<u>Pre-Meeting Workshops</u>

Workshop A – Investment Opportunities in Diabetes Technology

08:25 Panel 1: Introductory Overview
Nick Pliam, MD, PhD
Bay City Capital, San Francisco, California

John Ryan, MBA
Onset Ventures, Menlo Park, California

08:40 Panel 2: Glucose and Analyte Monitoring

Noninvasive Glucose Monitoring
Warren Grundfest, MD, FACS
University of California, Los Angeles, Los Angeles, California

Glucose and Analyte Monitoring with Respect to Regulatory Issues
Steven Gutman, MD
University of Central Florida, Orlando, Florida

Hospital Diabetes Monitoring and Insulin Delivery
Jeffrey Joseph, DO
Thomas Jefferson University, Philadelphia, Pennsylvania

09:45 Panel 3: Insulin and Metabolic Peptide Delivery

Benefits and Drawbacks of Insulin Pump Therapy
John Pickup, MD, PhD
Guy's Hospital, London, England

Insulin Pump Therapy in Type 2 Diabetes
Poul Strange, MD, PhD
Phase 1 to 4 LLC, Princeton Junction, New Jersey

Patient Preferences for Insulin Pump Therapy in Type 1 and Type 2 Diabetes
Gloria Yee, RN, CDE
University of California, San Francisco, San Francisco, California

10:50 Break

11:15 Panel 4: Lifestyle Management

Food Engineering
Todd Abraham, PhD, MBA
Kraft Foods Inc., Northfield, Illinois

Surgical Technologies for Treating Obesity
William Plovanic, CFA
Canaccord Adams, Chicago, Illinois

The Payer's Perspective on Lifestyle Intervention
Jeff Klonoff, MPH, MBA, CPA, CFP
Hewitt Associates, San Francisco, California

12:20 Conclusion

12:25 End of Workshop

12:25 Lunch

<u>Pre-Meeting Workshops</u>

Workshop B – Hemoglobin A1c Laboratory and Clinical Advances

<u>Laboratory and Diagnostic Panel</u>

08:25   Moderator
           Jan Krouwer, PhD
           Krouwer Consulting, Sherborn, Massachusetts

08:30   Biologic Variability in Hemoglobin A1c and Its Implications for Estimated Average Glucose and the
`   Diagnosis of Diabetes
           Robert Cohen, MD
           University of Cincinnati, Cincinnati, Ohio

09:05   Hemoglobin A1c Standardization: Progress and Current Issues
           Randie Little, PhD
           University of Missouri, Columbia, Missouri

09:25   Blood Spot Testing for Hemoglobin A1c
           Sanjay Kapur, PhD, MBA
           ZRT Laboratory, LLC, Beaverton, Oregon

09:45   Is Setting a Target Hemoglobin A1c Treatment Goal of 7% Reasonable?
           Trefor Higgins, MSc, FCACB
           DynaLIFE$_{Dx}$, Edmonton, Canada

10:00   Q & A and Panel Discussion

10:20   Break

<u>Clinical Panel</u>

10:45   Moderator
           Howard Zisser, MD
            Sansum Diabetes Research Institute, Santa Barbara, California

10:50   Toward More Rational Utilization of Hemoglobin A1c
           George Cembrowski, MD, PhD
           University of Alberta, Edmonton, Canada

11:10   Point-of-Care Hemoglobin A1c Testing in an Emergency Room Setting
           Michelle Magee, MD, CDE
           Georgetown University, Washington, District of Columbia

11:30   Use of 1,5-Anhydroglucitol for Assisting Postprandial Hyperglycemia
           Michael Shanik, MD
           Island Endocrinology, PC, Smithtown, New York

11:50   An Alternate Technology for Assessing Mean Glycemia: Dermal Fluorescence
           Marwood Ediger, PhD
           VeraLight, Inc., Albuquerque, New Mexico

12:05   Q & A and Panel Discussion

12:25   End of Workshop

12:25   Lunch

<u>Pre-Meeting Workshops</u>

Workshop C – Blood Glucose Monitoring: Decision Support and Data Management

<u>Academic Panel</u>

13:25	Moderators
	Richard Bergenstal, MD Stephen Gitelman, MD
	International Diabetes Center, University of California, San Francisco,
	Minneapolis, Minnesota San Francisco, California
13:30	Developing Clinical Decision Support Systems to Guide Therapy Using Self-Monitoring of Blood Glucose
	David Rodbard, MD
	Biomedical Informatics Consultants LLC, Potomac, Maryland
13:50	Model-Based Prediction of Blood Glucose for Decision Support in Diabetes: Pros and Cons
	Ole Hejlesen, PhD
	Aalborg University, Aalborg, Denmark
14:10	A Comparison of Seven-Point Self-Monitoring of Blood Glucose Testing and Continuous Glucose Monitoring
	Guido Freckmann, MD
	Institute for Diabetes Technology, Ulm, Germany
14:30	The Kaiser Algorithm for Glucose Control
	Marc Jaffe, MD
	Kaiser South San Francisco Medical Center, South San Francisco, California
14:50	Ambulatory Glucose Profile: A Universal Interactive Report to Facilitate Clinical Decision Making Employing Continuous Glucose Monitoring
	Roger Mazze, PhD
	International Diabetes Center, Minneapolis, Minnesota
15:05	Q & A and Panel Discussion
15:25	Break

<u>Industry Panel</u>

15:50	Moderators
	Richard Bergenstal, MD Stephen Gitelman, MD
	International Diabetes Center, University of California, San Francisco,
	Minneapolis, Minnesota San Francisco, California
15:55	Leveraging Technologies in Glucose Monitoring: Continuous Glucose Monitoring and Self-Monitoring of Blood Glucose
	Matthias Axel Schweitzer, MD, MBA
	Roche Diagnostics GmbH, Mannheim, Germany
16:15	Clinical Decision Support to Guide Glucose Management
	David Price, MD
	LifeScan, Inc., Milpitas, California
16:35	Patient-Guided Insulin Adjustments
	Israel Hodish, MD, PhD
	Hygiea, Ann Arbor, Michigan
16:55	Innovative Strategies for Inpatient Blood Glucose Data Management
	Denise Zito, BS, MT(ASCP)SI
	Medical Automation Systems, Inc., Charlottesville, Virginia
17:10	Q & A and Panel Discussion
17:30	End of Workshop
17:30-20:00	Reception and Poster Presentation
20:00-22:00	Posters Remain on Display for Viewing

Pre-Meeting Workshops

Workshop D – Future Drugs for Diabetes and Obesity

13:25   Moderator
          Umesh Masharani, MD
          University of California, San Francisco, San Francisco, California

13:30   Current Drugs for Diabetes and What Is Needed in the Future
          Robert Rushakoff, MD
          University of San Francisco, San Francisco, California

13:50   Alternative Routes of Insulin and Peptide Administration
          Lutz Heinemann, PhD
          Science & Co., Düsseldorf, Germany

14:10   Future Drugs for Diabetes
          Alexander Fleming, MD
          Kinexum, Harpers Ferry, West Virginia

14:30   Future Drugs for Obesity
          Frank Greenway, MD, FACP
          Louisiana State University, Baton Rouge, Louisiana

14:45   Q & A and Panel Discussion

15:10   Break

15:35   Moderators
          Robert Burk, MD
          Albert Einstein College of Medicine, Bronx, New York

          Gerald Sydorak, MD
          Burlingame, California

15:55   Drug Development Technology
          Jeffrey Trimmer, PhD
          Entelos, Inc., Foster City, California

16:15   Challenges in Conducting Clinical Trials of New Diabetes Drugs
          Wayman Wendell Cheatham, MD, FACE
          U.S. Navy, Bureau of Medicine and Surgery, Washington, District of Columbia

16:35   Conducting Diabetes Drug Clinical Trials: Regulatory Aspects
          Carl Anderson
          Tacoma, Washington

16:55   Will Bariatric Surgery Replace Drugs for Type 2 Diabetes?
          Pamela Foster, MD, FACS
          Peninsula Surgical Specialists Medical Group, Burlingame, California

17:10   Q & A and Panel Discussion

17:30   End of Workshop

17:30-20:00   Reception and Poster Presentation

20:00-22:00   Posters Remain on Display for Viewing

Agenda ▪ Friday, November 6, 2009

Ninth Annual Diabetes Technology Meeting

07:00   Continental Breakfast

Session I: Technologies for Metabolic Monitoring

08:00   Welcoming Remarks
               Carol Herman, RN
               Center for Devices and Radiological Health,
               U.S. Food and Drug Administration, Silver Spring, Maryland

08:05   Introduction
               David Klonoff, MD, FACP
               Mills-Peninsula Health Services, San Mateo, California;
               University of California, San Francisco, San Francisco, California

08:10   Moderator
               COL Karl Friedl, PhD
               U.S. Army, TATRC, Fort Detrick, Maryland

08:15   Keynote Address: Diabetes in the 21st Century
               Alfred Mann, MS
               MannKind Corporation, Valencia, California

08:35   Tattoo Technology for Managing Glucose
               Heather Clark, PhD
               Draper Laboratory, Cambridge, Massachusetts

08:55   Raman Spectroscopy for Noninvasive Glucose Monitoring
               Jan Lipson, PhD
               C8 MediSensors, Inc., Los Gatos, California

09:15   First Report of the Accuracy of Continuous Glucose Monitoring Using Glucose-Binding Protein (GBP)
               Kevin Judge, MD
               BD Technologies, Research Triangle Park, North Carolina

09:35   Sensor-Augmented Pump Therapy: Results of a Recently Completed Trial
               Jeroen Hermanides, MD
               Academic Medical Center, Amsterdam, The Netherlands

09:50   Q & A and Panel Discussion
10:10   Break

Session II: Biomarkers for Type 2 Diabetes

10:35   Moderator
               Lt Col Mark True, MD, FACP
               Lackland Air Force Base, San Antonio, Texas

10:40   Circulating Serum Protein Markers of Type 2 Diabetes
               Andreas Pfützner, MD, PhD
               IKFE Institute for Clinical Research, Mainz, Germany

11:05   A Multimarker Model for Assessing Risk of Type 2 Diabetes
               Michael McKenna, PhD
               Tethys Bioscience, Inc., Emeryville, California

11:30   Exercise Performance Biomarkers
               Kong Chen, PhD, MSCI
               National Institutes of Health, Bethesda, Maryland

11:55   Q & A and Panel Discussion
12:20   End of Session
12:20   Lunch

Ninth Annual Diabetes Technology Meeting

Session III: Artificial Pancreas—Continuing Glucose Monitoring Alarms

13:30	Moderators
	Jeffrey Joseph, DO
	Thomas Jefferson University, Philadelphia, Pennsylvania
	Marc Torjman, PhD
	University of Medicine and Dentistry of New Jersey, Camden, New Jersey
13:35	Artificial Pancreas Research Award
13:40	Alarm Characterization and Accuracy Criteria for a Continuous Glucose Monitor That Could Replace Self-Monitoring of Blood Glucose Testing
	Geoffrey McGarraugh, MS
	Abbott Diabetes Care, Alameda, California
14:00	Real-Time Continuous Glucose Monitoring Alarms and Considerations for Patients
	John Mastrototaro, PhD
	Medtronic Diabetes, Northridge, California
14:20	Analytical Methods for Assessment of the Efficacy of Alerts and Alarms of Continuous Glucose Sensors
	Jim Brauker, PhD
	Dexcom, San Diego, California
14:40	Accuracy of Continuous Glucose Monitoring Alarms and Its Relationship to the Effectiveness of Open- and Closed-Loop Control
	Boris Kovatchev, PhD
	University of Virginia, Charlottesville, Virginia
15:00	Overnight Closed-Loop Insulin Delivery
	Roman Hovorka, PhD
	University of Cambridge, Cambridge, England
15:15	Q & A and Panel Discussion
15:40	Break

Session IV: Artificial Pancreas—The Food and Drug Administration's Point of View* (*CNE Accredited)

16:05	Moderators
	Jeffrey Joseph, DO
	Thomas Jefferson University, Philadelphia, Pennsylvania
	Marc Torjman, PhD
	University of Medicine and Dentistry of New Jersey, Camden, New Jersey
16:10	Panel Members
	Patricia Beaston, MD
	U.S. Food and Drug Administration, Silver Spring, Maryland
	Arleen Pinkos, MT(ASCP)
	U.S. Food and Drug Administration, Silver Spring, Maryland
	Joy Samuels-Reid, MD, FAAP
	U.S. Food and Drug Administration, Silver Spring, Maryland
	Charles Zimliki, PhD
	U.S. Food and Drug Administration, Silver Spring, Maryland
17:30	End of Session
17:30-20:00	Reception and Poster Presentation
20:00-22:00	Posters Remain on Display for Viewing

Ninth Annual Diabetes Technology Meeting

07:00   Continental Breakfast

Session V: Alternate Delivery Routes for Insulin and Metabolic Peptides

08:00   Diabetes Technology Leadership Award
         David Klonoff, MD, FACP
         Mills-Peninsula Health Services, San Mateo, California;
         University of California, San Francisco, San Francisco, California

08:05   Moderators
         Gerold Grodsky, PhD
         University of California, San Francisco, San Francisco, California

         Athanassios Sambanis, PhD
         Georgia Institute of Technology, Atlanta, Georgia

08:10   Fulfilling the Promise of Diabetes Technology: From Pumps to an Artificial Pancreas
         William Tamborlane, MD
         Yale University, New Haven, Connecticut

08:30   When to Add Insulin in Type 2 Diabetes Patients Who Are Failing Oral Agents and/or Glucagon-Like Peptide-1 Therapy
         Janet McGill, MD
         Washington University, St. Louis, Missouri

08:50   Insulin Delivery Technology: Injection Techniques and Needle Lengths
         Paul Hofman, MD
         University of Auckland, Auckland, New Zealand

09:10   Closed-Loop Glycemic Control: The Importance of Insulin Kinetics
         Kenneth Ward, MD
         Oregon Health Services University, Portland, Oregon

09:30   The Technology and Clinical Aspects of Nasal Insulin Therapy
         Lance Berman, MD
         CPEX Pharmaceuticals, Inc., Exeter, New Hampshire

09:50   IN-105: A Novel Insulin Analogue
         Anand Khedkar, MSc(Tech)
         Biocon Limited, Bangalore, India

10:05   Q & A and Panel Discussion

10:30   Break

Session VI: Diabetes Telemedicine* (*CNE Accredited)

11:10   Moderators
         Riccardo Bellazzi, PhD
         University of Pavia, Italy

         Jan Wojcicki, PhD, DSc
         Institute of Biocybernetics, Warsaw, Poland

11:15   Telemedicine Support for Real-Time Continuous Glucose Monitoring
         Mercedes Rigla, MD, PhD
         Hospital de Sabadell, Barcelona, Spain

11:35   A Diabetes Telemedicine System with Decision Support: Two-Year Update
         Eckhard Salzsieder, PhD
         Institute of Diabetes, Karlsburg, Germany

11:55   Peterson Student Award and Winner Presentation

12:15   Q & A and Panel Discussion

12:30   End of Session

12:30   Lunch

Ninth Annual Diabetes Technology Meeting

Session VII: Hospital Technology

13:30   Moderators
         Dorian Liepmann, PhD
         University of California, Berkeley, Berkeley, California

         Ann Sheehy, MD, MS
         University of Wisconsin, Madison, Wisconsin

13:35   Clinical Aspects of Tight Glycemic Control in the Hospital
         Douglas Coursin, MD
         University of Wisconsin, Madison, Wisconsin

13:55   How Glucose Should be Measured in the Intensive Care Unit
         Martin Ellmerer, PhD
         Medical University Graz, Graz, Austria

14:15   A Novel Fluorescent Intravascular Sensor for Continuous Glucose Monitoring in the Intensive Care Unit
         Thomas Peyser, PhD
         Glumetrics, Irvine, California

14:30   Q & A and Panel Discussion

14:50   Break

Session VIII: Technologies for Improving Adherence to Therapy* (*CNE Accredited)

15:15   Moderator
         John Pickup, MD, PhD
         Guy's Hospital, London, England

15:20   Technology and Adherence: What Is the Link?
         Robert Gabbay, MD, PhD
         Pennsylvania State University, Hershey, Pennsylvania

15:40   Efficacy of Continuous Glucose Monitoring in Patients with Type 2 Diabetes Mellitus
         COL Robert Vigersky, MD
         U.S. Army, Walter Reed Army Medical Center, Washington, District of Columbia

16:00   Panel Discussion: A Challenge to Industry—What Technology Do We Need for Improving Adherence and Outcomes?
         Daniel Crowe, MD
         Southborough Medical Group, Southborough, Massachusetts

         Neesha Ramchandani, PNP, CDE
         Maimonides Medical Center, Brooklyn, New York

         Brian Hipszer, PhD
         Thomas Jefferson University, Philadelphia, Pennsylvania

         Amy Tenderich, MA
         Diabetes Mine, San Francisco, California

17:00   End of Session

Session IX: Live Demonstration* (*CNE Accredited)

17:05   Moderator
         John Pickup, MD, PhD
         Guy's Hospital, London, England

17:10   Live Demonstration of the U.S. Army Warfighter Physiological Status Monitor
         Mark Buller, ScM
         U.S. Army, Research Institute of Environmental Medicine, Natick, Massachusetts

17:30   End of Meeting