Biostatistics Epidemiology Administration Computing Resource Health Outcomes
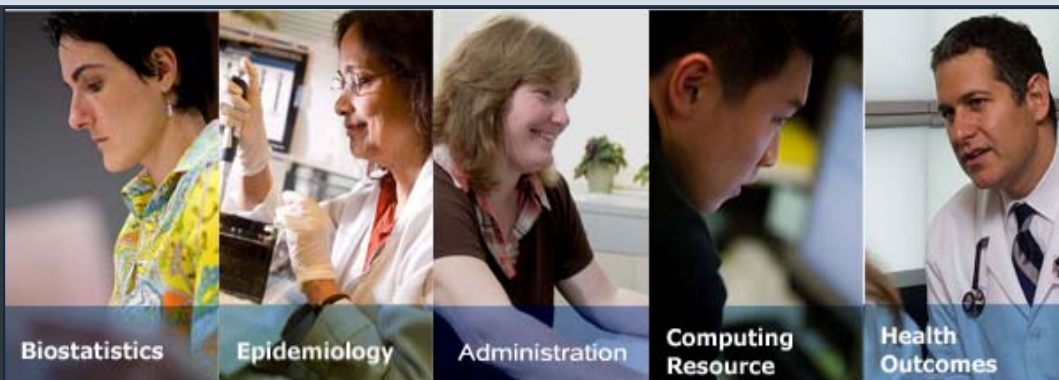
ANNUAL REPORT TO THE NATION ON THE STATUS OF CANCER

The 2009 Annual Report to the Nation on the Status of Cancer features colorectal cancer trends and highlights the use of statistical modeling as a tool for interpreting past and future trends to assist in cancer control planning and policy decisions. **Ann Zauber, PhD**, led the statistical modeling group which demonstrated that increased colorectal cancer screening made a major impact on reducing colorectal cancer mortality 1975-2000 and would be a very powerful intervention to further reduce colorectal cancer mortality if we could increase screening from 50% to 70%. Dr. Zauber is the principal investigator for the MISCAN modeling group which is part of the Cancer Intervention and Surveillance Modeling Network of NCI. Their statistical modeling was able to separate out effects of risk factors and screening interventions and establish the overall impact of the screening intervention.

COMPUTATIONAL SERVER CLUSTER MOVED TO NYC

Three of the eight servers of the Computational Server Cluster, which supports the statistical analysis and research performed by departmental statisticians, were recently moved from the New Jersey data center to our server room in the basement. Having all eight servers together within our reach allows us to manage and administer the cluster more efficiently and subsequently improve network functionality. The move was managed by **Venkatraman Seshan, Ravi Jagannathan**, and **Kai-Hsiung Lin**. These servers run Xubuntu (Linux) v9.10 (Karmic Koala) and support all open source statistical and programming software (R v2.10, C, Fortran, etc.). SAS 9.2 and MATLAB are available on one node each. Sun Grid Engine will be installed in these servers for efficient and simultaneous processing of multiple jobs. A training session for users will be offered soon. Email Ravi at jagannar@mskcc.org if you need more details or a login to the cluster.
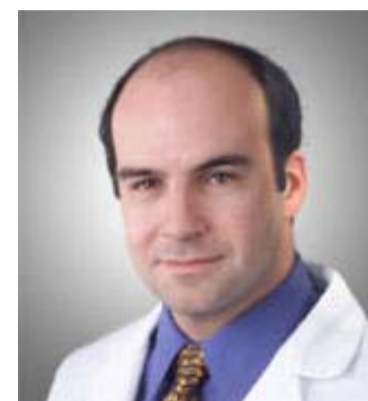
FACULTY PROMOTION

Peter B. Bach, **MD, MAPP**, has just been promoted to the rank of Member. Dr. Bach was the inaugural member of our Health Outcomes Research Group in 1998, and has contributed greatly to the group's national recognition for its innovative research in cancer health services. His work has been continuously funded by the NIH for the last decade, during which he has published more than 75 scientific papers, including multiple articles in the *New England Journal of Medicine*, *JAMA*, and the *Annals of Internal Medicine*. He is also a frequent contributor to the editorial sections of both medical journals and the lay media, including the *New York Times*, *Wall Street Journal*, and National Public Radio. Dr. Bach also performs clinical work as a pulmonary and critical care specialist in the Department of Medicine.

Peter B. Bach, MD, MAPP

His research has documented that low quality of care contributes to excess mortality for African Americans with cancer, that limited access to high quality primary care physicians may reduce care quality for minority groups, that care fragmentation in the Medicare program may drive up costs while impeding the development of effective pay-for-performance programs, and that CT screening for lung cancer may harm patients by prompting over-treatment without reducing the risk of serious illness or death.

In 2005 and 2006, he served as Senior Adviser to the Administrator of the Centers for Medicare and Medicaid Services. He is currently a Senior Scholar at the International Agency for Research on Cancer, and a member of the Institute of Medicine's National Cancer Policy Forum, the Committee on Performance Measurement for the National Committee on Quality Assurance, and the Health Information Technology advisory group to the President's Council on Science and Technology Policy. Dr. Bach is a graduate of Harvard College, the University of Minnesota Medical School, and the University of Chicago School for Public Policy.

NEW GRANTS: CONGRATULATIONS VICTORIA!

Victoria Blinder, MD

Victoria Blinder, MD, has been awarded two grants to support research on ethnic differences in the impact of breast cancer on employment status, financial situation, and quality of life. The first, an MSKCC Cancer Survivorship Initiative grant, sponsored by Chanel, is one of only two awarded in 2009. Dr. Blinder and her research team aim to develop a structural equation model to describe the relationship between employment status, financial situation, and quality of life, and to understand the factors that help explain this relationship.

The second grant is awarded through the NCI-funded CCNY/MSKCC Partnership (U54 CA137788). Dr. Blinder will partner with a Hunter College labor economist, Prabal De, PhD, to develop a methodology to evaluate discrimination in the labor market, to pilot test a measure of self-reported workplace discrimination, and to determine whether or not labor market discrimination is exacerbated by a diagnosis of breast cancer. This work will be embedded in the first study described above.

Participants for these studies will be drawn from patients at MSKCC, as well as those receiving treatment at six local community hospitals including: The Ralph Lauren Center for Cancer Care and Prevention, Queens Cancer Center of Queens Hospital, The Breast Center at New York Hospital Queens, Lincoln Medical and Mental Health Center, Bellevue Hospital Center, and Woodhull Medical and Mental Health Center. Departmental colleagues involved include: **Peter Bach, Ethan Basch, Elena Elkin, Amy Hamilton,** and **Sujata Patil**. The MSKCC Core Facility for Online Research Tools, directed by Dr. Basch, will participate in the development of electronic surveys.

SEMINAR SERIES

January marked the start of the 2010 Winter/Spring Biostatistics Seminar Series. All seminars take place on Wednesdays from 4pm to 5pm in the 3rd floor conference room, unless otherwise noted. Our next guest speakers will be Ian McKeague, PhD, from Columbia University on February 10th, and Sijian Wang, PhD, from University of Wisconsin – Madison on February 24th. The full schedule can be found on the departmental website.

GLIOGENE MEETING

Jonine Bernstein, PhD, and Sara Olson, PhD, hosted the international GLIOGENE study meeting at MSKCC on January 13-14. The study is focused on gene discovery and the genetic epidemiology of glioblastomas. Investigators from over 20 international research institutions took part, including Margaret Wrensch, PhD, MPH, from UCSF and Stephen Chanock, MD, from NCI.

STAFF ANNOUNCEMENTS
WELCOME NEW STAFF!

Radhai Rastogi
Research Project Coordinator, Epidemiology Service
Radhai Rastogi holds an MPH from Johns Hopkins, Bloomberg School of Public Health. Prior to coming to MSKCC, she worked at the NIH in the Genetic Basis of Mood and Anxiety Disorders Unit. She will be working with Irene Orlow, Sara Olson, and Malcolm Pike on their respective research needs.

Brian Denton
Assistant Research Biostatistician, Biostatistics Service
Brian Denton holds a Masters in Statistics from Purdue University and a Masters in Economics from Indiana University. He has experience as a SAS programmer working with inVentiv Clinical Solutions.
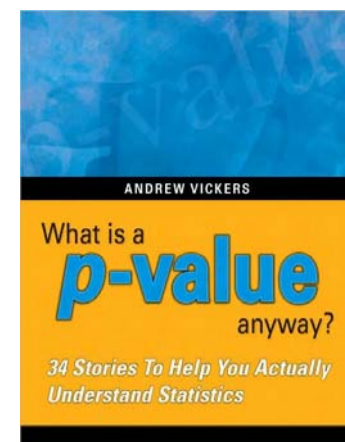
RECENT PROMOTIONS

Anne Reiner was promoted to Research Biostatistician in the Biostatistics Service.

STAFF ACHIEVEMENTS

Ravi Jagannathan ran the 2009 Chicago Marathon in October and finished with an official time of 4 hours 56 minutes. This was his second marathon and he improved his run time by 37 minutes compared to the Marine Corps Marathon he ran in Washington, DC in 2008. He plans to run the New Jersey and New York City marathons in 2010.

RECENT PUBLICATIONS

❖ **Andrew Vickers, PhD**, has published an introductory statistics textbook entitled *What is a p-value anyway? 34 Stories to Help You Actually Understand Statistics*. The publisher is Addison Wesley. The book is intended for undergraduates, and offers a fun introduction to the fundamental principles of statistics, presenting the essential concepts in thirty-four brief, enjoyable stories.

❖ *The Brief Pain Inventory and Its "Pain at Its Worst in the Last 24 Hours" Item: Clinical Trial Endpoint Considerations*
Thomas Atkinson, Tito Mendoza, **Laura Sit**, **Steven Passik**, Howard Scher, Charles Cleeland, and **Ethan Basch**
Thomas Atkinson, PhD, published a paper in *Pain Medicine* establishing the measurement properties and regulatory value of the Brief Pain Inventory, the most commonly used pain measure used in clinical trials.

❖ *Adverse Symptom Event Reporting by Patients vs Clinicians: Relationships with Clinical Outcomes*
Ethan Basch, **Xiaoyu Jia**, **Glenn Heller**, **Allison Barz**, **Laura Sit**, **Michael Fruscione**, **Mark Appawu**, **Alexia Iasonos**, **Thomas Atkinson**, **Shari Goldfarb**, Ann Culkin, Mark Kris, **Deborah Schrag**
Ethan Basch, MD, MSc, published a paper in the *Journal of the National Cancer Institute* finding that patient and clinician adverse event (AE) reporting is discrepant but complementary, providing a justification to include patient AE self-reporting in clinical trials and drug labeling.

❖ *Low Annual Caseloads of United States Surgeons Conducting Radical Prostatectomy*
Caroline Savage and **Andrew Vickers**
Caroline Savage, MPH, and **Andrew Vickers, PhD**, co-wrote a paper in the *Journal of Urology* showing that the majority of surgeons treating prostate cancer in the US have extremely low annual caseloads, which could potentially lead to increased rates of both surgical complications and cancer recurrence.

❖ *Analytical Strategies for Characterizing Chemotherapy Diffusion with Patient-Level Population-Based Data*
Camelia Sima, **Katherine Panageas**, **Glenn Heller**, and **Deborah Schrag**
Camelia Sima, MD, MS, published a paper in *Applied Health Economic and Health Policy* describing analytical approaches for characterizing trends in diffusion of chemotherapy drugs subsequent to their FDA approval.

❖ *Predicting the Risk of Perioperative Transfusion for Patients Undergoing Elective Hepatectomy*
Camelia Sima, William Jarnagin, Yuman Fong, **Elena Elkin**, Mary Fischer, David Wuest, Michael D'Angelica, Ronald DeMatteo, Leslie Blumgart, and **Mithat Gönen**
Camelia Sima, MD, MS, published a second paper in the *Annals of Surgery* detailing a prediction model for perioperative transfusion among patients undergoing elected hepatectomy.

DEPARTMENTAL HOLIDAY PARTY & SERVICE AWARDS
December 10, 2009

The Department took time to celebrate the holidays and honor the service achievements of our colleagues. With a sunset view of the East River, we snacked, dined, and cheered to the sounds of jazz and laughter, while some of us partook in friendly competition at the virtual ping-pong table of the Wii or with a little help from Snoopy. Special thanks go to each of you for contributing in your own ways and making this event such a memorable one. See more pictures online.

Congratulations and thank you for your service!

5 Years	10 Years	20 Years	35 Years
Jonine Bernstein, PhD	Mithat Gönen, PhD	Colin Begg, PhD	Howard Thaler, PhD
Nicole Ishill, MS	Andrew Vickers, PhD		
Shireen Lewis, MPA			
Xiaolin Liang, MA			
Katherine Wong			