

From the Director

As many of our members know, we are now well into the process of submitting the competing renewal of our Cancer Center Support Grant (CCSG) application.

For those of you who are not familiar with this process, it initially involves the submission of a very complicated P30 grant application to the NCI, which all NCI-designated cancer centers must do every four to five years.

The CCSG must, of course, discuss outstanding science but in addition a very important part of the review is referred to as “essential characteristics,” which are facilities, organizational capabilities, interdisciplinary collaboration, institutional commitment, cancer focus, and authority of the director.



Dr. Williams

Our application is due Sept. 25. Many of us have already been working on it for months, and I believe we are on schedule.

After it is submitted, there will be an administrative review at the NCI followed by a site visit, which will occur Jan. 9. During that visit, there will be a presentation by all four of our research programs (Breast Cancer, Cancer Control, Experimental and Developmental Therapeutics, and Hematopoiesis, Microenvironment, and Immunology).

In the middle of the day, our cores for which we are seeking support from the CCSG (Biostatistics, CRO, Biologic Microscopy, Clinical Pharmacology, Flow Cytometry, Chemical Genomics) will do a poster session for the reviewers. More than likely, there will be tours of the cores as well.

After the site visit, the report will be transmitted to the Cancer Center Parent Committee and ultimately the NCI Executive Committee. We should have some information in spring 2008 and the new funding cycle will start in the fall.

The process is a difficult one but of obvious importance to all of us and our institution. I am confident our application will be by far the best one we have ever submitted and that we will be successful. I sincerely appreciate the efforts of all who are involved and ask your indulgence as we proceed with this important task.

[Dr. Stephen Williams](#)

Director, IU Simon Cancer Center



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Advanced therapy offers cure for relapsed cancer patients

Testicular cancer patients who do not respond to traditional therapy can be cured with high-dose chemotherapy and a stem cell transplant, according to an Indiana University School of Medicine report in the July 26 issue of [*The New England Journal of Medicine*](#).

About 90 percent of testicular cancer patients respond to traditional therapy, which involves multiple courses of cisplatin, first used successfully in the treatment of this disease by Lawrence Einhorn, MD, in the mid-1970s. That course of therapy turned a disease from a mostly fatal cancer into one of the more curable forms of cancer for men, who typically are in their 20s when diagnosed with testicular cancer.

It is rare for the NEJM to carry a retrospective study from a single institution that is not a randomized study. This review looks at the outcome of 184 patients with metastatic testicular cancer. Einhorn and colleagues demonstrated that the disease is potentially curable with a high dose chemotherapy and stem cell transplant using cells harvested from the patient before the initial chemotherapy infusion.

The patients received carboplatin and etoposide chemotherapy at five times the dosage administered to men receiving initial therapy. A side effect of the high dosage is a reduction of blood cells so a stem cell transplant is given to replenish the body's immune system through a process similar to a blood transfusion. Three to four weeks later the entire process is repeated.

"The message for patients is that through research, diligence, and new technologies there is hope," Einhorn, professor of medicine at the Indiana University Melvin and Bren Simon Cancer Center and the lead author of the study,

said. “The bar is steadily being raised and more patients are being saved.”

Although the number of relapsed testicular cancer patients is small, IU Simon Cancer Center treats a majority of them. As a leader in this treatment, the center’s researchers were able to collect the necessary data for the NEJM retrospective.

For the patients each year who are treated with this therapy, there is renewed hope. “This is new medicine, and it tells patients that cures are on the horizon,” Stephen Williams, MD, director of IU Simon Cancer Center and a co-author of the paper, said.

Other IU co-authors include Amy Chamness, BA; Mary J. Brames, RN; and Susan M. Perkins, PhD.



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News Briefs

Angiogenesis core adds full-time tech

A new full-time technician, Myka Estes, has joined the Angiogenesis and Endothelial Progenitor Cell Core Facility. The core offers a variety of in vitro and in vivo angiogenesis assays including, in vivo murine angiogenesis models, and a sophisticated eight-color flow cytometric analysis of circulating endothelial cells in human blood. For additional information, contact David Ingram, director, at dingram@iupui.edu, or Laura Mead at lmead@iupui.edu.

Swanson named associate director for cancer prevention and control

G. Marie Swanson, PhD, MPH, has been named associate director for cancer prevention and control at IU Simon Cancer Center and professor and associate chair of the Department of Public Health, IUSM. Swanson most recently was dean of the Mel and Enid Zuckerman College of Public Health at the University of Arizona. Swanson earned a master's degree and a doctorate in sociology from Wayne State University and a master's of public health in epidemiology from The Johns Hopkins University.



Marie Swanson

Matei named co-leader of EDT program

Daniela Matei, MD, has been named co-leader of the experimental and developmental therapeutics (EDT) program. Matei attended medical school in her native Romania and completed her internship and residency in New York and her hematology and oncology fellowship at the University of California in Los Angeles, where she was the recipient of a National Institutes of Health training grant. Matei is a recent recipient of the IUSM's Young Investigators Award in recognition of her ovarian cancer research.



Daniela Matei

Lu Named Efroymsen Professor of Oncology

Hua Lu, MD, PhD, has been appointed a professor of biochemistry and molecular biology and nominated as the first Daniel and Lori Efroymsen Professor of Oncology at IUSM. Lu earned his medical degree from Jiangxi Medical College in Nanchang, China. He also holds a master's degree from the Chinese Academy of Medical Sciences in Beijing, China, and a doctorate in biochemistry and molecular biology from Rutgers University. Most recently, he was on the faculty at the Oregon Health and Science University and Princeton University.

The Daniel and Lori Efroymsen Professor in Oncology was established in 2003 by the Efroymsen Fund of the Central Indiana Community Foundation. An IU Simon Cancer Center development board member since 2000, Lori Efroymsen established the professorship in memory of her husband, Daniel, and in

honor of Patrick Loehrer, MD, his physician at the center. The faculty member holding this title conducts basic science research in gastrointestinal cancer.

Suvannasankha tapped as MMRF Fellows Award recipient

Attaya Suvannasankha, MD, was selected by the Multiple Myeloma Research Foundation (MMRF) as a 2007 MMRF Fellows Award recipient. Her proposal was rated among the top by a panel of expert reviewers participating in the MMRF. The MMRF process has been approved by the NCI as it meets the same rigorous scientific standards that the NCI applies to its own research grant review process. Suvannasankha's proposal, "The Role of c-FLIP in Multiple Myeloma," focuses on proteins. Treatments aiming at key proteins which cause drug resistance may improve treatment outcome, according to Suvannasankha. A protein called c-FLIP is expressed at abnormally high levels in MM cells and may make the cancer cells resist chemotherapy. Her data suggests that high levels of c-FLIP are caused by a pathway called NFkB. Suvannasankha will check c-FLIP and NFkB protein levels in bone marrow of MM patients to see whether they are linked. Suvannasankha proposes to block the NFkB pathway, lowering the level of c-FLIP and evaluating the effects on the growth of MM cells.

Cancer center members serve as mentors during summer program

Eighteen students spent their summer vacations exploring possible careers as cancer researchers in the nine-week IU Simon Cancer Center Summer Research Program, gaining hands-on experiences by working with physicians and researchers at the cancer center. During the program, students were assigned mentors affiliated with the center. The following served as mentors: Navin Bansal, PhD; Sherif Farag, MD, PhD; Brittney-Shea Herbert, PhD; Tom Imperiale, MD; David Jones, PhD; Kurt Kroenke, MD; Mary Maluccio, MD, MPH; Lindsey Mayo, PhD; Marc Mendonca, PhD; Christie Orschell, PhD; Lawrence Quilliam, PhD; Daniel Sliva, PhD; John Turchi, PhD; Feng-Chun Yang, MD, PhD; Xin Zhang, PhD; and Qi-Huang Zheng, PhD.

IUSCC in the news

In late July, WRTV's (Channel 6) "Staying Healthy" segment focused on *The New England Journal of Medicine* report about an advanced therapy for testicular cancer patients (see lead story). Stephen Williams, MD, director of IU Simon Cancer Center and a co-author of the study, spoke with the reporter about the findings. In addition, the study was covered by *The Washington Post*, *USA Today*, WebMD, MSNBC.com, *Medical News Today*, the Associated Press, and Network Indiana among others.

Robert Goulet, MD, medical director of the IU Breast Care and Research Center, was featured in a segment about Clarian Health's upcoming changes to the health care plan for employees on NBC's *Today* show on Aug. 10.

New Members

The following people are new members of IU Simon Cancer Center:

Melissa Carpentier, PhD, assistant professor of pediatrics, associate member of Cancer Control

Hua-Chen Chang, PhD, assistant professor of pediatrics, associate member of Hematopoiesis, Microenvironment, and Immunology

Romnee Clark, MD, associate professor of clinical medicine, full member of Experimental and Developmental Therapeutics

Hua Lu, PhD, professor of biochemistry and molecular biology, full member of Experimental and Developmental Therapeutics

Marie Swanson, PhD, MPH, associate director for cancer prevention and control and professor and associate chair of the Department of Public Health, IUSM, full member of Cancer Control

Clark Wells, PhD, assistant professor of biochemistry and molecular biology, full member of Breast Cancer

New Grants

The following IU Simon Cancer Center members recently received the following grants:

Asok Antony, MD

Nutritional Regulation of hnRNP-E1 and Related Genes

National Cancer Institute

Janice Blum, PhD; Randy Brutkiewicz, PhD; Mark Kaplan, PhD

Role of IL-17-secreting T Cells in Anti-viral Immunity

National Institute of Allergy and Infectious Diseases

Susan E. Clare, MD, PhD

Delivery of Nanovectors to Hypoxic Areas of Breast Tumors Using a "Trojan Horse"

Breast Cancer Research Foundation

Larry Cripe, MD

Fostering Humanism in Clarian's Culture: A Professional Development Program

Clarian Health

Bradley Doebbeling, MD, MSc

Improving Healthcare through the Application of Engineering Research and Best Practices

Purdue University

Melissa Fishel, PhD

Chemosensitization of Pancreatic Tumors via Inhibition of a DNA

BER Enzyme, Ape1

National Cancer Institute

John Foley, PhD

Amphiregulin and Breast Cancer Metastasis to Bone

Komen Cancer Foundation

Xin-Yuan Fu, PhD

Roles of STAT Proteins in Tumor Vaccine Development

National Cancer Institute

Lisa Kamendulis, PhD

Ann Roman, PhD

Human Papillomaviruses and the Tumor Microenvironment

National Cancer Institute

Martin Smith, PhD

Selenium Protection of Bone Marrow During Chemotherapy

National Heart, Lung, and Blood Institute

Jian-Ting Zhang, PhD

Targeting the Amino Terminal Gate of Human MRP1

National Cancer Institute

Tumor Microenvironment / Osteosarcoma ITRAC grants

Nadia Carlesso, PhD

Notch Signaling as Therapeutic Target in Myelodysplastic Syndromes

Lindsey Mayo, PhD

Mdm2 – Osteosarcoma

Susanne Ragg, MD, PhD

Proteomics and Metabolomics Analyses to Identify Biomarkers of Osteosarcoma

Ahmad Safa, PhD

Novel Targeted Therapy for Osteosarcoma

Attaya Suvannasankha, MD

Murine Model of Human Multiple Myeloma

Cong Yan, PhD

Microenvironment Change and Tumorigenesis in STAT3 Bitransgenic Mice – In Vivo Model

Studies to Elucidate the Potential Involvement of the Kpuffer Cell in
Polyhexamethylene Biguanide Mouse Liver Hemangiosarcomes
Arch Chemicals

Raymond Konger, MD

Role of PPARgamma in Ultraviolet Stress Responses
National Institute of General Medical Sciences

Linda Malkas, PhD

A Structure/Function Analysis of a Tumor Specific Protein
National Cancer Institute

Daniela Matei, MD

Role of Tissue Transglutaminase in Ovarian Cancer
Veterans Administration Merit Award

Michael Robertson, MD

Mechanisms of STAT 4 Deficiency in the Immune System of Cancer
Patients
National Cancer Institute

Michael Robertson, MD

Prostate Adenocarcinoma
Amgen Oncology Institute

IUSM Showalter Awards

Nadia Carlesso, MD, PhD

Functional Characterization of Hematopoietic Stem Cells
Generated During Sepsis

Hua-Chen Chang, PhD

Enhancement of Immunology for Cancer Patients

Bryan Schneider, MD

Assessment of the Role of Genetic Polymorphisms in
Angiogenesis Genes on VEGFR-2 Expression, Activation
and Inhibition

Clark Wells, PhD

Identifying the Molecular Mechanisms by which Nephrin and
CD2AP Regulate Kidney Filtration

Kenneth White, PhD

Novel Targets for Controlling Phosphate in Chronic Kidney
Disease

Upcoming Events

Hard-hat tours available

Tours of IU Simon Cancer Center are currently underway. Tours are available every first and third Tuesday during regular working hours and a limited number of evening tours are also being offered. Participants must wear full-length pants and closed-toe shoes in order to tour the new facility. Hard hats and safety glasses will be furnished and must be worn at all times. To schedule or participate in a tour, contact [Cindy Arndt](#), 278-9902.

2 discounted oncology conferences scheduled for September

Intended to bridge the current gaps in the dissemination of treatment information to practicing oncologists, the **Oncology Congress**, Sept. 6-7 at the Hilton San Francisco, presents comprehensive, practical information focused on patient care. Developed by a diverse board of advisors representing centers of excellence, the content focuses on current research findings and their impact on clinical practice and strategies for treating a wide range of cancers. Unlike most other conferences, this program encourages peer-to-peer interaction and debate. IU has negotiated discounts for clinicians: \$595 for MDs, \$295 for nurses and physician assistants, and free for fellows. Use priority code COE9 when [registering](#).

The **Chicago Supportive Oncology Conference**, Sept. 27-29 at the Hyatt Regency in Chicago, concentrates on providing oncologists and clinicians an overview of state-of-the-art symptom and side-effect management, communication issues, and end-of-life care for patients with cancer. The IU negotiated discounts for this meeting are \$295 for MDs, \$195 for nurses and physician assistants, and free for fellows. Use priority code COE9 when [registering](#).

Construction Update

By late July, the exterior of IU Simon Cancer Center was nearly complete with limestone, brickwork, glass panels, and roofing almost all in place.

By fall, touch-ups on the glass, limestone, and pre-cast panels are expected to be done. Inside, rooms are beginning to look like usable space. The first coats of paint have already been applied in the clinic space on the west end of the second floor, with cabinets, counters, and bathroom tiles currently being installed.



Overall, construction remains on schedule, with the first patients expected to be seen in the new facility in October 2008.

The IU Simon Cancer Center, a \$150 million project, will provide 80 new private inpatient rooms and 50 new outpatient infusion chairs for cancer treatment along with numerous amenities and support services for patients and their families.
