

From the Director

After months of hard work, countless rehearsals, the involvement of more than 30 people, and feedback from our external advisors, we are now just a few weeks away for the site visit for our NCI Cancer Center Support Grant. As you might imagine, it has been an educational experience.

For me, one thing that will stand out is that I have a better understanding of some accomplishments in our Cancer Control research program that have great implications for cancer health.



Dr. Williams

For example, two of our colleagues have made some remarkable accomplishments in innovative methods of tobacco control. Anna McDaniel, DNS, has developed a video game that appears to have the potential to change the attitudes of pre-adolescent girls about tobacco and may decrease their likelihood of smoking.

In another study, an automated telephone intervention increases the likelihood of successful smoking cessation in Wishard Hospital patients.

Cancer Center Support Grant

Sept. 25: Submitted a complicated P30 grant to the NCI, which all NCI-designated cancer centers must do every four to five years

Dec. 17: External advisors met on campus and provided feedback

Jan. 9: NCI site visit

Spring 2008: Review by Parent Committee

Fall 2008: New funding cycle begins

burden of cancer.

Prior to her recruitment here, Karen Hudmon, DrPH, MS, BSPHarm, and collaborators developed the Web-based [Rx for Change](#) program to teach health professional students techniques for patient education for smoking cessation. Through NCI funding, this program has been disseminated to health professional schools across the country, and each year, about 7,000 students participate in a training. In a follow-up study that will likely be funded, Hudmon seeks to conduct a randomized study of community pharmacists and pharmacy technicians of two interventions to encourage and teach them methods to counsel their patients about smoking cessation.

Also, Sue Rawl, PhD, in collaboration with several IUSCC colleagues, has initiated a randomized trial that will evaluate a novel method to encourage colorectal cancer screening in a cohort of 674 African American primary care patients.

These are just a few examples of some exciting translational research being led by members of the IU Simon Cancer Center. As I've noted in this column before, I think we can all take great pride in the strides that are being made here because I believe we are poised for great progress in our efforts to lessen the

[Dr. Stephen Williams](#)

Director, IU Simon Cancer Center



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December 2007

ITRAC helps fund, plan new therapies

Hair loss, fatigue, and nausea are widely known side effects of chemotherapy, but some cancer patients also experience "chemo-brain."

A cognitive dysfunction, chemo-brain makes it hard for some people to concentrate, and it leads to difficulty remembering things. Soon, a diverse team -- composed of Indiana University researchers from psychology, nursing, pediatrics, pharmacology, and radiology -- will begin a study to identify what causes chemo-brain in women with breast cancer. Their study is made possible, in part, thanks to pilot seed funding support from the Indiana University Melvin and Bren Simon Cancer Center Translational Research Acceleration Collaboration (ITRAC).

ITRAC is a planning and funding process which can facilitate the development of new cancer diagnostics and therapies from the laboratory to the bedside and back. Overall, ITRAC aims to support development of innovative and improved treatments to better detect, treat and, ultimately, cure cancer.

Without ITRAC, the chemo-brain study, for example, probably would not get underway for another six to 12 months or perhaps never unless another funding source, such as an external grant, was found. Traditionally, external grant applications take nine to 12 months from time to submission to funding, if approved.

ITRAC brings together researchers from different areas -- and universities -- working together toward a common cause: finding a cure for cancer. To date, ITRAC has brought together researchers from the IU Simon Cancer Center, the Purdue Cancer Center, and the University of Notre Dame's Walther Cancer Research Center.

"ITRAC helps investigators form research teams and break

down silos that are naturally found in any research environment," Mark Kelley, PhD, the associate director for basic science research at the IUSCC and a co-investigator of the chemo-brain study, said. "The ITRAC process requires that research teams, including basic and clinical scientists, work together to speed the velocity of the science from the bench to the clinic as well as from the clinic back to the bench. With science becoming ever more complex, the formation of multi-disciplinary teams is the most effective and correct way to undertake complex problems in cancer prevention, detection, treatment and delivery."



Kelley

In addition, Kelley said the ITRAC process requires greater accountability of how funds are used and careful scrutiny of the outcomes. Only research with the greatest patient impact potential will be supported.

David Johnson, president and CEO of BioCrossroads, the state's initiative to grow the life sciences, said he's not aware of any other university using ITRAC's approach to translate discovery into action.

"It's revolutionary," Johnson said. "Although it's in an academic environment, ITRAC tries to bridge the gap between the traditional – the pure discovery domain of academic research – and the very applied discovery domain of corporate R & D (research and development). It's an approach that says we're going to borrow some of the project management processes that organize corporate research and focus more specifically on outcomes."

ITRAC, open to all members/affiliates of the IU Simon Cancer Center, is designed to financially assist investigators in moving their projects to external grant submission status (R21, R01, etc.). Please visit the [ITRAC Group Site](#) for further details, including process, requirements and deadlines.

Leaders at the IU Simon Cancer Center approached BioCrossroads for insights into project management practices used in the corporate world.

In addition to grant money, ITRAC helps researchers map out their projects, and it provides expertise to scientists who have made significant discoveries in their labs but aren't sure what steps are

necessary to turn those discoveries into products that will improve patient care.

The program complements a growing emphasis by the National Institutes of Health on accelerating the development and testing processes that basic science laboratory discoveries go through to become new patient treatments.

IU Simon Cancer Center committees review research projects and identify those with the most potential for clinical applications as well as commercial potential -- potential that the individual scientists may not even realize is there.

Since its establishment in November 2006, ITRAC has awarded more than \$500,000, mapped 73 projects, established and/or recommended collaborations with at least 50 projects, and identified intellectual property needs: 14 disclosures, four patents, and one potential license.

"After one year, an exciting benefit we are seeing is the identification of intellectual property, which, we hope, will continue to grow and dovetail with the growing emphasis in the state's life sciences initiative and lead to more biotech startups and licensing opportunities and decrease the 'brain drain' from the state," Kelley said. "Whatever it takes to help speed research findings to help cancer patients in Indiana and elsewhere is what this initiative is all about."



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News Briefs

Broxmeyer awarded national prize for cord blood research

Hal Broxmeyer, Ph.D., a pioneer in the field of umbilical cord blood transplantation for the treatment of leukemia and anemia, was named the recipient of the 2007 E. Donnall Thomas Prize during the American Society of Hematology's annual meeting in Atlanta on Dec. 10. At the presentation ceremony, he discussed his research and the scientific discoveries that led to the successful use of cord and placental blood for treating malignant and non-malignant disorders, as well as ways to enhance the efficacy of cord blood transplantation in the future. Broxmeyer is the 2002 recipient of the Karl Landsteiner Memorial Award, presented by the American Association of Blood Banks. This prestigious award, which claims seven Nobel Prize winners among its honorees, also recognizes original research contributing to the field of blood-related diseases and treatments.

IUSCC represented at San Antonio Breast Cancer Symposium

The IUSCC breast cancer program was well represented during the 30th annual San Antonio Breast Cancer Symposium (SABCS) in San Antonio, Texas, Dec. 13-16. **Sunil Badve**, MBBS, MD, FRCPath; **Silvia Bigatti**, PhD, **Susan Clare**, MD, PhD; **Robert Goulet**, MD; **Robert Hickey**, PhD; **Linda Malkas**, PhD; **Kathy Miller**, MD; **Harikrishna Nakshatri**, PhD; **Bryan Schneider**, MD; and **George Sledge**, MD, attended. The objective of the SABCS is to provide state-of-the-art information on the experimental biology, etiology, prevention, diagnosis, and therapy of breast cancer and premalignant breast disease, to an international audience of academic and private physicians and researchers. Prior to the symposium's opening, The

Triple Negative Breast Cancer Foundation (TNBC) and Susan G. Komen for the Cure convened one of the first "think tanks" dedicated specifically to triple negative breast cancer, a particularly aggressive and difficult-to-treat form of the disease. Sledge serves on the TNBC's medical advisory board.

Shedd-Steele, new outreach and diversity coordinator, works with community

Rivienne Shedd-Steele has been named outreach and diversity coordinator at the Indiana University Melvin and Bren Simon Cancer Center. As such, she will develop and implement cancer education programs and leverage resources to assist the IU Simon Cancer Center in increasing cancer awareness in the community, with a focus on underserved populations. Shedd-Steele will work with diverse community groups and build collaborative relationships with the purpose of increasing participation in cancer clinical trials. She will also help to develop strategies to enhance awareness of health disparities research that focuses on the differences in the incidence, occurrence, mortality and burden of cancer that exists among those diverse populations. Shedd-Steele most recently was the partnership program coordinator for the National Cancer Institute's Cancer Information Service (NCI/CIS) Midwest Region.



Shedd-Steele

Hard-hat tours available

Tours of the new IU Simon Cancer Center outpatient and inpatient facility 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.
