

**The National Cancer Institute Office of Biorepositories and Biospecimen Research (OBBR)
and the National Institutes of Health Office of Rare Diseases present the
Biospecimen Research Network (BRN) Symposium: Advancing Cancer Research Through
Biospecimen Science**

March 13–14, 2008
Renaissance M Street Hotel
Washington, D.C.

Symposium Goal:

The primary goal of the symposium is to address the significant impact of pre-analytical biospecimen variability on cancer research and molecular medicine.

The meeting will feature expert presentations and interactive discussions from a broad range of stakeholders whose work involves biospecimens, including research investigators, clinicians, industry representatives, hospital administrators and patient advocates.

Agenda

**Thursday, March 13,
2008**

7:30 a.m. - 8:30 a.m.

8:30 a.m. - 8:45 a.m.

Registration and Continental Breakfast

Welcome

Anna D. Barker, Ph.D.

Deputy Director

National Cancer Institute (NCI)

Director

Advanced Technologies and Strategic Partnerships

8:45 a.m. - 9:15 a.m.

**The Importance of High-Quality Biospecimens to the
Research Enterprise**

Carolyn C. Compton, M.D., Ph.D.

Director, Office of Biorepositories and Biospecimen Research
(OBBR)

Acting Director, Office of Technology and Industrial Relations
(OTIR)

Office of the Director, NCI

9:15 a.m. - 9:30 a.m.

Question-and-Answer Session

9:30 a.m. - 10:00 a.m.

**The Role of Biospecimens in Biomarker Research:
Challenges and Opportunities**

David F. Ransohoff, M.D.

Professor of Medicine and Clinical Professor of Epidemiology
University of North Carolina at Chapel Hill

10:00 a.m. - 10:15 a.m.

Question-and-Answer Session

10:15 a.m. - 10:30 a.m.

Break

10:30 a.m. - 12 noon

**Lessons Learned: Effects of Biospecimen Quality on Genomic
and Proteomic Research**

Session Chair: Carolyn C. Compton, M.D., Ph.D.

Director, OBBR

Acting Director, OTIR

Office of the Director, NCI

10:30 a.m. - 11:00 a.m.

Pitfalls and Gaps in Research Using Human Biospecimens

Patrick O. Brown, M.D., Ph.D.

Investigator
Howard Hughes Medical Institute
Department of Biochemistry
Beckman Center for Molecular and Genetic Medicine
Stanford University Medical Center

11:00 a.m. - 11:15 a.m. **Question-and-Answer Session**

11:15 a.m. - 11:45 a.m. **Critical Pre-Analytical Variables in the Real World of Tissue Procurement**
Lance Liotta, M.D., Ph.D.
University Professor, Life Sciences
Co-Director, Center for Applied Proteomics and Molecular Medicine
George Mason University

11:45 a.m. - 12 noon **Question-and-Answer Session**
12 noon - 1:15 p.m. **Hosted Lunch Tables: Meet the Experts**
(Lunch will be available for purchase.)

1:15 p.m. - 2:45 p.m. **HER2/neu: Lessons Learned From Paired Diagnostics and Therapeutics**
Session Chair: Elizabeth Hammond, M.D., FCAP
Professor of Pathology
University of Utah School of Medicine/LDS Hospital

1:15 p.m. - 1:35 p.m. **Presentations and Panel Discussion:**
Paul Waring, M.D., Ph.D., M.B.B.S.
Senior Director of Pathology and Diagnostics
Genentech, Inc.

1:35 p.m. - 1:55 p.m. **Measurement of HER2**
Daniel F. Hayes, M.D.
Clinical Director, Breast Oncology Program
Professor, University of Michigan Comprehensive Cancer Center

1:55 p.m. - 2:15 p.m. **Molecular Diversity of Human Breast Cancers**
Dennis J. Slamon, M.D., Ph.D.
Director, Clinical/Translational Research
Jonsson Comprehensive Cancer Center
Professor of Medicine and Chief
Division of Hematology and Oncology
David Geffen School of Medicine
University of California, Los Angeles

2:15 p.m. - 2:45 p.m. **Panel Discussion**
2:45 p.m. - 3:00 p.m. **Break**
3:00 p.m. - 5:00 p.m. **Research Advances in Biospecimen Science I**
Session Chair: Scott Jewell, Ph.D.
Associate Professor, Department of Pathology,
College of Medicine
The Ohio State University

3:00 p.m. - 3:20 p.m. **The NCI Biospecimen Research Network and Literature Database**
Helen Moore, Ph.D.
Director, Biospecimen Research Network
OBBR, NCI

3:20 p.m. - 3:30 p.m. **Question-and-Answer Session**

3:30 p.m. - 3:50 p.m. **Influence of Cellular Heterogeneity in Carcinoma Specimens for Identification of Clinically Relevant Molecular Signatures**
James L. Wittliff, Ph.D., M.D. hc
 Professor of Biochemistry and Molecular Biology
 James Graham Brown Cancer Center
 University of Louisville

3:50 p.m. - 4:00 p.m. **Question-and-Answer Session**

4:00 p.m. - 4:20 p.m. **Effects of Fixation vs. Tissue Processing on Immunohistochemical Analysis**
William E. Grizzle, M.D., Ph.D.
 Professor, Department of Pathology
 University of Alabama at Birmingham

4:20 p.m. - 4:30 p.m. **Question-and-Answer Session**

4:30 p.m. - 4:50 p.m. **Proteomic Discovery in Archived Tissue Blocks**
Brian M. Balgley, M.D., Ph.D.
 Chief Technical Officer
 Calibrant Biosystems, Inc.

4:50 p.m. - 5:00 p.m. **Question-and-Answer Session**

5:00 p.m. - 5:15 p.m. **Day 1 Wrap-Up**
Carolyn C. Compton, M.D., Ph.D.
 Director, OBBR
 Acting Director, OTIR
 Office of the Director, NCI

5:15 p.m. - 7:00 p.m. **Poster Session and Reception**
 Poster presenters may begin to set up their posters starting at 4:00 p.m.

Friday, March 14, 2008

7:30 a.m. - 8:30 a.m. **Registration and Continental Breakfast**

8:30 a.m. - 9:00 a.m. **Locking in Pre-Analytical and Post-Analytical Performance: Being Pound Wise, Not Penny Foolish**
Steve Gutman, M.D.
 Director
 Office of In Vitro Diagnostic Device Evaluation and Safety (OVID)
 Center for Devices and Radiological Health
 Food and Drug Administration (FDA)

9:00 a.m. - 9:15 a.m. **Question-and-Answer Session**

9:15 a.m. - 9:35 a.m. **Patients' Perspective on Biospecimen Quality**
Paula Kim
 Chief Executive Officer
 Translating Research Across Communities

9:35 a.m. - 9:45 a.m. **Question-and-Answer Session**

9:45 a.m. - 10:00 a.m. **Break**

10:00 a.m. - 11:30 a.m. **Assessing and Qualifying Biospecimen Quality**
Session Chair: Steven Gutman, M.D.
 Director, OVID, FDA

10:00 a.m. - 10:20 a.m. **Signal: Noise? The Importance of the Pre-Analytical Phase in Sample Storage**
Scott D. Patterson, Ph.D.
 Executive Director, Medical Sciences
 Amgen Inc.

10:20 a.m. - 10:30 a.m. **Question-and-Answer Session**
Pre-Analytical Variables in Validation of Methylated Biomarkers in Blood Plasma
Theo deVos, Ph.D., M.S.P.H.
Vice President, Development Diagnostics
Epigenomics, Inc.

10:30 a.m. - 10:50 a.m.

10:50 a.m. - 11:00 a.m. **Question-and-Answer Session**
11:00 a.m. - 11:20 a.m. **Measuring Biomarker Stability in Frozen Tissue**
Scott Jewell, Ph.D.
Associate Professor, Department of Pathology
College of Medicine
The Ohio State University

11:20 a.m. - 11:30 a.m. **Question-and-Answer Session**
11:30 a.m. - 12:30 p.m. **Lunch**
(Lunch will be available for purchase.)

12:30 p.m. - 2:00 p.m. **Research Advances in Biospecimen Science II**
Session Chair: William Grizzle, M.D., Ph.D.
Professor, Department of Pathology
University of Alabama at Birmingham

12:30 p.m. - 12:50 p.m. **Overcoming Challenges to Tissue-Based Studies**
Christopher J. Logothetis, M.D.
Chair, Department of Genitourinary Medical Oncology,
The University of Texas M. D. Anderson Cancer Center

12:50 p.m. - 1:00 p.m. **Question-and-Answer Session**
Nonpatient-Related Variables Affecting Detection of VEGF in Urine Biospecimens
Kevin Camphausen, M.D.
Chief, Radiation Oncology Branch
Head, Imaging and Molecular Therapeutics Section
NCI

1:00 p.m. - 1:20 p.m.

1:20 p.m. - 1:30 p.m. **Question-and-Answer Session**
Defining Optimal Tissue Handling Procedures for Multiplex In Vitro Diagnostics
Guido Brink, M.S.
Director, Quality Management and Regulatory Affairs
Agendia, BV

1:30 p.m. - 1:50 p.m.

1:50 p.m. - 2:00 p.m. **Question-and-Answer Session**
2:00 p.m. - 2:15 p.m. **Break**
Incorporating Biospecimen Science Into Research Practice: Opportunities, Challenges, and Progress
Session Chair: Kevin Camphausen, M.D.
Head, Imaging and Molecular Therapeutics Section
Chief, Radiation Oncology Branch
NCI

2:15 p.m. - 3:45 p.m.

2:15 p.m. - 2:35 p.m. **Harmonizing Biospecimen Best Practices Across the Prostate SPORES**
Angelo M. De Marzo M.D., Ph.D.
Director, Tissue Microarray Core Facility
Associate Director of Cancer Research Pathology
Associate Professor of Pathology, Oncology, and Urology

2:35 p.m. - 2:45 p.m. Johns Hopkins University
2:45 p.m. - 3:05 p.m. **Question-and-Answer Session**
Practical Applications of Biospecimen Science in Biobanking
Gerry Thomas, Ph.D.
Professor of Molecular Pathology
Imperial College London

3:05 p.m. - 3:15 p.m. **Question-and-Answer Session**
3:15 p.m. - 3:35 p.m. **CAP: Preparing Pathologists**
Elizabeth Hammond, M.D., FCAP
Professor of Pathology
University of Utah School of Medicine/LDS Hospital

3:35 p.m. - 3:45 p.m. **Question-and-Answer Session**
3:45 p.m. - 4:15 p.m. **General Question-and-Answer Session**
4:15 p.m. - 4:30 p.m. **Closing Remarks**
Carolyn C. Compton, M.D., Ph.D.
Director, OBBR
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