**Animals in Research**

**Proper documentation of animal studies assists in replication of results**

A new publication from the National Academies Press provides guidance on what information should be covered in scientific papers describing animal studies so that the research can be replicated. Examples include: conditions of housing and husbandry, genetic nomenclature, microbial status, detailed experimental manipulations, and handling and use of pharmaceuticals. The report—*Guidance for the Description of Animal Research in Scientific Publications*—notes that “Analyses of published studies with research animals have demonstrated numerous deficiencies in the reporting of details in research methods for animal studies. Considerable variation in the amount of information required by scientific publications and reported by authors undermines this basic scientific principle and results in the unnecessary use of animals and other resources in failed efforts to reproduce study results.” The full report is found at <http://tinyurl.com/3jcnumz>.

**NABR releases updated version of Crisis Management Guide**

The latest edition of the *NABR Crisis Management Guide™* offers tools to prevent, prepare for, and respond to animal rights extremist campaigns against researchers and research institutions, including step-by-step instructions to prepare for various crisis scenarios created by activists. NABR staff is also available to advise member organizations on tailoring specific crisis management and crisis communication plans. Contact AAA at <exec@anatomy.org>for an electronic copy; include your name, title & full academic affiliation.

**New AAALAC position statements reflect 2011 changes in Guide**

The Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) International has revised several of its position statements and added new statements to reflect 2011 changes to the *Guide for the Care and Use of Laboratory Animals*. Revised positions include the Definition of “Laboratory Animals” and

**Outreach continued from previous page**

out to schools and community clubs, these resources will be useful to further educate the broader community about neuroanatomy.

The ABBC competition is designed to stimulate and excite students’ interest in brain research and encourage them to consider neuroscience research as a career option through their exposure to state-of-the-art laboratories and the opportunity to talk to enthusiastic neuroscientists. As histology is a vital part of understanding the brain, the inclusion of histology in the competition is dependent on having the histology resources available, which would not be possible without AAA support. AAA has greatly contributed to this education outreach endeavor.

*Linda J. Richards, Ph.D., The University of Queensland; Australian Brain Bee Challenge National Coordinator*

**REACHING OUT – A Prosthetics & Orthotic Limb Workshop**

On August 2, 50 students and professionals from around the world converged in Northwest Indiana at the Indiana University School of Medicine – Northwest (IUSM-NW) for a unique workshop sponsored in part by the American Association of Anatomists. *Reaching Out – A Prosthetics & Orthotic Limb Workshop*, conducted and sponsored by Rick Rocco, Jr., of Rocco Prosthetics & Orthotic Center in Cincinnati, was a part of the medical school’s annual summer International Human Cadaver Prosection Program. During the workshop, participants were able to apply their knowledge about limb anatomy and function via interaction with trans-femoral amputee patients. The overall objective was to get the participants excited about and interested in learning human anatomy through real-
life clinical application of gross anatomy and anatomical relationships focusing on prosthetics and orthotics for human extremities, thus motivating them to seek careers in anatomical and related sciences.

Participants from the U.S., Canada, Spain, Argentina, Egypt, Mexico, and Nigeria were selected through an extensive application process from an international pool of 250 applicants. They included undergraduate students, medical students, physicians, professors, and one junior high school student. During the two months preceding the workshop, participants received instruction focused on human gross anatomy and radiology through interactive discussion sessions and a hands-on experience in cadaver radiography. Topics for discussion were: anatomical terminology; upper extremity; lower extremity; clinical case studies of the brachial plexus, lumbosacral plexus, and unhappy triad of the knee; basic medical imaging; advanced medical imaging; and anatomical dissection instruments and techniques.

For the actual workshop, all participants were dressed in scrubs and paired with participants whom they did not know and who had different educational backgrounds and skills, thus facilitating the team-based, problem-solving experience. Session One focused on a case study analysis of an orthotic and prosthetic patient. Participants were taken through the anatomical evaluation and casting process with amputee patients. Evaluation consisted of patient history as related to prosthetics and orthotics, discussion of anatomy and pathology, gait analysis, measurement techniques, and ultimately the casting process resulting in a negative mold.

As negative impression techniques are extremely important with regard to custom orthotic and prosthetic systems, techniques were demonstrated and several examples of both orthotic and prosthetic components and devices were examined. Participants were assisted by licensed orthotists and prostheticians to apply anatomical knowledge while making a prosthetic device for their patient. Through outdoor sports activities (i.e., running, jumping, side-stepping, etc.), the amputee patients demonstrated the use of advanced prosthetic devices.

Session Two focused on design, fitting, and use of advanced prosthetic limbs, including myoelectric technology. This session was jointly instructed by Rocco Prosthetics & Orthotic Center and Össur, an orthopedic company. Again, participants interacted with amputee patients applying their knowledge of limb anatomy and function to the application of cutting-edge prosthetics technology through fitting and design, and observation of function via indoor and outdoor exercises.

At the end of the program, all participants were awarded a certificate of completion and the top two each received a one-year student membership in AAA. Amputee patients thought that the program was “great” and volunteered to participate in future workshops. Responses from participants were overwhelmingly positive, including these comments:

- The workshop was SUPERB, since it introduced us to the art and science of constructing prosthetic limbs. I had no idea that the field of prosthetics was so complex.
- What an inspiration to have met an actual patient who shared his story and experience with us so that we may learn more about it and more about anatomy!
- I cannot forget the Prosthetics and Orthotics Workshop where we had the AMAZING opportunity to learn how to cast for a limb, learn about the various highly technical prosthetics, and how they work, much less learn first-hand from those that utilize such technology on a day-to-day basis.
- The prosthetics workshop was really eye-opening and taught a lot of information about things I really had never thought about much. The anatomy and engineering and mechanics behind it all is a whole other field related to medicine. Working with our patients makes you really appreciate what you have and inspires you to never give up—anything is possible.

Based on this year’s success, the program will be offered again on July 31, 2012.

Ernest F. Talarico, Jr., Ph.D., associate director of medical education & assistant professor of anatomy & cell biology, IUSM-NW; Associate Faculty of Radiologic Sciences, IU-Northwest

The Attending Veterinarian and Veterinary Care. Other new positions relevant to researchers include Cage or Pen Space, Social Housing, and Safety Requirements for Walk-In Cage/Rack Washers and Bulk Sterilizers. These positions will be used by the Council on Accreditation to evaluate and accredit animal care and use programs. Details are available at <www.aalac.org/accreditation/positionstatements.cfm>