

Thursday, November 10, 2016

## Workshop A: Implanted Sensors

### Panel 1: Long-Term Implantable Glucose Sensors

08:00 **Moderators**

Kong Chen, PhD, MSCI  
National Institutes of Health  
Bethesda, Maryland

David Kerr, MD, FRCPE  
William Sansum Diabetes Center  
Santa Barbara, California

08:05 **Update of Clinical Experience with a Long-Term Fully-Implanted Continuous Glucose Monitoring System**

Joseph Lucisano, PhD  
Glysens Inc., San Diego, California

08:15 **Tissue-Integrating Sensors**

Natalie Wisniewski, PhD  
Profusa, South San Francisco, California

08:25 **Precise // Pivotal Trial: 90-Day Subcutaneously Implanted Glucose Sensor**

Mark Christiansen, MD  
Diablo Clinical Research, Walnut Creek, California

08:35 **Long-Term Implantable Optical Continuous Glucose Monitoring System**

Jeffrey Joseph, DO  
Thomas Jefferson University, Philadelphia, Pennsylvania

08:45 **GlucoWizzard,™: Preclinical Development and Transition to Human Testing**

Michail Kastellorizios, PhD  
Biorasis, Storrs Mansfield, Connecticut

08:55 **An Implanted Osmotic Pressure Sensor**

Andreas Pfützner, MD, PhD  
Pfützner Science & Health Institute, Mainz, Germany

09:05 **What Do Clinicians Want in an Implantable CGM?**

Jessica Castle, MD  
Oregon Health & Science University, Portland, Oregon

09:15 **Q & A**

09:35 **Break**

### Panel 2: Market Opportunities, Financial Issues, and Exit Strategy

09:55 **Moderators**

Jeffrey Joseph, DO  
Thomas Jefferson University  
Philadelphia, Pennsylvania

Matthew Maryniak, MBA  
Fenix Group International, LLC  
Wyomissing, Pennsylvania

10:00 **Market Opportunities and Customer Preference Data for a Fully Implanted Long-Term CGM Solution**

William Markle, MBA  
Glysens Inc., San Diego, California

10:10 **Tiny Sensor, Great Big World**

William McMillan, MS  
Profusa, South San Francisco, California

10:20 **Next Generation Technology for New Market Challenges**

Tim Goodnow, PhD  
Senseonics, Inc., Germantown, Maryland

- 10:30 **The Value Proposition of Implants**  
Paul Strasma, MBA  
Capillary Biomedical, Inc., Irvine, California
- 10:40 **Utilizing Start – Up Accelerators to Advance CGM Devices: Lessons Learned from Mass Challenge**  
Fotios Papadimitrakopoulos, PhD  
Biorasis, Storrs Mansfield, Connecticut
- 10:50 **Value Creation through Science or Distribution?**  
Rune Frisvold, MBA  
Lifecare AS, Bergen, Norway
- 11:00 **Investor Perspective on Implantable CGM**  
Matthew Maryniak, MBA  
Fenix Group International, LLC, Wyomissing, Pennsylvania
- 11:10 **Q & A**
- 11:30 ***End of workshop/Lunch***

Thursday, November 10, 2016

## Workshop B: Biomarkers for Diabetes

### Panel 1: Update on Established Biomarkers

- 08:00 **Moderators**  
George Cembrowski, MD, PhD  
Alberta Health Services  
Edmonton, Alberta, Canada  
Julia Mader, MD  
Medical University Graz  
Graz, Austria
- 08:05 **eA1C**  
Boris Kovatchev, PhD  
University of Virginia, Charlottesville, Virginia
- 08:20 **Blood Ketones – Measurement, Interpretation and Clinical Utility**  
Andrew Drexler, MD  
University of California, Los Angeles, Los Angeles, California
- 08:35 **A1C – Update on Measuring, Interpreting and Including POC Tests**  
Michelle Magee, MD, MBBCH, BAO, LRCPSI  
MedStar Health Research Institutes, Washington, DC
- 08:50 **Metrics to Measure CGM**  
Pratik Choudhary, MD, FRCP(UK)  
King's College London, London, United Kingdom
- 09:05 **Q & A**
- 09:35 **Break**

### Panel 2: Emerging biomarkers

- 09:55 **Moderators**  
Guillermo Arreaza-Rubin, MD  
National Institutes of Health  
Bethesda, Maryland  
Gerold Grodsky, PhD  
University of California, San Francisco  
San Francisco, California
- 10:00 **The Need for a New Definition of Hypoglycemia**  
Brian Frier, MD, FRCP(Edin), FRCP(Glas)  
The Queen's Medical Research Institute, University of Edinburgh, Edinburgh, Scotland
- 10:15 **Noninvasive Glucose Measurement**  
Avner Gal, MBA, MSCEE, MSc  
Integrity Applications, Ashkelon, Israel
- 10:30 **C-Peptide and Proinsulin**  
Andreas Pfützner, MD, PhD  
Pfützner Science & Health Institute, Mainz, Germany
- 10:45 **Innovations in Novel Electrochemical Sensors, Methods, and Analytes**  
Jeffrey La Belle, PhD, MS, MSEE, BSEE  
Arizona State University, Tempe, Arizona
- 11:00 **Q & A**
- 11:30 **End of workshop/Lunch**

**Thursday, November 10, 2016**

**Workshop C: Coding, Coverage, Reimbursement, and Competitive Bidding**

**Panel 1: Coding and Coverage**

- 12:30 **Moderators**  
Barry Ginsberg, MD, PhD  
Diabetes Technology Consultants  
Wyckoff, New Jersey  
Claudia Graham, PhD, MBA, MPH  
Dexcom  
San Diego, California
- 12:35 **An Overview of Coding & Coverage for Diabetes Products**  
Bruce Taylor  
Roche Diabetes Care, Inc., Indianapolis, Indiana
- 12:50 **How Reimbursement Coding & Coverage Affect Patient Choices**  
Jerry Gomez, MBA  
ArkrayUSA, Inc., El Paso, Texas
- 13:05 **Impact of Healthcare Reform on Reimbursement for New Technologies**  
Patricia Telgener, RN, MBA  
Emerson Consultants, Inc., Excelsior, Minnesota
- 13:20 **A New CPT Code for CGM: A Golden Opportunity or a Black Hole?**  
Erika Miller, JD  
Cavarocchi · Ruscio · Dennis Associates, LLC, Washington, DC
- 13:35 **Q & A**
- 14:05 **Break**

**Panel 2: Reimbursement and the Competitive Bidding Process by CMS**

- 14:25 **Moderators**  
Jane Chiang, MD  
American Diabetes Association  
Alexandria, Virginia  
John Warren  
McDermottPlus  
Washington, DC
- 14:30 **Patient Policy Advocacy Perspective**  
Christel Marchand Aprigliano, MS  
Diabetes Patient Advocacy Coalition  
Tampa, Florida
- 14:40 **An Overview of the Competitive Bidding Process**  
Timothy Trysla  
Alston & Bird LLP, Washington, DC
- 14:55 **Diabetes Safety Monitoring in Medicare's Competitive Bidding Program**  
Gary Puckrein, PhD  
National Minority Quality Forum, Washington, DC
- 15:10 **The Anticipated Impacts of Competitive Bidding on Diabetes Health Outcomes**  
David Marrero, PhD  
University of Arizona Schools of Public Health and Medicine, Tucson, Arizona
- 15:25 **How Will Trends in Federal Health Policy Affect Diabetes?**  
Thomas Milam  
TrueLifeCare, LLC, Brentwood, Tennessee
- 15:40 **Q & A**
- 16:00 **End of workshop**
- 16:00–18:30 **Poster session and inauguration of the 2016 Diabetes Technology Meeting**
- 18:30–20:00 **Posters remain on display for viewing**

Thursday, November 10, 2016

## Workshop D: Metrics for Diabetes

### Panel 1: Metrics for Describing Performance of a Monitor

- 12:30 **Moderators**  
Vincent Crabtree, PhD  
Juvenile Diabetes Research Foundation  
New York, New York
- Courtney Lias, PhD  
U.S. Food and Drug Administration  
White Oak, Maryland
- 12:35 **Correct, Complete, and Still Comprehensible – How to Best Describe Accuracy of Blood Glucose Meters?**  
Rolf Hinzmann, MD, PhD  
Roche Diabetes Care, Mannheim, Germany
- 12:50 **Best Metrics of Glycemia Measured by a BGM**  
David Rodbard, MD  
Biomedical Informatics Consultants, LLC, Potomac, Maryland
- 13:05 **The Relationship Between BGM and CGM**  
David Simmons, MD  
Ascensia Diabetes Care, Parsippany, New Jersey
- 13:20 **Borrowing from Big Data Technologies to Drive CGM Metrics Ubiquity**  
Annika Jimenez, MPlA  
Dexcom, San Diego, California
- 13:35 **Q & A**
- 14:05 **Break**

### Panel 2: New Metrics for Control

- 14:25 **Moderators**  
Guido Freckmann, MD  
Institute for Diabetes Technology  
Ulm, Germany
- Frank Schwartz, MD  
Ohio University  
Athens, Ohio
- 14:30 **The New Glucose Pentagon: Applying Novel Composite Metrics to Assess the Results of Glycemic Control in CGM-Based Studies**  
Robert Vigersky, MD  
Medtronic Diabetes, Washington, DC
- 14:45 **Composite Metrics for Clinical Trials – Can They Help Us?**  
Alexander Fleming, MD  
Kinexum, Harpers Ferry, West Virginia
- 15:00 **Is Calibration Necessary for CGMs?**  
Andrea Fachinetti, PhD  
University of Padova, Padova, Italy
- 15:15 **Long-Term Metrics**  
Marc Breton, PhD  
University of Virginia, Charlottesville, Virginia
- 15:30 **Q & A**
- 16:00 **End of workshop**
- 16:00–18:30 **Poster session and inauguration of the 2016 Diabetes Technology Meeting**
- 18:30–20:00 **Posters remain on display for viewing**

# Friday, November 11, 2016

07:00 *Continental Breakfast*

## Session 1: Patient-Generated Health Data for the Precision Medicine Initiative

08:00 **Moderators**

Judith Fradkin, MD  
National Institutes of Health, NIDDK  
Bethesda, Maryland

Karl Friedl, PhD, COL (US Army, ret.)  
University of California, San Francisco  
San Francisco, California

08:10 **The Connected Patient**

Howard Zisser, MD  
Verily Life Science, San Francisco, California  
University of California, Santa Barbara, Santa Barbara, California

08:25 **Health Data Analytics Applied to Diabetes**

Shahram Ebadollahi, PhD  
IBM Watson Health, Yorktown Heights, New York

08:40 **An Open Source Platform Enabling an Ecosystem of Diabetes Apps and Research**

Howard Look, BSCE  
Tidepool, Palo Alto, California

08:55 **Leveraging Patient Generated Data and Decision Support to Deliver Personalized Recommendations**

Rick Altinger, MS EM, BSME  
Glooko, Mountain View, California

09:10 **Q & A**

09:25 **Break**

**Friday, November 11, 2016**

## **Session 2: Regulatory Initiatives in Diabetes Technology**

- 09:45 **Moderator**  
David Klonoff, MD, FACP, FRCP(Edin), Fellow AIMBE  
Mills-Peninsula Health Services, San Mateo, California
- 09:50 **Diabetes Technology Society Leadership Award**
- 09:55 **DTSec**  
David Kleidermacher  
BlackBerry Limited, Santa Barbara, California
- 10:05 **Insulin Pump Security**  
Colin Morgan, CISSP, CISM, GPEN  
Johnson & Johnson, Fort Washington, Pennsylvania
- 10:15 **Medical Device Cybersecurity: An FDA Perspective**  
Suzanne Schwartz, MD, MBA  
U.S. Food and Drug Administration, Silver Spring, Maryland
- 10:30 **The DTS-BGMs Surveillance Program: Update**  
Joan Lee Parkes, PhD  
Joan Lee Parkes Consulting, Inc., Bristol, Indiana
- 10:45 **News from FDA on Glucose Monitoring Regulation**  
Courtney Lias, PhD  
U.S. Food and Drug Administration, White Oak, Maryland
- 11:00 **Privacy of Diabetes Apps**  
Sarah Blenner, JD, MPH  
UCLA Fielding School of Public Health, Los Angeles, California
- 11:15 **What's New with HIPAA**  
Iliana Peters, JD, LLM  
U.S. Department of Health and Human Services, Office for Civil Rights, Washington, DC
- 11:30 **Q & A**
- 11:55 **End of session/Lunch**

## **Session 3: Use of Mobile Apps to Increase Adherence**

- 12:50 **Moderators**  
Riccardo Bellazzi, PhD  
University of Pavia  
Pavia, Italy
- 12:55 **Digital Self-Management Support: Improving Outcomes for Patients with Diabetes**  
Adam Kaufman, PhD  
Canary Health, Los Angeles, California
- 13:10 **Integrating Real-Time Blood Glucose and Mobile Behavioral Data for Enhanced Problem Solving**  
Shelagh Mulvaney, PhD  
Vanderbilt University, Nashville, Tennessee
- 13:25 **A European Perspective**  
Pratik Choudhary, MD, FRCP(UK)  
King's College London, London, United Kingdom
- 13:40 **Q & A**
- 13:55 **End of session/Break**

**Friday, November 11, 2016**

**Session 4: Artificial Pancreas – Recent Innovations in Algorithms**

**14:15 Moderators**

Jeffrey Joseph, DO  
Thomas Jefferson University  
Philadelphia, Pennsylvania

Marc Torjman, PhD  
Thomas Jefferson University  
Philadelphia, Pennsylvania

**14:20 Artificial Pancreas Award**

**14:25 Model Predictive Control for AP: Cost Function Design to Improve Safety & Performance**

Ravi Gondhalekar, PhD  
Harvard University, Cambridge, Massachusetts

**14:35 Combining Two Schools of Thought in One Algorithm**

Moshe Phillip, MD  
Institute for Endocrinology and Diabetes, Schneider Children's Medical Center of Israel, Petah Tikva, Israel

**14:45 Individually Adaptive Algorithm for Artificial Pancreas: In Silico & One-Month Outpatient Free-Living Conditions**

Claudio Cobelli, PhD  
University of Padova, Padova, Italy

**14:55 inControl: a Closed Loop Control System for Type 1 Diabetes**

Patrick Keith-Hynes, PhD  
TypeZero Technologies, Charlottesville, Virginia

**15:05 Multi-Module Multivariable Artificial Pancreas Control Systems**

Ali Cinar, PhD  
Illinois Institute of Technology, Chicago, Illinois

**15:15 Integration of an Adaptive Bolus Calculator in an Artificial Pancreas**

Nick Oliver, FRCP  
Imperial College, London, United Kingdom

**15:25 Translation of Hybrid Closed – Loop Technology Into Better Care for T1D**

William Tamborlane, MD  
Yale School of Medicine, New Haven, Connecticut

**15:35 Q&A**

**16:00 End of Session**

**16:00–18:30 Poster Session Night Two**

**18:30–20:00 Posters remain on display for viewing**



# Saturday, November 12, 2016

07:00 *Continental Breakfast*

## Session 5: New Drugs

08:00 **Moderators**

Curtiss Cook, MD  
Mayo Clinic Arizona  
Phoenix, Arizona

Alicia Warnock, MD  
US Navy; Walter Reed National Military Medical Center  
Bethesda, Maryland

08:05 **Student Presentation**

08:25 **Glucagon Formulations**

Jessica Castle, MD  
Oregon Health & Science University, Portland, Oregon

08:45 **Optimizing Basal Insulin**

David Kerr, MD, FRCPE  
William Sansum Diabetes Center, Santa Barbara, California

09:05 **Novel Rapid-Acting Insulins**

Tim Heise, MD  
Profil Institut für Stoffwechselforschung GmbH, Neuss, Germany

09:25 **Biosimilar Insulin**

Lutz Heinemann, PhD  
Science & Co., Dusseldorf, Germany

09:45 **Q & A**

10:00 **Break**

## Session 6: New Insulins and Delivery Systems

10:20 **Moderators**

Deborah Greenwood, PhD, RN, BC-ADM, CDE, FAADE  
Sutter Health  
Sacramento, California

Dorian Liepmann, PhD  
University of California, Berkeley  
Berkeley, California

10:25 **Infusion Set Advances**

Lutz Heinemann, PhD  
Science & Co., Dusseldorf, Germany

10:45 **Patch Pumps**

John Pickup, MA, BM, DPhil, DSc, FRCPath  
King's College London, London, United Kingdom

11:05 **Apps for Insulin Dosing Software**

Signe Schmidt, MD, PhD  
Hvidovre University Hospital, Hvidovre, Denmark

11:25 **OpenAPS**

Rachel Sandlain  
OpenAPS, Bel Air, Maryland

11:45 **Q & A**

12:00 *End of session/Lunch*

# Saturday, November 12, 2016

## Session 7: New Developments in Needle Sensor CGMs

- 13:00 **Moderators**  
Andrea Bell-Vlasov, PhD  
U.S. Food and Drug Administration  
Silver Spring, Maryland  
Jeffrey Sutton, MD, PhD  
National Space Biomedical Research Institute  
Houston, Texas
- 13:05 **New Data on Flash Glucose Monitoring**  
Scott Harper, BS  
Abbott Diabetes Care, Alameda, California
- 13:20 **Accuracy of a Novel CGM System Employing Transfer Technology**  
Shinjiro Sekimoto, MS  
Arkray, Inc., Kyoto, Japan
- 13:35 **Pushing the Boundaries in CGM Performance**  
Peter Simpson, MEng  
Dexcom, San Diego, California
- 13:50 **New Developments in Sensor Technology**  
Brian Kannard, BS, MBA  
Medtronic Diabetes, Northridge, California
- 14:05 **New Data on the Accu-Chek Insight CGM System**  
Guenther Schmelzeisen-Redeker, PhD  
Roche Diabetes Care GmbH, Mannheim, Germany
- 14:20 **Q & A**
- 14:35 **Break**

## Session 8: Social Media

- 14:55 **Moderators**  
Leslie Landree, PhD  
U.S. Food and Drug Administration  
Silver Spring, Maryland  
John Pickup, MA, BM, DPhil, DSc, FRCPath  
King's College London  
London, United Kingdom
- 15:00 **Harnessing Social Media for Diabetes Research**  
Joyce Lee, MD, MPH  
University of Michigan, Ann Arbor, Michigan
- 15:20 **How Social Media Affects Adoption and Use of Technology**  
Amy Tenderich, MA  
DiabetesMine, San Francisco, California
- 15:40 **The Diabetes Village-People with Diabetes Need to Be Heard**  
David Kerr, MD, FRCPE  
William Sansum Clinic, Santa Barbara, California
- 16:00 **Q & A**
- 16:20 ***End of session/Break***

**Saturday, November 12, 2016**

**Session 9: Live Demonstration**

16:30 **Moderator**

John Pickup, MA, BM, DPhil, DSc, FRCPath  
King's College London  
London, United Kingdom

16:35 **Quell & Quell Apps**

Frank McGillin  
Neurometrix, Inc., Waltham, Massachusetts

Shai Gozani, MD, PhD

Neurometrix, Inc., Waltham, Massachusetts

16:50 **Meeting Summary**

17:00 ***Adjourn Meeting***