

**Children's Memorial
Research Center™**

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A Member of the
McGaw Medical Center
of Northwestern University
Chicago, Illinois

www.childrensmrc.org

InTouch

WITH RESEARCH

at Children's Memorial Research Center

Director's Message

During the past year we have witnessed significant milestones related to Children's Memorial Research Center to better serve its membership of 205 investigators. These

include: discontinuation of the Molecular and Cellular Pathobiology Program and the emergence of two new Centers: Digestive Diseases and Immunobiology, and Pediatric Critical Illness and Injury; creation of the category of non-programmatically aligned member, which offers all the benefits of research center membership in the absence of highly specialized programs or centers; the success of 120 extramurally-funded principal investigators achieving \$30 million in grants; national recognition for Children's Memorial Hospital's research

enterprise attaining a 31% increase in NIH funding in one year; provision of CME credit for seminars; renovation of the Wolfson conference room at the Halsted facility with high-tech IT and videoconferencing capabilities; and hiring of new faculty for several programs.



Mary J.C. Hendrix, PhD,
Medical Research Institute
Council Professor, President &
Scientific Director, Children's
Memorial Research Center

Equally noteworthy is our commitment to enhance the infrastructure for clinical and translational research. To achieve this goal, the research center has committed funds to support all or a major portion of the salaries for key staff positions; is funding the recruitment of two faculty biostatisticians and one Master level statistician to form a substantial core that will be available to all members; provides a major portion of the salaries for the Institutional Review Board (IRB) chair and staff; provides salary support to faculty members who serve on the IRB; and offers salary support for a contract specialist for industry-sponsored clinical trials.

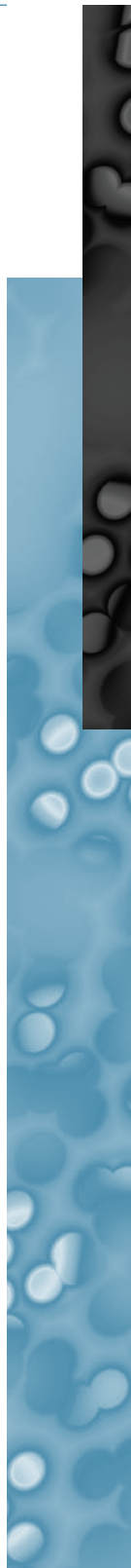
As we continue to meet member needs and support the clinical mission of Children's Memorial, I wish to point out the critical nature of the myriad forces shaping our future: the comprehensive campaign to build the Ann & Robert H. Lurie Children's Hospital of Chicago; the ongoing strategic planning decisions with Northwestern University's Feinberg School of Medicine to inventory current research activity and identify opportunities for interactions, shared facilities and research space relocation options; and the expansion of the research enterprise, with limited resources. All of these activities should encourage us to "sharpen our public image" using our Web site, publications and press releases, and rhetoric. I am extremely proud of your accomplishments, your scholarly contributions and our extraordinary supportive donor community.



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to support all aspects of
translational research



News:

Principal Investigator of Historic Child Health Study



Photo: Children's Memorial Audio-Visual Department

Jane Holl, MD, MPH

Jane Holl, MD, MPH, attending physician and medical director for patient safety at Children's Memorial, and associate professor of pediatrics, preventive medicine, and healthcare studies at the Feinberg School, is the principal investigator for the Chicago area's involvement in the largest child health study to be conducted in U.S. history. The study will follow women from pre-pregnancy through conception and childbirth, and then track their children until age 21.

In the year 2000, the Children's Health Act was passed in the United States Congress. The legislation included a recommendation for the development of what became the National Children's Study — a national, longitudinal study about the health of U.S. children. The National Institute of Child Health and Human Development brought together representatives from the Environmental Protection Agency, the Centers for Disease Control and Prevention and all the other NIH branches to start planning the design, methodology, sampling, hypotheses and goals. Seven pilot, or vanguard, sites were selected in 2005 to test various aspects of the study, including the sampling strategy, community engagement and community outreach, and sample collection. The vanguard sites are slated to begin data collection in July of 2008.

In early 2007, a Request for Applications (RFA) was put out for study centers, to which Northwestern

responded. Dr. Holl noted: "As a general pediatrician who for many years had been conducting health services research, looking at topics such as access to care, health insurance coverage for children, the relationship between health insurance coverage and adequate health care services, and patient safety and medical errors, I understood the incredible value of longitudinal data sets."

When the RFA came out, "I realized we had a great opportunity. At the time I had been collaborating closely with a number of maternal-fetal medicine obstetricians at Northwestern. The study is of great interest to obstetricians because the amount of data gathered during pregnancy, and the outcomes of all the infants, is unprecedented."

"We realized early on that we would strengthen our application if we could come in with a single bid from all the major academic medical institutions in the Chicago area." The contract was awarded to Northwestern and will be based at the Institute for Healthcare Studies. There are three key partners with co-investigators at the University of Chicago, the University of Illinois at Chicago, particularly in the School of Public Health, and the National Opinion Research Center (NORC). NORC will be conducting a large part of the field work, in particular the community-based screening, recruitment and enrollment of study subjects. "We have capitalized on some of the main strengths of

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Holiday Outreach Campaign a Success

We would like to thank everyone for their contribution to the Greater Chicago Food

Depository campaign in December 2007. Research center staff contributed 495 pounds of food, \$190 in gift cards and \$100 in cash that will help feed the 500,000 hungry men, women and children in our community. The Food Depository states that

the donations collected from us will help provide over 722 meals for the hungry in our community.

Thank you all again for your contributions. Because of you, someone will eat today.

Tony Rankin, Facilities Manager

InTouch
WITH RESEARCH
at Children's Memorial Research Center

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773.755.6341
2300 Children's Plaza, M/C 205
Chicago, Illinois 60614

Second Annual “Cracking the Code with the Bear” Research Symposium

Following the overwhelming success of the inaugural research symposium held in 2006, the second annual “Cracking the Code with the Bear” symposium was held on November 16, 2007 at the Hotel Intercontinental Chicago. This event was the result of a collaboration between the Bear Necessities Pediatric Cancer Foundation, Marcelo Bento Soares, PhD, Cancer Biology and Epigenomics Program leader at the research center, professor of pediatrics at the Feinberg School, and Rachelle and Mark Gordon Endowed Professorship, and Stewart Goldman, MD, Medical Director of Neuro-oncology, associate professor of pediatrics at the Feinberg School, and the Gus Foundation Chair of Neuro-oncology at Children’s Memorial. Cancer researchers from throughout the Chicago area were encouraged to attend the symposium.

Invitations went out to leaders in the field of cancer biology and epigenomics research to nominate a postdoctoral fellow or junior faculty member from their institution to present his or her research. The criteria for selecting candidates were seminal contributions to and anticipation of leadership in their field. Ten individuals were selected:

Beth Villavicencio, MD, PhD, Pediatric Hematology/Oncology Fellow, Fred Hutchinson Cancer Research Center and Children’s Hospital and Regional Medical Center.

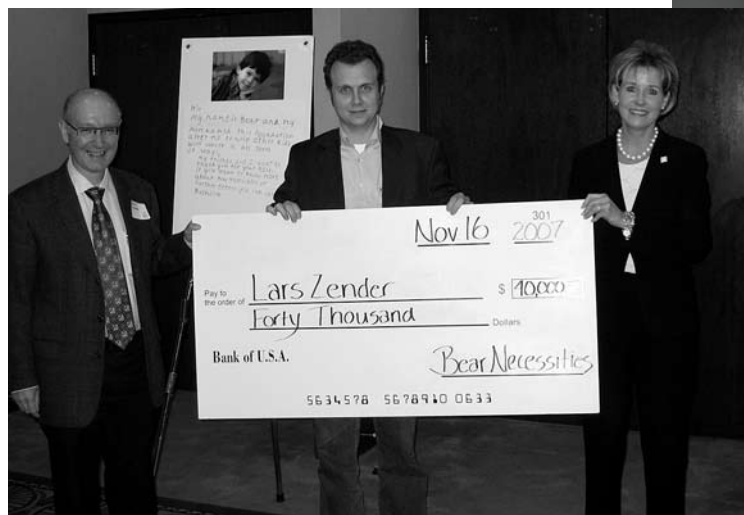
Aedin Culhane, PhD, Research Associate, Harvard School of Public Health, Dana-Farber Cancer Institute.

Chrystal Louis, MD, MPH, Instructor, Texas Children’s Cancer Center, Baylor College of Medicine.

Dipak Panigrahy, MD, Instructor in Surgery, Pediatric Oncology, Dana-Farber Cancer Institute, Research Associate, Vascular Biology Program, Boston Children’s Hospital.

Lars Zender, MD, Postdoctoral Fellow, Cold Spring Harbor Laboratory.

Ghia Euskirchen, PhD, Associate Research Scientist, Yale University.



(From left) Marcelo Bento Soares, PhD, Lars Zender, MD, and Kathleen Casey, president and founder of Bear Necessities

Danielle Irvine, PhD, Postdoctoral Fellow, Cold Spring Harbor Laboratory.

Alysson Renato-Muotri, PhD, Research Associate, Laboratory of Genetics, The Salk Institute.

Julius Brennecke, PhD, Postdoctoral Fellow, Cold Spring Harbor Laboratory.

Jan Korbel, PhD, EMBO & Marie Curie Fellow, Yale University.

Franklin D. Costantini, PhD, Professor, Department of Genetics and Development, Columbia University, delivered the keynote address. A reception and awards ceremony followed.

To continue to advance promising pediatric cancer research, Bear Necessities awarded a \$40,000 research grant to Cold Spring Harbor’s Lars Zender. Nikia Laurie, PhD, the 2006 grantee, moderated the event and expressed her gratitude for the opportunities that the symposium offers to its presenters. The research center wishes to thank the Bear Necessities Pediatric Cancer Foundation for its full underwriting support of the symposium. For a full list of symposium presentation titles, please visit www.bearnecessities.org.

Closer Look:

Office of Sponsored Programs

The Office That Works

The Office of Sponsored Programs (OSP) at Children's Memorial Research Center is a unit that functions quietly behind the scenes to make all the hard work pay off — literally. OSP provides support to the Children's Memorial Hospital research community in finding and applying for funding opportunities, managing budgets and workflows during the funding period, and complying with government and agency regulations. The office provides education and outreach, is available for questions and brainstorming, and interacts frequently with researchers, staff and trainees. Here is an introduction to OSP staff and their observations about the office.

Harmony Maple, MPA, Director

Our office is divided into pre- and post-award duties. Pre-award involves finding funding opportunities and submitting proposals to various sponsors, and post-award involves setting up budgets, managing all aspects of the grant and closing out awards. I have a degree in public administration, but I learned almost everything by getting my hands in and doing the work.

With the NIH funding situation, people are more hesitant to submit proposals, but we strive to help folks in their submissions. Kimberly [Deprey] works hard on funding alerts and invites people to talk to us. New investigators particularly need to attend our outreach sessions, or to sit down with us one-on-one. They need that encouragement.

This year, our outreach and training will focus on educating the administrators who are working with investigators on proposals and awards.

I think we should be proud that our NIH funding is up even though the NIH budget is going down. Our investigators are putting out good proposals and doing innovative things. It's gratifying to see a researcher who was worried about funding and now has awards coming in. There's a lot of pressure to keep your lab running in these hard times, but we do have success stories.

At the Society of Research Administrators meeting, we received compliments from another hospital on our wonderful Web site. We also recently sat down with individuals from Northwestern Memorial Hospital who are re-organizing their research office, to advise them.

I hope that we have the reputation of being here to support people. Noreen [McWilliams] is known for being helpful and hands-on.

Kimberly Deprey, Assistant Director, Pre-Award

I assist our program leaders with their proposals and send out funding opportunities to researchers based on their interests. I also prepare reports for our board of directors that show the big picture. During my time here I have seen researchers as brand new investigators, and I'm amazed at their development.

New investigators feel overwhelmed with the different proposal components and agency regulations that they need to learn about. When they meet with us, we go through the



OSP staff (front from left) Colleen Grogan, Harmony Maple, Katie Seifert, Kimberly Deprey (back from left) Norene McWilliams, Rochanna Thomas, Tara Massimino

Photo: Steve Evans

various pieces to make a clearer picture for them, and they breathe a sigh of relief.

Colleen Grogan, Assistant Director, Pre-Award

I started in research administration in Boston, where I was a departmental research administrator in the Molecular Cardiology Research Institute at Tufts New England Medical Center. I'm seeing more clinicians and basic scientists opening up discussions and teaming up on projects. People are being more exploratory in what they're doing and working together to get funding.

Tara Massimino, MA Assistant Director, Pre-Award

I have a master's degree in social science research, and worked for the Pediatric Practice Research Group (PPRG) at the Mary Ann & J. Milburn Smith Child Health Research Program. I evolved into an administrator for a grant, doing the day-to-day operations and budget. With the experience I was gaining, I started noticing that OSP would be a good fit. My interactions with OSP when I worked for the PPRG were always positive.

Norene McWilliams, JD, MPH, Assistant Director, Pre-Award, Clinical Trials

I focus primarily on negotiating clinical trial agreements with industry sponsors and assisting investigators in developing budgets. I was a lab tech for ten years and realized that I had to move on to something else eventually as a career. So I decided to go to law school at night.

We're seeing a more direct route of basic findings into clinical trials. Investigators are taking basic research into animal models, and in a fairly short period are getting clinical trials going. It seems that in the last five to 10 years, there's been an explo-



OSP staff members brainstorming

sion of basic science that is able to go quickly into a clinical mode. And that's a wonderful thing.

Rochanna Thomas, Senior Administrative Assistant

I assist the entire OSP staff with essential administrative tasks. Having an opportunity to work with both the pre- and post-award teams allows me to handle a variety of projects from the very simple to the extremely complex. I came from the banking industry, so stepping into the research field was a new and exciting experience for me. I have learned so much, and I continue to grow.

Katie Seifert, Assistant Director, Post-Award

I help set up agreements, pay invoices from our subcontracts and monitor expenses. I'm working on the finances overall. I came by way of the University of Chicago, where I worked on pre- and post-award for grants and contracts and budgeting for unrestricted accounts.

Roberta Gerard, BSN, Assistant Director, Post-Award

I joined OSP recently, so everything is new to me. I worked for Bernard Mirkin, PhD, MD, the former director of the research center, and through that work am experienced with reconciling funds. Since I have been at Children's Memorial for over 10 years, I'm familiar with the systems and know a lot of people. I worked briefly as a nurse, and for an insurance company before coming here.

Fundraising:

MRIC Matters

About the MRIC

The Medical Research Institute Council

(MRIC) was established in 1951 as a private, independent initiative to raise funds for innovative biomedical research. In 1991, the MRIC began its affiliation with Children's Memorial Hospital. Since that time, the MRIC has raised \$40 million, including support of Children's Memorial Research Center construction and expansion. MRIC funding has led to advanced investigation in cancer, heart disease, genetics, microbiology and neonatology.

Chairman's Report

MRIC Chairman Rick Tannenbaum presented the MRIC's Research Campaign Update to the research center board of directors in December. Since 1991 the MRIC, along with its two junior boards, has completed funding of a professorship in neurobiology, an education center, the genetics program, a neurobiology research fund, the Mirkin Young Investigator chair, the Phase II building expansion, brain tumor research, a photon radio surgery system and an endowed chair for the research center's president and scientific director. The MRIC currently is working to complete a \$7.5 million campaign in support of the Rachelle and Mark Gordon Endowed Professorship in Cancer Biology and Epigenomics; three recruitments for the Human Molecular Genetics Program; the Clinical and Translational Research Program; and pediatric kidney research.



Former MRIC chairs: (From left) Andy Gelman, Betsey Pinkert, Cindy Wile, JoAnn Eisenberg and Rick Tannenbaum

Children's Ball was Out of This World

More than 1,300 guests packed the ballroom at the Hyatt Chicago last December for the

49th annual Children's Ball, the MRIC's signature fundraising event. Galaxy Gala was the theme for the ball that capped off a successful 2007 campaign that raised funds for pediatric medical research.



2007 co-chairs Jenny Patinkin (left) and Lisa Lewis with an alien band and friends who entertained guests during the cocktail reception at the 2007 Children's Ball

2007 Children's Ball and MRIC Campaign co-chairs Lisa Lewis and Jenny Patinkin chose the theme of Galaxy Gala as a nod to the era of space exploration of the 1950s and 1960s when fantasy became reality. The out-of-this-world evening consisted of exciting entertainment, fabulous food, dramatic decor and most importantly, fundraising for pediatric medical research. A space ship theme welcomed guests to the cocktail reception with time machines, an alien band of musicians, robotic drink-dispensing machines and roaming "alien" guests in black tie attire. A space age canopy hung over the dance floor and an array of galactic centerpieces including satellites, planets and stars decorated the tables.



2008 co-chairs
Emily Emmerman
and Meredith
Bluhm-Wolf

At the ball, the co-chairs for the 2008 campaign and ball were announced. They are Meredith Bluhm-Wolf and Emily Emmerman.

Bluhm-Wolf has served on the MRIC board for nearly two years and has been active on the special events committee. She is excited about her new role and thrilled to be continuing the family legacy of a commitment to pediatric research. Her mother, Barbara Bluhm-Kaul, served as a co-chair in 1981.

Emmerman is new to the MRIC this year and is eager to put her 20-year health care background to work. She became involved because she recognizes the critical role research plays in the delivery of health care

and understands the need for increased private funding for pediatric research initiatives.

Both co-chairs look forward to an exciting and busy year of fundraising and events culminating with the Children's Ball on December 13 at the Chicago Hilton and Towers. They are already hard at work on the ball theme and their fundraising strategy for the year, which will include broadening their donor base. The co-chairs are eager to begin working towards completing the MRIC's \$7.5 million campaign.

Next up for the co-chairs and the MRIC is the 2008 campaign kick-off event coming up in the spring, during which the theme for the ball will be unveiled.

by Arla Silverstein

Children's Memorial Research Center Leadership

Mary J.C. Hendrix, PhD, President and Scientific Director
Philip M. Iannaccone, MD, PhD, Deputy Director for Research —
Basic Sciences and Senior Vice President
Philip V. Spina, CRA, Senior Vice President and
Chief Operating Officer
Ram Yogev, MD, Deputy Director for Research — Clinical Sciences

Associate Directors:

Santhanam Suresh, MD, Anesthesia Research
John Lavigne, PhD, Child Psychiatry Research
Larry Jennings, MD, PhD, Pathology Research
Leon Epstein, MD, and Paul Schumacker, PhD, Pediatric Research
Cynthia Rigsby, MD, Radiology Research
Surgery Research

Directors, Programs and Centers:

Marcelo Bento Soares, PhD, Cancer Biology and
Epigenomics Program
Ram Yogev, MD, Clinical and Translational Research Program

Philip M. Iannaccone, MD, PhD, Developmental Biology Program
Ann Harris, PhD, Human Molecular Genetics Program
Xiaobin Wang, MD, MPH, ScD, Mary Ann & J. Milburn Smith
Child Health Research Program
Lauren Pachman, MD, Molecular and Cellular Pathobiology
Program
Martha C. Bohn, PhD, Neurobiology Program
Stewart Goldman, MD, Center for Clinical Trials Research
Peter F. Whittington, MD, and Xiao-Di Tan, MD, Center for
Digestive Diseases and Immunobiology
Ram Yogev, MD, Center for HIV/AIDS Research
Mark Wainwright, MD, PhD, Center for Pediatric Critical Illness
and Injury
Katherine Kaufer Christoffel, MD, MPH, Center on Obesity
Management and Prevention
Tadanori Tomita, MD, and Marcelo Bento Soares, PhD,
Falk Brain Tumor Research Center
Helen Binns, MD, MPH, Pediatric Practice Research Group

Awards, Honors and Research News



Photo: Children's Memorial Audio-Visual Department

Steven E. Krug, MD



Photo: Andrew Campbell

Martha C. Bohn, PhD

October 29, 2007 (*HealthDay News*, *Washington Post*) —

The American Academy of Pediatrics (AAP), has issued a statement that the emergency defibrillators that have saved thousands of adult cardiac arrest victims can also safely be used on children younger than 8 years old.

Steven E. Krug, MD, chairman of the academy's Committee on Pediatric Emergency Medicine, head of the Division of Pediatric Emergency Medicine at Children's Memorial and professor of pediatrics at the Feinberg School, said "There has been an advance in the technology. Even in a situation where you can provide only an adult dose, that still may be better than doing nothing." As with adults, defibrillation of children experiencing a problem must be done quickly. "Time is of the essence," Krug said. "As time passes, the chance of resuscitation decreases rapidly." The likelihood of survival decreases by seven to 10 percent with each minute of delay to defibrillation after cardiac arrest, the AAP statement said.

Martha C. Bohn, PhD, a founding member of the editorial board of the journal *Gene Therapy and Molecular Biology*, has been invited to serve an additional four years. This new journal has been accepted with enthusiasm by the scientific and medical community. Bohn is director of the Neurobiology Program at the research center, professor of pediatrics at the Feinberg School, and the Medical Research Institute Council Professor in Neurobiology.

Marcelo Bento Soares, PhD, has been invited to serve on the editorial board of *Gene*, an international journal on genes, genomes and evolution.

Mary J.C. Hendrix, PhD, presented the 5th DSR Sarma Lectureship in Oncologic Pathology at the University of Toronto in November 2007. Dr. Hendrix presented her lab's novel work in reprogramming the plasticity of metastatic tumor cells with embryonic microenvironments to the Department of Laboratory Medicine and Pathobiology. The Lectureship is named in honor of Doctor Sarma's pioneering work in developing newer probes helpful in early diagnosis of cancer and for cancer prevention and therapy.

Hans-Georg Simon, PhD, assistant professor of pediatrics at the Feinberg School, and Bernard L. Mirkin Scholar in the Developmental Biology Program at the research center, will be chairing a platform session at the American Association of Anatomists (AAA) meeting at Experimental Biology in San Diego, April 5-9, 2008. The session, entitled "How to make a limb: Developmental paradigms" will feature seven invited up-and-coming researchers to discuss their current projects in a workshop forum. The platform session is unique because of its focus on trainees and junior faculty, and the educational component that such speaking opportunities provide. For more information on the AAA meeting, visit the Web site at www.anatomy.org.

November 5, 2007 (*U.S. News & World Report*)

— New research has found a strong correlation between a child's weight and the amount of sleep that child gets. The study, published in the November 2007 issue of the journal *Pediatrics*, found that sixth-graders who averaged less than 8.5 hours of sleep a night had a 23 percent rate of obesity, while their well-rested peers who averaged more than 9.25 hours of sleep had an obesity rate of just 12 percent. Stephen Sheldon, MD, director of the Sleep Medicine Center at Children's Memorial, said "Pediatricians and parents really need to start paying closer attention to sleep-wake habits. In this society, we put a premium on being awake, and that premium may hurt us in the long run." Sheldon is also a professor of pediatrics at the Feinberg School.

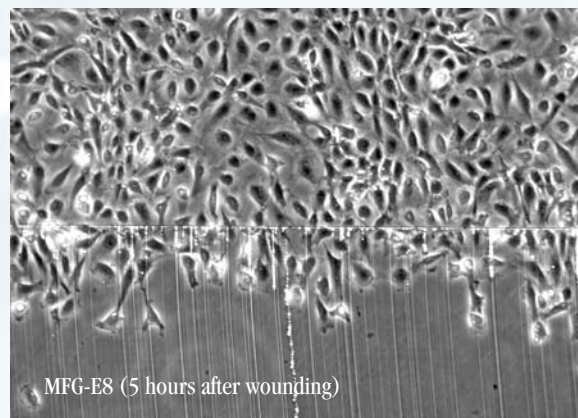
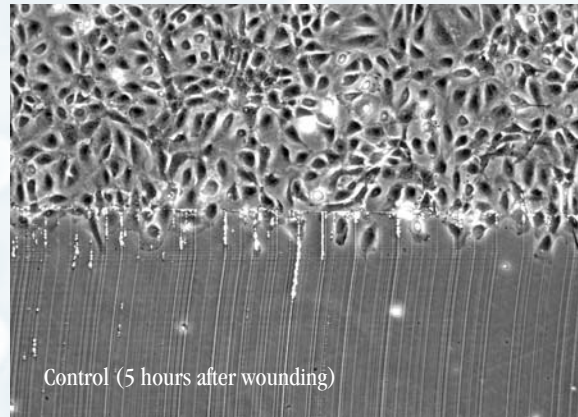


Photo: Steve Evans


Hans-Georg Simon, PhD (3rd from right) with his lab. **Troy Camarata (far left)** and **Sarah Calve, PhD, (second from right)** will be presenting their work at the AAA meeting.

November 17, 2007 (*ScienceDaily*) — Xiao-Di Tan, MD, and colleagues in the Center for Digestive Diseases and Immunobiology have identified a crucial role for MFG-E8, a component of human breast milk. The protein is important in the maintenance and repair of the intestinal lining in rats and mice. In a wound-healing experiment with cultured rat intestinal epithelial cells, treatment with MFG-E8 improved migration to the site of injury. Additionally, depletion of this protein in mice resulted in decreased intestinal migration and localized injury of the intestinal lining. In septic mice with widespread infection due to puncture of the large intestine, treatment with MFG-E8 improved intestinal cell migration, whereas depletion prolonged healing time. These data suggest that MFG-E8 might be useful for the treatment of individuals with bowel injuries. Tan and colleagues published their results in the December 2007 issue of *The Journal of Clinical Investigation*. Tan is associate professor of pediatrics at the Feinberg School, and the Eloise and Warren Batts Research Scholar in the Molecular and Cellular Pathobiology Program at the research center.

January 16, 2008 (*U.S. News & World Report*) — A study has found that the drug etanercept significantly improved psoriasis symptoms in children under 17 with moderate to severe psoriasis. 57 percent of the children and teens enrolled in the study had at least a 75 percent improvement in their symptoms, and their quality of life also improved. “Psoriasis is not just some benign skin disease but can be truly life-altering for patients,” said the study’s lead author, Amy Paller, MD, attending physician in the Division of Dermatology at Children’s Memorial, and chair of Dermatology at the Feinberg School. “In our study, etanercept positively impacted quality of life,” added Paller. To assess the drug’s safety and efficacy in children under 17, Paller and colleagues recruited 211 children and adolescents with moderate to severe psoriasis. The researchers chose etanercept because it’s already being used to treat children with juvenile rheumatoid arthritis and appears to be safe in that population.



MFG-E8 induces intestinal epithelial cell migration in vitro (Tan, X-D, et al.)

February 12, 2008 (*Chicago Sun-Times*) — A new study published in the *Journal of Allergy and Clinical Immunology* indicates that geography may have an impact on whether you develop asthma. Ruchi Gupta, MD, assistant professor of pediatrics at the Feinberg School, and colleagues at the Mary Ann & J. Milburn Smith Child Health Research Program and other institutions, report that while race, gender, age and genetics do play a role, these are not enough to account for huge differences in asthma rates found in adjacent neighborhoods. Several factors appear to trigger asthma in kids, including air pollution, exposure to dust mites and cockroaches, obesity and diets low in antioxidants. Many children with asthma also live with smokers. The research was based on a survey of nearly 49,000 Chicago public school students. 

Appointments

Luigi Strizzi, MD, PhD, has joined the laboratory of Mary J.C. Hendrix, PhD, in the Cancer Biology



Photo: Children's Memorial Audio-Visual Department

Luigi Strizzi, MD, PhD

and Epigenomics Program from the National Cancer Institute in Bethesda, Maryland, where he worked as a Fogarty Fellow in Dr. David Salomon's laboratory. His research has involved the role of the epidermal growth factor related protein Cripto-1 during mammary gland

development and tumorigenesis. Dr. Strizzi will study the characterization of Cripto/Nodal signaling pathways in cancer and development, and the identification of epigenetic factors capable of regulating these pathways.

Student News

Chris Heier, a graduate student in the laboratory of Christine DiDonato, PhD, Human Molecular

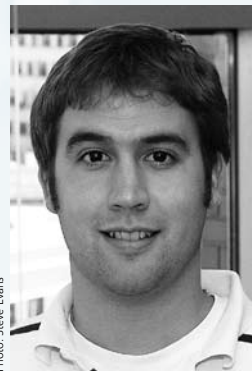


Photo: Steve Evans

Chris Heier

Genetics Program, has won the Presidential Fellowship for 2008-10 from Northwestern. This highly competitive award is the most prestigious fellowship awarded by Northwestern, to candidates who combine outstanding intellectual or creative ability with the capac-

ity to play an active part in the life of the Society of Fellows. Recipients of the Presidential Fellowship become part of Northwestern's Society of Fellows. The Society meets twice per quarter and enables stellar students from across the university to have interdisciplinary interactions with their peers in other fields. The goal is to create future leaders

who are enthusiastic and literate about the broad scholarship of the university.

Kathleen Somera-Molina (Mark Wainwright, MD, PhD, Division of Neurology, advisor) received



Photo: Philip V. Spina III

Kathleen Somera, PhD

her PhD degree on December 28, 2007 from the Integrated Graduate Program in the Life Sciences at Northwestern, with a focus on pharmacology and drug discovery. Her thesis is entitled "Glial activation links early-life seizures and increased susceptibility to seizures

in adulthood." Somera-Molina also received a Master of Science in Clinical Investigation from the Department of Preventive Medicine at the Feinberg School. She plans to pursue career opportunities in industry.

Kirsten Morris, PhD, joined Ann Harris' lab as a postdoctoral fellow in November of 2007. Morris came from Rush University, where she completed her graduate training in biochemistry. Harris is the director of the Human Molecular Genetics Program, professor of pediatrics at the Feinberg School, and the George and Valerie Kennedy Endowed Chair.

Neil Blackledge, also of the Harris group, received his PhD degree on December 20, 2007 from



Photo: Steve Evans

Neil Blackledge, PhD

Oxford University. His thesis is entitled "Characterising boundary elements of the CFTR locus." He will continue in the Harris lab as a post-doctoral fellow.

by Suzan Hammond

Principal Investigator of Historic Child Health Study (continued from page 2)


each of our institutions through the inclusion of co-investigators with specific expertise that is critical to the success of the study," Dr. Holl said.

The National Children's Study will examine the effects of environmental influences on the health and development of more than 100,000 children across the United States, with the ultimate goal to improve the health and well-being of children. The study defines "environment" broadly, including: natural and man-made environment; biological and chemical; physical surroundings; social and behavioral; genetics; cultural and family; and geographic locations. By analyzing how these elements interact and what their effects might be on children's health, researchers hope to gain an understanding of the roles of these factors on health and disease.

As Dr. Holl noted: "A wide range of data will be collected. There will be a series of self-reported survey measures, all kinds of demographic information, information about family composition, and the environment in which the child is growing up. There's a huge environmental health component with virtually all types of environmental samples being obtained at many points during pre-conception, pregnancy, and throughout the child's life, such as air, water and soil. We'll be able

to comment on the community environmental measures and exposures for these children. There will also be a wide array of biological samples collected. For example, during pregnancy the mother will receive three ultrasounds although this is not at all typical for a routine pregnancy. Numerous biomarkers will be obtained during pregnancy and after the children are born."

The study will also allow scientists to address disparities that exist between different groups of children in terms of their health, health care access, disease occurrence and quality of care. Because many questions will arise that cannot be investigated by the primary study centers, adjunct studies will be encouraged to answer these more specific or local questions.

Dr. Holl expects to begin recruiting families in the summer of 2009. The National Children's Study will provide an incredibly rich source of information to answer questions related to children's health and development, and will form the basis of child health guidance, interventions and child health policy for years to come. 

Information in this article about the National Children's Study is from: "What is the National Children's Study?" at www.nationalchildrensstudy.gov/about/mission/overview.cfm.



Profile:

Mary Beth Madonna



Mary Beth Madonna, MD

Mary Beth Madonna, MD, is an attending physician in the Division of Pediatric Surgery at Children's Memorial, assistant professor of surgery at the Feinberg School, and a member of the Cancer Biology and Epigenomics Program at the research center. Juggling her demanding schedule can be challenging, but she emphasizes that her division head, Marleta Reynolds, MD, and fellow staff members have been very good about allowing her protected time to pursue research activities.

Clinical experiences motivate her research. Most children who come to the hospital with neuroblastoma — the second most common solid tumor in children — have a poor prognosis. Mary Beth wants to understand cellular behavior in the disease in order to find therapies. She recently created a less virulent neuroblastoma cell line by inserting a gene for nerve growth factor, and is beginning to characterize the cell line to ultimately develop treatments.

Mary Beth finds fulfillment in seeing patients and their families postoperatively. "They're sick, you take care of the problem, they come back and they're happy," she says. On the research side, it can take years to find a discovery that's clinically relevant, so the smaller steps, such as getting a good result, are exciting. She regards the late Bernard Mirkin, PhD, MD, as an inspiration, and hopes she can continue the same quality of work that he brought to the bench.

In her very limited spare time, Mary Beth spends time with her family, all Chicago area residents. She makes her home in Streeterville and loves to spend summers outdoors enjoying local venues such as Navy Pier and Millennium Park. She ran in the Chicago Marathon last September and intends to compete again in 2008 to raise money for Children's Memorial.

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[Children's Memorial Research Center]



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Children's Memorial Research Center is the research arm of Children's Memorial Hospital, and a virtual center for pediatric research at Northwestern University's Feinberg School of Medicine. Founded in 1989, the research enterprise has grown to include more than 200 investigators and more than \$28 million in external funding for research, two-thirds from the NIH and other federal agencies.