CAMBRIDGE HEALTHTECH INSTITUTE’S INAUGURAL

POC + mHealth DIAGNOSTICS
summit

November 5-7
Sheraton Boston Hotel
Boston, MA

November 5-6
Point-of-Care and Mobile Health Diagnostics
Technologies: Molecular Diagnostics,
Sensors, Disease Management

November 6-7
Point-of-Care and Mobile Health Diagnostics
Clinical-Consumer Interface: Go-to-Marketing
Strategies, Innovation Path, Integration

Keynote Speakers:

Rebecca Richards-Kortum, Ph.D.,
Stanley C. Moore Professor & Chair, George R.
Brown School of Engineering, Rice University

Alberto Gutierrez, Ph.D.,
Director, Office of In Vitro Diagnostics and
Radiological Health (OIR), CDRH, FDA

Hear presentations from:

- AMDIS (Association of Medical Directors of
  Information Systems)
- Bill & Melinda Gates Foundation
- Boston Children’s Hospital
- Careticker
- Center for Integration of Medicine and
  Innovative Technology (CIMIT)
- Clinical and Laboratory Standards Institute
  (CLSI)
- Clinton Health Access Initiative (CHAI)
- FDA
- Harvard Medical School
- HCI Group
- Mango Health
- Massachusetts General Hospital
- Mayo Clinic
- MC10
- National Cancer Institute, NIH
- Partners Healthcare System
- PatientsLikeMe
- Pixie Scientific
- Quanttus
- Rice University
- Stanford University
- University of California, Berkeley
- University of California, Davis
- University of California, Los Angeles
- University of Houston
- University of Pennsylvania Medical Center
- Veterans Health Administration
- Worcester Polytechnic Institute

Register by August 15th
and Save up to $400

healthtech.com/poc-mhealth-diagnostics-summit
Pre-Conference Events

Tuesday, November 4
12:00-5:00pm Afternoon Workshop
WS: Commercialization Boot Camp: Manual for Success in Diagnostics*

Instructors: Harry Glorikian, Healthcare Consultant
Elaine Cheung, Business & Corporate Development, Illumina
Sandra Statz, Vice President, Clinical, Quality & Regulatory, Exact Sciences Corporation
Gary Palmer, M.D., J.D., MBA, MPH, Senior Vice President, Medical Affairs, Foundation Medicine, Inc.
Sara Chenault, Director, Patient Advocacy, Genomic Health
Laura Deming, Medical Device & Life Science Product Development Executive, LLD Consulting

This workshop will define the priority checklist for executing a successful strategy and operational plan for commercializing molecular diagnostics. It will examine the process of bringing a product to market based on data-driven case histories. Financial resources needed to execute the project plan will be measured in the current climate. Participants will learn key requirements for advancing molecular diagnostics through product development, including acquiring knowledge of regulatory, reimbursement, health economic, managing key opinion leaders and patient advocacy considerations. This course will leverage the instructors’ years of accumulated experience spanning financial, technical and scientific acumen, as well as overcoming roadblocks on the path to commercial success.

• Real world examples and case studies
• FDA approval on the colon cancer screening test
• Clinical utility and health economics
• Managing key opinion leaders
• Patient advocacy

DINNER SHORT COURSES
Tuesday, November 4
5:30-8:00pm SC1: Technologies and Applications for POC Testing for Infectious Disease*

Instructors:
Holger Becker, Ph.D., Founder & CSO, microfluidic ChipShop GmbH
Gyorgy Abel, M.D., Ph.D., Director, Molecular Diagnostics, Immunology & Clinical Chemistry, Laboratory Medicine, Lahey Clinic Medical Center

• Key enabling technologies for microfluidics
• Instrumentation requirements
• System detection developments
• Clinical cases

Thursday, November 6
5:45-7:45pm SC2: The Future of POC and DTC: Why New Strategies are Necessary for Larger Markets*

Instructors:
Peter Miller, COO, Genomic Healthcare Strategies
Keith Batchelder, M.D., Founder & CEO, Genomic Healthcare Strategies

This is a course for those who will be making decisions about the future directions of their organizations. The course will discuss the impacts of science, technology, and costs on the fabric of healthcare organizations in the next few years. New connectivity, increasing portability, the merging of diagnosis and treatment locations, the increasing quantification of diagnostics, the increased focus on management of chronic disease – these and other factors are converging and changing healthcare. The instructors will describe the significant changes in future markets and strategies required to succeed in these markets.

• Portability and democratization of diagnostics
• Need for changing sales models for organizations in healthcare
• New models for the relation of diagnostics and drugs
• Ubiquitous connectivity
• How to succeed in these new markets

*separate registration required.
Point-of-Care and Mobile Health Diagnostics Technologies: Molecular Diagnostics, Sensors, Disease Management

TUESDAY, NOVEMBER 4

11:00 am -12:00 pm Short Course Registration
12:00- 5:00 pm WS: Commercialization Boot Camp: Manual for Success in Diagnostics*
4:00 - 6:00 pm Main Conference Registration
5:30 - 8:00 pm SC1: Technologies and Applications for Point-of-Care Testing for Infectious Disease*  
*Separate registration required; please see page 2 for details.

WEDNESDAY, NOVEMBER 5

7:15 - 8:15 am Registration & Morning Coffee

OPENING SESSION

8:15 Conference Director’s Welcome Remarks

8:20 Chairperson’s Opening Remarks
Gerald J. Kost, M.D., Ph.D., MS, FACB, Professor, Pathology and Laboratory Medicine; Director, Clinical Chemistry and Point-of-Care Testing; Faculty, Biomedical Engineering and Comparative Pathology, University of California, Davis

8:30 KEYNOTE PRESENTATION

Developing Miniature Imaging Systems to Enable Better Screening for Oral, Esophageal, and Cervical Cancer at the Point-of-Care in Low Resource Settings
Rebecca Richards-Kortum, Ph.D., Stanley C. Moore Professor & Chair, George R. Brown School of Engineering, Rice University
This talk will describe efforts to engineer appropriate high-performance, low-cost biophotonics technologies to identify cancer and precancer at a stage where it can be treated in low-resource settings. We will describe results of clinical studies in the US, China, Brazil, and Botswana.

9:00 Low Cost Point-of-Care Detection Technologies
Hugh A. Bruck, Ph.D., Professor, Mechanical Engineering, University of Maryland
This presentation will review the various prototypes of low-cost optical technologies that have been developed at the FDA’s Office of Science and Engineering laboratories and the University of Maryland Multi-scale Measurements Laboratory. The following four technologies will be discussed, for example (1) a webcam-based multi-wavelength fluorescence plate reader, (2) a lens-free optical detector (3) a Lab-on-a-chip (LOC), and (4) a wide-field flow cytometer.

9:30 Implementing Point-of-Care Testing to Improve Outcomes in Primary Care
Kent Lewandrowski, M.D., Associate Chief, Pathology; Director, Pathology Laboratories and Molecular Medicine, Massachusetts General Hospital; Professor, Pathology, Harvard Medical School
Point-of-care testing (POCT) offers reduced turnaround time and facilitates more timely medical decision making. Improved outcomes resulting from POCT may include better medical outcomes, financial outcomes and outcomes resulting from improved clinical operations. Primary care practices are facing increasing challenges relating to decreased reimbursement, pay for performance insurance contracts and increasing patient case loads. POCT offers one strategy to help alleviate these pressures. This presentation will review the literature on POCT in improving outcomes in primary care. We will also present data from at study at the Massachusetts General Hospital utilizing POCT in a primary care practice.

10:00 Coffee Break in the Exhibit Hall with Poster Viewing

CANCER MANAGEMENT AT THE POINT-OF-CARE

10:40 Chairperson’s Remarks
Avraham Rasooly, Ph.D., Health Scientist Administrator, Division of Cancer Treatment and Diagnosis, National Cancer Institute

10:45 Clinical Challenges and the Point-of-Care Needs in Breast Cancer Diagnosis
Jane E. Brock, MBBS, Ph.D., Assistant Professor, Harvard Medical School; Medical Director, Surgical Pathology Grossing Room; Associate Pathologist, Brigham & Women's Hospital, Dana Farber Cancer Institute and Harvard Medical School
Breast cancer is a heterogeneous disease comprising different histological types with different responses to therapy and outcome requiring tailoring of treatments. POC diagnostic needs include rapid histopathologic diagnosis, provision of the current traditional prognostic factors such as tumor grade, ER, PR and Her2 status needed to guide treatment, and in the near future, evaluation of sensitivity/resistance information to treatment regimens and tracking of disease burden.

11:15 Smart Handheld Devices to Screen Melanoma and Other Skin Lesions
George Zouridakis, Ph.D., Professor, Engineering Technology, Electrical & Computer Engineering, Computer Science, University of Houston
Modern smartphones and tablets featuring multicore processors, dedicated microchips for graphics, high-resolution cameras, and wireless communication can run sophisticated software very fast. Such devices empower clinicians to make timely and accurate point-of-care diagnoses, while patients are treated in a more comfortable and less costly setting alternative to hospitalization. We present a smartphone digital dermoscopy application for screening melanoma and Buruli ulcer, a flesh-eating bacterial disease.
Cancer Treatment and Diagnosis, National Cancer Institute

Avraham Rasooly, Ph.D., Health Scientist Administrator, Division of Cancer Treatment and Diagnosis, National Cancer Institute

Chairperson’s Remarks

Viewing

Refreshment Break in the Exhibit Hall with Poster Viewing

1:35 Point-of-Care Ultrasound Scanner for Breast Cancer Imaging

Paul E. Barbone, Ph.D., Professor, Theoretical Acoustics & Applied Mechanics, Mechanical Engineering, Boston University

New developments in ultrasound (US) imaging, especially elastography, have made US more useful than ever before in breast cancer imaging applications. Enabling this technology on point-of-care (POC) laptop platforms would make it available to low-resource communities. In this presentation, we discuss the potential role of POC US with advanced elastography capabilities in breast cancer management in diverse low-resourced settings.

2:05 Cancer Care at the Point-of-Care

Catherine Klapperich, Ph.D., Associate Professor, Biomedical Engineering; Director, NIBIB Center for Future Technologies in Cancer Care, Boston University

To address the current issues that (cancer) patients face in low resource settings in the developing world, the Center is focusing on the identification, prototyping and early clinical assessment of innovative point-of-care (POC) technologies for the treatment, screening, diagnosis and monitoring of cancers. This talk will address how our integrated multidisciplinary team, consisting of engineers, clinicians, public health practitioners, and technology transfer experts, is currently evaluating technologies in various stages of development for suitability across a range of primary care and non-traditional healthcare settings.

2:35 A Portable, Low Cost 3D Mechano-Transduction Mapping Device for Solid Tumor Detection

James K. Gimzewski, Ph.D., Ph.D. hc, DSc hc, FRS FREng, Distinguished Professor, Chemistry & Biochemistry, University of California, Los Angeles

Tissue biomechanics and heterogeneity may be a quantitative marker to predict the behavior of solid tumors such as breast and thyroid. I will provide an overview of our work on single cell/tissue cancer mechanics as well as introduce ongoing research on a portable, low cost, piezosensing FNE (Fine Needle Elastography) device to be used for profiling the biomechanics and tissue heterogeneity in tissues ex vivo.

3:05 Sponsored Presentation (Opportunity Available)

3:35 Refreshment Break in the Exhibit Hall with Poster Viewing

IMAGING TECHNOLOGIES AT THE POC

4:10 Chairperson’s Remarks

Avraham Rasooly, Ph.D., Health Scientist Administrator, Division of Cancer Treatment and Diagnosis, National Cancer Institute

4:15 Portable Ultrasound in Remote, Resource-Poor, Disaster, and Emergency Settings

Anthony J. Dean, M.D., FAAEM, FACP, Associate Professor, Emergency Medicine in Radiology; Director, Division of Emergency Ultrasonography, Department of Emergency Medicine, University of Pennsylvania Medical Center

Technical advances in the design and manufacture of ultrasound (US) equipment have resulted in the development of lightweight, battery-operated devices that produce high-quality images. Portability allows ultrasonography to be used in environments where no other imaging is available: for triage, evacuation decision-making, field management, and guidance for invasive procedures. A burgeoning body of literature is resulting in rapid improvement in the IT and infrastructural requirements for ultrasound by inexperienced operators telemedically guided by experts.

4:45 PANEL DISCUSSION: THE STATUS OF HOSPITAL POC TESTING AND ITS REGULATION

With the pending CMS ruling to outlaw POC glucose meters in hospitals as off-label use, unless operated as high complexity devices, there is interest in understanding the future of POCT regulation and the impact on hospitals. This panel will review the status of high complexity devices and regulation policies.

Moderator: Jeffrey A. DuBois, Ph.D., Vice President, Medical & Scientific Affairs, Nova Biomedical

Panelists: Marcy Anderson, Director, Development & Education, Scientific Affairs, Nova Biomedical

8:25 Chairperson’s Opening Remarks

Gerald J. Kost, M.D., Ph.D., Associate Professor, Pathology and Laboratory Medicine; Director, Clinical Chemistry and Point-of-Care Testing; Faculty, Biomedical Engineering and Comparative Pathology, University of California, Davis

Additional Panelists to Be Announced

5:45 Welcome Reception in the Exhibit Hall with Poster Viewing

6:45 Close of Day

THURSDAY, NOVEMBER 6

7:45 - 8:25 am Morning Coffee

MEASURING PHYSICAL AND PHYSIOLOGICAL PARAMETERS

8:25 Chairperson’s Opening Remarks

Ki H. Chon, Ph.D., Professor & Head, Biomedical Engineering, Worcester Polytechnic Institute

We developed a smart phone application to measure heart rate interval series which can be used intermittently to detect AF in real time. For continuous monitoring of paroxysmal AF, we developed a wearable device with reusable ECG electrodes with a smart phone as a medium for data transfer. Hence, the seminar will discuss the development and clinical testing of both intermittent and continuous monitoring of AF.
9:00 Micro- and Nano-Scale Technologies for Applications in Medicine at the Point-of-Care
Utkan Demirci, Ph.D., Associate Professor, Medicine, Canary Center for Cancer Early Detection, Stanford University

In this talk, we will present an overview of our laboratory’s work in these areas focused on applications in point-of-care and primary care settings including applications for ovarian cancer detection from urine, rapid CD4 counts for global health, multiple pathogen detection with a focus on viral load from unprocessed whole blood and bedside peritonitis detection for end-stage kidney disease patients going through peritoneal dialysis therapy. These emerging technologies could shape our future creating broadly applicable platforms for scientific discovery, providing clinical solutions for resource-constrained settings in the developing world as well as for primary care settings in the developed world.

9:30 Coffee Break in the Exhibit Hall with Poster Viewing

MOLECULAR DIAGNOSTICS AT THE POINT-OF-CARE

10:10 Chairperson’s Remarks
Miguel Ossandon, MS, Program Director, Cancer Diagnosis Program, Division of Cancer Treatment and Diagnosis, National Cancer Institute, NIH

10:15 Moving Molecular Diagnostics to the Point-of-Care
Gerald J. Kost, M.D., Ph.D., MS, FACP, Professor, Pathology and Laboratory Medicine; Director, Clinical Chemistry and Point-of-Care Testing; Faculty, Biomedical Engineering and Comparative Pathology, University of California, Davis

This presentation addresses sepsis, a challenge for molecular diagnostics. Learning objectives are to: define sepsis and the impact of bloodstream infections; introduce sepsis biomarkers, trend mapping, and algorithmic decision-making; compare/contrast molecular systems; address unmet needs; and understand potential impact of technologies on patient outcomes. We conclude that molecular systems focusing on early holistic diagnosis, management, and treatment, and new POC formats soon will make rapid response a reality in critically care.

10:45 A Handheld Point-of-Care Genomic Diagnostic System for HIV Detection
Luke P. Lee, Arnold and Barbara Silverman Distinguished Professor Bioengineering, Electrical Engineering & Computer Science, and Biophysics, University of California Berkeley

In this talk, I will present our integrated molecular diagnostic system (iMDx) for POC and mobile digital healthcare. The iMDx comprises a self-contained sample preparation from whole blood, multiplexed protein assays, and ultrafast nucleic acid amplification assays on chip with a sample-to-answer readout platform. Additionally, the iMDx features cell phone data connectivity and GPS sample geotagging, which can enable epidemiological surveying and remote healthcare delivery.

11:15 Point-of-Care Smartphone Detection of Salmonella
Jeong-Yeol Yoon, Ph.D., Associate Professor, Agricultural & Biosystems Engineering, Animal & Comparative Biomedical Sciences, and Biomedical Engineering, The University of Arizona

We report the use of 1) paper microfluidics and the smartphone-based optical detection towards food, water and medical applications, 2) droplet microfluidics (called “wire-guided droplet manipulations - WDM”) towards in situ monitoring of bloodborne pathogens and endocarditis, and 3) microfluidic-based, continuous bioreactor that will be seeded with mammalian (mostly human) cells, towards creating mock-up human organs (organ-on-a-chip).

11:45 Technology Challenges and Opportunities in POC and mHealth for Cancer Detection and Diagnosis in Low Resource Settings
Miguel Ossandon, MS, Program Director, Cancer Diagnosis Program, Division of Cancer Treatment and Diagnosis, National Cancer Institute, NIH

Development in consumer electronic devices, microfabrication, cellular phone and hand-held devices has resulted in an explosion of POC and mHealth technologies. Due to the mobile nature, portability and potentially low cost, these technologists play an important role in low resource areas. However, development of POC/mHealth applications for cancer is lagging due in part to the complex nature of cancer. This talk will focus on the challenges of mHealth and POC technologies for cancer in low resource settings.

12:15 pm Close of Conference

Join us for PART 2 on Thursday and Friday: Point-of-Care and Mobile Health Diagnostics Clinical-Consumer Interface. See page 6 for more details.
Point-of-Care and Mobile Health Diagnostics Clinical-Consumer Interface: Go-to-Marketing Strategies, Innovation Path, Integration

THURSDAY, NOVEMBER 6
12:30-1:30 pm Registration

TRANSFORMING HEALTHCARE THROUGH PATIENT-CENTERED DEVICES

1:30 Chairperson’s Opening Remarks
Katherine Tynan, President, Tynan Consulting LLC

1:40 Seeking the Value in HIT / Innovating Out of Eminence-Based Care
William Bria, M.D., CMIO, The HCI Group; President, AMDIS (Association of Medical Directors of Information Systems)

Medicine is undergoing more changes over the past decade than in the previous half-century. Remaining focused on the core of the profession and the contract with society is more important now than ever before. This discussion will review those trends and forces that threaten to positively AND negatively disrupt the practice of medicine in America and what we can do as professionals to be sure we retain the patient-centered focus of our profession while bringing appropriate technologies to bear on the delivery of better care to our fellow man.

2:10 Impact of POC Devices on Managing Care in the Community
Rob Havasy, Team Lead, Product & Technology Development, Center for Connected Health, Partners Healthcare System

Changing payment models and pressures to slow the growth of healthcare costs are driving providers and healthcare organizations to re-think the data that they collect about their patients. The renewed focus on preventive care, population health, and patient wellness means that the old measures of disease: blood pressure, blood sugar, and others are less relevant to frontline clinicians. Measuring how sick someone is means it’s already too late. Progressive health systems are looking for new measures of health that can deployed in the clinic or by patients themselves so that interventions can happen earlier when they are more impactful and cost-effective. When exercise is as good at treating many conditions as the most common drugs, new measures of patient adherence to treatment recommendations are needed.

2:30 INTERACTIVE PANEL: Managing the Last Mile of Healthcare Implementation through Technology
Moderator: Katherine Tynan, President, Tynan Consulting LLC
Panelists:
Robert Havasy, Team Lead, Product & Technology Development, Center for Connected Health, Partners Healthcare System
Jason Oberfest, Co-Founder and CEO, Mango Health
Chiara Bell, CEO, Careticker
Jennie Rubinshteyn, Co-Founder and CFO, Pixie Scientific

With the advent of new payment models, larger numbers of people eligible for care and the rapidly expanding over-65 demographic, there is an increasing focus on provision of more clinically effective and cost-efficient care. Digital health platforms embedded in the healthcare delivery system including point of care diagnostics will be key to success.

• What type of POC systems are favored in the new healthcare delivery systems?
• What kind of data/evidence is required from POC system developers to drive adoption?
• What payment and business models are preferred?

3:10 Sponsored Presentation (Opportunity Available)

3:40 Refreshment Break in the Exhibit Hall with Poster Viewing

BENCH-TO-BEDSIDE HOSPITAL IMPLEMENTATION

4:15 Chairperson’s Remarks
Katherine Tynan, President, Tynan Consulting LLC

SPECIAL MAYO CLINIC CASE STUDY CO-PRESENTATIONS

4:20 Part 1: Clinical Implementation and IT Bench-to-Bedside Hospital Implementation and Integration of Devices and Apps
John O’Horo, M.D., Assistant Professor, Medicine, Mayo Clinic
Rahul Kashyap, M.D., Assistant Professor, Anesthesiology-Critical Care Medicine, Mayo Clinic

Acute resuscitation involves complex decision making, pattern recognition, and knowledge of a rapidly changing body of research. This area is ripe for clinical decision support, yet few applications have been developed to give point of care support to rapidly deteriorating patients. We describe our experience in developing and testing the ‘checklist for early recognition and treatment of acute illness’ as a practical guide to initial resuscitation in simulation and clinical environments.
4:50 Part 2: Clinical Innovation and IT
Overcoming Challenges in the Distant Training and Implementation of POC Decision Support Tools in Global ICUs
Rahul Kashyap, M.D., Assistant Professor, Anesthesiology-Critical Care Medicine, Mayo Clinic
If there is no set path to innovation and the process to change the health IT systems and practice of care is an iterative process, it is even more complex, when one reaches beyond North America. We would like to share our learning experiences with implementation of the CERTAIN “Checklist for Early Recognition and Treatment of Acute Illness” in four different continents.

5:20 End of Day

5:45 - 7:45 SC2: The Future of POC and DTC: Why New Strategies Are Necessary for Larger Markets*
*Separate registration required; please see page 2 for details.

FRIDAY, NOVEMBER 7

7:45-8:25 am Morning Coffee

MOBILE HEALTH TECHNOLOGY: INTEGRATION AND COLLABORATION

8:25 Chairperson’s Opening Remarks
Dipti Patel-Misra, Ph.D., MBA, CEO, DPM Resources Group; Health Informatics, UNC Charlotte

8:30 KEYNOTE PRESENTATION
Mobile Health and Patient-Centered Care
Alberto Gutierrez, Ph.D., Director, Office of In Vitro Diagnostics and Radiological Health (OIR), CDRH, FDA
The presentation will focus on the benefits of patient home/patient-centered care, in particular those employing the latest web-enabled technologies that have revolutionized Hypertension, Asthma, DM and other major American healthcare challenges.

9:00 Integrating Technology to Transform Point-of-Care Diagnostics
Gene Walther, MBA, Deputy Director, Diagnostics, Discovery, Global Health Program, Bill & Melinda Gates Foundation
Providing accurate diagnostic information is vital to ensure appropriate treatment interventions are applied. Less than 40% of the public health patients receive comprehensive diagnostic information to guide health care workers in the developing world. The Bill and Melinda Gates Foundation is exploring the development of an integrated technology platform that could provide syndromic diagnostic panels to guide health care workers in the use of appropriate interventions to more than 90% of the target population.

9:30 eMedicine, eMonitoring, eHospital, and mHealth Apps: Seven Critical Factors that Need to Be Assessed in Determining Whether Your Product Will Be Commercially Successful
Regina Au, New Product Planning, BioMarketing Insight
With the invention of wireless technology, wireless applications and mobile apps for remote monitoring in diagnosing and managing diseases have started to become a way of life in the healthcare and medical device industry. There is an app for everything but not all apps are or will be successful. Developing apps to help improve a patients’ quality of life or a healthcare professional’s ability to provide better and more efficient care can be very challenging and difficult. Understanding the market environment and market dynamic for product adoption by all stakeholders involved including reimbursement and regulatory is critical for success because the incentive for product adoption by each stakeholder will be different.

10:35 Chairperson’s Remarks
Dipti Patel-Misra, Ph.D., MBA, CEO, DPM Resources Group; Health Informatics, UNC Charlotte

10:40 Accelerating Technology Development and Innovation in Medical Centers: Seed Funds, Award Programs, Entrepreneurial Clinicians
Alexandra Pelletier, Manager, Innovation Program, Boston Children’s Hospital
We offer a seed fund, a technology development awards program, and a clear set of processes to facilitate experimentation with new devices, software and other innovations. Integration of the new technology into existing workflows, continuity of data and, ultimately, improved health outcomes and operational efficiency are key evaluation measures. The clinicians themselves were engaged and incented to become part of the innovation process and technology development teams. This presentation will share experiences from these two organizations and highlight key learnings.

11:05 A New Model to Develop Mobile Point-of-Care Applications in Academic Medical Centers
A. Hasan Sapci, M.D., Assistant Professor, Health Care Informatics, Department of Allied Health, Adelphi University
The information revolution changed the way we provide healthcare in academic medical centers and integrated access to clinical information provides new options that were never considered before. Most medical specialties and departments have custom needs beyond existing products in the market. This presentation will summarize our experience with the design, development and implementation of innovative mobile point-of-care system development processes and propose a new model for agile clinical informatics application development in academic medical centers.
CO-PRESENTATION AND PANEL DISCUSSION: OPPORTUNITIES AND BARRIERS TO CLINICAL ADOPTION

11:30 POC Diagnostics in Non-Acute Settings: Opportunities and Barriers to Clinical Adoption

As the number of primary care providers diminishes and the need for primary care increases with an aging population and the introduction of the Affordable Care Act, there is an acute need to increase the ability of providers to care for more patients without decreasing the quality of care given and without unduly burdening the providers, patients or their families. Point-of-Care testing in primary care holds promise to improve operational efficiency, the timeliness and accuracy of clinical decision-making, and patient engagement. Strategies to facilitate clinical adoption and address barriers will be discussed.

- How can lessons from operations research and systems engineering be applied to clinical adoption of POC technology in healthcare?
- What strategies are most successful in bridging the clinical and engineering worlds in technology development?
- What are the key lessons learned to date from the experiences of the NIBIB Center for Point-of-Care Technologies in Primary Care at CIMIT?

Ronald Dixon, M.D., Director, Virtual Practice Project, Massachusetts General Hospital
John Collins, Ph.D., COO and Director, Technology Implementation, Center for Integration of Medicine and Innovative Technology (CIMIT)
Penny Ford-Carleton, Director, Clinical Innovation, Center for Integration of Medicine and Innovative Technology (CIMIT)

12:15 pm Sponsored Presentation (Opportunity Available)

12:45 Luncheon Presentations (Sponsorship Opportunities Available) or Enjoy Lunch on Your Own

1:45 Session Break

BEHAVIOR CHANGE PROGRAMS, POC TRIALS, AND AGILE DEVELOPMENT IN WEARABLES

2:00 Chairperson’s Remarks

Gerald J. Kost, M.D., Ph.D., MS, Professor, Pathology and Laboratory Medicine; Director, Clinical Chemistry and Point-of-Care Testing; Faculty, Biomedical Engineering and Comparative Pathology, University of California, Davis

2:05 Development of a Flexible mHealth Platform for Supporting Clinicians and Researchers in Delivering Evidence-Based Behavior Change Programs

Devin Mann, M.D., Assistant Professor, Medicine, Section of Preventive Medicine and Epidemiology, Boston University School of Medicine

Leveraging mHealth technologies for achieving health care goals and supporting health care providers is a critical goal for research and increasingly, healthcare operations. This presentation will tell the story of an academic research group that is working to build a simple, flexible mHealth system that helps clinicians promote lifestyle changes among their patients. Key challenges and facilitators to agile development in this setting will be reviewed as well as design considerations for embedding these systems in electronic health record and healthcare operations workflows.

2:35 EHR-Enabled Point-of-Care Trials: How a Healthcare System can Ascertain an Intervention’s Value While Providing Routine Care

Valmeek “Vick” Kudesia, M.D., Director, Clinical Informatics, Massachusetts Veterans Epidemiology Research and Information Center (MAVERIC), Veterans Health Administration

Uptake of a new intervention in a healthcare organization is partially driven by its perceived value in that healthcare organization. This presentation will summarize the work of MAVERIC in the VA in developing point-of-care trials that are supported by the VA’s EHR itself and deployed as part of routine care. Though the trials to date focus on pharmacologic interventions, generalized lessons relevant to mHealth and POC diagnostic technologies will be discussed.

CO-PRESENTATION AND INTERACTIVE PANEL: DESIGNING, DEVELOPING, AND MAXIMIZING THE VALUE OF WEARABLE TECHNOLOGY

3:05 Adoption of Wearable Technology in Healthcare

Carlos Rodarte, Corporate Strategy, PatientsLikeMe

3:15 How Do Developers, Clinicians, Healthcare Providers, and Academic Researchers Partner in this Space?

Sanjay Gupta, Vice President, Product Development, MC10

When members of the healthcare ecosystem collaborate, significant innovation and value can be brought to patients. MC10’s partnerships with some of the largest pharmaceutical and healthcare brands in the world give them a unique perspective on the best methods for collaboration. This presentation will share the partnership models used by MC10 and best practices learned along the way.

3:25 Interactive Panel: Designing, Developing, and Maximizing the Value of Wearable Technology

The increasing adoption of wearable technology in healthcare is increasing rapidly, as are the number of start-up companies and cross-industry collaborations. There is a real opportunity to positively impact healthcare outcomes – both from a quality and cost-savings perspective – with the development, use and integration of wearable tech. There are, however, many challenges.

- How do you prioritize the applications and use cases of the technology?
- What types of partnerships are integral for the success of the technology?
- What do you foresee being the top challenges and obstacles in the industry?

Moderator: Carlos Rodarte, Corporate Strategy, PatientsLikeMe
Panelists: Alexandra Pelletier, Manager, Innovation Program, Boston Children’s Hospital
Sanjay Gupta, Vice President, Product Development, MC10
Maulik Majmudar, M.D., CMO, Quanttus

4:05 Close of Conference

Join us for PART 1 on Wednesday and Thursday: Point-of-Care and Mobile Health Diagnostics Technologies. See page 3 for more details.
Sponsorship & Exhibit Information

CHI offers comprehensive packages that can be customized to your budget and objectives. Sponsorship allows you to achieve your goals before, during, and long after the event. Packages may include presentations, exhibit space and branding, as well as the use of delegate lists. Signing on early will maximize your exposure to qualified decision-makers and drive traffic to your website in the coming months.

Podium Presentations — Available within Main Agenda!
Showcase your solutions to a guaranteed, targeted audience through a 15- or 30-minute presentation during a specific program, breakfast, lunch, or a pre-conference workshop. Package includes exhibit space, on-site branding, and access to cooperative marketing efforts by CHI. Lunchees are delivered to attendees who are already seated in the main session room. Presentations will sell out quickly! Sign on early to secure your talk.

Invitation-Only VIP Dinner/Hospitality Suite
Select specific delegates from the pre-registration list to attend a private function at an upscale restaurant or a reception at the hotel. From extending the invitations, to venue suggestions, CHI will deliver your prospects and help you make the most of this invaluable opportunity.

Focus Group
CHI will gladly provide you the opportunity of running a focus group on-site. This exclusive gathering can be useful to conduct market research, collect feedback on a new product idea, and collect marketing intelligence from industry experts on a specific topic.

User Group Meeting/Custom Event
Co-locate your user group meeting or custom event. CHI will help market the event, manage logistical operations, develop the agenda, and more. CHI can handle the entirety of the meeting or select aspects.

Exhibit — Sign on by August 1st and Save $300
Exhibitors will enjoy facilitated networking opportunities with qualified delegates, making it the perfect platform to launch a new product, collect feedback, and generate new leads. Exhibit space sells out quickly, so reserve yours today!

Additional branding and promotional opportunities are available, including:
• Conference Tote Bags
• Literature Distribution (Tote Bag Insert or Chair Drop)
• Badge Lanyards
• Program Guide Advertisement
• Padfolios and More...

Hotel & Travel Information

Conference Hotel:
Sheraton Boston
39 Dalton Street
Boston, MA  02199

Reservations: 617-236-2000
Discounted Room Rate: $269 s/d
Discounted Cut-off Date:  October 6, 2014

Please visit the hotel and travel page of our conference website or call the hotel directly to reserve your sleeping accommodations. You will need to identify yourself as a Cambridge Healthtech Institute conference attendee to receive the discounted room rate with the host hotel. Reservations made after the cut-off date or after the group room block has been filled (whichever comes first) will be accepted on a space- and rate-availability basis. Rooms are limited, so please book early.

Why Stay at Sheraton Boston?
The Sheraton Boston is located only 4 miles from Logan International Airport, in Boston's trendy Back Bay neighborhood. Attendees will enjoy complimentary wireless internet in guest rooms, and access to a state-of-the-art fitness center and indoor swimming pool. Easily access shops and restaurants in the Prudential Center and Copley Place. Stroll just a few blocks to Copley Square, the Charles River or the Boston Common.

We understand that you have many choices when making your travel arrangements. Please understand that reserving your room in the CHI room block at the conference hotel allows you to take full advantage of the conference sessions, events and networking opportunities, and ensures that our staff will be available to help should you have any issues with your accommodations.

Flight Discounts:
Special discount rates have been established with American Airlines for this conference.
• Call American Airlines Directly at 800-433-1790 and use Conference Code 61N4BI
• Go to aa.com/group and enter Conference Code 61N4BI in promotion discount box.
• Contact our designated travel agent, Rona Meizler, at 617-559-3735 or rona.meizler@protravelinc.com

Car Rental Discounts:
Special discount rentals have been established with Hertz for this conference.
• Visit www.hertz.com to make your reservation and enter Hertz Convention Number (CV) 04KL005
• Call Hertz directly at 800-654-3131 and use our Hertz Convention Number(CV) 04KL005