

## Sensory Update

### BOSS2 Rolling Along in 2011

The 5-year examinations for the Beaver Dam Offspring Study (BOSS2 for short) got underway in June 2010. Since that time we have welcomed over 1100 participants to our study offices for their exams. While many of the BOSS2 participants live in Beaver Dam or surrounding communities, we also have many participants who live in other states (and countries). While we want to thank all of you who have participated so far, a special thank you to those of you who have come from afar and fit us in during your visit to Beaver Dam. The BOSS2 exam is very similar to the first BOSS exam and includes testing a participant's vision, hearing, sense of smell and memory. As in the past, there is a vascular component which includes a carotid artery ultrasound and blood pressure measures, as well as a blood draw to measure total and HDL cholesterol. Participants will have their eyes dilated so that pictures of the retina and lens can be obtained. The exam takes an average of 3 ½ hours.

Research from the original BOSS study revealed that there is less hearing loss among baby boomers than what has been experienced by prior generations. New findings from this study will help researchers and medical professionals to understand and possibly minimize or delay the sensory impairments typically associated with aging.

**Haven't been contacted yet?** Don't worry; we won't be contacting some of you until later this year or early 2012. However, if you have moved or changed phone numbers since we last saw you, give us a call or send us an email to make sure we have your correct contact information. Anyone who was eligible for the original BOSS study is also eligible to participate in this study.

### Behind the Scenes



Two of the people most of you talk to, but never see, are our schedulers Jill and Melissa. Both came on board with the research group in the spring of 2010 just before BOSS2 exams started. Melissa comes to us from a background in recruitment and Jill from a background in sales. Both spend much of their day on the phone answering participants' questions, and helping them select an appointment time, with the goal of making each participant's experience as convenient and pleasant as possible.

### Beaver Dam Staff Update

Continuing on with us from the first BOSS are examiners Tom Dugolenski and Jo Welsch and office assistant Shirley Vant Hoff. We are pleased to welcome some new members to our staff, examiners John Flunker and Lisa Werning and medical assistants Tonya Brunet and Ilean Anderson. Earlier this year Rebecca Glewen, a familiar face to many BOSS and EHLS participants, moved on to a new job within the Beaver Dam school system. Fortunately for us, Becky has volunteered to continue on with the studies as a community liaison. We wish her all the best in her new position.

*Over 1100 people have participated in the BOSS2 exam to date*

*Exams will continue through 2012*

*We often are scheduling 4-6 weeks in advance*

# Beaver Dam Offspring Study

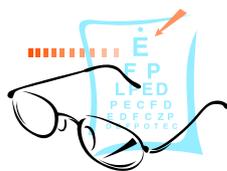
Summer 2011

## Does a healthy lifestyle delay the onset of Hearing Loss?

The Beaver Dam Offspring Study attracted national attention earlier this year when some of its findings were published in the May issue of the *Archives of Otolaryngology – Head & Neck Surgery*. The results indicate hearing impairment affected 6% of participants aged 35-44 years, 11% of those aged 45-54 years, 25% of those aged 55-64 years and 43% of those aged 65 years and older.

Factors found to be associated with hearing loss in this study include having a noisy job and a history of ear surgery. Lower socioeconomic status, measured by years of education and occupation, was also associated with worse hearing. In addition, cardiovascular risk factors, as measured by changes in blood vessel characteristics and the use of statins (cholesterol-lowering medication), were significantly associated with hearing impairment.

Lead author Scott D. Nash, a doctoral student working with BOSS principal investigator Dr. Karen Cruickshanks, states "Hearing loss may not be an inevitable part of aging, and our findings, which are in line with other studies, point to the possibility that if we live healthier lifestyles, lifestyles that can reduce our chance of cardiovascular disease for example, we may be able to prevent or delay hearing loss."



## Using BOSS Data to See Risk Factors Clearly

Age-related Macular degeneration (AMD) is an eye disease that is characterized by a loss of sharp central vision and is often associated with the aging process. Using data from the first BOSS exam, researchers published their findings on AMD and its related risk factors in the *Archives of Ophthalmology* in June 2010. The good news is that there was no late stage AMD found among the BOSS participants and only 3.4% of participants had early AMD. The percentage of people with early AMD did vary by age group with the disease being uncommon (2%) among those less than 55 years old but more likely (10%) among those 65 year and older. Results showed that current smokers and those who smoked more during their lifetime were more likely to have early AMD while participants with higher HDL (good) cholesterol were less likely to have early AMD.

## Checking in with Mom and Dad - News from the EHLS

Last fall, the 4<sup>th</sup> examination phase of the Epidemiology of Hearing Loss study (EHLS) was completed. There were 1,857 people who participated in this exam phase. Around 80% of those eligible took part, and once again, Beaver Dam has set the standard for participation in research studies. University of Wisconsin researchers have a wealth of information to evaluate from this and previous EHLS exam phases. The ability to look at changes in health over time is one of the key assets of this study. Data from the most recent exam will enable us to further explore the relationship between cardiovascular factors and hearing loss. We will continue to investigate generational differences in the onset of hearing loss by combining data from the EHLS and the BOSS. It has been our pleasure to work with the people of Beaver Dam. Our success is the result of the support of the participants and the Beaver Dam community.

Thanks to the  
BOSS  
participants  
who  
scheduled  
their exams  
as part of  
their vacation  
plans...

...the longest  
distance  
traveled by a  
participant to  
date was over  
3400 miles!



### For more information:

800-253-0986

920-885-6823

608-890-0332

[boss@episense.wisc.edu](mailto:boss@episense.wisc.edu)

Beaver Dam Offspring Study  
University of Wisconsin  
School of Medicine & Public Health  
610 Walnut Street, 10<sup>th</sup> Floor  
Madison, WI 53726-2336