



...where miracles begin



# RESEARCH UPDATE

July 2008

## REDUCING ALCOHOL ABUSE THROUGH A COMMUNITY-BASED PROGRAM



**Through the Russellville School District, Madisun and her mother participated in a program that worked to decrease the use of alcohol among secondary students.**

In June, the Substance Abuse and Mental Health Services Administration (SAMHSA), an agency of the US Department of Health and Human Services, released the results of a survey on underage alcohol use. More than 40% of the nation's estimated 10.8 million underage current drinkers (persons aged 12 to 20 who drank in the past 30 days) were provided free alcohol by adults 21 or older. The study also indicates that 1 in 16 underage drinkers (6.4% or 650,000) was given alcoholic beverages by their parents in the past month.

Mark Edwards, PhD, a pediatric psychologist, has led a 3-year study ending in August funded by the US Department of Education that focused on promoting behavioral health and decreasing the use of alcohol among secondary students through the implementation of a variety of prevention and intervention programs involving students, parents, teachers, and the community. The study, the Russellville Alcohol Abuse Reduction Project, was conducted in the Russellville School District with the school district and Child Development, Inc. (CDI), as ACHRI's community partners in the project. Both agencies are previous research partners of ACHRI as well.

The grant provided for licensed therapists in secondary schools, parent education programs, curriculum development including behavioral health and alcohol awareness, training and certification for area therapists in counseling for alcohol abuse, and a social marketing campaign about alcohol abuse among teens. "This is an evaluation of a community-based program," says Dr. Edwards, "we're not experimenting with an untried program." To evaluate the program, the research team measured changes in knowledge, attitudes, and behaviors about alcohol before and after each activity for every student and, when included, every parent.

Project Director Patti Butler, MS, MSW, of CDI describes the program as a community effort. One example of this effort is the Parent Pledge that the program distributed to parents at the beginning of each school year. Parents could voluntarily sign the pledge which included the promise not to serve alcohol to minors in their homes and to contact the parents of a visiting teen who appears to be intoxicated. The program published the contact information for participating parents in a booklet distributed to all parents at parent-teacher conferences in October of the school year.

"For parents, the pledge means 'Call me, and I'll call you, too,'" says Angie White, a Research Assistant on the project. The recent SAMHSA survey showed that over half (53.4%) of underage current alcohol users were at someone else's home when they had their last drink, and 30.3% percent were in their own home. The Parent Pledge was one of the program's prevention strategies to affect drinking in the homes of students.

Ms. White of UAMS is also the mother of Madisun, a Russellville student entering the ninth grade. For the past three years, the alcohol reduction program has impacted Madisun's school, family and community. Madisun says, "It showed that parents cared about their children if they were part of the parent pledge and willing to take steps to ensure their children didn't drink."

With the grant period ending this summer, the school district must complete its program sustainability plan for the next year before it is eligible to reapply for funding. "Changing social norms takes time," says Ms. Butler. "Three years is not enough time to change social norms. We're off to a good start, and it's up to the community." The work of this research team with the community has given it a good start with the experience and measures to reduce alcohol abuse.

## INTRODUCTIONS ARE IN ORDER

When the research institute opened in 1992 there were only a handful of researchers on campus. In fiscal year 2008 approximately 120 researchers prepared and submitted proposals for future research projects or actively participated in research. With this growth in the number of investigators on campus comes the challenge of ensuring that everyone is properly introduced to new researchers as they arrive on campus. Collaboration is the key to successful research, and a proper introduction is the key to collaboration. Here we introduce some of the most recent additions to our research family. We will feature several researchers each month.

### Jose Romero



Dr. Jose Romero is the new Horace C Cabe Professor of Pediatrics and Chief of the Pediatric Infectious Diseases Section at UAMS/ACH and Medical Director for Clinical Trials Research at ACHRI. Prior to joining us on July 1, he was the Section Chief of Pediatric Infectious Diseases at the University of Nebraska Medical Center in Omaha, NE. His research interests include the molecular pathogenesis, molecular diagnostics, molecular epidemiology and therapy of enteroviral infections; the diagnosis, prevention and therapy of respiratory syncytial virus infections; and vaccine clinical trials.

#### **What are your plans for research projects in the near future?**

I hope to begin several vaccine trials for prevention of meningococcal and respiratory syncytial virus infections.

#### **Why do you think research is important?**

Research is an integral part of the health sciences. Through it we gain insights into the causes of disease processes, potential therapeutic approaches and the best ways to treat and prevent illness.

### Juliana Frem, MD



Dr. Frem is assistant professor of pediatrics at UAMS and is board certified in pediatrics and pediatric gastroenterology. Prior to joining UAMS/ACH in August 2007, she completed a fellowship in pediatric gastroenterology, hepatology, and nutrition at Emory University School of Medicine. Her research interests include pediatric short bowel syndrome and copper supplementation in infants with cholestasis.

**What are your plans for research projects in the near future?** *I am currently researching the use of soluble fiber in pediatric short bowel syndrome, looking at its impact on feeding tolerance. I am also working on a project looking at the epidemiology of malnutrition in children of Arkansas.*

**Who are you collaborating with?** *I am collaborating with Dr G. Fuchs, Dr T. Badger and Dr R. Lyle.*

**Anything else you would like people to know about your research interests?** *I am interested in nutritional needs during infancy.*

**Why do you think research is important?** *There is a big need for research in the pediatric age group; research enables us to examine our practices and helps in advancing the care of children.*

## Horacio Gomez-Acevedo



Horacio Gomez-Acevedo is an instructor in the UAMS Department of Pediatrics. Prior to joining ACHRI in December of 2007, he worked as an assistant professor in the department of Mathematics and Computer Sciences at Tougaloo College in Tougaloo, MS.

**What are your plans for research projects in the near future?** *There are a number of dynamical processes that occur when humans are exposed to toxicants. In particular, when mice are exposed to trichloroethylene (TCE) or its metabolites, important changes occur in the CD4+ T cells. I plan to use mathematical models to quantitatively describe how the TCE attenuates the apoptosis in CD4+ T cells that may promote autoimmunity. The modeling would help in the design of optimal therapeutic interventions that will revert as much as possible the effects of the toxicant on the CD4+ T cells.*

**Who are you collaborating with?** *Currently I am collaborating with Drs. Kathleen Gilbert and Sarah Blossom.*

**Anything else you would like people to know about your research interests?** *One of the main advantages of mathematical modeling is the versatility to describe the “system” behavior under different scenarios without the necessity of repetitive experimentation for each case. In the medical field changes over time occur at every level: metabolic, physiologic, immunologic, etc. With mathematical modeling we can paste together the snapshots of information, and we can use that information to predict, prevent or interpret possible outcomes. I like to refer to this quote:*

*"If people do not believe that mathematics is simple, it is only because they do not realize how complicated life is."  
-John von Neumann*

## CONGRATULATIONS

**Shanmugam Nagarajan, PhD**, a researcher at the Arkansas Children's Nutrition Center, was awarded \$1.25 million by the National Institutes of Health for a 5-year study to examine the role of cellular receptors in atherosclerosis. The project aims to advance the understanding of how Fcγ receptors affect lesion development in the disease.

“This research will shed light on how this deadly cardiovascular disease originates and progresses,” Nagarajan said. “We believe that if we can advance the understanding of the atherosclerosis process, we can discover the best ways to treat it.”

A press release announcing the award is currently in preparation. It is expected to be released next week and will be available on the ACH website at the Press Release page ([http://www.archildrens.org/press\\_room/press\\_releases.asp](http://www.archildrens.org/press_room/press_releases.asp)).

**Steve Bowman, PhD**, was recently awarded \$50,000 from the Epilepsy Foundation for a project titled Injury Patterns, Outcomes, and Disparities in People with Epilepsy. This project compares hospital outcomes for injured people with epilepsy with similar people who do not have epilepsy. He and his colleagues will look at whether people with epilepsy receive the same care and treatment as people who do not have epilepsy. A comparison of where people die is also included to see if people with epilepsy are more likely to die before reaching the hospital.

Dr. Bowman is an Assistant Professor with appointments in the UAMS College of Medicine's Department of Pediatrics and the UAMS College of Public Health's Departments of Epidemiology and Health Policy and Management. Dr. Bowman specializes in the application of health services research methods to injury prevention and trauma systems research. His research interests include 1) identifying hospital organizational characteristics associated with optimal trauma outcomes, 2) developing and evaluating effective prevention interventions to reduce the unintentional and intentional injury fatalities and hospitalizations, 3) eliminating racial and ethnic disparities in acute trauma care outcomes by identifying variability of care and opportunities for quality improvement, and 4) improving trauma care in rural communities through systems research and evaluation.

Dr. Bowman joined ACHRI in April of 2007. In his previous position, he served as an epidemiologist for the Washington State Department of Health, in charge of systems evaluation and quality improvement for the EMS and trauma system. He also served as the director of the tobacco prevention and control program there, as well as chronic disease prevention programs.

## PRESIDENT'S CHOICE

Stop by the bulletin board located in the first-floor lobby of the ACHRI building to see this month's President's Choice publications. The following articles were selected as this month's feature publications.

- Kramer TL, Miller TL, Phillips SD, Robbins JM. Quality of mental health care for depressed adolescents. *Am J Med Qual.* 2008 Mar-Apr;23(2):96-104.
- Carbajal R, Rousset A, Danan C, Coquery S, Nolent P, Ducrocq S, Saizou C, Lapillonne A, Granier M, Durand P, Lenclen R, Coursol A, Hubert P, de Saint Blanquat L, Boëlle PY, Annequin D, Cimerman P, Anand KJ, Bréart G. Epidemiology and treatment of painful procedures in neonates in intensive care units. *JAMA.* 2008 Jul 2;300(1):60-70.

ACHRI would like to know about your published findings, as your articles are published, please email or mail a copy to [Phaedra Yount](#) (mail slot 842). The number of publications by our researchers is reported to the hospital and ACHRI boards, so it is important that we receive an accurate count of the publications your research produces. To see all recent publications by ACHRI researchers and their collaborators, please visit the [publications web page](#).

## MILEAGE RATE INCREASE

Last week the Internal Revenue Service announced an increase in the business standard mileage rate for the final six months of 2008. The rate will increase to \$0.585 for all **business miles driven from July 1, 2008 through December 31, 2008**. ACH will reimburse for business related travel based on the rates determined by the IRS.

Mileage incurred before 07/01/08 will be reimbursed at \$0.505 a mile. If you have any questions please contact Leslie Montgomery at 364-6546.

## REQUEST FOR RESEARCH HIGHLIGHTS FOR 2008 ANNUAL REPORT

It is that time of the year again. We are collecting research highlights that will be published in our 2008 annual report. We would like to publish a highlight from EVERY researcher on this campus. If you would like to be included in this report, please send your research accomplishments from the last fiscal year (July 1, 2007-June 30, 2008) to [Phaedra Yount](#). If you would like to see examples, please take a look at our [2007 annual report](#).

## A SIGNATURE IS A SIGNATURE NO MATTER *WHEN IT WAS SIGNED RIGHT?* ...

Well...when it comes to informed consent in human subject research, not really....

When performing the informed consent process, the person obtaining consent (POC) should sign at the same time as the participant and the witness. The period between the time the first person signs to the time the last person signs shouldn't be any more than about five minutes. Remember, we need to be able to verify each step of the process. If there is a discrepancy between the times, we can't verify that the POC was actually present during the consenting process.

What if this isn't possible because of the way that your protocol is written? Then you need to document this in your consent process plan. Remember, the Institutional Review Board (IRB) in policy 15.5 says that you should detail the informed consent process that you plan to use for your project when you make your **initial submission**. If your protocol makes it impossible to get the POC signature at the same time as the witness and participant, make sure this is outlined completely in your initial IRB submission. If the IRB approves this deviation from the norm, you can use this procedure for consent. Otherwise....everybody signs at the same time!

## RECENT AWARDS AND SUBMISSIONS

Awards				
PI	Agency	Project Title	Project Period	Total Funding for All Years
Kathleen Gilbert	TCE Settlement	Intervention for Trichloroethylene-Induced Autoimmune Disease	7/1/08-6/30/11	\$800,000
Submissions				

PI	Agency	Project Title	Project Period	Total Funding
Sarah Blossom	NIH	Comparing Mouse Strain Sensitivity to Pro-Oxidant Neuroimmune Alterations Following Combined Development Environmental Exposures	10/01/08-9/30/10	\$398,250
Jill James	HRSA	Autism Intervention Research Network on Physical Health (AIR-P Network)	9/1/08-8/31/11	\$247,272
Jill James	HRSA	Autism Intervention Research Network on Physical Health (AIR-P Network) - Nutrition Project	9/1/08-8/31/11	\$277,197

## NEW INDUSTRY-SPONSORED PROJECTS

Clinical Trials	Agency	Project Period	Total Cost
Richard Jacobs	Cubist Pharma	6/2008 - 5/2009	\$45,012.50
Ariel Berlinski	MPEX Pharma	6/2008 - 5/2009	\$34,950.50
Robert Saylor	Sanofi Aventis	6/2008 - 5/2009	\$180,105.00
Amy Scurlock	Genocea	6/2008 - 6/2009	\$39,395.00

## ACHRI INVESTIGATOR'S MEETING

The next ACHRI investigator's meeting will be held August 9 in the Brandon Auditorium at 11:30. Lunch will be served to the first 50 attendees. Did you miss the April meeting? You can access the slide presentation from our website. Visit <http://achri.archchildrens.org/resources/PIMeetingSlides.htm>.

## FUNDING OPPORTUNITIES

The National Association of Children's Hospitals (NACH) prepares and distributes upcoming funding opportunities every two weeks. Funding opportunities recently distributed by the NACH are available on the ACHRI web site ([http://achri.archchildrens.org/resources/funding\\_opp.htm](http://achri.archchildrens.org/resources/funding_opp.htm)). This file is updated monthly. Bookmark the page! The listing of funding opportunities is located on the intranet; you must have access to MyACH vault files to open the file.

## GRANT WRITING TIP: NOT AVAILABLE AT YOUTUBE

ACH Media Services has taped the recent ACHRI presentations on its intramural grant programs. These presentations are now available for viewing at ACH's Online Educational Opportunities Web site. (This is the same Web site where many people view ACH Pediatric Grand Rounds.)

To access ACHRI's presentations, go to <http://imediassrv.archchildrens.org/mediasite/Catalog/>. Select "Other Presentations" on the menu on the left. To find the ACHRI presentations, type ACHRI in the search text window and click "Find Presentations". Select the presentation you wish to view.

After you select a presentation, a new window opens that displays streaming video and the slide show side by side. You may need to adjust the volume. If the displayed controller doesn't provide the desired volume, try adjusting the volume through the Volume controller on the Taskbar or through Sounds and Audio Devices on the Control Panel.

As of July 1, the presentations for the ACHRI/ABI and CUMG intramural grant programs are available. The July 7 presentation on the ACHRI Student and Clinical Staff Research Intramural Grant Program will be available at the Web site soon. We will link the ACHRI intramural program web pages to these presentations.

## Submitting Electronic Applications to NIH?

ACHRI will hold a workshop providing an overview of downloading PureEdge Viewer and grant applications from Grants.gov. There will be a demonstration of completing and viewing application forms, using the SF424 Cover Component as an example, with PureEdge. Participants will work at a computer station to get hands-on experience with these tasks. There will also be a discussion of transferring completed applications to ACHRI for submission to NIH as well as an explanation of what happens during the submission process. The workshop is on August 25 from 2:00 to 3:30 in EC 59 (2nd floor, ACH East Campus Building). There is space only for 18 participants, so please email John Gregan if you would like to attend.