BNCD member John Colombo and Susan Carlson have reported results from the first five years of their 10-year clinical study of prenatal DHA supplementation KUDOS (Kansas University Docosahexaenoic Acid Outcomes Study). They found that supplementing pregnant women with 600 mg of DHA a day for their entire pregnancies, resulted in a significantly longer gestation and higher birth weight – both of which have implications for improving neurodevelopment outcomes as well as preventing hospitalizations for preterm birth and resulting medical cost savings. This would mean that a simple, inexpensive nutritional supplement could increase U.S. infants’ birth weight and gestational age closer to those found in other developed countries such as Norway and Australia. Whether supplementation can benefit the overall health and development of the children is the focus of the next five years of the study. The study is in press with the American Journal of Clinical Nutrition. http://www2.ku.edu/~lsi/news/kiddrc/Fall%202012-Winter%202013/index.shtml#dha

BNCD member Hugh Catts’ research study looked into the prevalence of late-emerging poor readers - children who perform up to standards in their early school years, but begin to fall behind as they get older. The study found that 13.4% of children could be classified as late-emerging poor readers. Their “results indicate that although many children may experience difficulties in beginning reading, a sizable percentage of poor readers may not manifest their difficulties until fourth grade or later.” However, the reading difficulties did not emerge out of the blue; these children had a history of language and/or nonverbal cognitive deficits. This shows that children who have some early deficits, often have trouble when faced with the more challenging text encountered in middle elementary school.

Rice Award Continues Milestone Study of Language Development

Mabel Rice was awarded $2.4 million by NIDCD to continue her longitudinal multiple study research project on language emergence, the world’s largest study to date, extending to years 11-15. Since 2002, Rice has worked with colleagues at Curtin University in Perth, Australia and the University of Nebraska, as well as others, to study the language development of single and twin children in the western part of the country. Their goal is to pinpoint possible environmental, neurodevelopmental or genetic risk factors in children with Specific Language Impairment. In 2009, Rice was the first to report that a variant in a gene on Chromosome 6 - KIAA0319 – was a likely culprit in Specific Language Impairment. The new grant will allow the researchers to follow the twins into adolescence, as well as their family members, to determine contributions to language that are part of a family structure, inheritance pattern or other factors. http://lsi.ku.edu/news/lifeline/latefall-earlywinter2012/news.shtml
Investigator Highlight

Kostas Kokkinakis is a new BNCD investigator in the Speech-Language and Hearing department at KU. His research centers on cochlear implants, prosthetic devices that can restore a sense of sound to a person who is deaf or hard of hearing. His lab is particularly interested in investigating ways to improve speech understanding by cochlear implant listeners in noisy environments-like a windy day. Dr. Kokkinakis says the aim of his lab is to discover novel ways towards enhancing cochlear implant users' listening performance by eliciting [hearing mechanisms in both ears] through multi-microphone signal processing strategies that can be easily used in existing cochlear implant devices. By improving the performance of those devices in adverse settings, we can considerably improve the quality of life for a large number of cochlear implant listeners.”

He has chosen to pursue avenues of research because he is “fascinated by cutting-edge research that has the potential of improving our understanding of the world and the quality of life for all of its citizens. My primary goal here at KU is to carry out translational research, whereby I intend to pursue ideas that can potentially turn basic science into applicable solutions.”

Dr. Kokkinakis was recently selected for funding by the Frontiers Pilot and Collaborative Studies Funding Program to study, “Binaural speech perception with auditory prostheses.”

See the last Research Participation Opportunity to participate in his current study. Page 3.

BNCD Professor Honors

Nancy Brady was awarded an ASHA Fellowship. It is one of the highest honors the Association bestows. To be awarded Fellow, the nominee must have made outstanding contributions to the discipline of communication sciences and disorders.

The key word for this award is "outstanding:" the nominee must truly stand out among one's peers. The term implies contributions that are significant and would be so regarded within and beyond one's community or state. While there are thousands of members who fulfill their professional responsibilities competently, only a small percentage have, by virtue of the quality and amount of their contributions, distinguished themselves sufficiently to warrant recognition.

The 2012 ASHA poster presentation by Steven Barlow, Lindsey Williamson, and Jingyan Wang titled, Mapping Oral Feed Attainment Skills in Preterm Infants, has been selected as a Meritorious Poster Submission.

The Meritorious Poster Submission recognition is for proposals judged by the Convention Program Committee to be exceptional. This poster is among those posters that received the highest ratings from Topic Committee reviewers across both submission categories of professional education and research. They received 1138 total poster submissions in 2012, and only 48 were selected for meritorious recognition.

Diane Loeb with Jayne Brandel were chosen for receiving the Language, Speech, and Hearing Services in Schools Editors Award. The editor’s chose the article, Program Intensity and Service Delivery Models in the Schools: SLP Survey Results, as the “most meritorious single article appearing in the journal” over the past year.

Holly Storkel was awarded an grant from the federal government. The grant is a 5-year $1.5 million preliminary clinical trial to study a book reading intervention to improve word learning by kindergarten children with Specific Language Impairment. See Research Participation Opportunities for study enrollment details.
## Research Participation Opportunities

### How does attention to people and objects impact children’s immediate cognitive performance?

The purpose of this project is to examine how parents and adolescents with developmental disabilities interact. Specifically, we are interested in your parenting style with your child during different types of routine activities.

**Age:** 11 to 18-year-olds with developmental disabilities (including autism or Down syndrome), language delays, and learning disabilities

**Time:** One-hour in-home visit scheduled at your convenience.

**Benefits:** $20 gift card

**Contact:** KU Infant and Early Cognition Lab; baby-lab@ku.edu; (913)897-8590

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### Help us learn how toddler nutrition affects children’s immediate cognitive performance.

The purpose of this study is to see the effect of interactive book reading on new vocabulary learning.

**Age:** Kindergarten

**Time:** About 2 sessions a week for 2-3 months. Visits will last about 15-30 minutes.

**Benefits:** You will be given a written report detailing your child’s performance on all standardized clinical tests administered. Child may learn some of the 30 words taught.

**Contact:** KU Word Learning Lab; wrdlrng@ku.edu; (785)864-4428

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### Do you use a cochlear implant device to understand speech? Have you had it for at least 1 yr?

The purpose of this research project is to examine strategies for the future.

**Age:** Adults 21-75 with one or two cochlear implants

**Time:** 1 session lasting 4-5 hours

**Benefits:** $200 plus travel reimbursement

**Contact:** Electrical Hearing Lab; kokkinak@ku.edu; (785)864-4835 or (785)864-4835

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## Award Winning Books From 2012

- **The Newbery Medal winner is Dead End in Norvelt** by Jack Gantos; published by Farrar Straus Giroux
- **The Caldecott Medal winner is A Ball for Daisy** by Jack Gantos; published by Schwartz & Wade Books
- **The Geisel Award winner is Tales for Very Picky Eaters** written and illustrated by Josh Schneider; published by Clarion Books
- **End in View** by Jack Gantos; published by Farrar, Straus & Giroux
- **A Ball for Daisy** written and illustrated by Chris Raschka; published by Schwartz & Wade Books
About this Newsletter:
The BNCD newsletter is designed to keep you informed about the ongoing research projects that are being conducted by BNCD researchers at the University of Kansas. Participants who have been part of recent research projects conducted by BNCD researchers, parents who have expressed interest in participating in future research, and individuals from organizations such as schools and daycare centers that have an interest in BNCD studies will receive this newsletter from time to time to keep them up-to-date about the research activities at the BNCD. If you do not wish to receive future newsletters, please call or e-mail the BNCD to have your name removed from our list.

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Just for Fun

What’s the largest pencil in the world?

Answer:

Code:

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