



## VISUAL LANGUAGE & VISUAL LEARNING

### Brain and Language Lab (BL2) Research Interns Earn fNIRS Certification

While Gallaudet University students were still away on their semester break last January, Brain and Language Lab (BL2) research interns were already back on campus, deep into their training for certification with functional near-infrared spectroscopy (fNIRS) brain imaging at Gallaudet University. An intense process, the certification covers fNIRS principles, procedures, standards for ethical and safe usage of fNIRS, and the

fundamentals of experimental design and analysis.

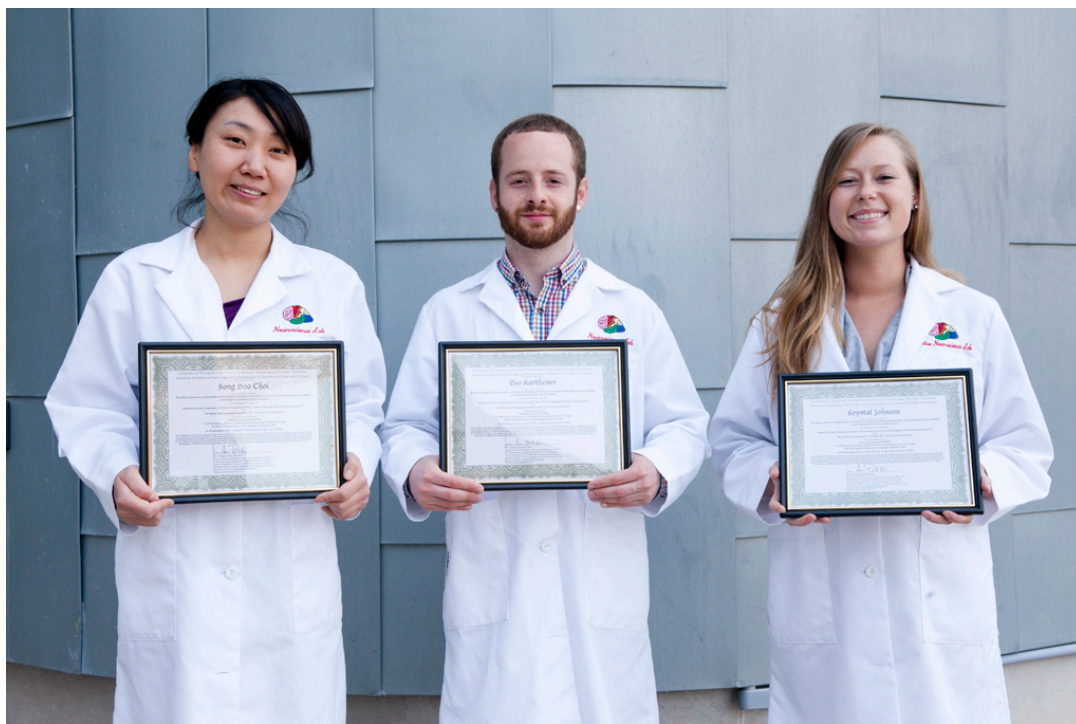
BL2 and VL2 are pleased to announce that the interns' diligent focus and hard work paid off; five graduate and undergraduate BL2 research interns have recently received their fNIRS certifications: **Song-Hoa Choi** (a post-baccalaureate intern), **Geo Kartheiser** (graduate intern), **Krystal Johnson** (undergraduate intern), **Erin Spurgeon** (graduate intern), and **Yashi Poindexter** (undergraduate intern).

**Laura-Ann Petitto** is the Scientific Director of the [Brain and Language Lab](#) (supported by Gallaudet

University, the National Science Foundation, and the National Institutes of Health), and in this lab, Petitto and her team study the neural processing of visual language, reading, and the effects of early bilingual exposure on the developing brain and its functions.

### In this issue:

Co-PI notes: Allen & Petitto p.4-5  
Breaking News: Updates on PEN Program p. 5  
Spotlight on Enns Lab p. 6-7



BL2 Research Interns (L-R) **Song-Hoa Choi**, **Geo Kartheiser**, **Krystal Johnson**, **Erin Spurgeon** (not pictured), and **Yashi Poindexter** (not pictured) recently earned fNIRS certification

VL2 OFFICIAL  
NEWSLETTER  
**2013**

Visual Language and Visual Learning (VL2) is a Science of Learning Center, funded by National Science Foundation Grant # SBE-1041725. Any opinions, findings, and conclusions or recommendations expressed are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

WRITTEN AND MAINTAINED BY

KRISTEN HARMON, PhD

CONTACT:

[Kristen.Harmon@gallaudet.edu](mailto:Kristen.Harmon@gallaudet.edu)

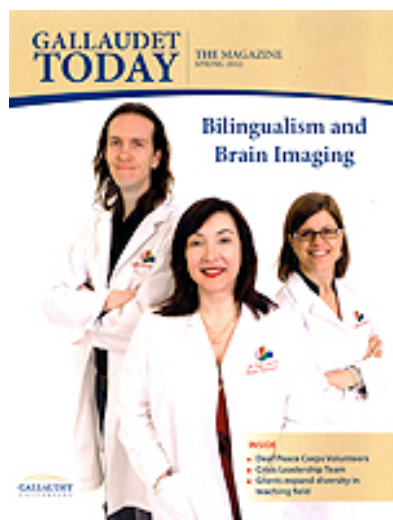
**GALLAUDET**  
UNIVERSITY

VL2: VISUAL LANGUAGE  
AND VISUAL LEARNING

# Brain Imaging

Continued from Page 1

Petitto said that the news of the recent certifications “makes a grand total of seven [fNIRS-certified] students since opening the lab [in 2011]! This is indeed the result of extraordinary commitment and skill on the part of the students and...also the outstanding leadership and teaching done by our VL2 researchers **Kaja Jasinska** and **Clifton Langdon**.”



With oversight by Petitto, Jasinska and Langdon trained the five interns, and they began their certification training with what Langdon described as a “bootcamp.”

At bootcamp, Langdon said, “we covered information such as how the fNIRS machine works (the neurophysiology) and compared it to other neuroimaging methodologies, the protocol for the using the fNIRS, and ethically appropriate interactions between researcher and study participants, and fundamental introduction to neuroimaging experiment designs.” (Langdon is pictured at the upper right).

After this intensive review, interns then were given “hands on” time with the fNIRS imaging equipment. The last two days of the fNIRS bootcamp were spent practicing and observing. As part of the training, interns are required to have completed twenty hours of observation and assisted practice. During this practice, interns took turns being the participant and the experimenter. This turn-taking gave everyone the opportunity to understand what it feels like to be a participant as well as an opportunity to gather feedback. After the January bootcamp, the interns have continued to refine their skills and deepen their understanding of how the fNIRS is used in research.

Langdon noted that “after weeks of additional hands on experience and training, we are thrilled to announce that they have become fully certified to conduct fNIRS experiments.”

Training in neuroscience with the fNIRS methodology is powerful tool for Gallaudet students to add to their professional development. Petitto noted that it is “particularly rare for undergraduate students to be given access at this level,” and so this is a wonderful and unique opportunity for Gallaudet undergraduate and graduate students. The BL2 fNIRS equipment is one of very few research-dedicated fNIRS in the area available for student training.

Research at the Brain and Language Lab at Gallaudet University focuses upon visual language processing, reading, and bilingualism. As Petitto said, in an interview with [Gallaudet Today](#) (see above left), “The contribution of [BL2]



would very much be one of shedding new light on the impact of visual processing and early acquisition and the brain mechanisms that make possible early sign and spoken language acquisition, and what happens to the brain in particular when it is confronted with two languages instead of one language...This allows us to answer directly many of the calls from the public community about bilingual education [and in our lab], we have been able to answer fundamental questions” (17).

With certification, Langdon said, BL2 interns now have the necessary expertise and background to use the fNIRS to begin investigating their own research questions.

Two Gallaudet University undergraduate students, **Yashi Poindexter** and **Krystal Johnson**, participated in the bootcamp and received





# at Gallaudet U

certification. Poindexter (pictured left of center crease) is a second degree transfer student in Deaf Studies.

Interning with BL2, Poindexter said, has "allowed me to

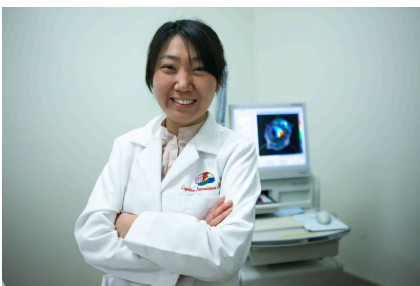
combine my interests for neuroscience, audiology and language."

She currently assists with a study on language and reading with cochlear implant users.



**Krystal Johnson** (pictured above right) is a Psychology major at Gallaudet University, and at BL2, she helps perform vital functions with the day to day operations and assists with experiments.

**Song-Hoa Choi** (below) is a post-baccalaureate statistical assistant and research assistant with BL2. She earned her first degree at the Sahmyook University in South Korea and then earned her second degree, in Mathematics, from Gallaudet University. She has worked with and continues to work with VL2 on the Early Education Longitudinal Study (EELS) and on the Beliefs and Attitudes About Deaf Education (BADE) scales. With BL2, Choi is focusing on a new project that



analyzes neural activity during didactic conversations; she is also helping collect data for other BL2 projects that examine language processing in Deaf individuals who use cochlear implants.

**Erin Spurgeon** (pictured below) is a first-year graduate student in Gallaudet University's Masters of Interpretation program, and with fellow lab

members, Song Hoa Choi and Kaja Jasinska, she is currently working on a study that examines whether patterns of brain activity are



similar between conversational partners, and if these similarities depend on the gender of each partner.

**Geo Kartheiser** (above right) is a M.A. candidate in linguistics at Gallaudet University.

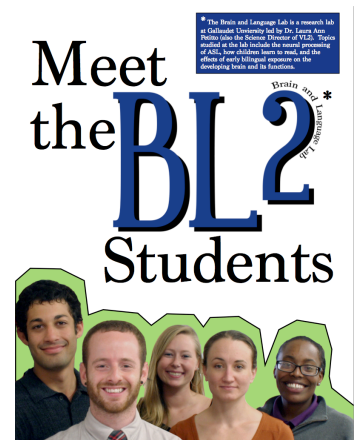
*"[The interns] are graduate and undergraduate students who are studying the brain at Gallaudet University. They are analyzing data, coding, learning neuroscience methods, questions, and techniques, and the fNIRS technology, all in the exploration of the human brain, language, and the neural processing and representation of visual signed languages."*

—**Laura-Ann Petitto**, VL2 and BL2 Science Director



While an undergraduate student at the Rochester Institute of Technology, he was involved with several studies with **Peter Hauser** of the Deaf Studies Laboratory (RIT). He also served as a visiting research coordinator for **Matthew Dye's** Cross-Modal Plasticity Laboratory at the University of Illinois at Urbana-Champaign. Geo aims to draw from his advanced training at the Brain and Language Laboratory to further investigate the impact of visual language as a second language on cognition.

We had the opportunity to chat with the BL2 students and to get to know them and their research interests a little better. For the latest "Meet the Students: BL2 Edition," see [VL2's website!](#)



Photos courtesy of Matthew Vita and Wei Wang.

# research

## Co-PI Notes from Laura-Ann Petitto and Tom Allen

It's been a fast-paced but great month of advancing VL2 forward towards the Site Visit in June 2013 and, frankly, forward in its entire future to come!

There was no relaxing for us (**Laura-Ann** and **Tom**) with a magazine on our long-haul flights to Texas and back to attend the Early Childhood Education, ECE, Summit IV, Austin Texas on March 21-24, where we and many in our VL2 team presented (including Dr. **Melissa Herzig**, **Melissa Malzkun**, **Adam Stone**, and our Dr. **Peter Hauser**

### Important Dates to Remember!

- VL2 Executive Team Meetings, Wednesdays, 11:30-12:30
- Annual Report, April, 2013
- NSF Annual Site Visit, June 13-14,

(NTID/RIT) gave the opening Keynote Address). Instead, every minute was devoted to shaping, designing, and building plans for the Center's future research and translational activities in the final two years of our Science of Learning Center's NSF funding (Years 8 and 9). And you can be sure that, with a task this enormous, our discussions and planning spanned well over the following 2 weeks upon our return and included important communications with many of our Center PIs.

In a nutshell, there shall be no end in sight for VL2! All future vision is imbued with the overarching passionate goal of sustainability and growth. All future plans were built with the NSF-inspired idea of advancing "breakthrough" science and

translation projects, especially those involving smaller networks of investigators, and especially projects and activities with the potential to make truly lasting contributions to science and society. As we turn to dive into this year's Annual Report, we will of course soon provide you all with a more specific account of these Center innovations to come!

When we weren't struggling with the mountainous task of planning the Center's future, we were working hard to advance aspects of our new PhD in Educational Neuroscience (PEN) program. There were the final versions of the Memoranda of Understanding (MOUs) – on the Gallaudet University side– to edit and amend and send back to each of our 4 partnership universities (*University of New Mexico, University of California, Davis, Georgia Institute of Technology, and National Technical Institute for the Deaf*). Then there were materials either to edit or to



create, and upload, to the relevant web sites including information about the PEN brochure (flyer), which will also be distributed widely through Gallaudet University's Graduate Admissions Office, as well as other information about the upcoming new PEN Faculty search and new graduate student recruitment (so exciting!). And there were many meetings, and committee meetings, to get all advanced. In this regard, we are

thrilled to recognize the outstanding contributions of Dr. **Melissa Herzig**. In addition to all else that she does so brilliantly as the VL2 Center's vital Education and Research Translation Manager, we are so happy to have her as the PEN program's new Associate Director (more on this wonderful news appears in this VL2 Newsletter).

Tom and I also spent much time advancing the VL2 NSF Supplemental grant that we have with **Melissa Malzkun**, the "Signing Creatures" (Avatar/Robotics) project. We've also made big leaps in the design of the Pilot Study associated with this NSF Supplemental grant involving experiments with our new eye-tracking system and children's reading with the new Bilingual ASL-English iPad App—and all else that goes into such studies (e.g., the IRB, which, thanks to Adam Stone's great work is now complete).

In the midst of all of the above, Tom and Laura-Ann are frantically writing some manuscripts, and revising and sending back others, all while keeping a strong eye cast on future grant writing possibilities for the Center. Here, we have been begun meetings and discussions with Federal granting agency officers, and colleagues, about future VL2 funding, grant writing opportunities, and collaborations. And, each of us are preparing (and practicing), and giving many talks in the coming weeks (more in this issue).

Laura-Ann's Brain and Language Laboratory (BL2) is in high-paced, "subject-testing mode." With several different studies underway in parallel, there is much excitement; for example, the students have dived in with gusto to our neuroimaging and behavioral study of deaf individuals who have



# connections

CIs. In the past two weeks, Laura-Ann is also thrilled to announce that several students have achieved the challenging status of being NIH Certified in functional Near-Infrared Spectroscopy technology and experimentation. Congratulations to **Erin Spurgeon, Geo Kartheiser, Krystal Johnson, Song-Hoa Choi, and Yashi Poindexter** (featured on the cover)!

Tom and his fantastic team have been racing to the finish line to collect and analyze the third cohort of young deaf children in his grand EELS project, with more exciting study of these children on the drawing board to come. And, as he rushes off to this and that conference, Tom will soon stop to celebrate the wonderful life event of his son Luke's marriage on a sprawling ranch in Texas. What fun! Congratulations to Tom and his family!

Have a great few weeks to come!  
*Tom and Laura-Ann*

## UPDATES & NEWS about the PEN PhD Program

A newly created interdisciplinary PhD Program in Educational Neuroscience (PEN) is under review at Gallaudet University (Washington, D.C.) and is anticipated to begin fall 2013. PEN is

Gallaudet's first interdisciplinary PhD program, and it includes our National Science Foundation, Science of Learning Center, Visual Language and Visual Learning, VL2 (the PhD program's administrative home), and the Departments of Psychology, Linguistics, Interpretation, Education, and Hearing Speech and Language Sciences.

Gallaudet's PhD Program in Educational Neuroscience pioneers how humans learn, spanning early child development and adults, with a special interest in the neuroplasticity of visually-guided learning processes sub-serving higher cognition. The PEN PhD program at Gallaudet further provides a unique strength in, and contribution to, pioneering advances in the learning and education of the young deaf visual learner.

**PEN Professorship Applicants:** The new PEN PhD Program is also seeking applicants at the assistant/associate professor level for a tenure-track position beginning fall 2013. (Click here for the [JOB ANNOUNCEMENT](#)). The successful candidate will be housed in one home department based on his or her scholarly research and expertise, with rich PEN program collaboration. The search committee is currently

reviewing applications, so, interested applicants, please send in your materials as soon as possible.

*Prospective PEN Students:* Review of applications for studying in this program will happen in a very short period of time, so prospective applicants are encouraged to begin putting together their applications. Note: The PEN application process begins on May 13, 2013 and will close on May 17, 2013. More information about the program can be found at this link with [INFORMATION ABOUT THE PEN PROGRAM](#). Student applicants can email [EdNeuroscience@gallaudet.edu](mailto:EdNeuroscience@gallaudet.edu) with specific questions.

VL2 is also pleased to announce that VL2's Education and Research Translation Manager **Melissa Herzig** will also be the new Associate

*Director for the PhD program in Educational Neuroscience.* As VL2's Education and Research Translation Manager, Herzig works closely with VL2 researchers, schools in our partner network, and with the Laurent Clerc National Deaf Education Center to best foster two-way collaborative relationships between education and science as well as to develop innovative educational products arising from the science. As the Associate Director of the PEN Program, Herzig will be providing her valuable expertise and experience to key aspects of the PEN program. Herzig is pictured above.



VL2 is a National Science Foundation-funded Science of Learning Center on Visual Language and Visual Learning, housed at Gallaudet University in Washington, D.C. Information in this newsletter is based upon work supported by the National Science Foundation under grant number SBE-1041725. For more information about the other Science of Learning Centers in the U.S., see:

The Learning in Informal and Formal Environments (LIFE) Center, University of Washington

Center for Learning in Education, Science, and Technology (CELEST), Boston University

Pittsburgh Science of Learning Center (PSLC), Carnegie-Mellon University

Spatial Intelligence and Learning Center (SILC)

Temporal Dynamics of Learning Center (TDLC), University of California, San Diego.



## Spotlight

### Enns ASL Research Team, University of Manitoba

#### Charlotte Enns and the ASL Research Team, University of Manitoba

We are not really a “lab”, but better described as a “research team.” By this, I don’t mean that we are not scientists, but rather that as educators we apply and explore the science in real life contexts, like classrooms and homes. The research team, under the leadership of Dr. **Charlotte Enns**, includes five graduate students who are also full-time teachers. This has the benefit of emphasizing ongoing connections between theory and practice, as well as providing ready access to deaf children, families, and adult learners of ASL. The disadvantage is that most members of the research team must divide their time between their teaching responsibilities and graduate studies. For this reason, the University of Manitoba students have not been able to participate as fully in the retreats, workshops, and presentations offered by VL2. We appreciate this opportunity to introduce ourselves and showcase our work in the VL2 Newsletter.

The primary focus of the research team has been the development of ASL assessment measures for teachers. Team members, **Kyra Zimmer**, **Sarah Rabu** and **Cheryl Broszeit**, were instrumental in adapting, piloting and standardizing the ASL Receptive Skills Test for use with children aged 3 to 12 years. This same group, along with team member **Deborah Goertzen**, are in the process of adapting the Assessing British Sign Language Development: Production Test for use in ASL. This test involves eliciting a narrative sample from a language-free video stimulus and then applying a standardized procedure for analyzing the sample. This project is being funded through the Social Sciences and Humanities Research Council of Canada.

Another key project of the research team involves taking what we are learning about ASL acquisition through the assessment measures and creating activities and resources for parents. **Liana Price** is the student lead on this project, and in collaboration with Dr. **Lynn McQuarrie** and her team at the University of Alberta, we are developing a second VL2 “Parent’s Toolkit” website to house these resources and to make them accessible to all.

Our team is strongly committed to research that supports and builds evidence-based practice by teachers and parents to facilitate the early acquisition of ASL in deaf children. This goal is always at the forefront of our work.

*Cheryl Broszeit is a first year M.Ed. student in Education (Curriculum, Teaching & Learning) studying part time at the University of Manitoba. She has been working on the ASL*

*Receptive Skills Test project with Dr. Charlotte Enns for several years. Cheryl’s own research focus will be*

*on developing a Fingerspelling and Numbering curriculum that non-deaf students will be able to use in Deaf Studies and ASL-English Interpretation programs across Canada, and possibly North America. Currently she is employed at Red River College teaching in the Deaf Studies Program and ASL-English Interpretation Program.*



*Deborah Goertzen began her career in education with the completion of her Early Childhood Education certificate in 1978. She later continued her education, graduating with a Bachelor of Education in 1998. She*



*From L-R: Charlotte Enns, Deborah Goertzen, Liana Price, Sarah Rabu, Cheryl Broszeit, and Kyra Zimmer*

# Lab Reports



is currently in her second year of studies working toward a Master of Education in Curriculum Studies and Learning. After several years of teaching in a variety of grade levels at the Manitoba School for the Deaf she transferred to the Manitoba Education Provincial Outreach Team where she has worked for the last five years. She works as an ASL Education Consultant, travelling to schools across Manitoba to provide support and education for schools with Deaf and Hard of Hearing students; providing support for teachers, strategies for Deaf education in a mainstream environment, Deaf Culture education, and ASL support. Deborah has also been heavily involved in implementing a pilot ASL and Deaf Culture program to be taught as an additional language course for non-Deaf students in a high school setting. In 2012, she joined the research team of Dr. Charlotte Enns working on assessment of expressive ASL skills.



Liana Price began her career as an Early Childhood Educator working in a bilingual/bicultural daycare program, Sign Talk Children's Centre. She received her certificate in ASL-English Interpretation from Grant McEwan

College in Edmonton, Alberta. After working as an interpreter and interpreter trainer for many years, she completed her B.Ed. degree and began teaching at the Manitoba School for the Deaf. Currently she is in her first year of the M.Ed. program at the University of Manitoba, and she is working as a Research Assistant with Dr. Charlotte Enns in the Visual Language Training to Enhance Literacy Development project. Her research interests focus on the importance of early acquisition of ASL.



**Sarah Rabu** completed her Bachelor of Education in 2001 and is currently in her second year of graduate studies in Education. She has over 20 years of experience working with Deaf children.

Currently, she is working in the Bimodal/Bilingual Program at the Manitoba School for the Deaf as an ASL Support Teacher and is a part of the Resource Team where she specializes in ASL assessment. Since 2006, she has been involved in a research team under the direction of Dr. Charlotte Enns focusing on the developmental process of ASL Receptive and Expressive skills for children. In addition, Sarah is interested in curriculum development, and is working to establish a formalized ASL curriculum for Deaf students in Manitoba.

Kyra Zimmer (pictured right with Price and Enns) has a Bachelor of Education Degree and is currently taking a Masters of Education in Curriculum Studies part-time. She has been working as a research assistant with Dr. Charlotte Enns on adapting the Assessing British Sign Language Development: Receptive Skills Test into ASL. We have a wonderful team of researchers and are looking forward to the test being distributed soon. The next project we will be working on is adapting the *Assessing British Sign Language Development: Production Test* into ASL.

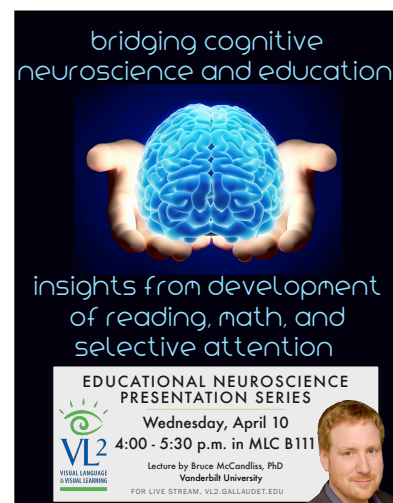


-Contributed by the Enns Team

For more information on the Enns Team at U. Manitoba:  
<http://home.cc.umanitoba.ca/~ennsci/cgi-bin/show/home.html>



# outreach



## Updates: VL2 Spring Lecture Series

Thursday, March 14, Professor **Beth Benedict** of Gallaudet University presented "How Early Intervention can Make a Difference: Research and Trends." For those of you would like to see the powerpoint and a video of

Benedict's presentation, these can be found [here](#).

There is only one remaining VL2 lecture this spring, with Dr. **Bruce McCandless**, of Vanderbilt University. Unfortunately, this lecture had to be rescheduled.



Watch the VL2 website and VL2 facebook page for updates on the rescheduled lecture.

If you missed the other VL2 presentations this semester, the videos are archived online and

can be found at the following links:

- (2012-2013) <http://webcast.gallaudet.edu>
- (2011-2012) <http://vl2.gallaudet.edu/presentation.php?id=y2011>
- (2010-2011) <http://vl2.gallaudet.edu/presentation.php?id=y2010>
- (2009-2010) <http://vl2.gallaudet.edu/presentation.php?id=y2009>
- (2008-2009) <http://vl2.gallaudet.edu/presentation.php?id=y2008>
- (2007-2008) <http://vl2.gallaudet.edu/presentation.php?id=y2007>

All 2013 lectures will be held from 4-5:30 p.m. on their designated day, in GU's MLC B111. Each is [live-streamed](#).



## Research Briefs

### Bimodal Bilingual Approaches for Children with C. Implants



Eye Gaze and Joint Attention:  
Fundamental Skills  
for Successful  
Interaction in Home  
and School  
Environments



The Benefits of Bilingualism:  
Impacts on Language and  
Cognitive Development

ASL/English  
Bilingual  
Education:  
Models,  
Methodologies,  
and Strategies



FIND THEM AT  
<http://vl2.gallaudet.edu>

# education

## THE VL2 Meeting: Update

THE VL2 meeting for VL2 students throughout the the nation continues to meet virtually on Fridays. In late March, **Jill Morford** presented an update on the various studies within SFA2. April 5th, a guest speaker, Dr. **Tonya Stremmlau** of the GU English Dept., presented on collaborative scientific writing. As the VL2 Meeting coordinator **Rupert Dubler** noted, "This promises to be a relevant presentation for everybody as she will discuss how we can better write collaboratively (e.g., aren't you thinking of that grant or article going through the 100th revision among your co-authors?!)." April 12, **Karen Emmorey** presented an overview of the recent research activity in SFA 3.

Previous VL2 meetings this spring have been hosted by SFA 1 leader **David**

**Corina** and Post-Secondary Engagement Coordinator **Diane Clark**, who shared information about the International Reading Project. Additionally, two VL2 meetings were focused exclusively on preparing for the annual iSLC conference. The meetings have continued to be a great success this semester!

### SFA 5: Integration of Research and Education News

Here's to wishing everybody a stress-free homerun to the end of the academic year! Please mark your calendar for our last VL2 meeting on May 3rd, 3-4:30 EST. We will talk about our accomplishments we have

had this past year, and what we would like to see for next year. Also, just like our successful holiday party, we would like all labs to host an end of the year party together. Bring food and invite your everybody from your lab to the meeting! See you there!

In the photo below, Peter and Erica wish you a "Happy April! HA-where's the sun??"



-Peter & Erica

## Student Leadership Team (SLT)

It is that time of the year again - to pick next year's Student Leadership Team! We are asking for nominations for the best, brightest, and hardest-working to join the team.



The perks include coming to Gallaudet for the Site Visit in June, a SLT retreat in the fall, sitting in weekly Executive Board meetings, advance notice of whatever's happening within VL2, increased contact and visibility with VL2 PIs, and planning various programs/events/surveys to better the lives of students within the Center. It is a great way to learn more about the inner workings of VL2, how Network Science happens, and an easy way to get more people to know who you are. And you get to work with a pretty cool team-the five of us have loved working with each other the past year! Any VL2-affiliated student is eligible to be on the SLT. You can nominate somebody, or nominate yourself. We will then ask all nominated people if they are interested in the position. Then we will have an online vote on who joins the SLT. Simply email me or any SLT member with your nominations. Put on your thinking caps and nominate somebody!

Thank you,

Deb, Corrine, Amy, Adam, and Erica

## VL2 & Affiliates at Society for Research in Child Development Annual Meeting, Apr. 18-20, Seattle, WA

VL2 researchers are represented in strong numbers at the annual meeting of the Society for Research in Child Development. VL2/BL2 Science Director **Laura-Ann Petitto** will be presenting, with BL2 Research Assistant **Kaja Jasinska**, "Age of Bilingual Exposure Predicts Distinct Contributions of Phonological and Semantic Knowledge to Successful Reading Development." **Thomas Allen**, VL2's Co-PI and BL2 Research Assistant **Song Hoa Choi** will be discussing, "ASL Skills, Fingerspelling and Early Alphabetic Knowledge." Post-secondary Engagement Coordinator **Diane Clark** will be chairing a panel on Early Language and Literacy in Deaf Individuals; Jill Morford will be the discussant. Clark is also presenting "Childhood Memories of Hearing and Deaf College Students: Influences of Language Modality and Timing of ASL Acquisition," with co-authors **Lynne E. Baker-Ward, Benjamin Brown, and Alena G. Esposito**. Along with co-authors **Paul Twitchell, Benjamin Anible, Paola E. Dussias, and Pilar Pinar, Jill Morford** will be presenting "Sensitivity to English Verb Biases by ASL-English Bilinguals." **David Corina, Kyle MacDonald, Virginia A. Marchman**, and VL2 Scientific Advisory Board Member **Anne Fernald**, are presenting, "Real Time Processing of American Sign Language (ASL) in Deaf and Hearing Native-Signing Infants." **Donna Morere** will discuss, "The challenges



of evaluating deaf children with additional disabilities," and **Charlotte Enns** will present, "Assessing Language in Deaf Children with Additional Disabilities." Then "Attentional Development in Deaf Children: Effects of Sensory Experience and Language Exposure" will be covered by **Matthew Dye**. **Peter Crume** will discuss "ASL Phonology as a Pathway to Literacy," and **Rain Bosworth, Jennifer Petrich, and Karen Dobkins** will present on "Effects of Attention and Visual Field Laterality on Motion and Form Processing in Deaf Signers."

## Reflections on iSLC 2013!

As noted in the previous newsletter, the sixth annual inter-Science of Learning Centers (iSLC) Conference was hosted by the Spatial Intelligence and Learning Center (SILC) in Philadelphia, PA, February 21 to February 23, 2013. Here, VL2 students reflect on iSLC 2013.

"This year at the iSLC conference, the Brain and Language Lab shared new research findings about bilingual reading development: specific parts of language knowledge and their contribution to reading mastery are altered as a results of bilingual experience in ways that support bilingual language and literacy advantages (Jasinska and Petitto). I also held a workshop on how to apply principles of learning to scientific communication. As an SLC, we can use our collective knowledge about how people best learn and process information in order to create scientific talks and posters that facilitate "audience

learning". I met with our collaborator, **Vicente Malave** (TDL), to advance our work on hidden process modeling of reading development. The iSLC conference was a big success!" -**Kaja Jasinska**

"iSLC is always a great conference for networking. It is always nice to get together with fellow VL2-ers and catch-up since we only get together once or twice a year. This year also featured an alumni panel with lots of excellent tips on life after grad school. With alum from different sectors, including industry, education and academia, we were given great insight into transitioning from grad school to post-doc and beyond." -**Corrine Occhino-Kehoe**

"One of my favorite things about the conference was the fact that I got to learn about the research conducted by different labs on the science of learning since I'm so used to hearing about research studies done by scientists and students in my own lab. Learning about other people's research gave me new perspectives from which to consider my own research. I also really appreciated the chance to network with other students." -**Erica Wilkins**

"My main impression of the conference is a renewed commitment to spreading awareness of the relevance of our research to populations and centers outside the deaf community. I had several really illuminating conversations discussing the benefit of incorporating ASL users in research. Other centers are fascinated to learn what we do and ask great questions. For example, looking at the gender biases in visuo-spatial learning and how that might be different in native ASL-users. Another conversation I had was about the recognition of social cues



# TIDBITS

on the face and how signers might show differential preference for this based on linguistic cues. We also talked about using deaf undergraduates to investigate facial processing interruptions (for example, presenting the face upside-down) and whether processing interruptions would be different between signers and nonsigners. People are eager and willing to listen; we need to be better emissaries." - **Amy Letteri**

"iSLC was a fantastic opportunity to interact with fellow trainees in the science of learning that are interested in asking similar experimental questions but come equipped with skills from a diverse range of disciplines." - **Tanya Evans**

-Contributed by Erica Israel

## Guggenheim for VL2 Affiliated Researcher Judith Kroll

VL2 affiliated researcher and PIRE grant PI Judith Kroll has received a Guggenheim fellowship. During this fellowship, she will study ["the consequences of second-language learning and bilingualism for the native language."](#)

## Visual Learning Creative Conversation @GU with Petitto and Langdon

A strong theme in this year's faculty development at Gallaudet University is visual learning and classroom practices. As part of a campus-wide effort to increase awareness of visual language and visual learning in a bilingual and multicultural campus environment, Gallaudet faculty and staff are invited to join colleagues for a lunchtime series of structured conversations about visual learning research and how it might be translated to classroom practice. On Wednesday, April 24, **Laura-Ann Petitto** and **Clifton Langdon** will lead a discussion for Gallaudet faculty and staff on "Bilingualism and the Brain."

## Summer Internship in Cognitive Neuroscience

**Matthew Dye's** lab is looking for an unpaid summer intern to assist in optical imaging and EEG studies in June and July. Dye notes that his lab has no funds, but can offer experience and training in the collection of EROS (optical), EEG, eye tracking, and behavioral data. Applicants should have good ASL skills as much of the testing will be with Deaf adults. If you know someone who is interested, please ask them to email Dye at [mdye@illinois.edu](mailto:mdye@illinois.edu).

## VL2 Grad Students Are Advocates in Issues in Higher Education

VL2 research assistants **Dorri Daggett** and **Amy Letteri** have been involved in the recent discussions in the media related to financial burdens facing students in the current economy. Dorri Daggett's observations were included in a letter that the American Psychological Association sent to the government about fairness in student loan practices, and Amy Letteri will be talking about loans Friday, Apr. 12, on National Public Radio.

## VL2's Storybook App in the News

Recently featured in a number of media and technology sites, VL2's first iPad app, "The Baobab" is making news! Recently, [blog sites](#) as varied as *The Hearing Journal*, *Decoded Science*, and *MediaBistro* have featured the app.

## VL2 Graduate Student is Key Speaker at Colloquium

**Corrinne Occhino-Kehoe**, a graduate research assistant with the **Morford** lab at the University of New Mexico and a member of the Student Leadership Team, is one of the key speakers for the 36th Annual Linguistics Spring Colloquium, to be held at San Diego State University, Saturday, April 20. She will be presenting, "A Cognitive Approach to Phonology in American Sign Language."



VISIT  
800 Florida Avenue NE  
Washington D.C., 20002, USA



FOLLOW  
[@NSFVL2](#)



CALL  
202.651.5866



WRITE  
[vl2@gallaudet.edu](mailto:vl2@gallaudet.edu)



LIKE  
VL2 Science  
of Learning Center



READ  
[vl2.tumblr.com](http://vl2.tumblr.com)



FAX  
202.448.7513

click on [vl2.gallaudet.edu](http://vl2.gallaudet.edu)