Dr. Brian Boyd & Team Awarded Federal Grant to Advance Social-Communication and Play in Children with Autism

The Advancing Social-Communication and Play (ASAP) intervention was created by a multidisciplinary team of researchers at UNC through a development grant funded by the Institute of Education Sciences (IES), U.S. Department of Education. ASAP, designed for use in public preschool classrooms, targets social-communication and play skills in young children with autism. The development process embodied aspects of translational research, such as using iterative cycles of reviewing empirically supported intervention content and strategies, seeking feedback from key stakeholders (e.g., teachers, speech-language pathologists, occupational therapists, administrators), and trialing the intervention in public preschool settings.

Recently, Drs. Brian Boyd (PI), Assistant Professor (OS/OT) and Linda Watson (co-PI), Professor (SHS), received additional IES funding ($3,167,682 over four years) to conduct an efficacy study of ASAP. The new study will span four years, and involve other researchers from UNC-Chapel Hill, as well as three other universities: Portland State University, University of Miami, and University of Minnesota. A cluster randomized trial will involve a total of 80 preschool classrooms. Half will be randomly assigned to the ASAP intervention, and the other half will continue their typical classroom instruction. This grant offers exciting opportunities for faculty and students in the DAHS. Students in doctoral, master’s, and undergraduate programs will participate in research by completing independent studies, administering child assessments, and coding/analyzing data on child outcomes. The ASAP research team will disseminate findings to local stakeholders through professional development trainings and local- and state-level conferences. Pending positive effects at the completion of the efficacy phase, researchers will publish the ASAP intervention manual and DVD so that it can be implemented in preschool classrooms serving children with autism across the country.
From Dr. Grace Baranek, Associate Chair for Research

It’s been a full year since I’ve stepped into the role of Associate Chair for Research and I’m proud to have had the opportunity to serve the department in this capacity. This issue documents scholarship and significant achievements in research by both faculty and doctoral students. Among those achievements: this year’s external funding outpaced the previous 10 years (Figure 1) - quite a feat during a time of state budget woes and cut-backs for many federal agencies as well as private foundations. Perseverance and teamwork has paid off. Higher rates of submissions have offset a potentially lower rate of funding; we are averaging 40% success rates thus far this year (Figure 2). Scholarship is certainly not all about funding, and the list of publications this quarter speaks to the passions and productivity of our faculty. The number and quality of faculty publications co-authored with doctoral and post-doctoral trainees is particularly impressive, demonstrating the collaborative and interdisciplinary nature of our teams in Allied Health Sciences. Through dissemination of research findings, theoretical papers, and evidence-based practices, we have contributed not only to the collective vitae of the department, but to the needs of our communities on issues related to health care, education, and policy. Kudos to all!

One of my goals this year was to complete a thorough needs assessment to determine areas of research strength and opportunity and to identify resources needed to continue to grow our department’s research enterprise and scholarship. Our office completed a three-pronged needs assessment with (a) detailed, structured interviews with Division Directors and administrators; (b) meetings with individual research faculty and/or faculty groups; and (c) completion and analysis of a faculty survey. Highlights from the faculty survey are included in this issue and are posted to the research webpage. The year provided an opportunity to work directly with our own Research Advisory Committee, the UNC Center for Faculty Excellence, NC TraCS, and the Office of Research Development, to more fully appreciate the existing resources on campus and to begin to leverage those resources to support further development of our research infrastructure. As part of the continuing process to develop goals/strategies for the coming year, the RAC will participate in a half-day retreat in mid-August. Dr. David Kiel, Leadership Development Coordinator at the Center for Faculty Excellence, will serve as facilitator using “Appreciative Inquiry” to reflect on our accomplishments and help us to envision our future based on the interface between our strengths and opportunities. We are looking forward to this event and to sharing more with you in person at the next Town Hall meeting. Thanks to all of you for your contributions and for helping me to build a positive research culture for our department.
Figure 1. External research funding over the past 10 years:

![Research Awards Graph]

Figure 2. Success rate of DAHS grant proposals in FY10-11:

![Outcome of Proposals in FY10-11 Graph]

Faculty Survey Results

The DAHS Office of Research together with the Research Advisory Committee, recently conducted a survey of the faculty, as one component of a year-long needs assessment, to identify faculty perceptions, across ranks/appointments and divisions, about the existing research culture and infrastructure, and to identify priorities and needed resources to further enhance faculty research activities for the whole department. The survey achieved a good
response rate (69%) and faculty from all divisions and across all ranks participated (N=51; 50% tenure track; 44% clinical/teaching). Thank you to all faculty who took the time to respond!

A few key results from our analysis of the data:

- 86% of faculty respondents agree that overall, they would recommend the department as a good place to work
- Over half of the faculty are involved in research in a significant way (e.g. supported by external funding, function as a PI or investigator)
- Of those that are not currently involved in research, most are interested in becoming involved either as a collaborator or as an investigator
- Clusters of research interests based on study population characteristics (e.g. age, vulnerable group membership) and research approach (e.g. intervention/efficacy) exist within the DAHS; these may be used to provide opportunities to enhance future interdisciplinary collaborations
- Faculty indicate that there are clear needs for increasing statistical/methodological support for faculty, as well as improving general administrative and IT support.
- Almost ¾ of faculty responding to the survey indicated that they intend to be involved in research as a collaborator or co-investigator, potentially contributing to grant writing in the next 6 months.
- While the majority of faculty feel that their salary levels are competitive with other faculty in their division (75%), fewer feel that their salary levels are reasonably competitive, when compared to other faculty at the University (31%), and even fewer feel that salary levels are reasonably competitive, when compared with other faculty in their discipline at comparable institutions in the U.S. (23%)
- The four priority areas for support as ranked by faculty respondents are: (1) statistical support, (2) methodological support, (3) pre-award support and (4) support to enhance competitiveness of me or my team(s).

A link to the full power point is available on our website at: https://www.med.unc.edu/ahs/for-faculty-staff/Research%20-%20Faculty%20Survey%20results071511.pptx/at_download/file

The data from this survey will serve both as a benchmark by which DAHS can track progress in the department and as a way to inform the development of priorities for research support. The hope is that through this survey DAHS Office of Research will be able to better tailor activities and align resources to support the needs of faculty pursuing research collaborations, enhance grant applications, and promote excellence in research and scholarship that contributes to the overall vision and goals of our department.

**Research News**

**Dr. Karen Erickson Awarded Funding for “GSEG 1% Professional Development”**

Our congratulations go out to Dr. Karen Erickson and her staff, who have recently been awarded a $1,556,546 over five years from the US Department of Education via the University of Kansas, entitled “GSEG 1% Professional Development”!
The GSES 1% Professional Development proposal involves the The Center for Literacy and Disability Studies (CLDS) to develop a multi-modal set of professional development materials for use by states as they prepare teachers to complete Alternate Assessment in reading and math with their students with significant intellectual disabilities. The multi-modal materials will support professional development in three primary formats: (1) Independent Study, (2) Train the Trainers, and (3) Online Training. In the first year, the CLDS will involve consortia members in interactive webinars to assess their needs and preferences with respect to the content and form of the professional development. Also in the first year, the frameworks for the three professional development formats will be developed. In the second and third years, the content will be developed, tools and materials will be published, and the three formats of professional development will be field tested by consortia members in teachers in consortia states. In the fourth and final year, the professional development will be disseminated and states will be provided with direct support and technical assistance as they work to roll out training.

We look forward to Karen’s work on this opportunity and the results of this research!

ERRIS Grant Writing Workshop - Accolades From Both Mentees and Mentors

History of ERRIS: About eleven years ago, the National Center for Medical Rehabilitation Research (NCMRR) of the National Institute of Child and Human Development (NICHD) developed an initiative to foster rehabilitation research across the United States by funding four regional centers. The one for the southeast that was funded was centered at the University of Virginia’s Kluge Children’s Rehabilitation Center. The name for this group is named Enhancing Rehabilitation Research in the South (ERRIS). Initially, its intent was to be a clearing house and resource for Rehabilitation Research. However, ultimately under the leadership of Dr. Jim Blackman, the focus changed to emphasize mentorship of faculty who were early in the stages of seeking federal and foundation grant support. Thus, the ERRIS Grant Writing Workshops began in 2003 with mentors from the University of Virginia and other institutions. Each mentee, selected from a competitive application process, is assigned a primary and secondary mentor. The goals of ERRIS are to:

1) Enable promising junior and mid-career faculty to complete a highly competitive proposal to the NIH for patient-oriented rehabilitation research (e.g. R01, R21, etc.) or career development (K series awards) by the end of the workshop. (NIDRR application also acceptable.)
2) Provide guidance in grant writing, clinical trial design, biostatistics, informatics, collaboration, grantsmanship, budgeting, and career development through lectures and individual consultation.
3) Develop a cadre of well-trained, experienced clinical researchers whose expertise will foster better rehabilitation research design.
Personal Experiences of DAHS Mentees and Mentors at ERRIS:

Dr. Rick Segal (Professor & Division Director, PT) has been a mentor since 2004. He stated, “Probably one of the most gratifying experiences I have had in my career and certainly while at UNC, has been mentoring faculty at ERRIS. I get the immediate satisfaction of seeing ideas being developed and the long-term satisfaction of a high success rate of mentees getting funding over the years. Moreover, I get the enjoyment of continued communication with mentees and writing letters of support as they successfully go up for promotion at their parent institution”.

Dr. Malcolm Cutchin (Professor, OS/OT) has been a mentor since 2009. He stated, “It is an honor to be involved in ERRIS and to represent UNC and Occupational Science. I really enjoy being able to mentor junior faculty in the grant writing process because it means so much to them and their career trajectory. An added benefit is what I learn from the more senior researchers/mentors who have now become friends and colleagues through the community that ERRIS creates.”

Several of our own junior faculty participated as mentees over the past several years, including Drs. Chinyu Wu, Mike Lewek, Vicki Mercer, Sadye Paez Errickson, Debbie Thorpe, and Adam Jack. Many have been subsequently successful in receiving NIH funding for their research. The Department of Allied Health Sciences has generously supported the participation of faculty members in the ERRIS workshop.

Dr. Sadye Errickson (mentee, 2011 cohort) stated, “ERRIS provided a unique opportunity to interact with rehabilitation research experts through didactic sessions and individual sessions. This active writing workshop provided support in developing one’s ideas, designing appropriate methodology, and fostering ‘next steps’ for NIH submission. ERRIS was intense in its expectations but equally zealous in its support for young investigators.”

Dr. Chinyu Wu (mentee, 2011 cohort) added, “During the workshop, there were talks and seminars which I heard from established researchers in rehabilitation, and met with staff of funding agencies. I also signed up to meet with experienced researchers one-to-one to discuss my own research work, which I find very, very helpful. We stayed at a very nice hotel and were all very well fed during the workshop, which was very helpful to concentrate on research work. I would recommend future new faculty to participate in this wonderful workshop.”

The workshop continues again in January 2012 and is applying for another five years of funding. The ERRIS website can be found at the following link: http://erris.med.virginia.edu/
Workshops and Seminars

AHS Research Forum Updates

We had two exciting Research Forum seminars take place during the Spring semester and we hoped you had a chance to be part of it! In April, Drs. Sharon William, Malcolm Cutchin, and Lori Leibold discussed their experiences and research career trajectories for successful federal funding through the National Institutes of Health. The seminar allowed the panelists to present their research experiences and stepping stones that led to NIH funding and provided the audience with insights into how one of our major research funders operates.

In May, ITS Information Security Executive Director Stan Waddell will spoke to the department relating to Sensitive Information, Computer Management, Maintenance and Upkeep, Securing Data at Rest Staff Education, and IRB/HIPPA issues of both proposed and existing projects. Many of our faculty and staff learned of important policies and procedures to take note of in order to ensure the storage of electronic data is done correctly and in accordance with the terms of our contracts and grants. Dr. Ruth Humphry, Chair of the Public Health-Nursing IRB, and John Bullock, Research Associate, Sensory Experiences Project, were on hand to answer questions about the interface of research and security issues for researchers. A follow-up inservice is being planned for research project staff in the fall.

The Research Forums are on hiatus for the summer session, and will resume in the fall semester - mark your calendars! Three tentative dates/topics are scheduled (11:30 am to 12:45 pm):

- August 31st: Rick Segal & Rick Wysk: NC State - UNC Rehabilitation Engineering Program
- September 28th: Malcolm Cutchin, Vicki Mercer, and Linda Watson: Panel discussion about Community Based Research
- October 26th: Jennifer Craft-Morgan: Mixed Methods Research

The DAHS Research Forum subcommittee (Drs. Mike Lewek, Brian Boyd & PhD students Don Goss & Kaitlyn Wilson), part of the Research Advisory Committee, would love to hear your ideas for topics at future forums.

Resources for Faculty

OUR Database - Clearinghouse for posting research opportunities

A valuable resource we would like to recommend to the faculty of Allied Health Sciences is the Office of Undergraduate Research (OUR) database - which is a clearinghouse for research opportunities (both volunteer and for credit) for undergraduates. DAHS faculty and research projects have been using this resource for over 18 months to recruit new volunteers and have been very pleased with the results. The Sensory Experiences Project team (Dr. Grace Baranek, PI) notes that they have received 40 qualified respondents to each posting, on average.

Link to the OUR database of opportunities:  [http://cf.unc.edu/our/pubforms/browse.cfm](http://cf.unc.edu/our/pubforms/browse.cfm)
Link to post an opportunity to OUR:  [http://www.unc.edu/depts/our/for_faculty.html](http://www.unc.edu/depts/our/for_faculty.html)
Grants Submitted (Apr. 2011 - June 2011)

**Intervention for Repetitive Behaviors in Autism**
Brian Boyd (PI); Investigators: James Bodfish; Autism Speaks

**Families’ Lived Experiences of Participating in an Intervention for Infants At-risk for Autism Spectrum Disorder**
Grace Baranek (PI); Investigators: Karla Ausderau, Debra Skinner & Linda Watson; Autism Speaks

**Electrophysiological and Psychophysical Measure of Auditory Temporal Processing**
Sara Mamo (PI); Investigators: John Grose; National Institutes of Health (NIH)

**Preparing Speech-Language Pathologists and Occupational Therapists for Working in Teams: Focus on High Need Socioculturally Diverse Children**
Elizabeth Crais (PI); Investigators: Cara McComish, Lisa Domby, Ruth Humphry, Susan Coppola; US Department of Education

**ORISE Fellow - U.S. Army Center for Health Promotion and Preventive Medicine**
Karen McCulloch, Oak Ridge Institute for Science and Education

**First Years Certificate Program**
Kathryn Wilson, William Demants and Wife Ida Emilie Foundation

**Preparing Professionals for Leadership Roles in Translational Research and Community Engagement Focused on Children with Disabilities Including High Need Children**
Elizabeth Crais (PI); Investigators: Grace Baranek, Harriet Able, Linda Watson;

**Big Words II**
Karen Erickson (PI); Investigator: Gary Bishop; US Department of Education

**Comparing Home-and Clinic-Based Exercise Interventions for Older Adults**
Vicki Mercer (PI); Investigators: Jan Busby-Whitehead, Janet Freburger, John Preisser, Michael Lee, Philip Sloane, Susan Blalock; Agency for Healthcare Research and Quality

**Contributions: Oral Language, Problem Solving and Reading Attitudes in Adolescent Reading Comprehension**
Karen Erickson; Investigators: Kristin Nellenbach; Institute of Education Sciences


**GSEG 1% Professional Development Award** $1,729,496 10/01/10 - 09/30/11
Karen Erickson (PI); Investigators: Penny Hatch; University of Kansas

**Minnesota SPDG Subcontract** $72,937 03/21/11 - 09/30/11
Karen Erickson (PI); Investigators: Penny Hatch; Minnesota Department of Education

**Advancing Social-Communication & Play** $3,166,220 07/01/11 - 06/30/15
Brian Boyd (PI); Investigators: Elizabeth Crais, Grace Baranek, Linda Watson; Institute of Education Sciences
**Publications**


Cagle, JG, LaMantia, M, Williams, SW, Pek, J, Edwards, LJ. Preference for Hospice Care among Older Adults: The Role of Race, Sex, Knowledge, Attitudes, Behaviors and Religiosity. *The Gerontologist*.


Flippin, M, Watson, LR, Boyd, BA, McGuinn Duncombe, H, Lenhardt, TW. Perspectives of school-based speech-language pathologists, occupational therapists and teachers on autism intervention in preschool programs. 34 manuscript pages.

Flippin, M, Watson, LR. Relationships between fathers’ and mothers’ responsiveness and the object play of children with autism spectrum disorders. 49 manuscript pages.


Haley, KL, Roth, H, Grindstaff, E, Jacks, AP. Computer-mediated intelligibility testing in aphasia and AOS. *Aphasiology*.


Hayden, JG. UNC Radiologic Science Web site- Author/revise online division information to serve current and prospective student and alumni populations.

Hayden, JG. UNC Radiologist Assistant Program Portal- Author/revise Web site for current students used to disseminate information regarding orientation/matriculation requirements, course/program calendars, faculty, resources, and support.

Hayden, JG. UNC Radiologic Science Digital Seminar- Author/revise site for seminar to serve as a tool for marketing and registration.


Losh, MC, Esserman, D, Lichtenstein, P. A twin study of environmental risk factors for autism and the broad autism phenotype.

Losh, MC, Esserman, D, Piven, J. Language processing ability as an index of genetic liability to autism. Journal of Neurodevelopmental Disorders.


Segal, RL. H-reflex modulation in the human medial and lateral gastrocnemii during standing and walking.


Honors & Achievements

- Professor Laine Stewart received the Louise Ward Excellence in Teaching Award.
- Dr. Rick Segal was appointed as co-interim director of the UNC-NCSU Biomedical Engineering Rehabilitation Engineering Center.
- The Division of Occupational Science & Occupational Therapy for graduating their first cohort of PhD students, Drs. Rebecca Aldrich & Antoine Bailliard, in May!
- Dr. Michelle Flippin, former DAHS post-doc, and member of the Research Advisory Committee, accepted a faculty position as Assistant Professor, Speech Language Pathology, at Appalachian State.
- Dr. Karla Ausderau has been selected to receive the Postdoctoral Award for Research Excellence for the 2011-2012 academic year from the UNC Office of Postdoctoral Affairs.
- Our congratulations go out to Angela Bonino, who was one of only four doctoral students selected to participate in ASHA’s Lessons for Success (http://www.asha.org/Research/L4S/default/) along with 28 other emerging scientists.

Congratulations to all!

Contacts

Please contact Wesley Winkelman, Contracts and Grants Manager, for any items you would like to see published in the next newsletter, feedback, or any questions or concerns.

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