## Schedule: Day 1, Friday, November 3, 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08:00 am – 08:30 am</td>
<td>Breakfast</td>
</tr>
<tr>
<td>08:30 am – 08:40 am</td>
<td>Welcome and Opening Remarks</td>
</tr>
<tr>
<td>08:40 am – 09:20 am</td>
<td>Machine Learning in Clinical Decision-Making Insights Panel</td>
</tr>
<tr>
<td>09:20 am – 10:00 am</td>
<td>Analytics in the Field Insights Panel</td>
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<tr>
<td>10:00 am – 10:20 am</td>
<td>Break</td>
</tr>
<tr>
<td>10:20 am – 11:00 am</td>
<td>Research Panel 1: Healthcare Machine Learning</td>
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<tr>
<td>11:00 am – 12:20 pm</td>
<td>Research Session 1: Physician Decision Making</td>
</tr>
<tr>
<td>12:20 pm – 01:20 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>12:45 pm – 01:20 pm</td>
<td>Keynote - Warren D. D'Souza</td>
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<tr>
<td></td>
<td>Vice President, Enterprise Data &amp; Analytics</td>
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<tr>
<td></td>
<td>University of Maryland Medical System</td>
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<tr>
<td>01:20 pm – 01:30 pm</td>
<td>Break</td>
</tr>
<tr>
<td>01:30 pm – 02:30 pm</td>
<td>Research Session 2: Telehealth</td>
</tr>
<tr>
<td>02:30 pm – 02:50 pm</td>
<td>Break</td>
</tr>
<tr>
<td>02:50 pm – 03:20 pm</td>
<td>Research Session 3: mHealth</td>
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<tr>
<td>03:20 pm – 04:00 pm</td>
<td>Research Session 4: Genetics</td>
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<tr>
<td>04:00 pm – 04:15 pm</td>
<td>Break</td>
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<tr>
<td>04:15 pm – 05:00 pm</td>
<td>Research Panel 2: Payment Reform</td>
</tr>
<tr>
<td>05:00 pm – 05:15 pm</td>
<td>Day 1 Wrap-up and Adjournment</td>
</tr>
<tr>
<td>06:30 pm – 08:30 pm</td>
<td>Reception</td>
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# Day 2, Saturday, November 4, 2017

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08:30 am – 09:00 am</td>
<td>Breakfast</td>
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<tr>
<td>09:00 am – 09:20 am</td>
<td>Research Panel 3: Technology Adoption and Impact</td>
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<tr>
<td>09:20 am – 10:00 am</td>
<td>Research Panel 4: Health Information Exchange</td>
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<tr>
<td>10:00 am – 10:15 am</td>
<td>Break</td>
</tr>
<tr>
<td>10:15 am – 11:15 am</td>
<td>Research Session 5: Social Media and Online Ratings</td>
</tr>
<tr>
<td>11:15 am – 11:45 am</td>
<td>Break</td>
</tr>
<tr>
<td>11:45 am – 12:20 pm</td>
<td><strong>Keynote - Martin “Marty” Makary</strong></td>
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<td>Surgical Oncologist, Professor of Surgery, NYT best-selling Author</td>
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<td>Johns Hopkins University School of Medicine</td>
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<tr>
<td>12:20 pm – 01:20 pm</td>
<td>Awards Luncheon and Book Signing</td>
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<tr>
<td>01:20 pm – 02:00 pm</td>
<td>Research Panel 5: mHealth</td>
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<tr>
<td>02:00 pm – 02:45 pm</td>
<td>Research Panel 6: Data Security and Management</td>
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<tr>
<td>02:45 pm – 03:00 pm</td>
<td>Break</td>
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<tr>
<td>03:00 pm – 03:45 pm</td>
<td>Research Panel 7: Social Media</td>
</tr>
<tr>
<td>03:45 pm – 03:50 pm</td>
<td>Final Notes on Behavior</td>
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<tr>
<td>03:50 pm – 04:00 pm</td>
<td>CHITA Synthesis and Envisioning a Research Agenda</td>
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<tr>
<td>04:00 pm</td>
<td>Adjourn</td>
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<td>Time</td>
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**Moderator:** Gordon Gao, University of Maryland, College Park

**Rema Padman**  
Professor of Management Science and Healthcare Informatics  
Carnegie Mellon University

**Hoo Chang Shin**  
Solutions Architect  
NVIDIA

**Hong Yu**  
Professor of Quantitative Health Sciences  
University of Massachusetts Medical School

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<td>Analytics in the Field Insights Panel</td>
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**Moderator:** Jeff McCullough, University of Michigan

**Cupid Chan**  
Chief Technology Officer  
Index Analytics

**Charles Gabrial**  
Analytics & Data Science Manager  
Defense Health Agency

**Anna Fernandez**  
Senior Associate, Health Informatics  
Booz Allen Hamilton

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**Moderator:** Gondy Leroy, University of Arizona
Writing for Impact – The Influence of Features in Medical Texts on Comprehension, Perceived Severity and Perceived Susceptibility of Developing the Condition
Gondy Leroy, Mengni Li, Stephen Rains, Nick Kloehn, David Kauchak, Debra Revere
University of Arizona, Pomona College, University of Washington at Seattle

Temporal Pattern Recognition for Acute Kidney Injury Prediction
Mohammad Amin Morid, Olivia R. Liu Sheng, Brian Sheng
University of Utah

A Machine Learning Approach for Understanding Population-Level Health Effects of E-Cigarettes
Wenli Zhang and Sudha Ram
University of Arizona

Predicting Risk of Cervical Cancer Using Artificial Neural Network and Logistic Regression
Yirui Deng, Betty Wang
Ivy Analytics LLC, Bellevue High School

Assessing Multi-Modality Screening Strategies for Women at High Risk of Developing Breast Cancer
Caglar Caglayan, Turgay Ayer, Donatus U. Ekwueme
Georgia Institute of Technology, Division of Cancer Prevention and Control, Centers for Disease Control and Prevention

A Configurational Analysis of Risk Patterns for Predicting the Outcome After Traumatic Brain Injury
Niku Gorji, Zsolt Zador, Simon Poon
University of Sydney, Salford Royal Foundation Trust, University of Manchester

11:00 am – 12:00 pm
Research Session 1: Physician Decision Making

Session Chair: Huaxia Rui, University of Rochester

How Does Awareness of Financial Incentives Affect Physician Behavior? Evidence from a Randomized Experiment
Margaret McConnell, William Rogers, Emilia Simeonova, Ira Wilson
Johns Hopkins University, Harvard University, Brown University, Tufts University

Yanzhen Chen, Oscar Madrid, and Andrew B. Whinston
Hong Kong University of Science and Technology, University of California, Berkeley, University of Texas at Austin

To Predict or Not to Predict: The Case of Inpatient Admissions to the Emergency Department
Sriram Somanchi, Idris Adjerid, Ralph Gross
University of Notre Dame, Carnegie Mellon University, Disruptive Robotics

12:00 pm – 01:20 pm
Lunch
Keynote - Warren D. D'Souza, Vice President, Enterprise Data & Analytics
University of Maryland Medical System

Break

Research Session 2: Telehealth

Session Chair: Kartik Ganju, McGill University

Rebalancing Geographic Healthcare Disparity through Telemedicine Consultations
Elina Hwang, Xitong Guo, Yong Tan, Yuanyuan Dang
University of Washington, Harbin Institute of Technology

Considering the Efficacy of Telemedicine: A Comparison of Three Analysis Methods
Brent Kitchens, Jennifer Claggett, Elena Karahanna, Thomas Hartka
University of Virginia

Making IT-enabled Organizational Work Practices Work through Knowledge Sharing Mechanisms
Roopa Raman, Varun Grover, Nick Roberts
University of Dayton, University of Arkansas, Colorado State University

Break

Research Session 3: mHealth

Session Chair: Haijing Hao, University of Massachusetts

Using Exact Patient Mobility Data to Predict Wandering Behavior
Reyhaneh Mogharab Nia, Lorens A. Helmchen, Janusz Wojtusiak
George Mason University, George Washington University

Is It Better to Give Than to Receive? Leveraging Digital Social Connections for Precision Motivation
Che-Wei Liu, Gordon Gao, Ritu Agarwal
University of Maryland, College Park

Research Session 4: Genetics

Session Chair: Aaron Baird, Georgia State University / Gwanhoo Lee, American University

Personalized Medicine and Big Data: The Value of Targeting
Manuel Hermosilla, Jian Ni
Johns Hopkins University

Exploring Medical Genetic Platforms: The Reuse Challenge
Sirkka Jarvenpaa, M. Lynne Markus
University of Texas at Austin, Bentley University
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**Moderator: Nirup Menon, George Mason University**

**Did Hospitals Benefit from Quality Improvement Efforts of Insurers? A Study of Semicollaborative Networks and Patient Outcomes in the PPACA Era**
Nirup M. Menon  
George Mason University

**The Business of Healthcare: Physician Integration in Bundled Payments**  
Jan Vlachy, Turgay Ayer, Mehmet U.S. Ayvaci, Srinivasan Raghunathan  
Georgia Institute of Technology, University of Texas at Dallas

**Measuring Relative Performance of Accountable Care Organizations: The Role of Health Information Technology**  
Chenzhang Bao, Indranil Bardhan  
University of Texas at Dallas

**Accelerating the Adoption of Bundled Payment Reimbursement Systems: A Data-Driven Approach Utilizing Claims Data**  
Wenchang Zhang, Margrét V. Bjarnadóttir, Rubén Proaño, David Anderson, Renata Konrad  
University of Maryland, Rochester Institute of Technology, City University of New York, Worcester Polytechnic Institute

**Examining Impacts of Clinical Practice Variation on Operational Performance: Implications for Bundled Payment Reform Models**  
Seokjun Youn, Gregory R. Heim, Subodha Kumar, Chelliah Sriskandarajah  
Texas A&M University, Temple University

**Coordinated Information Flow Improves Chronic Heart Failure Patient Care**  
Tala Mirzaei, Rahul Singh, Rajiv Kohli, Janice Gasaway  
Florida International University, University of North Carolina, College of William and Mary Health Care Analytics at Cone Health

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<td>Reception – Clyde’s of Georgetown</td>
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3236 M Street NW Washington, DC 20007
The Westin Georgetown, Washington D.C.

2550 M St NW, Washington, DC 20037

1. Head west on M St NW toward 24th St NW
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2. Slight right onto Pennsylvania Ave NW
   0.6 mi
3. Continue onto M St NW
   Destination will be on the left
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Program - Saturday, November 4th, 2017

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<td>Research Panel 3: Technology Adoption and Impact</td>
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Moderator: Christian Wernz, Virginia Commonwealth University

Audit or Subsidize? The Impact of IoT Adoption on Nursing Home Rating System
Xu Han, Niam Yaraghi, Ram Gopal
Florida Atlantic University, University of Connecticut

Repairing the Digital Divide Can Increase the Service Divide: The Effects of Patient Portals on Kidney Allocation
Yeong-In Kim, Mehmet Ayvaci, Srinivasan Raghunathan, Bekir Tanriover
University of Texas at Dallas, University of Texas Southwestern Medical Center

Downtime of Electronic Health Record Systems and Its Impact on the Clinical Laboratory and Patient Care
Ethan Larsen, Raj Ratwani, Christian Wernz
Virginia Polytechnic Institute and State University, National Control for Human Factors in Healthcare, Virginia Commonwealth University
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<tbody>
<tr>
<td>09:20 am – 10:00 am</td>
<td>Research Panel 4: Health Information Exchange</td>
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**Moderator:** Yuriy Pylypchuk, HHS/ONC

**The Impact of Health Information Exchange Use on Chronic Disease Management: An Empirical Investigation**  
Hilal Atasoy, Emre Demirezen, Pei-Yu Chen  
Temple University, University of Florida, Arizona State University

**Payment Mechanisms, Incentives for Adoption and Value of Health-Information Exchanges (HIEs)**  
Mehmet Ayvaci, Huseyin Cavusoglu, Yeongin Kim, Srinivasan Raghunathan  
University of Texas at Dallas

**Does Health Information Exchange Improve Patient Outcomes? Empirical Evidence from Florida Hospitals**  
Min Chen, Sheng Guo, Xuan Tan  
Florida International University

**Uncovering Differences in Interoperability Among Hospitals**  
Yuriy Pylypchuk, Vaishali Patel, Carla S. Alvarado, Talisha Searcy  
US Department of Health and Human Services, Office of the National Coordinator for Health Information and Technology, (HHS, OS/ONC)

**Participation in Health Information Exchanges and Physicians’ Referral Patterns: Are they Mutually Reinforcing?**  
Saeede Eftekhaari, Niam Yaraghi, Ram Gopal, R. Ramesh  
State University of New York at Buffalo, The Brookings Institution, University of Connecticut

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<tr>
<td>10:15 am – 11:15 am</td>
<td>Research Session 5: Social Media and Online Ratings</td>
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</table>

**Session Chair:** Jennifer Claggett, University of Virginia

**Are Online Reviews of Physicians Reliable Indicators of Clinical Outcomes? A Focus on Chronic Disease Management**  
Danish Saifee, Zhiqiang (Eric) Zheng, Indranil Bardhan, Atanu Lahiri  
University of Texas at Dallas

**Visual Social Media Analytics: Impact of Medical Knowledge on User Engagement**  
Xiao Liu, Bin Zhang, Anjana Susarla, Rema Padman  
University of Utah, University of Arizona, Michigan State University, Carnegie Mellon University
**User Engagement and Doctor-Seeking Decision in an Online Health Infomediary**
Dobin Yim, Jiban Khuntia, Sanghee Lim, Wenjing Duan
Fordham University, University of Colorado Denver, Johns Hopkins University, George Washington University

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| 11:45 am – 12:20 pm | Keynote - **Martin “Marty” Makary**  
Surgical Oncologist, Professor of Surgery, NYT best-selling Author  
Johns Hopkins University School of Medicine |
| 12:20 pm – 01:20 pm | Awards Luncheon and Book Signing         |
| 01:20 pm – 02:00 pm | Research Panel 5: mHealth                |

**Moderator: Sanghee Lim, Johns Hopkins University**

**Riding for Likes: Effects of Badge Features in a Wellness Field Experiment**
Zachary J. Sheffler, De Liu, Shawn P. Curley  
University of Minnesota

**The Impact of Sensing Technologies on Multiple Stakeholders in the Elderly Ecosystem**
Sharon Tan, Oteng Nstweng, Zhiquan Ong, Fang Zhou, Yingqiu Dong, Kai Luo  
National University of Singapore

**The Effects of User Contests on Sustained Use of m-Health Applications**
Sanghee Lim, Juntae Kim, Nakyung Kyung, Byungtae Lee  
Johns Hopkins University, KAIST

**Unlocking the Potential of Economic Incentives in Healthcare: The Role of Health Wearables**
Idris Adjerid, George Loewenstein, Aaron Striegel, Rachael Purta  
University of Notre Dame

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<th>Time</th>
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<tr>
<td>02:00 pm – 02:45 pm</td>
<td>Research Panel 6: Data Security and Management</td>
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**Moderator: Liz Davidson, University of Hawai’i**

**Deidentify**
Philipp Burckhard, Rema Padman  
Carnegie Mellon University

**Do Hospital Data Breaches Reduce Patient Care Quality?**
Sung Choi, M. Eric Johnson,  
Vanderbilt University

**Contextual Integrity and Governance of Personal Health Data**
Jenifer Sunrise Winter, Liz Davidson  
University of Hawai’i at Mānoa
Understanding and Detecting Data Defects in Medicaid Datasets: Towards Higher Data Quality for Better Decision Support
Yili Zhang, Pratik Tamakuwala, and Günes Koru
University of Maryland, Baltimore County

Population Health and Distributed Health Data Networks: Privacy Preserving Menu-Driven Approaches to Querying Electronic Health Data Sources
Jessica M. Malenfant, Kyle Erickson, Kimberly Barrett, Adam Paczuski, Zachary Wyne, Chayim Herzig-Marx, Jeffrey Brown
Harvard University

A Multi-level Clustering Approach for Anonymizing Physical Activity Data
Pooja Parameshwarappa, Zhiyuan Chen, Günes Koru
University of Maryland, Baltimore County

Synthesizing Data to Target Outreach Efforts for National Disease Control
Sze-chuan Suen
University of Southern California

02:45 pm – 03:00 pm  Break

03:00 pm – 03:45 pm  Research Panel 7: Social Media

Moderator: Heiko Gewald, The Neu-Ulm University of Applied Sciences, Germany

Non-Clinical Ratings Provided by Commercial Websites and Clinical Ratings Provided by the Government are Equally Important for Online Users: A Controlled Experimental Survey Study
Niam Yaraghi, Weiguang Wang, Gordon Gao, Ritu Agarwal
University of Connecticut, University of Maryland, College Park

Modeling Physicians’ Dynamic Behaviors in an Online Healthcare Community: An Empirical Study Using a Vector Autoregression Approach
Luan Wang, Lu (Lucy) Yan, Xitong Guo, Greg Heim
Harbin Institute of Technology, Indiana University, Texas A&M University

What Satisfies the Patient? An Analysis of Factors Influencing Patient’s Online Ratings
Maximilian Haug, Heiko Gewald
The Neu-Ulm University of Applied Sciences

Using Web-based Social Network Analysis to Guide Behavioral Interventions in Medically Underserved Communities
Erh-Hsuan Wang, Leming Zhou, Valerie Watzlaf, Paul Abernathy
University of Pittsburgh, FOCUS Pittsburgh

Does Psychological Language Used on Twitter Exert a Placebo Effect on County-Level Cancer Mortality?
Anton Ivanov, Raj Sharman, Reda Wilson
State University of New York at Buffalo
Mitigating Data Quality Hurdles in Patient-to-Patient Portals: Are Online Cues Predictors of Good Responses?
Srikanth Venkatesan, Raj Sharman, Ashish Kumar, Ram Bezawada
State University of New York at Buffalo

Healthcare Crowdsourcing: Harnessing the “Wisdom of the Crowd” to Solve Medical Mysteries
Indika Dissanayake, Sridhar Neru, Yang Lee, Rahul Singh
University of North Carolina at Greensboro, University of Texas at Arlington, Northeastern University

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<td>Final Note on Physician Behavior</td>
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A Glass Ceiling on Living: Gender Overlap and Disparities in Heart Attack Survival
Brad N Greenwood, Seth Carnahan, Laura Huang
University of Minnesota, University of Michigan, University of Pennsylvania

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