



NORTHWESTERN  
UNIVERSITY

# Hematology/Oncology News



ROBERT H. LURIE  
COMPREHENSIVE CANCER CENTER  
OF NORTHWESTERN UNIVERSITY

Volume 2 Issue 10 July 2007

## Featured Faculty



**Annadriana Zakarija, M.D.**  
Instructor

Dr. Zakarija graduated from the University of Chicago in 1992 and received her medical degree from Rush Medical College in 1997. She completed an Internal Medicine residency at Northwestern University in 2000 and continued on at Northwestern for her Hematology and Oncology Fellowship, which she completed in 2004. In the same year she also received an MS degree in Clinical Investigation. Dr Zakarija has been on faculty at Northwestern since 2004.

Dr. Zakarija is the Medical Director of the Rube Walker Blood Center, and the Northwestern Center for Bleeding Disorders. She specializes in benign hematology, and her interests include hemophilia, thrombotic thrombocytopenic purpura (TTP), and coagulation disorders. Her research project with Dr. Charles Bennett and Dr. Hau Kwaan on risk factors for TTP, was recently presented at the American Society of Apheresis meeting where it received the best Hematology Abstract Award. She also enjoys teaching the housestaff and fellows, and has been recognized for her efforts by teaching awards from the Department of Medicine residents in 2006 and the Hematology-Oncology fellows in 2007.

Dr. Zakarija is a native Chicagoan, and continues to enjoy the city with her friends and family. She also enjoys cooking, traveling, and biking.

### *Hematology/Oncology News*

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## Recent Publications

[Agulnik M, da Cunha Santos G, Hedley D, Nicklee T, Dos Reis PP, Ho J, Pond GR, Chen H, Chen S, Shyr Y, Winkvist E, Soulieres D, Chen EX, Squire JA, Marrano P, Kamel-Reid S, Dancey J, Siu LL, Tsao MS.](#) Predictive and pharmacodynamic biomarker studies in tumor and skin tissue samples of patients with recurrent or metastatic squamous cell carcinoma of the head and neck treated with erlotinib. *J Clin Oncol.* 2007 Jun 1;25(16):2184-90.

[Bennett CL, Nebeker JR, Yarnold PR, Tigue CC, Dorr DA, McKoy JM, Edwards BJ, Hurdle JF, West DP, Lau DT, Angelotta C, Weitzman SA, Belknap SM, Djulbegovic B, Tallman MS, Kuzel TM, Benson AB, Evens A, Trifilio SM, Courtney DM, Raisch DW.](#) Evaluation of Serious Adverse Drug Reactions: A Proactive Pharmacovigilance Program (RADAR) vs Safety Activities Conducted by the Food and Drug Administration and Pharmaceutical Manufacturers. *Arch Intern Med.* 2007 May 28;167(10):1041-9.

[Engel RH, Kaklamani VG.](#) HER2-Positive Breast Cancer : Current and Future Treatment Strategies. *Drugs.* 2007;67(9):1329-41.

[Hormaeche I, Licht JD.](#) Chromatin modulation by oncogenic transcription factors: new complexity, new therapeutic targets. *Cancer Cell.* 2007 Jun;11(6):475-8.

[Kwaan HC.](#) The life and vision of a pioneer: a tribute to Tage Astrup, D.Sc., Dr.Med.h.c. *Semin Thromb Hemost.* 2007 Jun;33(4):299-300.

[Olsen EA, Kim YH, Kuzel TM, Pacheco TR, Foss FM, Parker S, Frankel SR, Chen C, Ricker JL, Marie Arduino J, Duvic M.](#) Phase IIB Multicenter Trial of Vorinostat in Patients With Persistent, Progressive, or Treatment Refractory Cutaneous T-Cell Lymphoma. *J Clin Oncol.* 2007 Jun 18

[Querfeld C, Kuzel TM, Guitart J, Rosen ST.](#) Primary cutaneous CD30+ lymphoproliferative disorders: new insights into biology and therapy. *Oncology (Williston Park).* 2007 May;21(6):689-96; discussion 699-700.

[Tigue CC, McKoy JM, Evens AM, Trifilio SM, Tallman MS, Bennett CL.](#) Granulocyte-colony stimulating factor administration to healthy individuals and persons with chronic neutropenia or cancer: an overview of safety considerations from the Research on Adverse Drug Events and Reports project. *Bone Marrow Transplant.* 2007 Jun 11

[Winter JN.](#) Defining the role of immunotherapy and radioimmunotherapy in the treatment of low-grade lymphoma. *Curr Opin Hematol.* 2007 Jul;14(4):360-8.

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## Funding Opportunity

The Charlotte Geyer Foundation supports research into the cause, prevention and treatment of cancer. The Foundation reviews proposals three times per year and awards grants up to \$100,000 each. The purpose of these awards is to provide up to one year of funding for exceptional proposals to give investigators the opportunity of advancing and improving projects to the point where they are able to successfully compete for an R01 or other award.

*The deadline is October 1, 2007.* If you plan to apply or need additional information, please contact the OFR Associate Director, Coleen Burrus, at 847-491-7435 or [c-burrus@northwestern.edu](mailto:c-burrus@northwestern.edu).

Full details, eligibility and instructions are available at:  
<http://www.charlottegeyer.org/apply.html>

## Featured Research Group

### *Ouchi Lab - Hem/Onc ENH*

The lab of Toru Ouchi, PhD has been working on the mechanism of human cancer development. Their primary research interests include human carcinogenesis caused by oncogenes and tumor suppressor genes. They use both molecular biological approaches and mouse model systems. They first demonstrated that BRCA1, breast cancer tumor suppressor protein, functions as a co-activator of p53 tumor suppressor protein, establishing that BRCA1 is involved in the regulation of gene expression. Recently, they isolated a gene encoding a protein named BAAT1 (BRCA1 Associated ATM Activator-1) which is required for the activation of ATM kinase, indicating that BRCA1 is also involved in the DNA damage pathway. One of their on-going projects is to generate mutant mice lacking BAAT1 gene to study the roles of BRCA1-BAAT1 pathway under conditions of cell stress.

The Ouchi group is also tackling another genetic approach using MMTV-Aurora-A mice. Aurora-A is a Ser/Thr kinase that is frequently overexpressed in a variety of human cancers. They and their collaborators confirmed that Aurora-A causes breast cancer when overexpressed in the breast, and found that those tumors contain cytogenetical problems such as aneuploidy. Their group is further conducting a translational approach to treat

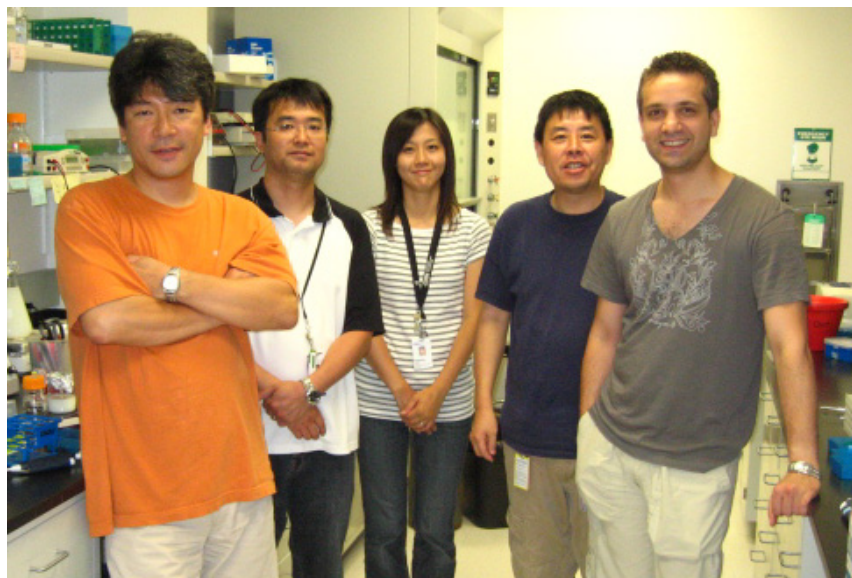
MTV-Aurora-A mice with specific chemical compounds.

Genes that they are working on, such as BRCA1, p53, Aurora-A etc, are closely associated with human cancers. Their translational research involves drug delivery against these tumors. In particular, they are collaborating with Merck to study Aurora-A inhibitors. Some of these inhibitors are currently under clinical trials.

Several Postdocs, students and research associates work in the Ouchi lab. They are from different countries around the world, resulting in an international atmosphere in the lab.

Dr. Ouchi is thinking of adding the aspect of systems biology and more translational research to his ongoing molecular biological studies. He is working with people in the Genome and Bioinformatics Cores at Northwestern University. Whole genome SNP screening is in progress to investigate the genome alteration in BRCA1 and Aurora-A-induced breast cancer.

Dr. Ouchi is currently running the laboratory on both the Evanston campus and the Chicago campus. Particularly, a downtown lab is for the murine model of human cancer. He would be happy to meet with people in the Northwestern community to discuss any idea of potential collaboration.



Ouchi lab "Team Genome Instability": (left to right) Dr. T. Ouchi, M. Taga (postdoc), M. Ouchi (Research Associate), M. Xu (Research Associate), F. Kara (postdoc). M. Ausman (IBiS student) is also a member

## News and Events

July Faculty Meeting  
Tuesday July 17th, 5:00 pm  
Lurie 5-133 Conference Room

Quarterly Hem/Onc Research Staff Meeting  
Wednesday July 18<sup>th</sup>, Noon  
Lurie 5-133 Conference Room

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## Congratulations

John Crispino, MD has been awarded a competitive renewal of his R01 from the NCI for the project titled "Mechanisms of Leukemogenesis in Down Syndrome".

Jonathan Licht, MD has received a Specialized Center of Research (SCOR) award from the Leukemia and Lymphoma Society, titled "Consortium for the Study of Chromatin Biology and Epigenetic Targeting in Hematologic Malignancies." This 5-year, \$6.25 million award will involve collaborative research of investigators from NU, Memorial Sloan-Kettering Cancer Center, Rockefeller University, Albert Einstein College of Medicine, and the University of Michigan.

Jayesh Mehta, MD and Seema Singhal, MD have received United States Patent 7,220,407 titled "G-CSF therapy as an adjunct to reperfusion therapy in the treatment of acute myocardial infarction". The invention relates to methods of using Granulocyte Colony Stimulating Factor (GCSF) polypeptide in conjunction with reperfusion therapy in the treatment of acute myocardial infarction or other ischemic events. Others listed on the patent are Charles Davidson, Nirat Beohar and Robert Bonow.

Hidayatullah Munshi, MD has been awarded a grant from the Wendy Will Case Cancer fund for his project titled "Fibrosis-Protease Cross-Talk Regulating Pancreatic Cancer Progression."

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## Welcome

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## Newly Opened Clinical Studies

DRUG G040148: TheraSphere for the Treatment of Liver Metastases: An Open Label Trial of TheraSphere in Patients with Liver Metastases from Primary Colorectal Cancer, Neuroendocrine Cancer or Non-Colorectal/Non-Neuroendocrine Cancer (P.I. Mulcahy)

DRUG CC-5013-CLL-001: A Multi-Center, Double-Blind, Randomized, Parallel-Group Study of the Efficacy and Safety of Two Lenalidomide Dose Regimens in Subjects with Relapsed or Refractory B-Cell Chronic Lymphocytic Leukemia (P.I. Frankfurt)

NU 07B1: A Double-Blind, Randomized Phase 2b Study Evaluating the Efficacy and Safety of Sorafenib Compared to Placebo when Administered in Combination with Paclitaxel in Patients with Locally Recurrent or Metastatic Breast Cancer (P.I. Gradishar)

ECOG 1206: Randomized Phase II Study of ECF-C, IC-C, or FOLFOX-C in Metastatic Esophageal and GE Junction Cancer (P.I. Mulcahy)

## Spotlight on Robert H. Lurie Comprehensive Cancer Center Division of Fertility Preservation

Today, cancer survivors are looking forward to a future of long-term survival due to advances in cancer detection and treatments. However, many of the therapies that have so effectively increased survival rates have long-lasting consequences, including impaired reproductive function. Traditionally, cancer patients had few choices for fertility preservation. However, recent innovations employing a three-dimensional alginate scaffold system for the *in vitro* maturation of murine follicles provide promising new technologies for clinical applications in human ovarian follicles; yet many physicians and patients are unaware of these options. In an effort to address the growing need for fertility preservation, the Division of Fertility Preservation was established. The mission of this new clinical division is to raise awareness about the impact of cancer treatment on reproductive potential, to assist cancer patients' identify their reproductive needs at the time of diagnosis and to address the quality of life for survivors, which includes parenthood after cancer. Restoration of fertility and hormonal function would substantially improve the quality of life for women of reproductive age after surviving cancer therapies, which may otherwise impair ovarian function.

As one of only five *Fertile Hope Center of Excellence* in the country, the Robert H Lurie Comprehensive Cancer Center of Northwestern University offers a comprehensive program of fertility-sparing options to men, women and children facing a

cancer diagnosis. Our goal is to offer these programs to cancer patients in their reproductive years prior to treatment. In order to accomplish this goal, the cancer center has begun to implement several programs to make fertility preservation a priority. For instance, the cancer center created a new patient navigator position for fertility preservation. Jill Trainer, LCSW is a full time, licensed clinical social worker who is available to meet with patients regarding their reproductive risks and provide options to preserve fertility prior to treatment. As a liaison between the cancer patient, oncologist and reproductive endocrinologist, the navigator can discuss options for fertility preservation and link the patient with the appropriate clinicians. Furthermore, at the Robert H. Lurie Comprehensive Cancer Center at Northwestern University, a Fertility Preservation questionnaire is automatically included within the electronic medical record (EPIC) for each cancer patient. Physicians are asked whether they spoke to the patient about fertility preservation options before closing the patient chart. Failure to answer the questionnaire will prevent the physician from closing the chart. The new feature of the EPIC chart is currently being piloted in Gynecologic Oncology. This process will remind physicians to discuss the possible consequences of cancer treatment and to refer patients to the appropriate resources. In doing so, the patient and provider engage in an open dialogue which will result in a more informed choice by the patient.

Jill is available during clinic hours to meet with patients to discuss their fertility options. Contact Jill by phone 6.1613, pager 5.7396, or [jtrainer@nmff.org](mailto:jtrainer@nmff.org) or send an email through EPIC.

For more information about the Division of Fertility Preservation, please refer to:  
<http://www.cancer.northwestern.edu/fertilitypreservation/index.cfm>