

**61ST ANNUAL SYMPOSIUM
ON CANCER RESEARCH**

**SYSTEMS
BIOLOGY
OF
CANCER**

October 30–November 1, 2008

The University of Texas M. D. Anderson Cancer Center
R. Lee Clark Clinic, 11th Floor
1515 Holcombe Boulevard, Houston, Texas

Chairpersons

Michelle Barton, PhD

Lydia Kaviraki, PhD

Gordon B. Mills, MD, PhD

THE UNIVERSITY OF TEXAS
MD ANDERSON
CANCER CENTER

Making Cancer History®

61st Annual Symposium on Cancer Research

SYSTEMS BIOLOGY OF CANCER

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Professor, Computer Science
& Bioengineering
Department of Computer Science
Rice University
Houston, Texas

The 61st Annual Symposium will bring together internationally-recognized scientists from academia, industry, regulatory agencies, and patient advocates to describe and discuss state-of-the art information about how systems biology is transforming cancer research, to M. D. Anderson. Dr. Lydia Kavradi (Rice University) will present the keynote address. In addition, Dr. Bernhard O. Palsson (University of California, San Diego) will receive the Ernst W. Bertner Memorial Award and Dr. Joseph Nevins (Duke University) will receive the Heath Memorial Award. There will also be a poster session for participants to present their research findings, and a Meet the Experts Luncheon for trainees. The symposium begins Thursday morning and will end Saturday at noon.

GOAL

The goal of this symposium is to bring together investigators who are well acquainted with the realities of applying new strategies in the clinical setting with basic researchers involved in the most recent advances in understanding systems biology of cancer.

EDUCATIONAL OBJECTIVES

After attending the symposium, participants should be able to

- Have a broad view of bioinformatics with supporting data and applications in systems biology of cancer;
- Discuss the advances in model organisms, computational biology and signaling;
- Identify opportunities for cross disciplinary funding and training in systems biology of cancer.

TARGET AUDIENCE

This symposium is directed towards scientists, scientists-in-training, physicians, physicians-in-training, students, and fellows interested in integrating large molecular data sets to generate information relevant to understanding the mechanism of cancer growth and ultimately diagnosing and treating it.

EDUCATIONAL METHODS

- Lectures
- Question-and-Answer Sessions
- Panel Discussions
- Posters

EVALUATION

A course evaluation form will provide participants with the opportunity to comment on the value of the program content to their practice decisions, performance improvement activities, or possible impact on patient health status. Participants will also have the opportunity to comment on any perceived commercial bias in the presentations as well as to identify future educational topics.

Accreditation

The University of Texas M. D. Anderson Cancer Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The University of Texas M. D. Anderson Cancer Center designates this educational activity for a maximum of 16.00 *AMA PRA Category 1 Credit(s)*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.

CME Certificates and Attendance Verification Certificates

Certificates awarding *AMA PRA Category 1 Credit*[™] or certificates documenting attendance will be distributed to participants when an individual departs the conference. To obtain a CME certificate, physicians must submit a completed evaluation questionnaire and a CME Verification Form.

Upon request, a record of attendance (certificate) will be provided on-site to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

CALL FOR POSTERS

Abstracts may be submitted for the Poster Session but must be received no later than August 1, 2008. All abstracts must be submitted electronically via our web-based transmittal form.

Should you have difficulty with the electronic system, call the Office of CME/Conference Services at 713.745.5000 for guidance. Participants will be notified of their posters' acceptance by mail or e-mail by September 5, 2008. Please indicate the person to whom correspondence should be sent if other than the first author and include an address, telephone number, fax number, and e-mail address (if available) when submitting the abstract. Registration for the symposium must be submitted with the abstract. Submit the abstract transmittal form and registration form to: <http://www.mdanderson.org/conferences>.

POSTER AWARDS

Trainees (graduate students or post-doctoral fellows) submitting abstracts for the symposium may request to be considered for a Poster Award by checking the appropriate box on the registration form. Abstracts will be judged by the organizing committee, and winners announced at the symposium. Winners must be present, and must present their poster to receive a prize. Details of the prizes to be announced on the symposium website.

YOUNG INVESTIGATOR TRAVEL FELLOWSHIP AWARDS

A limited number of travel fellowships will be available to graduate and medical students, postdoctoral fellows, and physicians in training. Only those applicants who submit abstracts will be considered for an award, which is intended to offset some of the expenses incurred by the recipient in connection with attending the symposium. Anyone wishing to apply for a travel fellowship should check the appropriate box on the registration form and attach a letter of recommendation. This letter should be on official letterhead, be signed by the dean or department head, and contain the following information about the applicant (due by August 1, 2008):

1. academic status
2. research activities in the subject area of the meeting
3. citations of recent articles in this subject area published in peer-reviewed journals

PROGRAM

Registration will open at 7:00 a.m. on Thursday, October 30, 2008.

Thursday, October 30, 2008

8:15 a.m. **KEYNOTE LECTURE**
**Integrating Molecular Markers in the Era
of Personalized Cancer Treatment**
Lydia Kavradi, PhD
Rice University
Houston, Texas

SESSION I: MODEL ORGANISMS

Session Co-chairs: Georg Halder, PhD; Jill Schumacher, PhD

- 9:15 **Introduction**
Georg Halder, PhD
- 9:20 **Gene Regulatory Networks for the Dorsal-ventral
Patterning of the Drosophila Embryo and Heart Migration
in the Ciona Tadpole**
Michael Levine, PhD
University of California, Berkeley
Berkeley, California
- 9:50 Break
- 10:10 **Gene-centered Transcription Regulatory Networks**
Marian Walhout, PhD
University of Massachusetts Medical School
Worcester, Massachusetts
- 10:40 **Integrated Analysis of Yeast Metabolism**
Jens Nielsen, PhD
Chalmers
Gothenberg, Sweden
- 11:10 **Gene Circuit Dynamics and Differentiation at the
Single-Cell Level**
Michael Elowitz, PhD
California Institute of Technology
Pasadena, California
- 11:45 Lunch/Poster Session I

SESSION II: COMPUTATIONAL BIOLOGY

Session Co-chairs: Ananth Annapragada, PhD; Gabor Balazsi, PhD;
Mandri Obeyesekere, PhD

1:15 **Introduction**
Session Co-chairs

1:20 **Efficacy of Weekly Docetaxel for Patients with Intense Angiogenesis: Validation of a New Theranostic Method Combining Biopsy Experiments and a Mathematical Model in a Mesenchymal Chondrosarcoma Patient**

Zvia Agur, PhD
Institute for Medical Biomathematics
Bnei, Ataroth, Israel

1:50 **Engineered Gene Circuits**

Jeff M. Hasty, PhD
University of California, San Diego
La Jolla, California

2:20 **Metabolic Engineering for Monitoring Physiologic Function**

Martin Yarmush, MD, PhD
Massachusetts General Hospital
Boston, Massachusetts

2:50 **Interactome Networks**

Marc Vidal, PhD
Dana-Farber Cancer Institute
Boston, Massachusetts

3:10 Break

3:40 **Computational Systems Biology for Modeling Cancer**

Pedro Mendes, PhD
University of Manchester
Manchester, United Kingdom

4:15 **THE ERNST W. BERTNER MEMORIAL AWARD**

Introduction: John Mendelsohn, MD
Reconstruction of the Genome-scale Human Metabolic Map Based on Build-35 and Bibliomic Data

Bernhard O. Palsson, PhD
University of California, San Diego
La Jolla, California

5:30-6:30 Reception

Friday, October 31, 2008

SESSION III: SIGNALING

Session Co-chairs: Rakesh Kumar, PhD; Prahlad Ram, PhD

8:15 **Introduction**
Rakesh Kumar, PhD

8:20 **Phospho-Signaling Networks, Disease Mechanism, and Clinical Outcome at the Single Cell Level in Myeloproliferative Disorders and Lymphoma**

Garry P. Nolan, PhD
Stanford University School of Medicine
Stanford, California

- 8:50 **A Systems Biology Approach to Understanding DNA Damage Signaling**
Michael Yaffe, PhD
Massachusetts Institute of Technology
Cambridge, Massachusetts
- 9:20 **A Robustness-based Approach to Systems-oriented Drug Design**
Hiroaki Kitano, PhD
The Systems Biology Institute
Shuibuya, Tokyo, Japan
- 9:50 Break
- 10:10 **Measuring and Modeling Cancer Pathways and Pharmacology**
Peter Sorger, PhD
Harvard Medical School
Boston, Massachusetts
- 10:40 **From Regulatory Motifs in Signaling Networks to Cellular Functions**
Srinvas (Ravi) Iyengar, PhD
Mount Sinai School of Medicine
New York, New York
- 11:15 **WILSON STONE AWARD PRESENTATION AND LECTURE**
Introduction: Oliver Bogler, PhD
- Noon Meet the Experts Luncheon/Poster Session II

SESSION IV: TRANSLATIONAL SYSTEMS BIOLOGY

Session Co-chairs: Ju-Seog Lee, PhD; Lajos Pusztai, PhD

- 1:30 **Introduction**
Session Co-chairs
- 1:35 **An Integromic Approach to Drug and Biomarker Discovery**
John Weinstein, MD, PhD
M. D. Anderson
Houston, Texas
- 2:05 **A Systems Approach to Marker Guided Therapy in Breast Cancer**
Joe W. Gray, PhD
Berkeley Lab
Berkeley, California
- 2:35 **Systems Biology in Drug Discovery and Development**
Didier Scherrer, PhD
AstraZeneca
Cheshire, United Kingdom
- 3:05 Break

- 3:30 **A Genome to Systems Understanding of Cancer**
Edison Liu, MD
Genome Institute of Singapore
Singapore
- 4:00 **HEATH MEMORIAL AWARD AND LECTURE**
Introduction: John Mendelsohn, MD
Genomic Strategies to Personalize Cancer Therapy
Joseph R. Nevins, PhD
Duke University
Durham, North Carolina
- 5:00-6:00 Poster Reception

Saturday, November 1, 2008

SESSION V: OPPORTUNITIES FOR CROSS-DISCIPLINARY FUNDING AND TRAINING

Session Co-chairs: Jonas Almeida, PhD; Ralf Krahe, PhD

- 8:15 **Introduction**
Session Co-Chairs
- 8:20 **NCI's Integrative Cancer Biology Program**
Daniel Gallahan, PhD
National Cancer Institute
Bethesda, Maryland
- 8:50 **Interdisciplinary Projects Arising in Pediatric Biomedicine**
Rudy Guerra, PhD
Rice University
Houston, Texas
- 9:20 **Opportunities for Cross Disciplinary Funding and Training**
Jack W. Smith, MD, PhD
The University of Texas School of Health Information Sciences
Houston, Texas
- 9:50 Break
- 10:10 **Opportunities for Leveraging the Clinical and Translational Science Awards to Enhance Training and the Conduct of Cancer Research**
Barbara Alving, MD
National Institutes of Health
Bethesda, Maryland
- 10:40 Panel Discussion
- 11:45 Closing Remarks
- Noon Adjourn

REGISTRATION INFORMATION

On-site registration opens at 7:00 a.m., Thursday, October 30, 2008. The opening session will begin at 8:15 a.m. on Thursday, October 30, and the symposium will adjourn at Noon on Saturday, November 1, 2008. Advance registration is encouraged as space and materials are limited. Please see registration form for applicable fees. The deadline for advance registration is October 17, 2008.

There are three ways to register:

- Mail to: Department of CME/Conference Services – Unit 1381, The University of Texas M. D. Anderson Cancer Center, P. O. Box 301439, Houston, Texas 77230-1439.
- Fax to 713-794-1724
- On-line at www.mdanderson.org/conferences

We accept the following forms of payment:

- Check (payable through U.S. banks only)
- Money Order
- Credit Cards (MasterCard, VISA, and American Express)
- Cash (on-site registration)

A receipt and confirmation letter will be sent to you within ten working days of receipt of your fee.

The full conference registration fee includes the tuition, abstract book, Meet the Experts lunch, breaks, and receptions. The student registration fee includes all of the above excluding lunch on Thursday. Students wishing to participate in the Thursday lunch must pay an additional fee of \$12.00.

Students: A reduced registration fee has been established for full-time students and physicians in training (interns, residents, and fellows). All students claiming this reduced fee are required to submit a letter of introduction from the chairperson of their department with their registration form.

M. D. Anderson Alumni: Alumni is defined as any faculty member (research or clinical) who has worked at M. D. Anderson and has retired or resigned, or any educational trainee who has trained at M. D. Anderson.

REFUND/CANCELLATION POLICY: The registration fee, minus a \$50 administrative handling fee, is refundable if a written request is received on or before October 17, 2008. No refunds will be granted after that date. The request for a registration refund must include the tax identification number of the company or institution if registration was paid by a company or institution check. Although no refunds will be granted after October 17, 2008, you may transfer your registration to a colleague. For additional information, contact CME/Conference Services at 713-792-2223 or toll free at 866-849-5866.

The Department of CME/Conference Services reserves the right to cancel activities prior to the scheduled date, if low enrollment or other circumstances make it necessary. Each registrant will be notified by mail, e-mail, or the contact numbers as given on the registration form. In case of activity cancellation, liability of the Department of CME/Conference Services is limited to the registration fee. CME/Conference Services will refund the full registration fee.

The Department of CME/Conference Services has the right to limit the number of participants in a program and is not responsible for any expenses incurred by an individual whose registration is not confirmed and for whom space is not available.

For additional information, contact the Department of CME/Conference Services at 713-792-2223 or 866-849-5866.

Special Assistance

Contact the Department of CME/Conference Services at 713-792-2223 or 866-849-5866 if you have any special dietary or ADA accommodation needs.

Accommodations

- A block of rooms has been reserved for symposium attendees at the Hotel ZaZa, 5701 Main Street, Houston, Texas.
- Early hotel reservation is suggested.
- The hotel phone number is 713-526-1991.
- When you make reservations be sure to mention **M. D. Anderson's Research Symposium** to be assured of receiving the special meeting rate of \$199.00 single or double occupancy.
- Please add 17% Texas state and local taxes.
- Reservations and deposits received after September 29, 2008, will be confirmed if space is available and at current hotel published guest room rates.

Air Travel

M. D. Anderson has a program with Continental Airlines for discounted air travel. For discounts, call your travel professional or Continental's MeetingWorks toll free at 800-468-7022. Outside of the United States, please call your local Continental Airlines Reservation Office. Also, you may book online at www.continental.com. Enter your Z Code: **ZKCS** and Agreement Code: **3L23GL** in the Offer Code Box when searching for flights. Lower fares may be available on the Internet or through your travel agency.

Ground Transportation

- Houston is served by two airports, George Bush Intercontinental (IAH) and William P. Hobby (HOU).
- Taxicabs are available at an estimated cost of \$40-60, to or from William P. Hobby Airport or George Bush Intercontinental Airport.
- Super Shuttle operates a shuttle bus between George Bush Intercontinental Airport and the Hotel ZaZa for \$23 one-way and \$42 round-trip. For more information, call 713-523-8888 or toll-free at 800-258-3826 or on-line at www.supershuttle.com.
- Super Shuttle operates a shuttle bus between William P. Hobby Airport and the Hotel ZaZa for \$18 one-way and \$32 round-trip. For more information, call 713-523-8888 or toll-free at 888-258-3826 or on-line at www.supershuttle.com.

The University of Texas M. D. Anderson Cancer Center has implemented a process whereby everyone who is in a position to control the content of an educational activity must disclose all relevant financial relationships with any commercial interest that could potentially affect the information presented. M. D. Anderson also requires that all faculty disclose any unlabeled use or investigational use (not yet approved for any purpose) of pharmaceutical and medical device products. Specific disclosure will be made to the participants prior to the educational activity.

Agendas are subject to change because we are always striving to improve the quality of your educational experience. M. D. Anderson may substitute faculty with comparable expertise on rare occasions necessitated by illness, scheduling conflicts, and so forth.

Photographing, audio taping or videotaping is prohibited.

Please let us know what specific topics, issues or questions you wish to see addressed or emphasized in this activity. Fax or e-mail CME/Conference Services. All responses will be forwarded to the Program Chairs for consideration.

CONFERENCE REGISTRATION - 0396

61st Annual Symposium on Cancer Research - Systems Biology of Cancer October 30–November 1, 2008

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Check appropriate box for Young Investigator Travel Fellowship Award

Graduate or Medical Student Postdoctoral Fellow Physician-in-Training

Full Conference Registration Fee

Before October 17, 2008.....\$300.00
 After October 17, 2008.....\$375.00

One Day Registration Fee Thurs Fri Sat

Before October 17, 2008.....\$105.00
 After October 17, 2008.....\$135.00

M. D. Anderson Alumni

Before October 17, 2008.....\$225.00
 After October 17, 2008.....\$280.00

Student Registration Fee

Before October 17, 2008.....\$100.00.....Thurs. Lunch Fee \$12
 After October 17, 2008.....\$125.00.....Thurs. Lunch Fee \$15

M. D. Anderson Faculty, Staff, Trainees (Exempt)

Faculty Student Trainee Fellow Other
 Before October 17, 2008.....Thurs. Lunch Fee \$12
 After October 17, 2008.....Thurs. Lunch Fee \$15
 Abstract Book.....\$10

I am a post-doc or graduate student and would like my poster to be considered for a prize.

The University of Texas
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