iuscc research news

October 2008

NCI again awards competitive grant to IU Simon Cancer Center; first awarded in 1999

The Indiana University Melvin and Bren Simon Cancer Center has been recognized as a premier cancer center for the third time by the National Cancer Institute (NCI) by renewing its clinical cancer center designation.

The NCI recently awarded the IU Simon Cancer Center a five-year, $6.5 million support grant following a multi-step competitive process.

The NCI designation places the IU Simon Cancer Center in an elite group of 64 research centers across the country that focus on the rapid translation of research discoveries to directly benefit people with cancer. It is the only NCI-designated cancer center in Indiana that provides patient care and performs basic research.

"This recognition by the NCI was made possible by the efforts of scores of our members and associates," Stephen D. Williams, MD, director of the IU Simon Cancer Center and HH Gregg Professor of Oncology with the IU School of Medicine, said. "It stands as a testimony to the talented researchers and physicians here who conduct cutting-edge cancer research and translate these findings to patients and those at risk of cancer."

Linda Weiss, PhD, chief of the Cancer Centers Branch of the NCI, added, "NCI-designated cancer centers, such as the IU Simon Cancer Center, are focused on discovering more about what causes cancer, and linking those research discoveries to the development of new and better methods in cancer prevention, early detection, treatment, and support for cancer survivors and their families."

In addition to providing seed money for new research, the NCI grant will support center leadership, research-related administrative functions, and shared research resources.

1992: The National Cancer Institute awards a planning grant to the IU School of Medicine for a cancer center. The IU Cancer Center is

The IU Simon Cancer Center first received the NCI designation in 1999, just seven years after its founding. Centers must be reviewed every four to five years to determine if they continue to

established and begins under Stephen D. Williams, MD.

1999: The IU Cancer Center receives National Cancer Institute designation as a clinical cancer center. The center receives $29 million in external funding.

2004: The cancer center's NCI designation is renewed and $52 million in external funding is received.

2008: The cancer center's NCI designation is renewed; $75 million in external funding is received.

meet the strict criteria required of NCI clinical cancer centers.

Grant funding awarded to IU cancer researchers and membership has continued to grow since 1999. External funding has grown from $29 million in 1999 to $75 million today.

The membership of the IU Simon Cancer Center has grown from 150 members -- researchers and oncologists -- in 1999 to its current 225 members.

The cancer center's patient and research facilities have increased as well. In 1999, the cancer center had 142,000 square feet. In late August, a 405,000-square-foot patient facility opened, and in early 2009, a new research building will open, giving the cancer center a total of 612,000 square feet.

Physicians and researchers at IU have been at the forefront of caring for cancer patients and developing new treatments that have become the standard of care worldwide. They have turned the cure rate of testicular cancer from 10 percent to nearly 95 percent today and gained an international recognition for treatment of breast, genitourinary, thoracic, hematologic and gastrointestinal cancers. IU Simon Cancer Center physicians at Riley Hospital for Children and Indiana University Hospital are recognized nationally for their bone marrow and stem cell transplantation program.

Members and collaborators of the cancer center are on the faculties of the IU schools of medicine, nursing, and dentistry as well as the science departments at IU and Purdue University.

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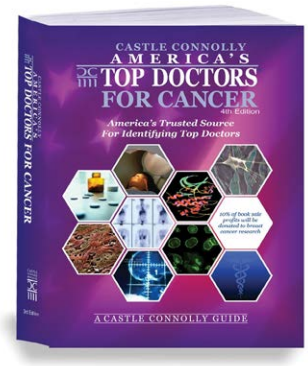
America's Top Doctors for Cancer recognizes 20 IUSCC physicians

Twenty physicians with the IU Simon Cancer Center have been recognized among the best in their field.

The 20 are among 25 in Indiana included in the most recent edition of *America's Top Doctors for Cancer.* The current guide identifies the nation's most outstanding physicians for the diagnosis and treatment of cancers in adults and children.



The physicians -- all of whom practice at the IUSCC and Clarian Health -- are (their special expertise is in parenthesis):

- Dennis Blom, MD (esophageal cancer, Barrett's esophagus, esophageal surgery)
- John Coleman III, MD (breast reconstruction, head & neck surgery, pediatric plastic surgery)
- James Croop, MD, PhD (rhabdomyosarcoma, clinical trials)
- Lawrence Einhorn, MD (testicular cancer, lung cancer, urologic cancer)
- Robert Fallon, MD (lymphoma, Hodgkin's disease, stem cell transplant)
- Sherif Farag, MBBS, PhD (multiple myeloma, leukemia & lymphoma, bone marrow transplant, stell cell transplant)
- Richard Foster, MD (testicular cancer)
- Robert Goulet Jr., MD (breast cancer, breast surgery)
- Paul Haut, MD, FAAP (stem cell transplant, bone marrow transplant, leukemia)
- Valerie Jackson, MD (breast imaging)
- Keith Lillemoe, MD (pancreatic cancer, colon cancer, pancreatic & biliary surgery)
- Patrick Loehrer Sr., MD (gastrointestinal cancer, thymoma, genitourinary cancer)
- Katherine Look, MD (ovarian cancer, uterine cancer)
- Scott Shapiro, MD (brain tumors, pituitary tumors)
- George Sledge Jr., MD (breast cancer)
- Frederick Stehman, MD (clinical trials, gynecologic

cancer)
- Allan Thornton Jr., MD (proton beam therapy) *Thornton is with the Midwest Proton Radiotherapy Institute in Bloomington, which is affiliated with the IUSM Department of Radiation Oncology and the IU Simon Cancer Center.*
- Thomas M. Ulbright, MD (testicular cancer, gynecologic pathology)
- Terry Vik, MD (neuroblastoma, clinical trials, cancer survivors-late effects of therapy, leukemia)
- Stephen Williams, MD (testicular cancer, gynecologic cancer, genitourinary cancer)

"Recognition from a source, such as *America's Top Doctors for Cancer*, is always appreciated. It further confirms that our dedicated faculty physicians are highly regarded by their peers and their patients. Their collaborative style with other health-care professionals at our partner hospitals -- Wishard Health Services, the Roudebush VA Medical Center, and Clarian Health and our colleagues at other campuses such as IU Bloomington, Purdue and Notre Dame -- makes their impact even greater."

Published by Castle Connolly, the guide contains detailed profiles of more than 2,100 of America's leading cancer specialists across more than 40 medical specialties. The doctors are selected by a physician-led research team based on comprehensive national surveys of physicians and medical leaders.

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Core Spotlight

Chemical Genomics Core

Recent advances in genomics, proteomics, systems biology, and chemical biology have resulted in dramatic expansion of our understanding of the molecular underpinnings of living systems. This information enables researchers to develop novel targeted therapies for a variety of intractable diseases.

However, there is a bottleneck currently limiting this type of translational research: the availability of diverse compound collections, chemical synthesis, and other specialized tools for high throughput biology. Academic investigators, who focus on fundamental biological mechanisms, do not have the tools to translate these discoveries into therapeutic agents.

The Chemical Genomics Core was established to facilitate the discovery of small molecule tools for biological pathway analysis and for therapeutic development. Small molecule tools can be very important in the development of therapeutic agents since they can be used to test the effects of altering biological processes in cells, which can lead to the identification of validated targets for drug development. In addition, these novel chemical tools will serve as the starting point for the elaboration of first-in-class targeted therapies.

The mission of the core is to provide IU investigators with cost-effective access to the large-scale screening capacity necessary to identify small molecules that can be optimized as chemical probes to study the functions of genes, cells, and biochemical pathways. The facility also has the capacity for a limited amount of optimization chemistry required to produce useful chemical probes/therapeutic agents from the hits identified in the initial screening.

The Chemical Genomics Core is equipped with automated liquid handling and assay detection instrumentation; structurally-diverse, drug-like small molecule libraries; infrastructure for hit identification and characterization, and medicinal chemistry capabilities for targeted chemical synthesis.

The core also provides:

- Consultation for assay development
- Assistance in assay implementation and validation
- Assistance in carrying out high-throughput screening of chemical libraries
- Access to compound libraries pre-plated, available for use in a 96- or 384-well format
- Training in the use of facility-maintained instrumentation
- Assistance with data analysis, informatics, and compound selection
- Assistance with targeted chemical synthesis

The types of assays implemented include:

- Activity-based enzymatic assays
- Affinity-based protein-protein and protein-DNA binding assays
- Cell proliferation assays
- Cell-based reporter assays

For more information, contact the core's director, **Zhong-Yin Zhang, PhD,** at 274-8025 or zyzhang@iupui.edu.

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News Briefs

On the trail of a targeted therapy for blood cancers

Kristin Chun, PhD, an investigator with the IU Simon Cancer Center and the Herman B Wells Center for Pediatric Research, and colleagues are focusing on a family of blood proteins that they hope holds a key to decreasing the toxic effects of chemotherapy in children and adults.

more

2 IUSCC members earn Komen grants

Two members of the IU Simon Cancer Center have been awarded grants from Susan G. Komen for the Cure. John Foley, PhD, and David Gilley, PhD, are among recipients of an unprecedented $100 million in grants Komen awarded to American and international scientists.

more

Cancer center members serve as mentors during Summer Research Program

Fourteen 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, the following IUSCC members served as mentors: Alexander Dent, PhD; David Haggstrom, MD; Cynthia Hingtgen, MD, PhD; Raymond Konger, MD; Kurt Kroenke, MD; Gordon McLennan, MD; Marc Mendonca, PhD; Christie Orschell, PhD; Jamie Renbarger, PhD, Clark Wells, PhD; and Qi-Huang Zheng, PhD.

IUSCC members in the news

- The U.S. Environmental Protection Agency Office of Research and Development has appointed **James Klaunig, PhD**, chair of the Human Health Subcommittee of the Board of Scientific Counselors (BOSC). The BOSC was established by the EPA to provide advice,


Klaunig

information, and recommendations about the Office of Research and Development's research program. Members of the BOSC Executive Committee and subcommittees constitute a distinguished body of scientists and engineers who are recognized experts in their respective fields.

- **Donald Orr, MD**, professor of pediatrics and the founding director of the Section of Adolescent Medicine at IUSM and Riley Hospital, will receive the 2008 Adele Dellenbaugh Hoffmann Award from the American Academy of Pediatrics. This award is given to an individual who exemplifies excellence in the field of adolescent health and advocates for adolescents to improve the delivery of their health care.
- **Eric Wiebke, MD**, has been named medical director of operating rooms for IU Hospital, effective Nov. 1.
- **Rafat Abonour, MD**, will again this year run to Bloomington and cycle back to Indianapolis for Miles for Myeloma: the Bloomington Boomerang, Part II. At midnight Oct. 31, he will leave the IU Simon Cancer Center and run to Bloomington. All are invited to wish Abonour and the other runners a safe journey as they begin their route. Everyone is also invited to participate in the finish-line celebration back at the IU Simon Cancer Center around 1:30 p.m. Nov. 2. Read news release.

Nov. 1 program: lung cancer research, treatments

The Research Advocacy Network -- in cooperation with the IU Simon Cancer Center, AstraZeneca, and Genentech -- invites you to take a closer look at lung cancer research and treatments during a program from 9 a.m. to 1 p.m. Nov. 1 at University Place Conference Center and Hotel. A continental breakfast begins at 8:30 a.m., followed by welcome remarks by Stephen Williams, MD, director of the IU Simon Cancer Center, at 9 a.m. The program includes:

- "What Are the Latest Treatments and Clinical Research Advances?" with Nasser Hanna, MD
- "What is the Research Discovering in Lung Cancer" with John Turchi, PhD
- Lunch and panel discussion

There is no fee to attend but registration is required. Register here. For more information, contact Elda Railey at erailey@researchadvocacy.org or (877) 276-2187.

IUSCC sponsors December cancer/oncology summit

The IU Simon Cancer Center is the headline sponsor of the Indiana Health Industry Forum's "Emerging Trends and New Developments in Cancer Discovery, Diagnosis and Treatment" cancer/oncology summit.

The summit is Dec. 1-2 at University Place Conference Center on the IUPUI campus.

"The event will provide a unique combination of presentations, panel discussions, and networking opportunities for scientists, clinicians, and supporting institutions and private corporations," conference co-chair Mark Kelley, PhD, said. "And we hope the format of the meeting will stimulate new interactions, connections, and collaborations among all of us in Indiana working in oncology."

Keynote speakers are Eric K. Rowinsky, MD, chief medical officer and executive vice president of ImClone Systems Inc., and Douglas W. Blayney, MD, medical director, University of Michigan Comprehensive Cancer Center, and president-elect of the American Society of Clinical Oncology.

Companies, organizations, or universities that have developed unique approaches or support for cancer detection or treatment are invited to submit abstracts of their work of no more than 250 words to be considered for the poster review. Abstracts that are selected will be notified by Nov. 14 and have their posters on display during the summit. To submit abstracts or register for the summit, go to http://www.ihif.org/.

“Cancer Stories” symposium set Nov. 6-8

“Cancer Stories: The Impact of Narrative on a Modern Malady,” a three-day symposium sponsored by the IU School of Liberal Arts at IUPUI and the IU School of Medicine, is Nov. 6-8.

The symposium is based on the premise that narratives about cancer have shaped the human and institutional response to cancer in America.

Prose, poetry, performance and the visual arts constitute the range of narratives the symposium will explore. Included are both the production and reception of cancer stories by physicians, nurses, patients, artists, and advocates to explore how the cultural meaning of cancer has shaped the human and institutional response to it.

"Cancer Stories" is a free symposium. Speakers and their topics include:

- David Cantor, deputy director of the Office of NIH

History, “Choosing to Live: Cancer Education, Movies, and the Conversion Narrative in 20th Century America”

- Arthur W. Frank, professor of sociology at the University of Calgary, Ontario, Canada, “Telling Your Story: Narrative Illness in an Age of Authenticity and Appropriation”
- Martha Stoddard-Holmes, associate professor of literature and writing studies, California State University, “Cancer Comix: Narrating Cancer through Sequential Art”

An independent documentary film, “A Lion in the House: The Transformative Power of Storytelling at End-of-Life,” will be shown and other breakout sessions are included.

Visit this site for more information.

New members

John Butterworth, MD
Affiliate member
Department of Anesthesia

Shreevrat Goenka, PhD
Associate member of Hematopoiesis, Microenvironment, and Immunology
Department of Pediatrics

Mark Henderson, MD
Affiliate member
Department of Radiation Oncology

Lisa Hess, PhD
Associate member of Cancer Control
Department of Public Health

Michael G. House, MD
Associate member of Molecular Carcinogenesis
Department of Surgery

Mircea Ivan, MD, PhD
Associate member of Breast Cancer Program
Department of Medicine Division of Hematology/Oncology

New grants

Janice Blum
Role of IL-17-secreting T Cells in Anti-viral Immunity
NIH-NIAID

Angelo Cardoso
Notch Modulates IL7-triggered STAT Signaling in Childhood T-cell Leukemia
St. Baldrick's Foundation

Rebecca Chan
Improved Therapies for AML in the Elderly
NIH-NIA

Magdalena Czader
Proteomic and Computational

Oussama Meroueh
Computer-Guided Design of Small Molecules that Block Tumor Invasion and Metastasis
Showalter Trust Foundations

Harikrishin Nakshatri
Lung Cancer Chemoprevention Through LC-1
NIH-NCI

Harikrishin Nakshatri
Animal Model for Local Inflammation-induced Breast Cancer
NIH-NCI

Methods in Pediatric Acute Lymphoblastic Leukemia
NIH-NCRR

Brad Doebbeling
Cancer Care Engineering Project 2: System Redesign
Purdue University

David Flockhart
Clinical Pharmacology Training Grant
NIH-NIGMS

Shreevrat Goenka
Role of CoaSt6 in Allergic Asthma
Showalter Trust Foundations

Paul Helft
Ethical Communication Skills for Surgery Residents
Clarian Health

Thomas Imperiale
Using Risk to Tailor Management of Digestive Diseases
NIH-NIDDK

Melissa Ann Kacena
Megakaryocyte-Mediated Inhibition of Osteoclastogenesis
Showalter Trust Foundations

Mark Kaplan
Pathogenesis of Atopic Dermatitis
NIH-NIAID

Mark Kelley
Molecular Medicine in Action
Riley Children's Foundation

Kurt Kroenke
Telecare Management of Pain & Depression in Cancer
NIH-NCI

Hua Lu
The Role of L5, L11 and L23 in the MDM2-p53 Feedback Regulation
NIH-NCI

Susanne Ragg
Tissue Banks and Pathology Tools Workspace Adoption of the caTissue Suite v1.1
NCI-SAIC

Ann Roman-Weiner
New Cellular Effectors of Human Papillomavirus E7 Activity
NIH-NIAID

George Sledge
Examination of the Human Kinome for Novel Genome-Specific Therapeutic Targets in Triple Negative Breast Cancer & Association of Genetic Variability with Receptor Activation of Tumor Angiogenesis Inhibitors
Susan G. Komen for the Cure
Cancer Foundation

Martin Smith
Selenium Protection of Bone Marrow During Chemotherapy
NIH-NHLBI

John Turchi
Development of Methodologies for the Analysis of DNA Repair Capacity to Predict the Response to Platinum Based Therapies
NIH-NCI

Claire Walczak
Mechanism of Spindle Assembly and Chromosome Segregation
NIH-NIGMS

Mu Wang
Biomarker Discovery and Validation in Multiple Myeloma Cells Using Multiple Proteomic Platforms
Multiple Myeloma Research Foundations