



**...where miracles begin**

## RESEARCH UPDATE - JULY 2007



### **Pediatric Clinical Nursing: Research at the Bedside**

ACH nurses exemplify the hospital's commitment of care, love, and hope. Many of these dedicated medical professionals also exemplify ACHRI's mission to improve children's health, development and well being through high quality research. These nurse researchers identify their projects from clinical issues they see in everyday practice. They work across many clinical areas and focus on issues such as family-centered care, pain assessment, and nursing policies and procedures.

**In the Pediatric Intensive Care Unit, PICU Director Kim White looks on as PICU Nurse Greg Taylor, RN, and ACH Director of Nursing Research Angela Green, PhD, APN, review study data.**

Angela Green, Ph.D., A.P.N. is the Director of Nursing Research at ACH. Nursing Research is part of Patient Care Services Administration and provides education and support for staff as they address clinical practice issues. "We provided support for 24 IRB-approved studies this past year, and in 21, the principal investigator was a nurse," says Dr. Green.

The nursing researchers present their findings in various forums—abstracts, posters, presentations, and publications—regionally and nationally. The biggest impact of their research though is a change in practice, which occurs much faster than traditional health care research because the researchers are at the bedside," says Dr. Green.

Research and evidence-based practice projects among pediatric clinical nurses at ACH have grown. "Research is now part of the career ladder for clinical nursing staff," says Dr. Green. These researchers have received funding through intramural programs, nursing organizations, and federal agencies though much of the nursing research at ACH is unfunded. As their experience grows, Nursing Research anticipates more funded projects, but more importantly their impact on patient care will increase.

### **President's Choice**

Stop by the bulletin board outside the research administration offices to see the poster featuring this month's President's Choice publications. The following articles were selected as this month's feature publications:

- Malik S, Cleves MA, Zhao W, Correa A, Hobbs CA; National Birth Defects Prevention Study. Association between congenital heart defects and small for gestational age. *Pediatrics*. 2007 Apr;119(4):e976-82. Epub 2007 Mar 26.
- Liu Z, Aronson J, Wahl EC, Liu L, Perrien DS, Kern PA, Fowlkes JL, Thrailkill KM, Bunn RC, Cockrell GE, Skinner RA, Lumpkin CK. A novel rat model for the study of deficits in bone formation in type-2 diabetes. *Acta Orthop*. 2007 Feb;78(1):46-55.

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 hospital and ACHRI boards, so it is important that we receive an accurate count of the publications your research produces.

### **In the Spotlight**

The announcement of Dr. Uma Nagarajan's new NIH-funded R01 is featured on the [Arkansas Business](#) and [Today's THV](#) web sites. To read the full press release, please visit the [ACH Press Room Web page](#). Please join us in congratulating Dr. Nagarajan on her new award.

Dr. Rosalia Simmen has accepted an invitation to join the editorial board for *Endocrinology* for the term, January 1, 2008 to December 31, 2011. Congratulations Dr. Simmen!

### **Equipment**

The ACH/ACHRI definition of equipment is “any piece of tangible equipment with a useful life of two (2) years or more that costs \$5,000 or more”. For grant related expenditures, equipment should be charged to expense object code (EOC) 800 Equipment. For purchases of items that do not meet the criteria of equipment, EOC 989 Other Expense may be used.

Service agreements, replacement parts and services such as telephone service, general labor and repairs are not considered “Equipment”.

Office of Management and Budget Circular (OMB) A-110 provides that the recipient (ACHRI) use the equipment in the project for which it was acquired as long as needed. When no longer needed for the original project the recipient (ACHRI) shall use the equipment in connection with its other federally-sponsored activities with priority being given to activities sponsored by the federal agency which funded the original project and then to activities sponsored by other federal agencies.

You may contact Barry Brady, Blake Harrison or Leslie Montgomery for questions relating to equipment.

### **Human Subject Research Compliance Quiz**

What are the three fundamental principles of The Belmont Report that underlie the conduct of human research?

- A. Respect for persons, beneficence, and justice;
- B. Do no harm, fair sharing of research benefits and burdens, and equitable selection of subjects;
- C. Respect for persons, voluntary informed consent, and voluntary withdrawal of subjects from research;

D. Good research design, voluntary participation, and respect for privacy.

The first person who responds to Margie Brackeen at [brackeenmargie@uams.edu](mailto:brackeenmargie@uams.edu) with the correct answer will win a prize!

The correct answer will be revealed in the August Research Update.

## New Industry-Sponsored Projects

PI	Agency	Project Period	Total Cost
Ilyas, M	Merck	6/2007 - 6/2009	\$55,029
Ilyas, M	King/Parexel	6/2007 - 6/2009	\$36,905
Saccente, Suzanne	Anthera	6/2007 - 6/2008	\$38,300
Kemp, Stephen	Insmmed	6/2007 - 7/2007	\$3,750

## Recent Grant Awards and Submissions

### Awards

PI	Agency	Project Title	Project Period	Total Cost
Shanmugam Nagarajan	AHA	Role of scavenger receptor like activity of Fcgamma receptors in atherosclerosis	7/1/07-6/30/09	\$143,000

### Submissions

PI	Agency	Project Title	Project Period	Total Cost
Nicolaas Deutz	NIH	Optimal Amino Acid Nutrition in Sepsis	4/1/2008- 3/31/2013	\$1,775,000
Richard Kurten	NIH	Modulating Airway Beta 2 AR to Regulate Contractility	4/1/2008- 3/31/2011	\$775,750
Sadia Malik	NIH	Maternal Smoking, DNA Repair Polymorphisms and the Risk of Septal Heart Defects	4/1/2008- 4/1/2013	\$649,350
Regina Okhuysen- Cawley	NIH	Patient Response and Outcome in TAMOF in Children	4/1/2008- 3/31/2010	\$7,100
Martin Ronis	NIH	Role of NOX and TNF in Ethanol-Induced Bone Resorption in the Cycling Female	1/1/2008- 12/31/2013	\$1,787,500
Bradley Schnackenberg	NIH	Mechanisms for Airway Epithelial Cell Wound Healing	4/1/2008- 3/31/2013	\$1,461,600
Amy Scurlock	NIH	Immunology Networks in Chlamydia Tract Infection	4/1/2008- 3/31/2013	\$661,500
Kimo Stine	CDC	PHO 10-03 The Epidemiology of Diamond Blackfan Anemia: The Diamond Blackfan Anemia Registry	9/1/2006- 9/29/2007	\$9,200

## Education Opportunities

### The Essentials of Quality Human Subject Research

When: July 25, 2007 8:00am to 5:00pm

Where: Brandon South B

This is an all day inclusive training seminar for new investigators, coordinators, and others involved in human subject research. This seminar covers such topics as; The IRB, Informed Consent; Research Misconduct; Research Record Keeping and much more!

Sponsored by ACHRI and the UAMS Research Support Center Target Audience: Investigators, Research Coordinators, Research Assistants/Associates Register on the ACH Training system under the "RES HUMAN PROTECTIONS CO" department.

Questions/Problems? Contact Margie Brackeen ([brackeenmargiei@uams.edu](mailto:brackeenmargiei@uams.edu))

### **Revising Text: Ten Principles for Writing Clearly**

When: July 23 from 1:30 pm to 3:30 pm

Where: EC 59 (2nd floor, ACH East Campus Building)

Revising a completed draft of your grant application or journal manuscript to improve its readability is a skill you can learn and apply. This workshop will introduce you to a method of revision developed by Joseph M. Williams, presented in *Style: Lessons in Clarity and Grace*. Now in its ninth edition, Williams' book has been used in collegiate technical editing and style courses for over 25 years. The workshop will provide an overview of revision and introduce the ten principles Williams offers as ways to help predict how readers will judge your prose and help you decide whether or how to revise it. There is space for 18 participants, so please email [John Gregan](mailto:John.Gregan) if you would like to attend. If you have any questions, call him at 364-6296.

### **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 will be updated twice monthly. Bookmark the page! The listing of funding opportunities is located on the intranet; you must have access to ACH webapps to open the file.

### **Grant Writing Tip: Readability Scales**

After using the spelling and grammar function in Microsoft Word, you can opt to display the readability statistics for the document (or selected portion of the document) reviewed. Each readability score bases its rating on the average number of syllables per word and words per sentence.

These scores are more the result of a formula than "statistics". The formulas for the scores Microsoft Word generates use averages of sentence lengths and syllables per word and constants in each to arrive at the resulting score. (The Microsoft Office Word Help file "Readability scores" provides these formulas.) The merit and foundation of these formulas could be debated at length, but when the spelling checker does not recognize many of the medical and scientific terms ACHRI researchers use, the readability score might not seem very just. Combined with the fact many of the terms used by ACHRI researchers tend to be multisyllabic, the score cannot seem very definitive.

The first of the two scores displayed is the Flesch Reading Ease score. It rates text on a 100-point scale. The higher the score, the easier it is to understand the document. The Microsoft Word help suggests that for most standard documents, you should aim for a score of approximately 60 to 70. That range is just a suggestion, one that an author of technical scientific text may not be able to meet writing to peers without seeming to be writing down to them.

The same thought comes to mind when considering the second of the two displayed scores, the Flesch-Kincaid Grade Level. This score rates text on a US school grade level. (For example, a score of 8.0 means that an eighth grader can understand the document.) For most documents, Microsoft Word help suggests aiming for a score of approximately 7.0 to 8.0. Again, a score this is perhaps inappropriate for peers and experts reviewing your grant application or manuscript.

Despite this criticism, generating these statistics can be useful if you look beyond the resulting numbers. Consider your audience and content when you reflect on these scores. At what level of expertise do you consider your reviewers? While NIH reviewers will be able to comprehend well written technical text, reviewers of some private granting agencies or organizations may not be. Be familiar with the background of your reviewers. Still, be sure to clearly define terms and explain processes that may be new to your audience, regardless of their background. You can select passages from your documents, whether it's a paragraph or an entire section, and generate readability scores for that passage. This strategy is especially useful for parts with complex or new ideas and procedures.

The other information displayed on the readability statistics screen can be helpful. Examine the number of sentences in a paragraph and the number of words in a sentence to consider if you have too lengthy of a passage for your audience. The percent of passive sentences can also indicate the need to revise sentences for conciseness.

If you run the spelling and grammar function and these scores do not appear, search on "Display readability statistics" in help. If the document contains text in languages other than English or text in multiple languages, the scores may not reflect the readability of the entire document's text.

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[Comments or Suggestions?](#)