburgh, USA

##### **Contactless Cardiovascular Sensing Using AI-Enabled Radars**

Jiangyifei Zhu<sup>1</sup>, Kuang Yuan<sup>1</sup>, Akarsh Prabhakara<sup>2</sup>, Yunzhi Li<sup>1</sup>, Gongwei Wang<sup>1</sup>, Kelly Michaelson<sup>3</sup>, Neelesh Nadkarni<sup>4</sup>, Justin Chan<sup>1</sup>, Swarun Kumar<sup>1</sup>

<sup>1</sup>Carnegie Mellon University, PITTSBURGH, USA. <sup>2</sup>University of Wisconsin-Madison, Madison, USA. <sup>3</sup>University of Washington, Seattle, USA. <sup>4</sup>University of Pittsburgh, PITTSBURGH, USA

##### **Utilizing Electronic Health Records to Understand Overall Disease Profiles and Inform Personalized Palliative-Oriented Dementia Care**

Yuchen Zhang, Zhirui Deng, Jennifer Seaman, Theresa Koleck

University of Pittsburgh, Pittsburgh, USA

##### **Leveraging Creatinine Trajectory Modeling and AKI Etiology to Predict Major Adverse Kidney Events Using Real-World ICU Data**

Xiaojiang Guo<sup>1</sup>, Kangho Suh<sup>1</sup>, Erin Barreto<sup>2</sup>, Levent Kirisci<sup>1</sup>, Lirong Wang<sup>1</sup>, Sandra Kane-Gill<sup>1</sup>

<sup>1</sup>University of Pittsburgh, School of Pharmacy, Pittsburgh, USA. <sup>2</sup>Department of Pharmacy, Mayo Clinic, Rochester, USA

##### **Redefining Fairness in AI-Driven Healthcare**

Harsh Hiwase, Cynthia McCarthy

Pitt School of Public Health, Pittsburgh, USA

## **AI and the Future of Social Support: Ethical Boundaries in Behavioral Health**

Jason Colditz

University of Pittsburgh, Pittsburgh, USA

## **International transparency guidelines reveal critical gaps in existing AI frameworks for machine learning-enabled medical device (MLMD) regulatory assessment**

Yash Raka, Shyam Visweswaran

University of Pittsburgh School of Medicine, Pittsburgh, USA

## **Dr. Human vs Dr. Robot: Understanding Patient Attitudes Towards Artificial Intelligence in Plastic Surgery**

Anna Bazell<sup>1,2</sup>, Dzana Katana<sup>1</sup>, Alex Madanat<sup>1</sup>, Sihan Hao<sup>1</sup>, Solomon Seckler<sup>1,3</sup>, Maria Escobar Domingo<sup>1</sup>, J. Peter Rubin<sup>1</sup>, Carolyn De La Cruz<sup>1</sup>

<sup>1</sup>University of Pittsburgh Department of Plastic Surgery, Pittsburgh, USA. <sup>2</sup>University of South Carolina School of Medicine-Greenville, Greenville, USA. <sup>3</sup>SUNY Downstate Department of Surgery, Brooklyn, USA

## **Advancing Risk Adjustment in Neonatal Critical Care: Development of a Population-Level Machine Learning Mortality Model**

Chelsea Bitler<sup>1</sup>, Jesse Klug<sup>2</sup>, Sarah Nutman<sup>1</sup>, Jesse Raffa<sup>3</sup>, Leo Celi<sup>3</sup>, Harry Hochheiser<sup>4</sup>, C. Briana Bertoni<sup>5</sup>, Brian King<sup>6</sup>, Gabriella Butler<sup>1</sup>, Thomas Hooven<sup>1</sup>, Christopher Horvat<sup>1</sup>

<sup>1</sup>UPMC Children's Hospital of Pittsburgh, Pittsburgh, USA. <sup>2</sup>University of Pittsburgh Medical Center, Pittsburgh, USA. <sup>3</sup>Massachusetts Institute of Technology, Cambridge, USA. <sup>4</sup>University of Pittsburgh, Pittsburgh, USA.

<sup>5</sup>Levine Children's Hospital, Charlotte, USA. <sup>6</sup>Harvard Medical School, Boston, USA

## **The Effect of Enforcing Fairness on Reshaping Explanations in Machine Learning Models**

Joshua Anderson, Shyam Visweswaran

University of Pittsburgh, Pittsburgh, USA

## Poster Presentations

### **Predicting Future Mobility in Spina Bifida: A clinician decision support system using the GUIDE algorithm.**

Chloe Shearer<sup>1,2</sup>, Gina McKernan<sup>1,2</sup>, Matthew Mesoros<sup>1,2</sup>, Oluwasanmi Adenaiye<sup>1,2</sup>, Aileen Chou-Franzese<sup>1,2</sup>, Amy Houtrow<sup>1</sup>, Brad Dicianno<sup>1,2</sup>

<sup>1</sup>Department of Physical Medicine and Rehabilitation, University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>2</sup>Human Engineering Research Laboratories, VA Pittsburgh Healthcare System, Pittsburgh, USA

### **Disparities in Tele dermatology Use in the United States: A Nationally Representative Analysis of 2020–2022 Medical Expenditure Panel Survey**

Benjamin Zhu<sup>1</sup>, Edwin Dovigi<sup>2</sup>, Joseph English<sup>2</sup>

<sup>1</sup>University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>UPMC, Pittsburgh, USA

### **AI-Driven Detection of Post-Cystectomy Dehydration Using Electrodermal Activity and Remote Monitoring**

Joseph DeCicco<sup>1</sup>, Bruce Jacobs<sup>2</sup>, Benjamin Davies<sup>2</sup>, Carissa Low<sup>2</sup>, Matthew Epstein<sup>2</sup>

<sup>1</sup>University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>2</sup>UPMC Department of Urology, Pittsburgh, USA

### **Korion Health's SoundHeart electronic stethoscope to enable equitable, inclusive, and scientifically rigorous remote health monitoring**

Anna Li<sup>1,2</sup>, Eric Dueweke<sup>1,3</sup>

<sup>1</sup>Korion Health, Pittsburgh, USA. <sup>2</sup>University of Pittsburgh & Carnegie Mellon University Medical Scientist Training Program, Pittsburgh, USA. <sup>3</sup>UPMC, Pittsburgh, USA

### **Sociodemographic Disparities in Telepsychiatry Use and Spending: A National Analysis of the Medical Expenditure Panel Survey, 2020-2022**

Benjamin Zhu<sup>1</sup>, Gina Perez<sup>2</sup>

<sup>1</sup>University of Pittsburgh, School of Medicine, Pittsburgh, USA. <sup>2</sup>UPMC, Pittsburgh, USA

### **Integrating a Family Caregiver Risk Screening Tool into Clinic: Usability Testing among Family Caregivers of People with Gynecologic Cancer**

Haomin Hu<sup>1</sup>, Youjia Wang<sup>1</sup>, Julie Klinger<sup>1</sup>, Grace Campbell<sup>2</sup>, I Made Agus Setiawan<sup>1</sup>, Andi Saptono<sup>1</sup>, Yong Choi<sup>1</sup>, Bambang Parmanto<sup>1</sup>, Heidi Donovan<sup>1</sup>

<sup>1</sup>University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>Duquesne University, Pittsburgh, USA

## **Exploring Potential Medications for Alzheimer’s Disease with Psychosis by Integrating Drug Target Information into Deep Learning Models: A Data-Driven Approach**

Oshin Miranda<sup>1</sup>, Chen Jiang<sup>2</sup>, Xiguang Qi<sup>2</sup>, Julia Kofler<sup>2</sup>, Robert A Sweet<sup>2</sup>, Lirong Wang<sup>2</sup>

<sup>1</sup>Brown University, Providence, USA. <sup>2</sup>University of Pittsburgh, Pittsburgh, USA

## **Tackling Healthcare 4.0 Challenges by Improving the Awareness of Digital Health**

Andi Saptono, Dilhari DeAlmeida, Suzanne Jane Paone

University of Pittsburgh, Pittsburgh, USA

## **Quantifying the impact of computer-aided diagnostic score on the clinical diagnosis of functional seizures**

Wesley Kerr<sup>1</sup>, Katherine McFarlane<sup>1</sup>, Markus Reuber<sup>2</sup>, Adriana Koek<sup>3</sup>, Amir Karimi<sup>4</sup>, Jena Grauer<sup>5</sup>, Di Sun<sup>6</sup>, Meagan Watson<sup>7</sup>, Elissa Patterson<sup>6</sup>, James Castellano<sup>1</sup>, Anto Bagic<sup>1</sup>, Leonard Hickman<sup>4</sup>, Sarah Yaghoubi<sup>1</sup>, Najda Robinson-Mayer<sup>6</sup>, Rachna Reddy<sup>1</sup>, Nicholas Beimer<sup>6</sup>, Laura Kirkpatrick<sup>1</sup>, Danielle Carns<sup>1</sup>, Alex Israel<sup>1</sup>, Zongqi Xia<sup>1</sup>, Yanshan Wang<sup>1</sup>, Laura Strom<sup>7</sup>, Page Pennell<sup>1</sup>, John Stern<sup>4</sup>, Lubomir Hadjiiski<sup>6</sup>, William Stacey<sup>6</sup>

<sup>1</sup>University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>University of Sheffield, Sheffield, United Kingdom. <sup>3</sup>University of California San Francisco, San Francisco, USA. <sup>4</sup>University of California Los Angeles, Los Angeles, USA. <sup>5</sup>Oregon Health Science University, Portland, USA. <sup>6</sup>University of Michigan, Ann Arbor, USA. <sup>7</sup>University of Colorado, Aurora, USA

## **Store-and-Forward Inpatient Teledermatology for Stevens-Johnson Syndrome/Toxic Epidermal Necrolysis Care in Burn Unit**

Selina Chang<sup>1</sup>, Joseph English III<sup>2</sup>

<sup>1</sup>University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>2</sup>University of Pittsburgh Department of Dermatology, Pittsburgh, USA

## **Comparison of Erythema Migrans Management through In-Person and Teledermatology Modalities**

Selina Chang<sup>1</sup>, Joseph English III<sup>2</sup>

<sup>1</sup>University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>2</sup>University of Pittsburgh Department of Dermatology, Pittsburgh, USA

## **Nonactionable Alerts from an Artificial Intelligence (AI) Powered Clinical Decision Support System used in a Clinical Trial**

Britney Stottlemeyer<sup>1</sup>, Tiffany Tran<sup>1</sup>, Caiden Lukan<sup>1</sup>, Tezcan Ozrazgat-Baslanti<sup>2,3</sup>, Esra Adiyeye<sup>2,3</sup>, Yuanfang Ren<sup>2,3</sup>, Raghavan Murugan<sup>4</sup>, Azra Bihorac<sup>2,3</sup>, Sandra Kane-Gill<sup>1,5</sup>

<sup>1</sup>University of Pittsburgh School of Pharmacy, Pittsburgh, USA. <sup>2</sup>Intelligent Clinical Care Center, University of Florida, Gainesville, USA. <sup>3</sup>Department of Medicine, Division of Nephrology, Hypertension, and Renal

Transplantation, University of Florida, Gainesville, USA. <sup>4</sup>Center for Critical Care Nephrology, Department of Critical Care Medicine, University of Pittsburgh School of Medicine, Pittsburgh, USA. <sup>5</sup>UPMC, Department of Pharmacy and Therapeutics, Pittsburgh, USA

### **Agentic AI for Cancer Biomarker Discovery in the Era of Spatial Omics**

Arun Das<sup>1</sup>, Kexun Zhang<sup>2</sup>, Jifeng Song<sup>1</sup>, Angela Chen<sup>2</sup>, Lei Li<sup>2</sup>, Yufei Huang<sup>1</sup>

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### **The Pitt Surgery Portal: A novel digital platform for comprehensive multi-omics analysis of critically injured patients**

NSP Koushik, Sambodh Sinha, Jaineel Varshney, Bhavya Donda, Shailendra Varshney, Hamed Moheimani, Upendra Kar, Jason Sperry, Timothy Billiar

Department of Surgery, University of Pittsburgh, Pittsburgh, USA

### **Feasibility of and satisfaction with a novel remote research study enrolling patients with acute pain in 11 Emergency Departments throughout Pennsylvania**

MARIA Pacella-LaBarbara, Victor Wu, Anthony Fabio, John Gianakas, Chunyan Wang, Evan Gu, Maiza Pereira Lobo, Leslie Hausmann, Alexandra Weissman

University of Pittsburgh, Pittsburgh, USA

### **Enhancing Readability in Personalized Spinal Cord Injury Q&A via Self-Reflection Rewriting**

Bayu Aryoyudanta, Maria Yuliana, I Made Agus Setiawan, Andi Saptono, Yong K Choi, Brad E. Dicianno, Bambang Parmanto

University of Pittsburgh, Pittsburgh, USA

### **Development of a Knowledge Graph-Based Symptom Management Recommendation System for Breast Cancer Patients Undergoing Chemotherapy**

Ruolin Li<sup>1</sup>, Jun-E Liu<sup>1</sup>, Teresa Hagan Thomas<sup>2</sup>

<sup>1</sup>Capital Medical University, Beijing, China. <sup>2</sup>University of Pittsburgh, Pittsburgh, USA

### **Symptom Networks and Core Symptoms in Patients with Solid Tumors Undergoing Chemotherapy: A Systematic Review**

Ruolin Li<sup>1</sup>, Xinyan Zhang<sup>1</sup>, Yiwen Zhou<sup>1</sup>, Yuanqing Wang<sup>1</sup>, Jun-E Liu<sup>1</sup>, Teresa Hagan Thomas<sup>2</sup>

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## **Distributional Semantic Similarity Enhances Noun-verb Priming for Neurotypicals, but Reduces it for People with Aphasia**

Sapna Chokshi<sup>1</sup>, Michael Walsh Dickey<sup>2,3</sup>, Tessa Warren<sup>4</sup>, Haley Dresang<sup>5</sup>

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## **Early Risk Detection and Prevention of Suicide in People With PTSD: Integrating AI-Driven Model Prediction and Clinical Trial Emulations**

LiRong Wang, Oshin Miranda, Xiguang Qi, Levent Kirisci, Neal Ryan

University of Pittsburgh, Pittsburgh, USA

## **A Serious Game Technology to Enhance Patient Self-Advocacy in Advanced Cancer: Preliminary Engagement Data from the STRONG Study**

Jessie Zhu, Kai-Lin You, Ruolin Li, Dmitriy Babickenko, Megan Hamm, Teresa Thomas

University of Pittsburgh, Pittsburgh, USA

## **A Social Media Chatbot-delivered Intervention to Reduce Online Victimization in Youth Vulnerable to Suicide Treated in Pediatric Primary Care: Development and Usability Study**

César Escobar-Viera<sup>1</sup>, Candice Biernesser<sup>1</sup>, Jason Jones<sup>2</sup>, Tylar Schmitt<sup>3</sup>, Emma Win<sup>3</sup>

<sup>1</sup>University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>University of Pennsylvania, Philadelphia, USA. <sup>3</sup>University of Pittsburgh Medical Center, Pittsburgh, USA

## **Do ChatGPT and Burn Surgeons Agree? Evaluating ChatGPT's Potential as a Burn Evaluation Tool in Acute Care Settings**

Alexis Henderson<sup>1</sup>, Hilary Liu<sup>1</sup>, Francesco Egro<sup>2</sup>

<sup>1</sup>University of Pittsburgh, School of Medicine, Pittsburgh, USA. <sup>2</sup>UPMC, Department of Plastic Surgery, Pittsburgh, USA

## **Current Applications of Radiomics in Neurotrauma**

Janam Patel<sup>1</sup>, Ayesha Akbar Waheed<sup>1</sup>, Daaniyal Quiddus<sup>1</sup>, Shaunak Patil<sup>1</sup>, Joseph Hudson<sup>2</sup>, Qazi Zeeshan<sup>2</sup>, D. Kojo Hamilton<sup>1,2</sup>, Nitin Agarwal<sup>1,2,3</sup>

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### **A review and content analysis of medication adherence applications**

Joy Xie<sup>1</sup>, Elizabeth Peck<sup>2</sup>, Neal Dalal<sup>1</sup>, Yash Shah<sup>2</sup>, Paul Weber<sup>1</sup>

<sup>1</sup>Rutgers RWJMS, Piscataway, USA. <sup>2</sup>Rutgers NJMS, Newark, USA

### **OncGeo Explorer: an Interactive Web App for Cancer Center Catchment Area Data-Analytics**

Alexander VanHelene, Aodong Qui, Kexin Sun, Semmie Kim, Harry Hochheiser

University of Pittsburgh, Pittsburgh, USA

### **Fact or Fiction: Exploring Hallucinated Sources and Outcomes in AI-Generated Research**

Aditi Choudhary<sup>1</sup>, Maria Eckmann<sup>2</sup>, Ainsley Anderson<sup>3</sup>, Rayan Khan<sup>1</sup>, Rohit Kumar<sup>1,3</sup>, Ayesha Waheed<sup>3,1</sup>, Ricardo Fernández-de Thomas<sup>1,3</sup>, Kojo Hamilton<sup>1,3</sup>, Nitin Agarwal<sup>1,3</sup>

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### **Microsoft Copilot Accurately Extrapolates SRS-22r Pain and Management Satisfaction Outcomes based on Clinical History**

Aditi Choudhary<sup>1</sup>, Nicole Don<sup>1</sup>, Benjamin Carnovale<sup>1</sup>, Will Rabon<sup>2</sup>, Raj Lavadi<sup>1</sup>, Rida Mitha<sup>1</sup>, Rohit Kumar<sup>1,2</sup>, Ricardo Fernandez de Thomas<sup>1,2</sup>, James Mooney<sup>1,2</sup>, Kojo Hamilton<sup>1,2</sup>, Nitin Agarwal<sup>1,2</sup>

<sup>1</sup>University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>UPMC, Pittsburgh, USA

### **Actigraphy versus Real Time Mobile Sensing: Measuring Sleep in Youth with Bipolar Disorder**

Adrianna Lopaczynski, Danella Hafeman, Boris Birmaher, John Merranko

UPMC, Pittsburgh, USA

### **Predicting Neuropathy Pain in Type 2 Diabetes Patients Using Patient-Level Real-World Data from the All of Us Research Program**

Ugochukwu Ezigbo, LiRong Wang, Chen Jiang

University of Pittsburgh, Pittsburgh, USA

### **Evaluating Large Language Model's accuracy in current procedural terminology coding given operative note templates across various plastic surgery sub-specialties**

Mia Carrarini, Hilary Liu, Catherine Perez, Francesco Egro

University of Pittsburgh Medical Center, Department of Plastic Surgery, Pittsburgh, USA

### **Artificial Intelligence Enhances Genomic Surveillance in Healthcare Outbreak Investigations**

Alexander Sundermann<sup>1</sup>, Jieshi Chen<sup>2</sup>, Melissa Saul<sup>3</sup>, Kathleen Shutt<sup>3</sup>, Marissa Griffith<sup>3</sup>, Graham Snyder<sup>3</sup>, Lora Pless<sup>3</sup>, Artur Dubrawski<sup>2</sup>, Lee Harrison<sup>3</sup>

<sup>1</sup>Pittsburgh, Pittsburgh, USA. <sup>2</sup>Carnegie Mellon University, Pittsburgh, USA. <sup>3</sup>University of Pittsburgh, Pittsburgh, USA

### **Analyzing ICG Pattern Recognition Between ChatGPT and Lymphatic Surgeons**

Alexis Henderson<sup>1</sup>, Chanel Reid<sup>2</sup>, Meeti Mehta<sup>1</sup>, Viraj Govani<sup>1</sup>, Shayan Sarrami<sup>2</sup>, Carolyn De La Cruz<sup>2</sup>

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### **Disability Toxicity Detection using Large Language Model.**

Wilbert Soekinto, Bayu Aryoyudanta, Firdaus Indradhirmaya, Ryan B. Osal, Chloe Y. Lee, Grace Y. Kim, Andi Saptono, Yong K. Choi, Bambang Parmanto

University of Pittsburgh, Pittsburgh, USA

### **Impact of a Serious Game-Based Virtual Learning Program on Community Mobility Knowledge and Self-Efficacy Among Wheelchair Users, Care Partners, and Clinicians**

Sangmi Park<sup>1,2</sup>, Jorge Candiotti<sup>1,2</sup>, Jason Raad<sup>1,2</sup>, Rosemarie Cooper<sup>1,2</sup>, Rory Cooper<sup>1,2</sup>

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### **Patient Perceptions of AI-Driven Decision Tools in Surgical Medication Management: A Study in Veterans with Peripheral Artery Disease**

Nika Zharichenko<sup>1</sup>, Lindsey Olivere<sup>2</sup>, Susan Barr<sup>3</sup>, Keri Rodriguez<sup>3</sup>, Nicole Beyer<sup>3</sup>, Katherine Reitz<sup>2,3</sup>

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### **Econsults: An Efficient and Effective Digital Healthcare Delivery Tool for Diabetes Care**

Esra Karslioglu French, Andie Mappel

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### **An Assessment of Data Accuracy: Comparing Physician EHR Vaccine Data to the Pennsylvania Immunization Electronic Registry System**

Jordan O'Hara-Scott<sup>1,2</sup>, Samar Musa<sup>1</sup>, Klancie Dauer<sup>1</sup>, Raymond Pomponio<sup>1</sup>

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### **From Screen to Skin: Leveraging Social Media Education to Improve Virtual Dermatology Care Preparedness**

Elijah Brown<sup>1</sup>, Aliyyat Afolabi<sup>1</sup>, Beth Hoffman<sup>2</sup>, Melissa Pugliano-Mauro<sup>3</sup>

<sup>1</sup>University of Pittsburgh SOM, Pittsburgh, USA. <sup>2</sup>University of Pittsburgh School of Public Health, Pittsburgh, USA. <sup>3</sup>UPMC Dermatology Department, Pittsburgh, USA

### **From Promise to Practice: Building Ethical, Equitable, and Trustworthy Generative AI in Healthcare**

Yanshan Wang

University of Pittsburgh, Pittsburgh, USA

### **An Agile AI-Powered Assistant for Reducing Physician Administrative Burden**

Kevin Kindler

UPMC, Pittsburgh, USA

### **Artificial Intelligence vs Human expertise in long-term tooth loss prediction**

Pablo Lopez-Galindo<sup>1</sup>, Giuseppe Troiano<sup>2</sup>, Matteo Serroni<sup>1,3</sup>, Debora Dias<sup>1,4</sup>, Gustavo Avila-Ortiz<sup>5</sup>, Andrea Ravidà<sup>1</sup>

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### **Response to the Netflix docuseries “Big Vape: The Rise and Fall of JUUL”: Analysis of YouTube Comments Using Qualitative Coding and Topic-Modeling**

Arpita Tripathi<sup>1</sup>, Beth Hoffman<sup>1</sup>, Arial Shensa<sup>2</sup>, Julia (Pengyue) Dou<sup>1</sup>, Piper Narendorf<sup>1</sup>, Nishi Hundi<sup>1</sup>, Jaime E Sidani<sup>1</sup>

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### **How Reliable Are AI Chatbots in Debunking Common Vaccine Myths?**

Elizabeth Felter<sup>1</sup>, Jermaine Campbell<sup>2</sup>, Fabiola Morales González<sup>1</sup>, Joe Kerley<sup>1</sup>, Jack Malen<sup>1</sup>, Beth Hoffman<sup>1</sup>

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### **Readability and Validity of AI Chatbot Responses to Maxillofacial Prosthodontic Frequently Asked Questions**

Stavroula Antonopoulou, Leila Sears, Banu Karayazgan, Maribeth Krzesinski, Cortino Sukotjo

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### **Targeted Automatic Econsults (TACos) Program to Enhance Diabetes Care by Machine Learning Prediction Model**

Esra Karslioglu French<sup>1</sup>, Justin Kanter<sup>2</sup>, Mary Winger<sup>3</sup>, Ellen Beckjord<sup>2</sup>

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### **Oraculum DUSK: Harnessing Counterfactual Simulation for Personalized Stroke Care in the Digital Era**

Mohamed Doheim

University of Pittsburgh, Pittsburgh, USA

### **Predicted Maxillofacial Prosthetic Workforce Needs in 2050: Implications of Rising Head and Neck Cancer Burden**

Himanshi Aggarwal<sup>1</sup>, Remya Ampadi Ramachandran<sup>2</sup>, Michael Kase<sup>3</sup>, Alvin Wee<sup>4</sup>, Cortino Sukotjo<sup>1</sup>

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### **Reducing Complexity in Surgical Consents: The Role of AI in Patient Communication**

Ryan Kelly<sup>1,2,3</sup>, Rahul Ramanathan<sup>1,2,3</sup>, Adway Gopakumar<sup>1,2,3</sup>, Jeremy Shaw<sup>4</sup>, Michael Shannon<sup>1,2,3</sup>, Richard Wawrose<sup>1,2,3</sup>, Michael Spitnale<sup>1,2,3</sup>, Joon Lee<sup>1,2,3</sup>, John Weddle<sup>1,2,3</sup>

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### **VEPerform: Gene-specific evidence calibration for variant effect predictors**

Cindy Zhang, Frederick Roth

University of Pittsburgh, Pittsburgh, USA

### **Using Narrative Medicine to Empower Empathetic Conversations in Telehealth**

Anvi Jain<sup>1</sup>, Ssanyu Birigwa<sup>2</sup>

<sup>1</sup>University of Pittsburgh, Pittsburgh, USA. <sup>2</sup>Columbia University, New York City, USA

## **Educating Artificial Intelligence in Plastic Surgery: A Systematic Review on the Status of Demographic Reporting in Plastic Surgery AI Research**

### **Analyzing ICG Pattern Recognition Between ChatGPT and Lymphatic Surgeons**

Alexis Henderson<sup>1</sup>, Chanel Reid<sup>2</sup>, Meeti Mehta<sup>1</sup>, Viraj Govani<sup>1</sup>, Shayan Sarrami<sup>2</sup>, Carolyn De La Cruz<sup>2</sup>

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## **Rational Design of Selective Cytokine-based Activators for CAR T Cells Using AlphaFold3 and Physics-Informed Machine Learning**

Zakaria Dahmani

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## **Reengineering the Clinical Education Pipeline: A Digital Health Approach to Solving the U.S. Provider Shortage**

Abanob Farag

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## **Integrating Actigraphy and Continuous Glucose Monitoring in Youth at Risk for Type 2 Diabetes**

Ethan Chi<sup>1</sup>, Caleb Harrison<sup>1</sup>, Adriana Rodriguez Gonzalez<sup>1</sup>, Jonathan Mitchell<sup>2</sup>, Mary Ellen Vajravelu<sup>1</sup>

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## **Artificial Intelligence as a Clinical Teaching Tool for Interpreting Dental Radiographs**

Kevin Pursel, Sarah Grafton

University of Pittsburgh School of Dental Medicine, Pittsburgh, USA

## **BrainFUS Atlas – A Bioinformatics Platform for Focused Ultrasound in Brain Therapies**

Michael Edwards<sup>1,2</sup>, Lilly Schultz<sup>3,2</sup>, Zheyue Zhang<sup>2</sup>, Junlin Li<sup>2</sup>, Zhimin Huang<sup>2</sup>

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## **Streamlining Screening: Utilizing Student-Driven Telehealth to Decrease Time to First In-Person Dental Appointment for Patients with Special Healthcare Needs**

Craig McKenzie, Lynne Taiclet, Andrew Jockers

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## **AI-Assisted Severity Scoring on Chest X-Rays for Acute Respiratory Failure: Development of a Web-Based Clinical Tool**

Hafiz Qurashi<sup>1</sup>, Robin Joyce<sup>2</sup>, Swathi Parvathaneni<sup>2</sup>, Anrey Peng<sup>2</sup>, Rachel Sadeh<sup>2</sup>, Song Xiang<sup>2</sup>, Kevin Mitchell<sup>2</sup>, Georgios D. Kitsios<sup>3</sup>, Ellen Hughes<sup>2</sup>

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## **Novel Application of Augmented Reality in Endoscopic Skull Base Streaming**

Yujin Choi<sup>1</sup>, Amogh Vellore<sup>1</sup>, Shovan Bhatia<sup>1</sup>, Griffin Hurt<sup>2</sup>, Michael Kann<sup>1</sup>, Rishi Basdeo<sup>3</sup>, Talha Khan<sup>2,4</sup>, Adam Monek<sup>1</sup>, Harrison Alexander<sup>2</sup>, Brendan Szczepkowski<sup>5</sup>, Anthony Tang<sup>6</sup>, Regan Shanahan<sup>1</sup>, Brock Gjesdal<sup>1</sup>, Kyle Affolter<sup>1</sup>, David Cabral<sup>1</sup>, Georgios Zenonos<sup>1</sup>, Paul Gardner<sup>1</sup>, Jacob Biehl<sup>2</sup>, Edward Andrews<sup>1</sup>

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## **Advancing Personalized Healthcare for Stoke Survivors with Aphasia via Adaptive Digital Anomia Treatment**

Mara Goodman, Candace van der Stelt, Mohammad Hassany, Peter Brusilovsky, William Evans

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## **Clinical Phenotyping of Gait-Balance Relationships Across Amputation Types: Foundational Data for AI-Enabled Assessment**

Abdullah Alhuzaymi<sup>1,2</sup>, Goeran Fiedler<sup>3</sup>

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## **Novel Approach to Pineal Region Lesions: Supracerebellar Infratentorial Approach Using the 3-Dimensional Exoscope: Case Series**

Sydney Scanlon, Amogh Vellore, Arka Mallela, Hussam Abou Al Shaar, Sakibul Huq, Constantinos G Hadjipanayis

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## **User's Concerns on Privacy When Using Large Language Model-Based Healthcare Applications**

Leming Zhou, Hongtao Wang, Yi Xu, Agus Setiawan, Haomin Hu, Andi Saptono, Bambang Parmanto, Yong Choi

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### **LemurDx: Measuring Hyperactivity Using Smartwatch Sensing and Machine Learning**

Maya Lewis<sup>1</sup>, Kelly Christenson<sup>1</sup>, Riku Arakawa<sup>2</sup>, Shreya Bali<sup>2</sup>, Helene Altmann<sup>1</sup>, Heather Joseph<sup>1</sup>, Sam Shaaban<sup>3</sup>, Mayank Goel<sup>2</sup>, Oliver Lindhiem<sup>1</sup>, Traci Kennedy<sup>1</sup>

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### **Understanding Clinician Perspectives on Predictive Models: A Pilot Study**

Smitha Edakalavan, Shyan Visweswaran, Rafael Ceschin, Ryan Zeh, Gregory Cooper

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### **Enhancing Regulatory Protocol Quality Through an Ethically Governed, AI-Assisted Review Framework**

Bill Yates, Brent Vazquez, Jeremy Dericco, Robert Cunningham

University of Pittsburgh, Pittsburgh, USA

### **Predicting Pain Treatment Outcomes Based on Phenotype Using Machine Learning Applied to Registry Data**

Ajay Wasan, Brian O'Connell, Rebecca Desensi, Dan Sokowloski, Sean McDermott, Greg Cooper

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### **Leveraging Unstructured Telephonic Data and AI to Enhance Personalized Insights**

Ian Price, Corey Mihna, Niko Drake-McLaughlin, Reuben Daniel

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### **Machine learning-Derived Regional Severity Assessment in Infant Sagittal Craniosynostosis**

Michael Hernandez<sup>1</sup>, Tiffany Jeong<sup>1</sup>, Tobi Somorin<sup>1</sup>, Janina Kueper<sup>1</sup>, Shelby Nathan<sup>1</sup>, Jake Wagoner<sup>2</sup>, Nawazish Khan<sup>1</sup>, Mokshagna Karanam<sup>2</sup>, Wenzheng Tao<sup>2</sup>, Ross Whitaker<sup>2</sup>, Shireen Elhabian<sup>2</sup>, Jesse Goldstein<sup>1</sup>

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### **AI for Preventive Care: Perinatal Depression Risk Identification and Intervention**

Samantha Rodriguez<sup>1</sup>, Kelly Williams<sup>2</sup>, Cara Nikolajski<sup>2</sup>, Leah Cope<sup>2</sup>, Lara Lemon<sup>3</sup>, Priya Gopalan<sup>4</sup>, Hyagriv Simhan<sup>3</sup>, Tamar Krishnamurti<sup>1</sup>

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## **Natural History of Cranial Morphology in Nonoperative Isolated Sagittal Craniosynostosis Using Machine Learning**

Tiffany Jeong<sup>1</sup>, Michael Hernandez<sup>1</sup>, Shelby Nathan<sup>1</sup>, Jake Wagoner<sup>2</sup>, Nawazish Khan<sup>2</sup>, Mokshagna Karanam<sup>2</sup>, Wenzheng Tao<sup>2</sup>, Ross Whitaker<sup>2</sup>, Shireen Elhabian<sup>2</sup>, Jesse A Goldstein<sup>1</sup>

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## **Cranial Morphology as a Predictor of Operative Management in Late Presenting Isolated Sagittal Craniosynostosis**

Tiffany Jeong<sup>1</sup>, Michael Hernandez<sup>1</sup>, Michelle Antony<sup>1</sup>, Tobi Somorin<sup>1</sup>, Janina Kueper<sup>1</sup>, Shelby Nathan<sup>1</sup>, Jake Wagoner<sup>2</sup>, Nawazish Khan<sup>2</sup>, Mokshagna Karanam<sup>2</sup>, Wenzheng Tao<sup>2</sup>, Ross Whitaker<sup>2</sup>, Shireen Elhabian<sup>2</sup>, Jesse A Goldstein<sup>1</sup>

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