



iuscc research news

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How often to screen for colon cancer? NEJM study finds 5-year risk extremely low

How frequently should symptom-free individuals at average risk for colon cancer undergo screening with colonoscopy?

In a study published in the Sept. 18 [New England Journal of Medicine](#), researchers led by Thomas F. Imperiale, MD, report that while there still is no definitive answer to the question, they now know the procedure need not be performed any sooner than every five years.



Imperiale

This is the first large study to systematically rescreen a group of average risk individuals who had normal findings from an initial colonoscopy. The rescreening showed that after five years they remained cancer free.

All 1,256 participants in the study were 50 years or older, had undergone a first-time screening with no cancer or pre-cancerous findings, and had no symptoms of colon cancer such as rectal bleeding, change of bowel habits, or unexplained weight loss during the five-year interval between screenings.

"The American Cancer Society and other guideline organizations call for colonoscopic screenings every 10 years but these recommendations are based on extrapolated, indirect data," Imperiale said. "No study has rescreened a large number of individuals 10 years after a normal initial colonoscopy. Our study didn't assess whether the recommendation of a 10-year screening interval for colonoscopy is 'right on,' but we did determine that the appropriate screening interval can be more than five years for average risk individuals. Frankly, we don't know the optimal time interval between screenings," Imperiale said.

Imperiale, who is a gastroenterologist, begins to discuss rescreening with his own patients seven to eight years after a previous normal exam unless they develop symptoms or have a family history of colon cancer in a first-degree relative.

The risk of colon cancer increases with age. Changes in lifestyle behaviors such as smoking, alcohol consumption, and physical activity also can affect risk.

"I try to tailor my rescreening recommendation to the individual patient. The interval and what rescreening method to use -- colonoscopy, virtual colonoscopy, fecal occult blood testing -- are all factors we discuss, Imperiale said.

"Determination of the appropriate frequency of rescreening for persons with normal findings on initial screening colonoscopy could have a substantial effect on the cost of colonoscopy and the capacity to provide it," the study notes. Imperiale, who is a clinical epidemiologist and an affiliate investigator of the Center on Implementing Evidence-based Practices at the Roudebush VA Medical Center, added it may impact the likelihood that individuals will return for rescreening.

According to the American Cancer Society, colorectal cancer is the third leading cause of cancer-related deaths in the United States when men and women are considered separately, and the second leading cause when both sexes are combined. It is expected to cause about 49,960 deaths (24,260 men and 25,700 women) during 2008.

In addition to Imperiale, authors of the study are Elizabeth A. Glowinski, RN, Indianapolis Gastroenterology Research Foundation; Ching Lin-Cooper, BS, IU School of Medicine; Gregory N. Larkin, MD, Eli Lilly; James D. Rogge, MD, Indianapolis Gastroenterology Research Foundation; and David F. Ransohoff, MD, University of North Carolina.

The study was funded, in part, by the National Institute of Diabetes and Digestive and Kidney Diseases.



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Midwest Proton Radiotherapy Institute announces new leadership

The Midwest Proton Radiotherapy Institute (MPRI) in Bloomington is joining forces with the Indiana University School of Medicine's Department of Radiation Oncology and the IU Simon Cancer Center, according to an announcement from the MPRI board, Clarian Health, and IUSM.

The MPRI board of directors appointed Peter Johnstone, MD, MA, president and chief executive officer of MPRI. Richard Helsper, vice president of operations for Clarian Health, was named chief operating officer. Both will retain their current positions, while working with the MPRI board, physicians, and staff to facilitate the transition.

"We are very excited about the synergies and potential of this integration," Daniel F. Evans Jr., MPRI chairman of the board and Clarian CEO, said. "The board believes this change provides all parties an opportunity to deliver more effectively and efficiently a broad range of cancer therapies and treatment to our patients from around the state and the world."

IU President Michael McRobbie said, "This approach will, among other things, rationalize the broader spectrum of cancer treatment at the IU Simon Cancer Center and provide a longer term, more secure platform from which MPRI can enhance clinical operations for the benefit of our patients and their families."

Since 2004, MPRI's clinic has offered a highly precise means of treating both benign and cancerous tumors in adults and children, while protecting healthy tissues and normal structures. Proton therapy is particularly successful in treating brain, head, neck, spine and prostate tumors, and it is often an option for patients with recurrent tumors.

The MPRI clinic, which is constructed within the Indiana University Cyclotron Facility, will remain in Bloomington. Dr. Allan Thornton serves as medical director of the clinic. MPRI is one of five proton centers in the United States and the only one located in the Midwest.



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Core Spotlight

Chemical Synthesis & Organic Drug Lead Development

IUPUI's Department of Chemistry & Chemical Biology has joined forces with the IU Simon Cancer Center to expedite the translational research and drug development efforts of cancer researchers on the IUPUI campus and throughout Indiana, establishing the Chemical Synthesis & Organic Drug Lead Development Core.

The core's goal is to support the synthetic and medicinal chemistry needs of IUSCC investigators as well as other academic entities within IUPUI and throughout the state. The core is also available to the broader life sciences community of central Indiana and elsewhere on a contract basis.



Long

The synthetic efforts of the core will include the synthesis of:

- Literature-cited compounds (including patented agents)
- Compounds discovered through high-throughput screening
- Experimental agents
- Focused libraries

In addition to synthesis, the core can provide:

- Improved ADMET (adsorption, distribution, metabolism, excretion, toxicity) properties of lead compounds to improve biological activity
- Lead optimization (SAR analysis)
- Database searching and data mining of drug discovery targets
- Insight on the patentability of chemical matter
- Chemical informatics

For more information, please e-mail either Dr. Long or Dr. Georgiadis at synthesiscore@chem.iupui.edu or call (317) 274-6804.



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News Briefs

Kelley named Betty and Earl Herr Professor of Pediatric Oncology Research

Mark R. Kelley, Ph.D., has been named the Betty and Earl

Herr Professor of Pediatric Oncology Research by the Indiana University School of Medicine Department of Pediatrics. The named professorship is awarded to a senior investigator with a strong history and established track record in pediatric oncology research. "Mark is a dedicated scientist with the experience and national network in pediatric hematology/oncology," Richard Schreiner, chair of Department of Pediatrics, said. "We are pleased to give him this appointment. He has been a leader in pediatrics cancer research ever since he arrived at the Indiana University School of Medicine in 1993."



Kelley

The Herr Professorship was established by Dr. Earl B. Herr Jr. and his wife Elizabeth Herr through the Riley Children's Foundation. Dr. Herr served as a member of the foundation's board of governors for more than 20 years. He was an employee of Eli Lilly & Co. for 36 years and served as president of Lilly Research laboratories and as executive vice president of Eli Lilly. The Lilly Endowment was a major contributor to the professorship.

Dr. Kelley is the associate director for the Herman B Wells Center for Pediatric Research and also the associate director for basic science research at the IU Simon Cancer Center. He is a professor of biochemistry and molecular biology and of pharmacology and toxicology. His main area of expertise is in DNA damage and repair and translating his studies to clinical cancer applications.

Dr. Kelley is a member of the American Association for the Advancement of Science, American Association for Cancer Research, Environmental Mutagen Society, Society for Pediatric Research, and American Society of Clinical Oncology.

ITRAC marks 2nd anniversary

Even though ITRAC (Indiana University Melvin and Bren

Simon Cancer Center Translational Research Acceleration Collaboration) hasn't quite existed for two years yet -- it was formed in October 2006 -- other leading cancer centers across the country are already looking to duplicate its successes with similar mechanisms at their own centers.

[Full story.](#)

Abonour runs, bikes 140 miles Nov. 1-2

Rafat Abonour, MD, an amateur marathon runner, will again this year run to Bloomington and cycle back to Indianapolis for Miles for Myeloma: the Bloomington Boomerang, Part II.

At midnight Nov. 1, he will leave the IU Simon Cancer Center's Barnhill Drive entrance and run to Bloomington. Luminaries honoring patients will light his path on campus. All are invited to wish Abonour and the other runners a safe journey as they begin their 140-mile route.



Abonour

Twelve hours later, he will arrive in Bloomington and make his way through a human tunnel formed by patients and their families on the Memorial Stadium field prior to the kick-off of the football

game. Free game tickets are available to IUSCC employees. To reserve tickets, please call (317) 278-4512 or e-mail cagifts@iupui.edu.

Miles for Myeloma: the Bloomington Boomerang, Part II

Midnight, Nov. 1:

Abonour departs IUSCC for Bloomington by foot

Noon, Nov. 1: Abonour arrives in IU Memorial Stadium

8 a.m. Nov. 2: Abonour leaves Memorial Stadium, cycles to Indy

1:30 p.m. Nov. 2: Abonour arrives at IUSCC; finish-line celebration begins

At 8 a.m. Nov. 2, he will depart Memorial Stadium by bicycle and make his way back to the IU Simon Cancer Center. Everyone is invited to join the finish-line celebration at 1:30 p.m. at the cancer center's Barnhill Drive entrance.

Since 2005, Abonour's patients and their families have raised nearly \$700,000 to further research for myeloma. This year,

Abonour's grateful patients hope to make him "The Million Dollar Man" by raising a cumulative \$1 million for research.

The funds generated by Miles for Myeloma are invested in IU research focused on developing better treatment options for the disease that affects 17,000 annually.

Donohue, pioneering urologist, dies

John Patrick Donohue, M.D., 77, of Melbourne Beach, Fla., died Sept. 4 in Sault Ste. Marie, Mich. [Full story.](#)



Construction crews are putting the finishing touches on Research III. According to Charles Rogers, assistant director for facility design & construction for the IU School of Medicine, RIII is on schedule. Contractors are on pace to finish in early January 2009 and occupancy will begin in mid-March. Rogers pointed out that those researchers assigned to RIII will need to get a Jag Tag with an embedded proximity chip, which allows users to simply hold the Jag Tag in front of card readers instead of swiping it. Watch for more details. When RIII opens, half of the labs will be used by IU Simon Cancer Center researchers.