



UNDERGRADUATE RESEARCH OPPORTUNITIES

2011-2012



UNIVERSITY of VIRGINIA

Research opportunities are available in the Psychology Department, the Curry School of Education, and the Medical School. Research assistants (RAs) have the opportunity to work in a variety of psychology labs. As a RA, students learn important skills not easily taught in the classroom, such as learning how to: use technical equipment, interact with participants, code and analyze data, and design experiments. RAs are typically expected to work 10 hours per week.

Doing a RAship is strongly recommended for students who are considering a Distinguished Majors Project. RAships are also valuable experiences for graduate school, medical school, law school, and other professional schools. In the research labs, faculty, post-docs, and graduate students are available to discuss graduate aspirations and to write letters of recommendations.

Procedure for Adding Research

1. Contact the lab where you would like to participate.
2. Add yourself to the permission list for PSYC 3590 under the section for the Professor's lab. If the lab director is in a department other than the Psychology Department (e.g., Curry School of Education and the Medical School), you may use Freeman as the instructor.
3. The lab contact person will send a list of approved students to Ms. Sties, the Undergraduate Coordinator, who will invite you to add the lab. If you have any questions send email to psych-info@virginia.edu.

LANGUAGE PROCESSING LAB

Beverly Colwell Adams

We study spoken and written language processing through syntactic ambiguity. Our current research examines how syntactically and semantically ambiguous sentences are comprehended. American, Dutch, French, and Korean students hear computer-generated speech in American English, Dutch, French, and Korean. We vary the amount of time between linguistic phrases of spoken language. The results will have important implications for instruction and bi-lingual communication. RA duties include 1) reading original research articles, 2) running the study/studies, 3) entering and analyzing data, 4) preparing experimental materials, as well as 5) preparing for conference presentations.

Contact: Prof. Adams, bca5y@virginia.edu

VIRGINIA INSTITUTE OF DEVELOPMENT IN ADULTHOOD

Joseph Allen

The VIDA Project (formally the KLIFF Project) is a longitudinal study examining the influence of social relationships, autonomy, and attachment processes on psychosocial development. We are exploring how young adults develop and manage friendships with their peers, and how family relationships influence qualities of these peer relationships. Data is collected on several different areas of adolescence and young adulthood, such as the quality of family relationships, friendships and romantic relationships, peer pressure, school achievement, delinquency, and internalizing behaviors. We use a variety of measurement methods, including self-reports, semi-structured interviews, parent-reports, peer reports, and observations of family and peer interactions.

RA tasks include conducting interviews with participants, data entry and checking, transcribing, and other administrative tasks. We train RAs to use computer programs and the protocol for conducting interviews with participants. RAs who work on the project for multiple semesters have the opportunity to take on higher level responsibilities (such as coding data, scheduling participants, and writing a thesis) and may apply for paid positions.

Contact: Ann Spilker, acs4a@virginia.edu
or Caroline White, cmw6b@virginia.edu
Website: www.teenresearch.org

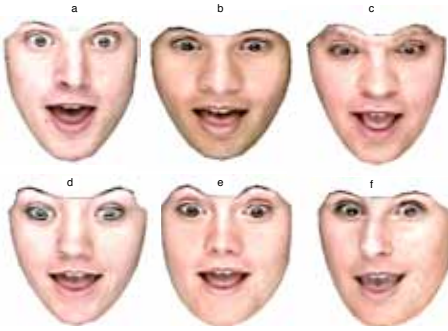
Undergraduate Presentations or Publications

- Manning, N. N., **Stephenson, J. C.**, '07, Allen, J. P. (2008, March). Early adolescent psychosocial predictors of future ego-resiliency. Poster presented at the biennial meeting of the Society for Research in Adolescence, Chicago, IL.
- Schad, M. M.**, '06, Szewdo, D. E., Antonishak, J., Hare, A., Allen, J. P. (2008). The broader context of relational aggression in adolescent romantic relationships: Predictions from peer pressure and links to psychosocial functioning. *Journal of Youth and Adolescence*.
- Schad, M. M.**, '06, Szewdo, D. E., Antonishak, J., Hare, A., Allen, J. P. (2008, March). The broader context of relational aggression in adolescent romantic relationships. Poster presented at The Biennial Meetings of the Society for Research on Adolescence, Chicago, IL.
- Schad, M. M.**, '06, Evans, M., Szewdo, D. E., Allen, J. P. (2008, March). Can peer pressure be a good thing? Poster presented at The Biennial Meetings of the Society for Research on Adolescence, Chicago, IL.
- Stephenson, J. C.**, '07, Hare, A. L., Manning, N. N., & Allen, J.P. (2008, March). The role of adolescent relationships in predicting withdrawal in emerging adulthood. Poster presented at the biennial meeting of the Society for Research in Adolescence, Chicago, IL.
- Stephenson, J. C.**, '07, Manning, N. N., Szewdo, D. E., & Allen, J.P. (2008, March). Negotiating adolescence: The importance of close relationships for dismissing adolescents. Poster presented at the biennial meeting of the Society for Research in Adolescence, Chicago, IL.
- Szewdo, D. E., Mikami, A. Y., Allen, J. P., & **Evans, M. A.**, '07 (2008, March). The need for attachment: Demonstrations through teens' photos on MySpace and Facebook. Biennial Meetings of the Society for Research on Adolescence, Chicago, IL.

HUMAN DYNAMICS LAB

Steven Boker

Our research explores how people coordinate their movements and facial expressions during conversation. RAs will be involved in all parts of the project including learning to use state of the art com-



puter software that tracks the body movements and facial expressions. The fall semester will involve training in the laboratory methods and in running a teleconferencing experiment. We are looking for motivated students interested in the psychology

of social interaction as well as the technical aspects of laboratory science in psychology. The project is in collaboration with researchers at the University of Rochester, University of Zurich, and Max Planck Institute in Berlin, so RAs will also have a chance to meet faculty and graduate students from other institutions. Priority will be given to students who can commit to at least two semesters.

Contact: Prof. Boker, boker@virginia.edu

SIGN COMMUNICATION, AUTISM, AND PSYCHOLINGUISTICS LAB

John Bonvillian

Our laboratory group has developed a simplified system of manual signing for children and adults who are mute or who have severe speech difficulties. In another project, we are conducting preliminary analyses of various historical texts as part of a linguistic fingerprinting study.

In current work, we are in the process of developing a one-handed version of our simplified sign system. The reason for developing a one-handed version is that many persons who have lost their spoken language skills as a result of strokes also have lost their ability to use one of their arms and hands. Some knowledge of sign communication is helpful in this research.

Contact: Prof. Bonvillian, jdb5b@virginia.edu

Undergraduate Presentations or Publications

Bonvillian, J.D., Loncke, F., & Moore, A.K., '11. (2011, March). The development of the simplified sign system. Invited address, annual confer-

ence of the Speech and Hearing Association of Virginia, Richmond, VA
Braddock, B.A., Loncke, F., Borg, S., Bonvillian, J.D., & **Mayer, V., '06** (2008, November). Trained modality use in an adult with expressive aphasia. Paper presented at the annual convention of the American Speech-Language-Hearing Association, Chicago, IL.

Bonvillian, J.D., Loncke, F., & **Moore, A.K., '11.** (2010, October). Simplified signs: A decade of research and development. Paper presented at the fourth Clinical Augmentative and Alternative Communication Research Conference, Iowa City, Iowa.

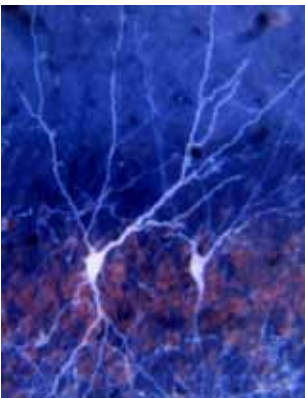
Bonvillian, J.D., Ingram, V.L., & **McCleary, B.M., '05** (2009). Observations on the use of manual signs and gestures in the communicative interactions between Native Americans and Spanish explorers of North America: The accounts of Bernal Diaz del Castillo and Alvar Nunez Cabeza de Vaca. *Sign Language Studies*, 9, 132-165.

Jack, A., **Liskey, K., '08,** Bonvillian, J.D., & Richards, H. C. (2008, September). Gestural imitation, hand preference, and communication ability in children with autism. Poster presented at the 2nd Clinical Augmentative and Alternative Communication Research Conference, Charlottesville, VA.

Mayer, V., '06, Braddock, B.A., Borg, S., Bonvillian, J.D., & Loncke, F. (2008, September). Trained modality intervention in expressive aphasia: Preliminary findings. Paper presented at the 2nd Clinical Augmentative and Alternative Communication Research Conference, Charlottesville, VA.

NEURAL DEVELOPMENT AND ORGANIZATION LAB

Peter Brunjes



Our lab is involved in probing a number of issues surrounding the organization and development of sensory systems in the brain. Sensory systems are useful models for examining how the brain works: they often have clear cut circuitry, and it is relatively simple to manipulate the amount and type of information processed by the system. Our work centers

around the olfactory system, which offers a number of unique features that make it an excellent model for studying the development and organization of the brain. Most of our recent work centers on studying the basic organizational features of the system, including understanding how odors are encoded in the olfactory cortex, and whether these representations change with olfactory experience.

When first joining the lab, RAs are usually responsible for participating in one aspect of an ongoing project as they are trained in various laboratory techniques. Once proficient, RAs often have the opportunity of developing more independent projects, many of which have become distinguished major projects.

Contact: Prof. Brunjes, brunjes@virginia.edu

EMOTION AND COGNITION LAB **Gerald Clore**

We are primarily interested in studying the effects of emotional experience on cognitive performance and behavior. Some of our research questions are: 1) Do emotions influence how we perceive our environment and ourselves? 2) Do emotions help us remember? 3) Do happy people think differently than sad people?

The small, cohesive atmosphere of our lab group provides opportunities for RAs to become intimately involved in all aspects of the research process. First-semester RAs are mainly responsible for scheduling participants, running experiments, and working with data. With increasing experience, lab members are encouraged to participate in the development of new research designs and the interpretation of results.

Contact: Jesse Pappas, pappas@virginia.edu

VIRGINIA AFFECTIVE NEUROSCIENCE LABORATORY **James Coan**

Our research focuses on the neural bases of emotional behavior, regulation, and experience, including a particular interest in the social regulation of neural processes underlying emotional responses. These interests integrate a variety of tools and methods,

including observational behavior coding to electroencephalography (EEG) to functional magnetic resonance imaging (fMRI).

RAs are typically involved in a number of activities, including running experiments, entering and analyzing data, and completing literature searches. There tends to be an emphasis on learning about and utilizing psychophysiological methods.

Contact: Karen Hasselmo, keh7g@virginia.edu

Website: www.affectiveneuroscience.org

Undergraduate Presentations or Publications

Bendycki, E.A., '10, Steiner, A.R.W., & Coan, J.A. (2010, January). Relationships between reports of empathic responding and emotion regulation strategies. Poster to be presented at the annual conference of the Society for Personality and Social Psychology, Las Vegas, Nevada.

Steiner, A. R. W., Coan, J. A., & **Bendycki, E. A., '10** (2009, October). Relatively greater right prefrontal activity corresponds with higher levels of empathy. Poster presented at the annual conference for the Society of Psychophysiological Research, Berlin, Germany.

Steiner, A. R. W., **Davis, M. T., '06**, & Coan, J. A. (2009, June). Prefrontal asymmetry mitigates the negative effects of insecure attachment styles. Poster presented at the annual conference for the Tufts University Conference on Emerging Trends in Behavioral, Affective, Social, & Cognitive Neurosciences, Medford, Massachusetts. (Graduated 2006)

Steiner, A. R. W., **Bendycki, E. A., '10**, & Coan, J. A. (2009, June). Prefrontal asymmetry moderates relationships between self-reported empathy and depression. Poster presented at the annual conference for the Tufts University Conference on Emerging Trends in Behavioral, Affective, Social, & Cognitive Neurosciences, Medford, Massachusetts.

SOCIAL BEHAVIOR AND DECISIONS LAB

Benjamin Converse

Work in our lab revolves around questions of cooperation and competition. For example, how do people evaluate their helpers and their rivals? Does the way people think about their rivals affect their style of competition or their motivation to win? What factors influence people's emotional and behavioral responses to receiving help from others? We are further interested in how the answers to these

questions lead to behaviors and decisions that promote or undermine stable social systems.

RAs will have the opportunity to participate in weekly lab meetings and many phases of the research process, including preparing and conducting experiments and surveys, managing study data, and working with the research team to refine experimental procedures. As RAs become more experienced in the lab, there will be opportunities to take a more advanced role in the research process. (Must be available for weekly RA meetings, Mondays 4-5pm)

Contact: *Johanna Cohoon, jlc7tu@virginia.edu*

CHILD STUDY CENTER

Judy DeLoache

In the Child Study Center, we investigate the perceptual and cognitive development of infants and young children. Many of our projects focus on how young children begin to master the multitude of symbols, including pictures and models, that are important for thought and communication with others.

A recent study examined the extent to which infants learn words from watching a best-selling baby video promoted and widely assumed to foster learning. Our results indicated that infants actually learned relatively little from their exposure to the video.

Related experiments provided the initial documentation of what we call scale errors—toddlers' efforts to interact with miniature objects that are far too small for such actions to be possible. For example, a 2-year-old might attempt to sit in a chair from a dollhouse or to get into a miniature car.

A quite different line of research concerns infants' interest in animals. We have found that infants pay substantially more attention to film clips of animals than to films of inanimate objects. This is the first-ever research on this topic, and we are currently conducting follow-up studies.

Our research program depends on the assistance of undergraduate research assistants. RAs work closely with an individual post doc or graduate student and the lab coordinator. Their duties include, but are not limited to, testing/observing young participants in the

research, transcribing and coding data from films of experimental sessions, preparing stimulus materials, and attending and contributing to lab meetings.

Contact: Kasey Soska, ksoska@virginia.edu

MEMORY PROCESSES LAB

Chad Dodson

Our research focuses on memory with an emphasis on the occurrence of false memories, overconfidence in one's memories and changes in memory across the lifespan. For example, some of our research examines eyewitness memory. We have observed with a typical eyewitness suggestibility paradigm that older adults are much more likely than younger adults to assert confidently that they remember witnessing an event that was only suggested to them. Some of our current projects are examining whether this age-related effect generalizes to more naturalistic eyewitness settings and whether there are variables that can minimize the occurrence of these kinds of high confidence errors.

We are looking for engaging, thoughtful and motivated research assistants. RAs are involved in designing new studies, recruiting participants and entering and analyzing data.

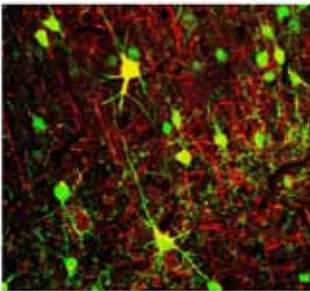
Contact: Alex Werntz, ajw3x@virginia.edu

Website: <http://faculty.virginia.edu/dodson/>

VISUAL DEVELOPMENT AND PLASTICITY LAB

Alev Erisir

Postnatal development of the brain is characterized by a plastic stage during which abnormal sensory stimulation can lead to life-long changes in the organization of visual cortex. Our lab aims to understand the biological mechanisms that enable this plasticity. What makes some young neurons lose their ability to respond to alterations in the sensory environment at the end of a critical period? What are the mechanisms by which the critical period of devel-



opmental plasticity is initiated, and terminated? Is there a change in the neurotransmitter receptor function in the visual cortex that can signal the onset or the offset of this period? Using anatomical techniques including immuno-electron microscopy, tract-tracing and confocal microscopy, we aim to reveal the changes that occur in visual system connectivity and glutamate receptor localization during and after the critical period of visual plasticity.

Upon joining the lab, RAs are assigned to an ongoing project. At the initial stages of the training, RAs learn tissue preparation techniques, light and electron microscope use and digital image analysis. Typically after several months of active contribution, RAs start formulating a project that they may use as their distinguished major thesis. Attending our regular lab meetings is also recommended. At least two semesters of commitment is required.

Contact: Prof. Erisir, erisir@virginia.edu

Undergraduate Presentations or Publications

- Corson J, Aldridge A, **Wilmoth K.**, '13, Erisir A. (2011). A survey of oral cavity afferents to the rat nucleus tractus solitarii. *J Comp Neurol.*
- Holtz, S.**, '11, Fu, A., Loflin, W., Erisir, A. (2011). Ultrastructural morphology and synaptic organization of parabrachial input to the rat gustatory thalamus. AChems Poster presentation.
- Corson J, Nahmani M, **Lubarsky K.**, '09, Badr N, Wright C, Erisir A. (2009). Sensory activity differentially modulates N-METHYL-D-ASPARTATE receptor subunits 2A and 2B in cortical layers. *Neuroscience.*
- Corson J, Nahmani M, **Lubarsky K.**, '09, **Badr N.**, **Wright C.**, '08, Erisir A. (2009). Sensory activity differentially modulates N-methyl-D-aspartate receptor subunits 2A and 2B in cortical layers. *Neuroscience.* 20;163(3):920-932.
- Nahmani M, Corson J, **Lubarsky K.**, '09, Badr, Erisir A. (2008). Synaptic NR2A and NR2B subunits respond differentially to sensory activity manipulations in developing and adult visual cortex. Poster presentation at Society for Neuroscience Meeting.
- Illig K, **Fleming M.**, '08, **Sachs S.**, '09, Erisir A. (2008). Ultrastructural analyses of glutamatergic input to piriform cortex during development. Poster presentation at Society for Neuroscience Meeting.

Corlew R, Wang Y, **Ghermazien, H.**, '05, Erisir A, Philpot B. D. (2007). Developmental switch in the contribution of presynaptic and postsynaptic NMDA receptors to long-term depression. *Journal of Neuroscience*, 27, 9835-9845.

MORALITY AND POSITIVE PSYCHOLOGY LAB

Jonathan Haidt

We study morality and moral emotions, such as moral disgust, elevation, awe, and admiration.



We examine how these emotions motivate moral judgments and behaviors, and how they can be used to improve leadership and ethics in organizations. We are especially interested in the psychological causes of ide-

ological differences. Using our research Website (www.YourMorals.org) and lab studies, we have identified many differences in the "moral foundations" of liberals and conservatives. We are using these findings to help us search for ways to increase mutual understanding and civility in politics.

RA duties include running and testing studies, web programming, helping to compile and evaluate the video library, analyzing liberal and conservative texts, and helping to generate ideas for future studies of morality and politics.

Contact: *Matt Motyl*, msm6sw@virginia.edu

Undergraduate Presentations or Publications

Silvers, J., '05, & Haidt, J. (2008). Moral elevation causes lactation. *Emotion*, 8, 291-295.

CHILD LANGUAGE AND LEARNING LAB

Vikram Jaswal

Our research focuses on how children (between 1 and 5 years of age) learn about the world, and how learning language changes how they think and reason about objects, events, and people.

RAs assist with everything from the design of the studies to the gathering of materials to the collection of data and data analysis.

Because RAs interact with children and their parents, it is crucial that you enjoy being around young children. Students interested in cognitive development or cognitive science are encouraged to apply. A year-long commitment is required.

Contact: Robyn Kondrad, rlk4s@virginia.edu

Website: faculty.virginia.edu/childlearninglab

Undergraduate Presentations or Publications

Jaswal, V. K., Croft, A. C., '10, Setia, A. R., '10, & Cole, C. A., '10 (in press).

Young children have a specific, highly robust bias to trust testimony. *Psychological Science*.

Jaswal, V. K., Lima, O. K., & Small, J. E., '08 (in press). Compliance, conversion, and category induction. *Journal of Experimental Child Psychology*.

Tenney, E. R., Small, J. E., '10, Kondrad, R. L., Jaswal, V. K., & Spellman, B. A. (in press). Accuracy, confidence, and calibration: How young children and adults assess credibility. *Developmental Psychology*.

Small, J. E., '08, Tenney, E. R., Kondrad, R. L., Jaswal, V. K., & Spellman, B. A. (April, 2009). Young children use accuracy and confidence, but not calibration, when judging credibility. Poster presented at the biennial meetings of the Society for Research in Child Development, Denver, CO.

Jaswal, V. K., & Malone, L. S., '05 (2007). Turning believers into skeptics: 3-year-olds' sensitivity to cues to speaker credibility. *Journal of Cognition and Development*, 8, 263-283.

EARLY CHILDHOOD LAB

Rachel Keen

We are interested in the development of cognitive and motor skills in infants and children. For example, how do children's problem solving skills change as their motor abilities improve? We use several different experimental methods (e.g., video recording, motion analysis, eye-tracking) to examine children's behavior.

RAs are involved in every aspect of research, including data collections, data coding and analysis, subject recruitment and scheduling, and literature searches. RAs meet regularly with lab members. Note: RAs must commit to 2 semesters in the lab and must have taken or be currently enrolled in a course on child development.

Contact: Prof. Keen, rachelkeen@virginia.edu

RAs must be responsible and have organizational skills.

Contact: Minhong Yu, minhongyu@gmail.com,

Website: people.virginia.edu/~mk9y/home.html

EARLY DEVELOPMENT LAB

Angeline Lillard

We are actively researching 1) how different preschool environments (Montessori and conventional) impact children's development, 2) how children know about pretending, and 3) how much exposure is required for children and adults to learn new words.

RAs help recruit participants, test children in the lab and at local Charlottesville schools, and help with coding and data entry. For the preschool study, students who are free at least 2 mornings per week, want to work 10 hours/week for the full academic year, and can drive to local schools to test children are welcome to apply. For studies of basic cognitive development, RAs help recruit participants, test children in the lab and at local Charlottesville schools, and help with coding and data entry. There is a weekly laboratory meeting for all researchers. The Early Development Lab is located off grounds on Millmont St.

Contact: Prof. Lillard asl2h@virginia.edu for preschool study

Contact: Eric Smith, eds6r@virginia.edu

Website: people.virginia.edu/~asl2h/EDL/EDLFrames.htm

Undergraduate Presentations or Publications

Lillard, A. S., & Peterson, J., '10. (revise and resubmit). SpongeBob's Impact on Young Children's Executive Function. *Pediatrics*.

Sorenson, L. '87, & Lillard, A.S. (2007). When Pretending Ends. Poster presented at the Cognitive Development Society, Santa Fe, NM.

AINSWORTH TREATMENT OUTCOME MONITORING LAB

Patricia Lee Llewellyn and Bethany Teachman

Research projects will include setting up and analyzing therapy outcome data from the Ainsworth clinic as well as assisting with projects examining cognitive and perceptual biases in fear and anxiety disorders through the Teachman Program for Anxiety Cognition and Treatment lab. We are seeking a student interested in serving as

the lead research assistant for the Mary D. Ainsworth Psychological Clinic. Students have an opportunity to expand both their research training and learn more about the operations of a psychology clinic by assisting with administrative duties. The applicant should have an interest in clinical outcome research and be a third or fourth year student. Interested applicants able to attend lab meetings from 1:30-2:30 on Fridays, and can commit to a full year will be given priority. Applicants should include a note detailing your prior experience and interest in clinical research.

Contact: Prof. Lee Llewellyn, plh6w@virginia.edu

SOCIAL NEUROSCIENCE LAB

James Morris

Our lab focuses on the the neural bases of normal and social function using a multimodal approach. By using such techniques as functional magnetic resonance imaging (fMRI), electroencephalography (EEG), scalp-recorded event-related potentials (ERP), and eye-tracking, we seek to understand how social behavior and brain processes interact. Past studies have focused on pretend play in adults, face recognition for in-group and out-group members, imitation, and self-transcendence.

Undergraduate RAs play an integral role in the lab. Duties include running subjects, data collection and analysis, stimuli creation as well as the opportunity to work alongside graduate students and create original research ideas. Experience with programming is preferred.

Contact: Holly Earls, hej3f@virginia.edu

Website: uvasocialneuroscience.com/Home.html

IMPLICIT SOCIAL COGNITION LAB

Brian Nosek

We are examining how conscious or non-conscious aspects of people's attitudes can influence judgments and behavior. Although attitudes include aspects that they can report, we are particularly interested in the influence of automatic, non-conscious attitudes, especially when they differ from the attitudes people can directly report.

RAs are involved in running experiments, entering and analyzing data, and helping create new studies. Other duties might include data entry, literature searches, article reviews, and study design. RAs also attend lab meetings with faculty and graduate students to gain research experience and expertise.

Contact: Calvin Lai, ckl5ae@virginia.edu

Website: www.briannosek.com/labgroup

Undergraduate Presentations or Publications

Tran, O. V., '09, Lindner, N. M., & Nosek, B. A. (2010). Do unto others: Effects of priming the golden rule on buddhists' and christians' attitudes toward gay people. *Journal for the Scientific Study of Religion*.

Tran, O. V., '09, Linder, N. M., Nosek, B. A. (2009). "Do Unto Others": Effects of priming the Golden Rule on Buddhists' and Christians' anti-gay attitudes. Presented at UCLA PURC.

CULTURE AND WELL-BEING LAB

Shigehiro Oishi

We are conducting experiments on the following projects: 1) Misunderstanding and understanding in interpersonal perception; 2) Cultural differences in happiness; 3) Residential mobility and its relation to prosocial behavior and consumer behavior; and 4) Physiological measures of well-being.

RA responsibilities include preparing experimental materials, conducting experiments, entering data, coding, and data acquisition. Applicants must be responsible and motivated about doing psychological research.

Contact: Thomas Talhelm, tat8dc@virginia.edu

Website: people.virginia.edu/~s05x/index.htm

Undergraduate Presentations or Publications

Kesebir, S., **Hincker, A. M., '09**, & Oishi, S. (2008, May). Cooperators are worse off being mobile. Poster session presented at the annual meeting of Association for Psychological Science, Chicago, IL.

Kesebir, S., **Hincker, A. M., '09**, Oishi, S., & Lun, J. (2008, June). Optimal levels of investment in local groups for varying levels of mobility: Which factors matter? Poster session presented at the Summer Institute on Social Cognition, Montréal, Canada.

SHARED UNDERSTANDING AND SOCIAL IDENTITY LAB

Shigehiro Oishi

We are looking for motivated, interested, and enthusiastic RAs. Our research examines how interpersonal interactions and the beliefs we attribute to others, shape our beliefs, feelings and actions—particularly those beliefs relevant to stereotyping and prejudice.

RA responsibilities include conducting experiments, preparing and organizing research materials, recruiting participants, entering data, coding videotaped interaction and/or written materials, and participating in lab meetings.

Contact: Ashley McCormack, amm4ac@virginia.edu

SEXUAL ORIENTATION, HUMAN DEVELOPMENT, AND FAMILY LIVES

Charlotte J. Patterson

Our research focuses on issues related to sexual orientation, human development, and family lives. How does sexual orientation influence family formation and family lives? How is this affected by the legal and public policy climates in which children, youth, and families live? These are some questions under study in our group.

Several studies are underway now. In one current project, we are working to compile data about community-level factors that might influence the experiences of lesbian and gay individuals and their families. We use zip codes to match this dataset to data from many other studies and examine the associations between factors such as political climate, number of households headed by same-sex couples, and number of LGBT organizations, on one hand, with psychological outcomes, on the other.

In another current study, we are working with a large sample of English-speaking gay fathers from the United States and abroad. This research is intended to examine modes of family formation among gay men of different ages, experiences of fathering among gay men, and modes of family functioning among gay father families. In addition, we have collected information from a subsample of these gay fathers' adult children to try to understand their experiences as children of gay parents.

We are also working on a study of psychological barriers to parenthood among lesbian and gay adults and will begin additional projects soon, as two additional graduate students have recently joined the lab.

We welcome the involvement of motivated, organized, efficient, and friendly undergraduate students as part of our research team. Research assistants usually work closely with a graduate student, and their duties may include reading original research studies, preparing materials for new studies, transcribing and coding data, and assisting in data analysis. There are also opportunities for advanced RAs to develop their own projects.

Contact: *Samantha Tornello, SLT6A@virginia.edu*

Website: *<http://people.virginia.edu/~cjp/application.html>*

Undergraduate Presentations or Publications

- Lick, D. J., Patterson, C. J., & Schmidt, K. M. (2011). "It gets better:" Recalled stigma, benefits, and openness among offspring of lesbian and gay parents. Poster presented at Association for Psychological Science, Washington, D.C.
- Lick, D. J., Patterson, C. J., Schmidt, K. M., & Riskind, R. G. (2011). Community climate predicts psychological adjustment for children of lesbian and gay parents. Poster presented at International Academy of Sex Research, Los Angeles, CA.
- Farr, R. H., Doss, K. M. & Patterson, C. J. (2010, August). Children's gender development in lesbian, gay and heterosexual adoptive families. Presented at the American Psychological Association, San Diego.
- Farr, R. H. **Forssell, S. L. '98**, & Patterson, C. J. (2010). Lesbian, gay, and heterosexual adoptive parents: Couple and relationship issues. *Journal of Gay, Lesbian, Bixexual and Transgender Family Studies*, 6, 1-15.
- Farr, R. H., **Forssell, S. L. '98**, & Patterson, C. J. (2010). Parenting and child developmt in adoptive families: Does parental sexual orientation matter? *Applied Developmentl Science*, 14, 164-178.
- Farr, R. H., **Forssell, S. L. '98**, & Patterson, C. J. (2009, May). Parental sexual orientation, gender, and division of labor among adoptive parenting coules. Poster presented at the Association for Psychological Science, San Francisco.

Forsell, S. L. '98, Farr, R. H., & Patterson, C. J. (2009, November). Sexual behavior, sexual satisfaction, attachment and relationship quality in gay male couples who parent. Presented as part of a symposium entitled *(De)constructions: Sex, Masculinities, and HIV/AIDS*, at the annual Congress of the Society for the Scientific Study of Sexuality, Puerto Vallarta, Mexico.

Patterson, C. J., Farr, Rachel, H., & **Forsell, S. L. '98**, (2009, April). Sexual orientation, parenting, and child development in adoptive families,. Paper presented as part of paper symposium, Sexual Orientation and Parenting: New Research Directions, Stephen T. Russell and Charlotte J. Patterson, Co-Chairs; at the Biennial Meetings of the Society for Research in Child Development, Denver.

Lick, D. J., Schmidt, K. M., & Patterson, C. J. (2009). The Rainbow Families Scale: Development and testing of a scale measuring experiences of individuals with lesbian and gay parents. Poster presented at Harrison Institute Research Conference, University of Virginia.

PERCEPTION LAB

Dennis Proffitt

Our research involves visual perception of spatial layout and the environment. What people consistently see is *not* what is really out there. When we are not outside, we use our room-size virtual reality system in many of these experiments. We investigate how the perception of space can be affected by the internal states of the body. We are interested in topics such as: 1) How effort/energetics can affect how long distances appear and how steep hills look, 2) How social and emotional factors influence perception and cognition, 3) How we scale distances and sizes of objects to our body, and 4) What are the factors that influence and improve performance in spatial navigation?

We seek fun, motivated RAs to help with various research projects. RAs attend weekly lab meetings, do data entry and analysis, and run experiments that could require the operation of virtual reality equipment, projection screens, and devices that measure physiological potential. Experiments are performed in rooms within Gilmer Hall as well as in outdoor fields around grounds.

Contact: Jon Zadra, zadra@virginia.edu

Website: faculty.virginia.edu/perlab

Undergraduate Presentations or Publications

Lessard, D. A., '09, Linkenauger, S. A. & Proffitt, D. R. (2009). Look before you leap: Jumping ability affects distance perception. *Perception*, 38, 1863-1866.

Stefanucci, J. K., Proffitt, D. R., Clore, G., & **Parekh, N., '04** (2009). Skating down a steeper slope: Fear influences the perception of geographical slant. *Perception*.

PROJECT DATE

N. Dickon Reppucci

Project DATE is a research project examining the quality of romantic relationships among adolescents in our community. Specifically, this project is intended to provide u with local information about (a) the prevalence of teen dating violence and victimization, (b) the risk factors related to experiencing relationships violence, and (c) the protective factors which predict positive relationship outcomes. RA duties will include: preparing interview materials, entering and coding data, reviewing and summarizing articles relevant to the study, and scheduling interviews with adolescents from the community who are enrolled in the study. Access to a car is preferred as RAs may be asked to collect and/or drop off forms within the community. Preference will be given to students who can register for 3 credit hours, and who have taken or are currently taking PSYC 3460. An interview, unofficial transcript and resume are required.

Contact: Alison Nagel, agn3f@virginia.edu

ADOLESCENT SEXUALITY AND THE LAW PROJECT

N. Dickon Reppucci

The project on Adolescent Sexuality and the Law focuses on a) factors that influence adolescent sexual-decision making b) adolescents' and adults' knowledge and perceptions of statutory rape and age of consent laws in Virginia. We hope for this project to shed light on individual and family-level processes that promote healthy sexual relationships and/or prevent unhealthy ones. Additionally, this project seeks to determine who adolescents consult about sexual-decisions and the impact of these discussions on their sexual behaviors. RAs duties will include: entering and coding data, reviewing and summarizing articles relevant to the study, and possibly assisting

with data collection in community settings. Preference will be given to students who can register for 3 credit hours and who have taken or are currently taking PSYC 3460. An interview, unofficial transcript and resume are required.

Contact: Alison Nagel, agn3f@virginia.edu

COMMUNITY PSYCHOLOGY LAB

N. Dickon Reppucci

We are partnered with the Charlottesville-Albemarle Commission on Children and Families (CCF) to provide students with an opportunity to participate in community-based research that has a direct effect on policy-making for local children and families. RA duties include: working with CCF staff to compile and summarize information from the web, internal documents, and community partners; assisting with audits of existing practices such that we may better understand how to improve service provision locally; and participating in work groups aimed at understanding and addressing specific community problems. Car transportation is required as CCF is located at 1600 5th Street Extended. An interview, unofficial transcript and resume are required.

Contact: Gretchen Ellis, gellis@albemarle.org

POLICE INTERROGATION PROJECT

N. Dickon Reppucci

The goal of the project is to assess community member's perceptions of issues related to police interrogation of juveniles. Specifically, we are attempting to gain a better understanding of what factors impact people's perceptions of adolescent competencies within an interrogation context. RAs duties will include: entering and coding data, reviewing and summarizing articles relevant to the study, and possibly assisting with data collection in community settings. Preference will be given to students who can register for 3 credit hours and who have taken PSYC 3460. An interview, unofficial transcript and resume are required.

Contact: Todd Warner, tcw9fr@virginia.edu

COGNITIVE AGING LAB

Timothy Salthouse

We study aging of cognitive functioning by administering a wide variety of cognitive tasks to participants ranging in age from 18-90+. The tasks assess different types of cognitive abilities, such as memory and spatial abilities. Among the questions that we are interested in are: 1) Which aspects of cognitive functioning are affected by aging? 2) When does age-related cognitive change begin? And 3) what factors affect the rate of cognitive aging?

Research assistants are primarily responsible for administering tests to participants in the project as well as scheduling appointments, scoring tests, and entering and checking data. Prospective RAs should have a cumulative GPA of 3.0 or higher, be mature and responsible, and have an interest in interacting with diverse populations from the community. Because the laboratory is located behind Barracks Road Shopping Center, reliable transportation is needed.

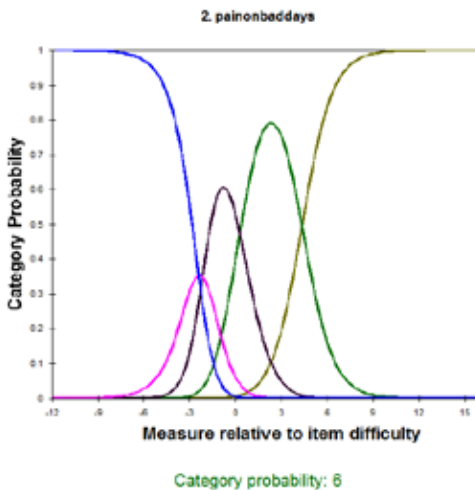
Research assistants can work for either credit or pay, and there are opportunities to work full-time for pay during the summer.

Contact: CognitiveAgingLab@virginia.edu

Website: www.mentalaging.com

PSYCHOMETRIC LAB

Karen Schmidt



Our research involves item response theory (IRT) measurement and focus on methodology to enhance construct validity and measuring individual differences. Current and ongoing projects include objective measurement of personality and individual experiences of pain, faking good detection in personality inventory responses, self-efficacy,

reasoning and spatial visualization, AIDs knowledge, and international learning experiences in varying age groups.

RAs gain experience in all aspects of the research process, including learning sophisticated statistical and measurement procedures such as multiple regression, item response theory modeling, and structural equation modeling. RAs learn how to search and summarize research articles, create Web design of surveys, doing Web-based data collection, conducting SPSS data analysis (including data coding, transformation, IRT analysis, and graphing), and creating reports and presentations. Reliable, independent, and creative assistance is strongly considered for co-authorship. Interested students should have completed PSYC 3005, and preferably PSYC 3006.

Contact: Prof. Schmidt, kschmidt@virginia.edu

Undergraduate Presentations or Publications

- Lick, D. J., Patterson, C. J., & Schmidt, K. M. (2011). "It gets better:" Recalled stigma, benefits, and openness among offspring of lesbian and gay parents. Poster presented at Association for Psychological Science, Washington, D.C.
- Lick, D. J., Patterson, C. J., Schmidt, K. M., & Riskind, R. G. (2011). Community climate predicts psychological adjustment for children of lesbian and gay parents. Poster presented at International Academy of Sex Research, Los Angeles, CA.
- Schmidt, K. M., Erbacher, M. K., **Schroeder, J. R., '08, Lick, D. J., '09, Ameringer, K. J., '09, & Fried, R. K., '09** (2009, May). How Much Does It Hurt? Affect, Personality, and Pain Relationships. Poster presented at the 2009 Association for Psychological Science Meeting, San Francisco, CA.
- Lick, D. J., Schmidt, K. M., & Patterson, C. J. (2009). The Rainbow Families Scale: Development and testing of a scale measuring experiences of individuals with lesbian and gay parents. Poster presented at Harrison Institute Research Conference, University of Virginia. **Ameringer, K. J., '09** (2008, March). Influence of significant other response on pain intensity and psychological distress in chronic pain sufferers. Partial credit model analyses of psychological, social, and cultural factors and relationships with individual experiences of chronic pain: A symposium. Paper presented at the International Objective Measurement Workshop, New York, NY.

Lick, D. J., '09 (2008, March). Pain coping and significant other relationships for chronic pain sufferers. Partial credit model analyses of psychological, social, and cultural factors and relationships with individual experiences of chronic pain: A symposium. Paper presented at the International Objective Measurement Workshop, New York, NY.

Schroeder, J. R., '08 (2008, March). Rasch Partial Credit Model (PCM) and Differential Item Functioning (DIF) analysis of the impact of culture on locus of control in chronic pain sufferers. Partial credit model analyses of psychological, social, and cultural factors and relationships with individual experiences of chronic pain: A symposium. Paper presented at the International Objective Measurement Workshop, New York, NY.

REASONING AND LAW LAB

Barbara Spellman



We study how people reason and make decisions. These processes have important consequences in everyday life, and we keep an eye towards how they can inform the legal system. Questions we research include: How do people decide who or what caused a bad outcome? Do judges think differently than jurors? When do people purely follow the law, and when are they influenced by their own beliefs and morality? Do any of these processes work differently in other cultures?

This small, fun lab seeks dedicated, enthusiastic students. RA duties include gathering materials, running experiments, entering and analyzing data, helping create new studies, and adapting to and managing research issues as they emerge. RAs are expected to attend weekly lab meetings and give a 20-30 minute presentation at one of them. Senior RAs may be given the opportunity to design and run

Website: people.virginia.edu/~ert8f/SpellmanLabHome.html

PROGRAM FOR ANXIETY, COGNITION, AND TREATMENT (PACT)

Bethany Teachman

Our lab studies cognitive processes that contribute to the development and maintenance of psychopathology, with a particular



interest in anxiety disorders. We evaluate cognitive processing, including biases in attention, interpretation, and memory that cause harm in anxiety as well as other forms of mental illness. We are especially interested in automatic cognitive processing and in understanding how thoughts that occur outside of our control or awareness contribute to emotional dysregulation.

We are looking for RAs interested in working on studies of cognition and psychopathology. RAs help with recruiting and running subjects and attend weekly lab meetings to gain general experience with conducting research. There are also opportunities for advanced RAs to later develop their own projects.

Contact: Jen Green, jws5be@virginia.edu

Website: projectimplicit.net/nosek//bethany/research.html

Undergraduate Presentations or Publications

Clerkin, E. M., **Cumming, E. C., '08, Siodmok, S. L., '08,** & Teachman, B. A. (2009, February). Modifying implicit associations impacts subsequent emotional vulnerability to a social stressor. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Tampa, FL.

Cody, M. W., Clerkin, E. M., **Appleman, C. A. '08,** & Teachman, B. A. (2008, November). Effects of imagery on affect and cognition in height fear. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.

Cody, M. W., **Huynh, C., '08, Viar, M. A., '09, Menatti, A. R., '08,** & Teachman, B. A. (2007, November). Negative self-relevant memory bias in social anxiety. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.

Saporito, J., **Ryan, C. E, '09,** & Teachman, B. A. (2007, November). Reducing stigma toward seeking mental health treatment. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.

- Smith-Janik, S. B., Reimuller, A. N., **Jankowski, K. F.**, '07, Eonta, A. M., & Teachman, B. A. (2007, November). Age differences in information processing biases in spider fear. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.
- Gordon, T., **Beadel, J.**, '08, & Teachman, B. A. (2008, November). Ethnic differences in anxiety triggers and responses. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.
- Menatti, A. R.**, '08, Cody, M. W., & Teachman, B. A. (2008, November). False memory for social feedback in social anxiety. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.
- Magee, J. C., **Laughinghouse, T.**, '08, Viar, M., **Buck, N.**, '08, & Teachman, B. T. (2009, February). Emotion regulation after intrusive thoughts in younger and older adults. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Tampa, FL. Teachman, B. A., & **Addison, L. M.**, '05 (2008). Training interpretation biases away from threat in spider fear. *Cognitive Therapy and Research*, 32, 448-459.
- Steinman, S. A., **Grim, E. C.**, '08, **Beadel, J. R.**, '08, & Teachman, B. A. (2008, November). Training positive interpretations among individuals high in anxiety sensitivity. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.
- Clerkin, E. M., Cody, M. W., **Aikens, T. H.** '08, Stefanucci, J. K., Proffitt, D. R., & Teachman, B. A. (2008, November). Imagery biases visual perception in height fear. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.
- Clerkin, E.M., **Cumming, E.M.**, '08, **Jankowski, K.F.**, '07, Skliris, C.A., & Teachman, B.A. (2007, November). Relationships among automatic and strategic measures of body dysmorphic disorder. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.

AUDITORY PERCEPTION LAB

Ching-Ling Teng

Our lab is interested in how experiences, especially early period of postnatal experiences shape sensory processing, and how they, when changes are made, affect perception and behavior. We use multi-/single- unit electrode recording techniques to map auditory

neurons responses in vivo. Combining with computational models and psychophysics, we ask questions about how these enriched/deprived experiences could functionally alter a subject's perception and behavior.

A commitment of one year of RA experience is desired. The first semester will involve literature reviews, computer simulations, setting up experiments and administrative tasks. The second semester will involve data acquisition and analysis. Current projects will involve rearing rat pups in pure-tone environments and testing their tone hearing thresholds in adulthood. We currently use pre-pulse inhibition for acoustic startle as the animal behavior assay to examine changes in tone perception.

Contact: Prof. Teng, teng@virginia.edu

Undergraduate Presentations or Publications

Gaskins, G. T., '10, Teng, C.-L. (2009). Gain modulations allow optimal readout for flexible sensory representations by attention. Poster presentation at Society for Neuroscience Meeting.

SOCIAL COGNITION AND BEHAVIOR LAB

Sophie Trawalter

In our lab, we study phenomena related to diversity. We are especially interested in how individuals develop competencies for life in diverse spaces. Some current lines of research examine 1) stress and coping responses to interracial contact, 2) prejudice detection, and 3) the social ecology of privilege. The goal of our research is to find ways to improve intergroup contact and intergroup relations so that all members of society may attain positive life outcomes.

We are looking for student research assistants who can help with: collecting data (e.g., running studies in the lab, distributing surveys, coding nonverbal data), creating surveys and stimulus materials for studies, conducting literature searches, and entering data.

Contact: Prof. Sophie Trawalter, strawalter@virginia.edu

Website: faculty.virginia.edu/scabl

PERSONALITY AND GENETICS LAB

Eric Turkheimer

Our research interests are divided into two main areas of study: behavioral genetics and personality assessment. From a behavioral genetics standpoint, we attempt to understand and predict adolescent externalizing behaviors such as risk-taking and substance abuse using genetically informed designs and sophisticated statistical models. Our interest in personality assessment is to explore new methods of personality disorder measurement and classification using both self- and peer-report.

RAs will have the opportunity to gain valuable research experience. Their integration into the lab consists of working alongside graduate students and faculty on ongoing projects as well as new research ideas that may develop. Typical RA duties include data entry and analysis, literature searches, and information gathering. While not mandatory, strong quantitative skills are recommended.

Contact: Bailey Ocker, blo9n@virginia.edu

BEHAVIORAL NEUROSCIENCE LAB

Cedric Williams

Our research is focused on identifying the mechanisms by which neuroendocrine hormones released during meaningful or emotionally arousing events influence the brain to encode memory for these types of experiences more effectively. We use neurochemical and behavioral techniques to examine the functional relevance of the anatomical and chemical connections between various brain areas during the memory storage process. An understanding of how meaningful or arousing events influence neural activity in specific anatomical regions will provide a model of how the brain transforms representations of everyday experiences into permanent memories.

Contact: Prof. Williams, clw3b@virginia.edu

Website: www.virginia.edu/psychology/people/detail.php?id=174

EARLY STEPS LAB

Melvin Wilson

The Early Steps Project is a multisite, longitudinal, treatment-



control study of 731 ethnically-diverse families from urban (Pittsburgh, PA), suburban (Eugene, OR), and rural (Charlottesville, VA) sites. Families were recruited from WIC offices when children were 2 years old. As children are

now enrolled in elementary school, the aims of the current project include:

- refining an intervention model aimed at supporting parenting skills to address children's adaptation to school and development of self-regulatory skills,
- examining the consistency of developmental models of problem behavior, emotional adjustment, and normative self-regulation in childhood in a large sample of diverse and potentially at-risk children, and
- examining risk markers, such as children's problem behavior and lack of school readiness, to evaluation the long-term impact of intervention on pathways to later drug abuse and other risky behaviors.

The Early Steps study consists of annual assessments in participants' homes and treatment sessions with families who were randomly assigned to the intervention group (control group families do not get treatment sessions). The families were previously assessed when children were about 2, 3, 4, and 5. Follow-up is being conducted now as children are about 7, 8, 9, and 10.

We are seeking undergraduate research assistants to work with us during the fall and spring semesters. Eligible students must have:

- a cumulative GPA of at least 3.00,
- be psych majors or intending to be psych majors,
- have completed 9 hours of Psychology courses (and ideally 3005/3006 course work),
- be in their 2nd or 3rd years at UVa (4th year students are considered on a case-by-case basis), and
- pay for a \$20 criminal background check (background checks required for all staff)

Because research assistants are involved in data collection in participants' homes, students must be available at least two days a week between 1pm – 8pm, and being available on Saturdays is also desirable. Research assistants must feel comfortable working with young children and to working with a very diverse population. Because the study is large and complex we encourage students to consider working with us for at least 2 consecutive years. We greatly value diversity of all types in our staff and research assistants. Fluent Spanish speakers also are encouraged to apply.

Research assistants support project staff in data collection by babysitting siblings or filming assessments in participants' homes, conducting standardized neighborhood observations, and accompanying staff when they go to schools and aftercare settings to do live coding of children's behavior, as well as lab-based tasks such as preparing materials for assessments, data entry, phone interviews with parents and children, filing, and other similar lab support tasks.

Contact: Margaret Anton, mta4j@virginia.edu

SOCIAL PSYCHOLOGY LAB

Timothy Wilson

Our lab invites motivated, sharp, and sociable undergraduates to help us prepare and run studies that explore people's emotions and thoughts. We study people's knowledge about their own feelings, behaviors, abilities and personalities. Our research focus is on emotional reaction to different events in life, and an individual's ability to predict his or her own reaction.

RAs are involved in all parts of the research process. Their main responsibility is to run social psychology studies, process and analyze the results, and see how the results fit social psychology theories. There are also lab meetings where research issues are discussed.

Contact: Dieynaba Ndiaye, dgn2h@virginia.edu

Website: people.virginia.edu/~tdw/

**NATIONAL CENTER FOR RESEARCH ON
EARLY CHILDHOOD EDUCATION**

Bridget Hamre

We are seeking students who are interested in being involved in a large educational research project. One team of students will be responsible for coding classroom video using the Classroom Assessment Scoring System. A second team of students will work on data from child assessments and classroom observations. We are looking for individuals who can work for credit in fall 2010. Scheduled hours are flexible and opportunities for work over breaks and summer exist. If you are interested in more information or would like to submit your resume, please contact Tess Krovetz at tbk6d@virginia.edu.

Contact: *Tess Krovetz, tbk6d@virginia.edu.*

Website: *www.ncrece.org*

VIRGINIA YOUTH VIOLENCE PROJECT

Dewey Cornell

We conduct research, provide training, and consult with policymakers on effective methods for youth violence prevention and school safety. Our current projects include studies of bullying, school climate, and student threat assessment. Each fall and spring we provide 40 area schools (elementary, middle, and high) with reports and recommendations on reducing bullying and improving school climate. An undergraduate research assistant would help with survey data coding and analysis, report writing, literature review, and development of presentation materials. An advanced student could identify a personal project using one of our databases. Experience with SPSS, Excel, and PowerPoint is desirable. Enthusiasm, conscientiousness, reliability, and attention to detail are essential. We have a weekly meeting at 9 am on Mondays.

Contact: *Prof. Cornell, dcornell@virginia.edu*

Web site: *youthviolence.edschool.virginia.edu*

AUTISM STUDIES LABORATORY

Jane Hilton

Our current research interest is on the effectiveness of various popular intervention approaches for teaching young children with this diagnosis communication skills. We are examining specific communication skill sets to determine if a particular treatment approach facilitates these skills more than other approaches.

Additional ongoing research involves the use of gestures by young children. All typically developing children use gestures prior to using spoken words for communication. Gesture use in children diagnosed with an autism spectrum disorder has also been examined and found to differ from gestures used by typically developing children. Ongoing research is looking at early gesture use in young children with autism and determining if any changes are noted following intervention during a 6-week communication program. We are located in the new Sheila C. Johnson Clinic in Bavaro Hall.

Contact: Prof. Hilton, jch7b@virginia.edu or call at 924-4625.

CHILD LANGUAGE DISORDERS LABORATORY

LaVae Hoffman

Specific Language Impairment (SLI) is a communication disorder characterized by a failure to develop age appropriate language abilities despite normal hearing and vision, normal nonverbal intelligence, nurturing and interactive child care in a monolingual environment, normal gross neurological functioning and the absence of significant emotional or behavioral disturbance. Approximately 7% of school-age children meet the diagnostic criteria for SLI, and these children often struggle in school settings because of difficulty learning to read and establishing satisfactory peer relationships. The Child Language Disorder Lab is interested in the information processing abilities of school age children who have this difficulty, the efficacy of language interventions, and how we can improve their academic experiences to lead to greater success in their lives.

Current studies revolve around the assessment of narrative language abilities in children who have SLI, as well as typically developing children; exploratory analysis of clinical profiles of children

who have good treatment outcomes following intensive language intervention; and analysis of parental engagement with school age children. RAs work closely with graduate students.

Students must be available at least 2 mornings or afternoons a week. A weekly laboratory meeting will be scheduled.

Contact: *Prof. Hoffman, lmh3f@virginia.edu*

MYTEACHINGPARTNER – MATHEMATICS/SCIENCE **Mable Kinzie**

MyTeachingPartner-Mathematics/Science offers innovative curricula and embedded on-line teacher supports aimed at supporting school readiness for at-risk pre-kindergarten students. We are currently analyzing data from a field test of the curricula and teacher supports with outcomes including children's knowledge and skills and teacher quality, fidelity, and concept knowledge. We are looking for students interested in mentored research experience for college credit. An undergraduate research assistant could be involved in coding and analysis of data, reviewing the literature, writing reports, and developing presentations. Experience with SPSS, Excel, and Microsoft Word/PowerPoint is desirable. Excellent organizational, communication, and collaboration skills are essential. We meet weekly on Mondays at 10:00 a.m. in Ruffner Hall. Help support this research to empower both teachers and their students as they become confident mathematicians and scientists!

Contact: *Mable Kinzie: kinzie@virginia.edu*

Website: *<http://www.mtpmathscience.net/>*

YOUNG WOMEN LEADERS PROGRAM **Edith Lawrence and Nancy Deutsch**

Young Women Leaders Program (YWLP) is a psychoeducational mentoring program that empowers at-risk middle school girls to be leaders by combining the benefits of one-on-one mentoring with targeted group activities. YWLP is currently: 1) expanding our one-year mentoring program into a two-year, multifaceted girls development program and 2) investigating the processes that contribute to the program's success in promoting healthy growth in girls. We have an ongoing mixed methods study of both the middle school girl par-

ticipants and the college women mentors.

RA responsibilities include the following tasks: 1) Working with survey data from girls, parents, and college women (coding, entering, checking, running statistical analyses, and organizing project files), 2) Researching topics related to the project through literature reviews, 3) Attending weekly lab meetings, and 4) Helping team members prepare presentations and papers. Additional research hours may be available for assisting with quantitative or qualitative data collection, including surveys and observations of mentoring groups, and, beginning in summer 2009, coding observational data for development and validation of an observational measurement tool.

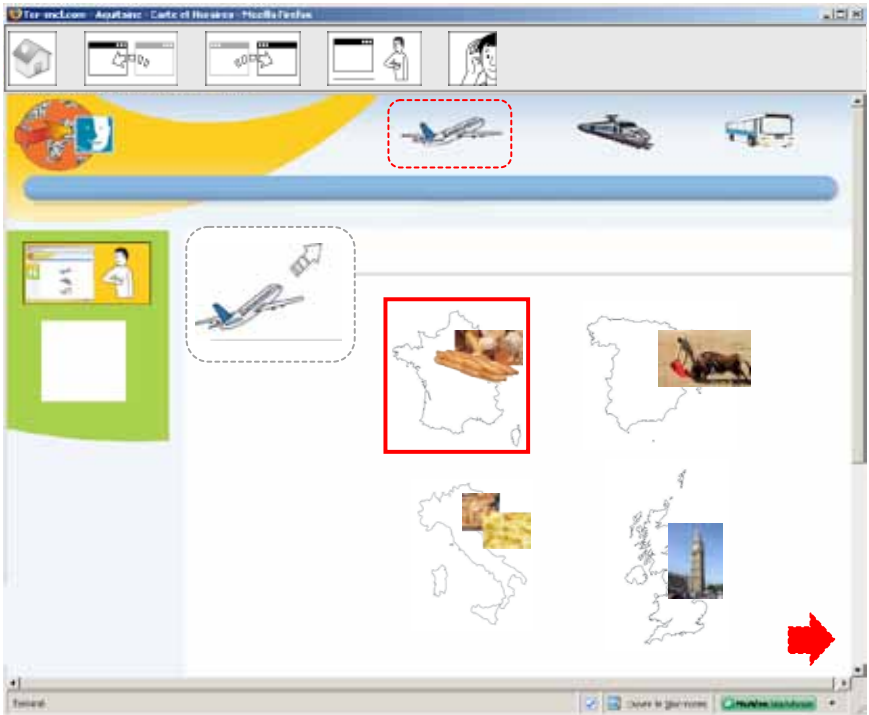
Contact: Nancy Deutsch, nld7a@virginia.edu

AUGMENTATIVE AND ALTERNATIVE COMMUNICATION LAB

Filip Loncke

We focus on processes that are involved when individuals communicate through non-standard modalities. We are running three major projects: 1) Learning through a communication device. This study, conducted simultaneously in Virginia, in France, and in Belgium, measures how a device with speech output influences





learning of new words and phrases; 2) The development of communication boards as an assessment tool for individuals without functional speech. Through picture-and-word communication boards, basic skills such as picture preference, choice making, categorization, memory, combinatorial awareness, and literacy are measured. The boards have been field tested in five countries; 3) The study of the potential of graphic symbols as navigators for non-literate people using the internet. We run simulation studies to determine which strategies work best for non-literate people.

RA duties will include (1) running studies, (2) entering and analyzing data, (3) preparing experimental (and intervention) materials, as well as (4) preparing for conference presentations.

Contact: *Prof. Loncke, filip.loncke@virginia.edu*

Undergraduate Presentations or Publications

Loncke, F., Canty, T., Goldkamp, J., **Wilburn, K.**, '08 (2008, August). AAC devices as cognitive-linguistic tools. Studies with the speech-generating barcode reader B.A.Bar. 17th Biennial Conference of the International

Society for Augmentative and Alternative Communication. Montreal, Canada.

Loncke, F., Davis, K., & **Roe, M.**, '08 (2008, August). How effective can speech-generating devices be in aphasia therapy? 17th Biennial Conference of the International Society for Augmentative and Alternative Communication. Montreal, Canada.

Roe, M., Loncke, F. , Wolfe, S., McGowan, J., **Sykes, R.**, & **Jones, R.** (2009, November). Picture/word Boards as assessment tools - development of an instrument. New Orleans. American Speech-Language & Hearing Association (ASHA).

CHILD OBSERVATION LAB

Robert Pianta

Our lab is mainly involved in the development of a new observation measure that assesses children's readiness as they enter elementary school. This tool is currently called the Classroom Assessment Scoring System--Child Version (CLASS-C) and is being used in preschool classrooms across the country. We are currently collecting data in New York, Miami, Los Angeles and right here in Charlottesville. We are collecting observations, direct assessment, teacher reports and parent reports this fall.

RA duties would potentially include being trained on the measure, conducting observations in local preschools, data entry, data cleaning, video coding, managing research issues as they emerge, and successfully communicating with members of our team. RAs are expected to attend bi-monthly lab meetings.

Contact: *Leslie Booren*, booren@virginia.edu

Website: www.virginia.edu/vprgs/CASTL/

PILOT STUDY TO IMPROVE REGULATORY SKILLS

Claire Cameron Ponitz

Teachers of preschoolers report that problems with classroom behavior can be a huge obstacle to children's success in the classroom. Skills like paying attention, mastering self-control, and learning to work independently are vital for doing well in school. The goal of the Pilot Study to Improve Regulatory Skills (PSIRS) project is to

work in a collaborative team with teachers to design activities they can use to teach children these important “skills for success.”

RAs will work with the principal investigator, postdoctoral researcher Claire Ponitz, and a group of Head Start teachers to develop lesson plans to improve children's classroom behavior. Teachers will then implement the lesson plans, first leading a whole-group activity that children can reenact during center time. In addition to helping develop the lesson plans, research assistants will conduct behavioral assessments with preschoolers and observe children in the classroom. Morning schedules and personal transportation are preferred because the project will occur outside of Charlottesville. Gas mileage will be reimbursed. Conscientious, enthusiastic students interested in working with both teachers and young children are encouraged to apply.

Contact: *Claire Ponitz*, ccponitz@virginia.edu

SOCIAL DEVELOPMENT LAB

Sara Rimm-Kaufman

We are conducting a series of studies on elementary classroom environments and the extent to which they contribute to children's self-control, social skills, and achievement. For example, one large scale, experimental study involves 24 inner city schools. Specifically, we are examining the effectiveness of an intervention called the Responsive Classroom (RC) Approach. The RC Approach offers teachers a set of principles and practices to build their capacity to manage behavior and teach in the classroom. Do these practices really improve teachers ability to engage children in learning?

RAs observe and code videotapes of elementary school classrooms in order to better understand classroom social processes, especially during mathematics instruction. RAs have an opportunity to learn a lot about elementary school classrooms. In addition to observing classrooms, we need help with data entry, basic descriptive data analysis, and other miscellaneous tasks. RAs must be clear-thinking, responsible, reliable and detail-oriented. Further, we require at least a one year commitment to the lab.

Contact: *Julia Thomas*, jbt4u@virginia.edu

Websites: www.socialdevelopmentlab.org,
www.responsiveclassroom.org

CONTINUUM OF POSITIVE BEHAVIOR SUPPORT

Martha Snell and Tina Stanton-Chapman

The major goal of our project is to develop and test a comprehensive social competence intervention referred to as a Continuum of Positive Behavior Supports (CPBS) in Head Start (HS) classrooms. The project will develop: a) an implementation manual with step-by-step guidelines and fidelity of intervention checklists; b) a manual to guide inservice training and staff training materials (e.g., videotaped examples, role play activities, consultation guidelines); c) classroom materials (e.g., social skill lesson plans and toys); and d) reliable measures sensitive to intervention effects on staff and children which can be used in further research.

The CPBS includes two levels a) universal strategies used with all children in a classroom including class-wide positive behavior support (PBS) methods to teach social competence and prevent and respond to problem behavior and b) individualized interventions involving assessment-based individualized PBS plans implemented only with children who require more intensive methods to reduce problem behavior and build social skills.

RAs will be involved in data management activities for a survey and follow-up interviews with HS personnel. The survey and interviews are designed to identify attitudes, beliefs, current practices and challenges in regard to teaching social skills and discipline. Students will assist with survey data input and transcription and coding of interview tapes.

Contact: *Prof. Voorhees*, mmv5r@virginia.edu, or *Sarah Hadden*, dsh5gn@virginia.edu

PEERTALK LAB

Tina Stanton-Chapman

Our project focuses on developing effective interventions for children with language delays and problem behavior in Head Start settings. The interventions use storybooks and thematic toys to teach children the following skills: initiations, turn-taking, sharing, and

obtaining a peer's attention.

RA duties include transcribing intervention session tapes, scoring of standardized assessments, completing treatment fidelity checklists and social validation measures, and observational coding.

Contact: Kristen Jamison, kjamison@virginia.edu

EXERCISE PSYCHOLOGY LAB

Diane Whaley

Research in our lab investigates physical activity behavior over the life span, with special attention given to how self-perceptions influence motivation for physical activity. Projects focus on youth, families, and adult physical activity behavior, often integrating healthy eating and other positive health behaviors. Most projects occur in the Charlottesville or surrounding community, engage community partners, and utilize qualitative and quantitative methods to assess behavior change.

RAs can be involved in all aspects of research, from participant recruitment and data collection, to coding, analysis, and literature searches. RA's will meet regularly with the director and/or doctoral student heading the research project. Applicants should have an interest in community engagement, work well as a member of a team, and be dependable.

Contact: Diane Whaley, dwhaley@virginia.edu

MATHEMATICS TUTORING FOR STRUGGLING STUDENTS

Sarah R. Powell

In a typical elementary classroom, a subset of students struggle with mathematics skills such as counting, addition, and subtraction. In this project, we provide individual tutoring to second- and third-grade students who struggle with mathematics.

RAs act as tutors in elementary schools in the Charlottesville area. Tutors teach students specific counting strategies for solving addition and subtraction problems and provide instruction on the meaning of mathematics symbols. Tutors follow tutoring protocols prepared by the research team, so tutors do not create their own lessons. Tutors do not need to have teaching experience, but tutors

should enjoy working with young students. Tutoring takes place during elementary school hours.

In addition to tutoring, RAs conduct pre- and posttesting in whole-class and individual settings. RAs must have a car to drive to schools in the Charlottesville area. (Mileage is reimbursed at the federal rate.) RAs receive all necessary testing and tutoring training from the research team. RAs also help with test grading and data entry upon completion of tutoring.

Contact: Sarah Powell srpowell@virginia.edu

YOUTH-NEX: PROGRAM EVALUATION AND COMMUNITY CONSULTATION

Maryfrances Porter

This branch of Youth-Nex, the UVA Center to Promote Effective Youth Development at the Curry School of Education, uses science to directly advance evidence-based and data-driven programming for youth in Virginia localities and the State of Virginia. Building on the existing community strengths, we rigorously test effectiveness of programming, initiatives, and policies to improve implementation and create sustainable change, as well as provide reliable information on youth topics.

At any time we have several projects underway with local and state partners. Projects often include: the development and implementation of needs assessments (i.e., data collection with residents and/or service providers), data collection/entry regarding the impact of youth programs, conducting of qualitative interviews or focus groups/transcription/data entry, data collection regarding the efficacy of program implementation, white paper/brief development (synthesis of research on specific topics written for lay readers).

Research assistants may work at Ruffner Hall, collect data directly from people in the community, and/or may complete some or all work within a local agency. Second, third, and fourth year students are welcome to apply; cumulative GPA must be at least 3.0; previous community or volunteer work strongly preferred; previous research experience strongly preferred. Students must submit an unoffi-

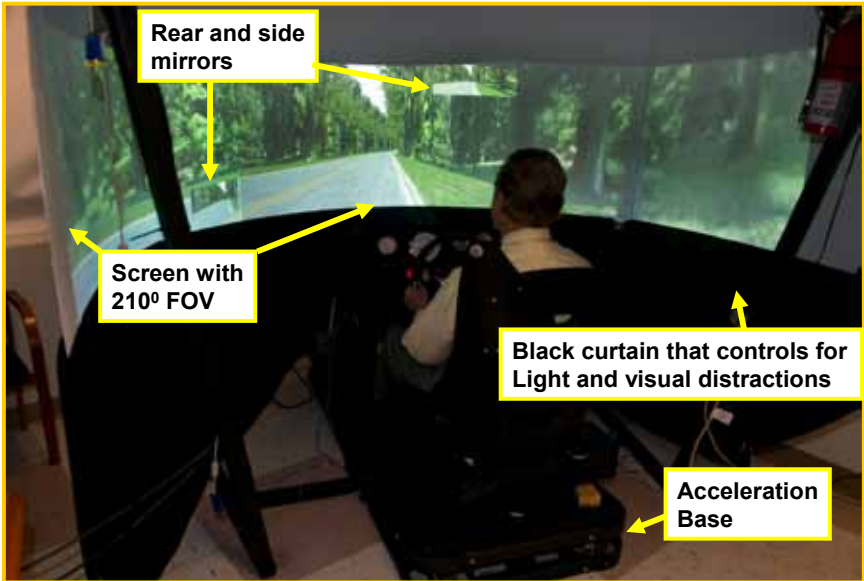
cial transcript and resume. Students who are fluent in Spanish are encouraged to apply, as well as students from diverse backgrounds.

Contact: Maryfrances Porter, mporter@virginia.edu

CENTER FOR BEHAVIORAL MEDICINE RESEARCH

Daniel Cox

Our laboratory investigates how best to assess and quantify risky driving of all types, and the possibilities for improving driving performance through the development of both behavioral and medical interventions. Specifically, our current projects include: 1) How dia-



betic hypoglycemia impairs driving and whether Diabetes.Driving.com, an interactive behavioral intervention, can reduce hypoglycemia-related risk of driving mishaps; 2) Whether Virtual Reality Driving Simulation training can help rehabilitate individuals recovering from a traumatic brain injury; 3) How long-acting methylphenidate impacts driving performance of young adults with Attention Deficit/Hyperactivity Disorder (ADHD); 4) Whether preparatory Virtual Reality Driving Simulation Training of novice drivers with Autism Spectrum Disorder will improve on-road driver performance; 5) How frequently Post-Operative Cognitive Dysfunction occurs among seniors undergoing cardiac surgery, and whether such impairments of activities of daily living can be rehabilitated; 7) Whether performance in the Virtual Reality Driving simulator predicts senior drivers who do and do not have video-documented recurrent driving mishaps; 8) Whether aerobic exercise improves

executive functioning of adolescent drivers and whether executive function relates to adolescents driving safety.

With funding from both NIH and DOD, we are developing a sophisticated acceleration-base, virtual reality driving simulator for testing, training and therapy- see photos. Research Assistants will be involved in data collection and coding, literature review, grant and manuscript preparation, research team meetings and future planning of grants and projects. For motivated students, opportunities for co-authorship of manuscripts and work on more independent research projects are afforded.

Offers potential RAs: 1) an innovative and cutting-edge virtual reality facility, 2) work that has immediate and significant implications, 3) an opportunity to interact and collaborate with people of varying levels of experience, including undergrads, recent college grads, graduate students, post-doctoral fellows and various faculty (e.g. psychologists, psychiatrist, cardiologists, gerontologists, engineers) who have been in the field for many years. Our current undergraduate, J. Quyen Nichols, is testing subjects with and without Attention Deficit/Hyperactivity Disorder on and off of medication in one study and adolescents with Autism Spectrum Disorder in another study. Quyen is conducting his Distinguished Majors Program project developing a test of driving hazard detection skills with video material of driving scenarios.

Contact: Christina Frederick, ccf7u@virginia.edu

Undergraduate Presentations or Publications

Singh H, **Barbour, B.M. '08**, & Cox D. J. (In Press) Driving Rehabilitation as delivered by Driving Simulation. In Fisher D, Rizzo M, Caird J & Lee J (Eds.), *Handbook of Driving Simulation for Engineering, Medicine and Psychology*. CRC Press.

Cox, D. J., Davis, M., Singh H., Barber B, Nidiffer, F. D., Trudel, T, Mourant, R, & Moncrief, R. (In Press). Driving Rehabilitation for Military Personnel Recovering from Traumatic Brain Injury using Virtual Reality Driving Simulation: A Feasibility Study, *Military Medicine*

Mikami, A. Y., Cox, D. J., Davis, M. T., Wilson, H. K., Merkel, R. L., & Burket, R. (2009). Sex differences in effectiveness of extended-release stimulant medication among adolescents with Attention-Deficit/

Hyperactivity Disorder. *Journal of Clinical Psychology in Medical Settings*, 16, 233-242.

Cox D. J., Ford D., Gonder-Frederick, L. A., Clark W. L., Mazze R., Weinger, K., & Ritterband L. (2009) Driving Mishaps Among Individuals with Type 1 Diabetes Mellitus: A Prospective Study. *Diabetes Care*, 32, 2177-2180.

Cox D. J., & Davis M. T. (2009). Attention Deficit/Hyperactivity Disorder (ADHD) and Driving Safety. In Verster J (Eds.), *Drugs, Driving and Traffic safety*.

Cox D. J., Mikami A., Cox, B. S., **Davis M. T. '06**, Mahmood A., Sood A., Moore, M., Burket, R., Merkel, R. L. (2008) Impact of long-acting methylphenidate on routine driving of adolescents with attention deficit/hyperactivity disorder (ADHD): Two case reports. *Archives of Pediatric & Adolescent Medicine*. 162, 793-794. Medical School 39.

NEUROIMMUNOLOGY AND BEHAVIOR LAB

Lisa Goehler

In addition to making us just feel tired and yucky, being sick also influences our moods and our ability to think clearly. This comes about because the immune system is able to signal and interact with brain regions that ultimately contribute to affective and cognitive functions, such as memory. But how, exactly, can the immune system signal the brain? Does aging influence the way the brain responds to sickness? Can anything be done about the fatigue, depression, and anxiety that can accompany chronic disease such as cancer, autoimmune disease (multiple sclerosis, rheumatoid arthritis) and heart disease?

The focus of the work in this lab is on understanding the neurological mechanisms that allow things like inflammation, infections, or chronic disease to influence our behavior. We combine anatomical techniques including functional neuroanatomy (using immunohistochemistry) immuno-electron microscopy, neuronal tract-tracing and confocal microscopy, with behavioral approaches to assess the kinds of ways that different immune challenges interact with the brain.

RAs joining the lab work initially on ongoing projects, which allow them to learn the various techniques we use and become

familiar with the issues involved in the work we do. RAs are encouraged to get involved with many different aspects of lab. Attending our regular lab meetings is also recommended.

Contact: Prof. Goehler, goehler@virginia.edu

BEHAVIORAL MEDICINE CENTER TYPE 1 DIABETES LAB

Linda Gonder-Frederick

We have openings for RAs with an interest in interdisciplinary behavioral medicine. RAs work on a variety of NIH-funded, non-profit, and pharmaceutical projects related to behavior and diabetes management. We make an effort to ensure that RAs get solid training experience on the many aspects of research in behavioral medicine.

RAs are a valuable and integrated member of an interdisciplinary research team, composed of psychologists, psychology fellows, graduate students, endocrinology fellows, statisticians, biomathematicians, and endocrinologists. We offer training experience and an opportunity for students to gain perspective on interdisciplinary behavioral research in a hospital setting. We are interested in students willing to commit to a two-year position, working 20+ hours/week in the summer and at least 10 hours/week during the school year.

Contact: Prof. Gonder-Frederick, lag3g@virginia.edu

Undergraduate Presentations or Publications

Nyer, M.B., Campbell, L.K., Mortimer, S.M., Kashmer, L.L., **Greear, M.L.**, '09, Clarke, W.L., & Gonder-Frederick, L. (2009, April). Does age matter? Fear of hypoglycemia in children and teens with type 1 diabetes and their parents. Society of Behavioral Medicine Annual Meeting and Scientific Sessions, Montreal, Quebec.

Campbell, L.K., Kashmer, L., Nyer, M., Bauchowitz, A., **Mortimer, S.**, '10, Greear, M., Clarke, W., Gonder-Frederick, L. Perceptions of learning and behavioral changes based on CGM feedback: A focus group study of youth with T1DM. Diabetes, 1978-PO, American Diabetes Association 69th Scientific Sessions, New Orleans, Louisiana, 2009.

Gonder-Frederick, L., Schmidt, K., **Vajda, K., '10, Greear, M., '09**, Singh, H., Shepard, J., Cox, D. Psychometric properties of the Hypoglycemia Fear Survey-II for adults with type 1 diabetes mellitus. *Diabetes Care* 34, 801-806, 2011.

Gonder-Frederick, L., Shepard, J., **Greear, M., '09, Vajda, K., '10, Spilker, A., '10**, Hawley, J., Nyer, M. Demographic and clinical factors associated with fear of hypoglycemia in mothers of youth with type 1 diabetes [abstract]. *Diabetes* 59 (suppl 1): 2204-PO, 2010.

ADDICTIONS LAB

Karen Ingersoll and Jennifer Hettema

Our laboratory is located within the UVA Center for Addiction Research and Education, where we conduct clinical research designed to investigate treatments for substance related disorders. We currently have several research projects underway, including: 1) What treatments work best to increase medication compliance and decrease drug use among individuals who are HIV positive and use cocaine, 2) What treatments work best to decrease the risk of alcohol exposed pregnancies among women who drink and do not use proper contraception, 3) What in session therapist and client behaviors impact the outcome of addictions treatment, and 4) What are effective methods for encouraging doctors to talk with their patients about addictions issues. Many of our studies focus on a particular form of therapy called Motivational Interviewing.

We highly value undergraduate participation in research and work with our RAs to develop a tailored experience that is consistent with your interests and will help you to accomplish your long term goals. Available activities include conducting participant interviews, coding tapes of therapy sessions, entering and analyzing data, reviewing literature, and participating in research team learning opportunities. Opportunities to author or co-author manuscripts or posters and conduct independent research projects are available for motivated students.

Contact: Prof. Hettema, jhettema@virginia.edu

FAMILY VIOLENCE LAB

Shelly Jackson

We have completed a project examining four types of abuse perpetrated against persons over the age of 59: financial exploitation, physical abuse, neglect, and a combination of abuses. We are in the process of writing up the findings and preparing them for publication. I am looking for an RA to provide assistance with manuscript preparation. This may include literature review, reviewing manuscripts, editing, preparing submission materials, and various other related tasks.

Contact: *Prof. Jackson, slj4u@virginia.edu*

CLINICAL PHARMACOLOGICAL RESEARCH UNIT

Bankole Johnson

CPRU is committed to research using new investigational medications that may lead to new pharmacotherapeutics for the treatment of drug dependence. Currently we are conducting inpatient clinical trials of investigational medications that are examining the effects of the medications on drug-induced craving and neurocognitive functioning in both alcohol and cocaine dependent individuals.

RAs who join the CPRU research team will gain valuable clinical trials research experience. Typical RA responsibilities include but are not limited to: administration of outcome measures to study participants, data scoring, data entry, literature reviews, administrative duties (copying, study binder creation, answering telephone), take participants on walk/smoke breaks. In addition, RA's will gain exposure to working with the Institutional Review Board by way of documentation review, protocol creation and maintenance, informed consent process, and protected health information regulations.

Good organizational skills, attention to detail, and interpersonal skills required, as well as computer experience (e.g., MS Office, Internet). Additionally, RAs must dress professionally.

Contact: *Prof. Erik Gunderson, ewg2n@Virginia.edu*

LABORATORY OF COGNITIVE NEURODYNAMICS

William B. Levy

Our laboratory studies the biological bases of cognition and behavior using computational models. A large, and continuing project is to understand hippocampal function with simulations based on neurons and synapses. Another project seeks to understand the role of memory in PTSD and its symptoms, particularly hyper-reactivity and poor sleep. This work is building models of the brainstem systems controlling sleep and the peripheral stress reactions.

Reading courses are available for students who seek a strong background before entering the lab. Occasionally enough such work can culminate in a small review article which can be submitted for publication. Laboratory research consists of computer simulations and data analysis. Student who do exceptional research work during the year may qualify for a paid summer research position.

Contact: *Prof. Levy, wbl@virginia.edu*

INTEGRATIVE MEDICINE PROJECTS

Justine Owens

Recent research projects are: 1) mindfulness-based stress reduction, 2) psychological factors in healthcare outcomes, 3) acupuncture treatment efficacy and mechanism of action, and 4) mapping and nurturing the path of wisdom in physicians and patients. This last project is a study of physicians who have made serious medical errors and chronic pain patients who have successfully managed chronic pain. The premise of this study is that physicians and patients who have successfully faced major life challenges are exemplars of finding wisdom out of adversity. All of our projects share a common interest in the measurement of stress and the development of life skills and treatments for successful stress management. We are working on a standardized medical evaluation of accumulated stress (allopathic load) using measures such as heart rate variability (HRV), EEG beta/theta ratio, cortisol, and immune function, toward the integration of alternative medical treatments into the conventional health care system.

RAs participate in projects at various stages from grant proposal, patient recruitment, data collection, literature review, data process-

ing, manuscripts and presentations. RAs also help with a database and Website for a new non-profit organization.

Contact: *Prof. Owens, owens@virginia.edu*

BEHAVIORAL NEUROENDOCRINOLOGY LAB

Emilie Rissman

Our research foci revolve around one main topic in behavioral Neuroendocrinology. We use mice to study sexual differentiation of brain and behavior. We are interested in roles of specific steroid receptors and genes on the sex chromosomes and how these generate sex differences in brain and behavior.

Males experience testosterone in late gestation and directly after birth whereas female ovaries are quiescent until puberty. Thus the model suggests, and decades of work support, the notion that the secretion of testosterone masculinizes the developing brain; in the absence of testosterone a feminine brain develops. We use knockout mice to assess the contributions of the genes for androgen receptor (AR), estrogen receptors (ER α , ER β), and the enzyme that converts testosterone to estradiol (aromatase) to the development and expression of sex differences. We have made several important discoveries; one of these is that masculine sexual behavior does not require the action of ER α during development or in adults. A second discovery is that ER β is involved in sexual differentiation of at least one behavior, lordosis, a female sexual behavior. Finally we have also identified a role for the AR in the expression of partner preferences and neural responses to odors from conspecifics. Our approach now is to focus on genes regulated by these steroid receptors during development.

In addition, to the classic model for sexual differentiation an alternative hypothesis is that genes on the sex chromosomes (X and Y) are involved in neural sexual differentiation. Using transgenic and sex chromosome aneuploid mice we have identified two sexually dimorphic behaviors, intruder directed aggression and pup retrieval that are influenced by genes on the sex chromosomes. We have also identified one neural sex difference, the vasopressin fibers in the lateral septum. In these cases individual with an XY sex chromosome complement are different than individuals with an XX karyotype.

Now that we have identified these differences we are moving to identify the specific genes responsible.

Undergraduate assistants, depending on the project can expect to conduct behavioral observations, tissue preparation, learn western blotting to quantify protein levels, qRT PCR quantification of gene expression, and/or immunocytochemistry.

Contact: Prof. Rissman, rissman@virginia.edu

BEHAVIORAL HEALTH AND TECHNOLOGY LAB

Lee Ritterband

The Behavioral Health and Technology Lab focuses on eHealth psychology research. Faculty in this lab are among the first researchers to test the feasibility and effectiveness of delivering interventions over the Internet. In the Fall of 2011, we will launch a large national trial to evaluate an Internet intervention for insomnia: Sleep Healthy Using the Internet (SHUTi). We tested SHUTi in two smaller pilot studies, and found favorable results. We look forward to now testing it in a national sample. We're also finishing up data collection for a national trial for children with encopresis. We will develop an Internet Intervention for spinal cord injury patients in 2011-2012 as well. The program is called iSHIFTup (Internet Skin Health Intervention For Targeted Ulcer Prevention). We're also collaborating on skin cancer prevention project and a game to reduce asthma attacks in children. More details on all these projects and the lab can be found on our website, <http://bht.virginia.edu>

RA responsibilities include pilot testing our Internet interventions, participating in multi-disciplinary meetings, conducting literature searches, helping with manuscript preparation, organizing and coding data, and more. Typically, RAs are interested in psychology graduate or medical school, but some may simply want exposure to a clinical psychology laboratory. We prefer to recruit 2nd and 3rd year students, but will consider 4th year students. We're looking for students with a good work ethic who enjoy working in a busy lab. RAs typically work 10 hours/week, although sometimes working more hours is possible in the summer. Students typically work in

the lab for course credit, although occasionally, there is funding for student positions.

If interested: Email a brief letter of interest and include 1) your interest in this position, 2) your current year in school, 3) your major, 4) your cumulative GPA, 5) your work and research experience, and 6) the names of 2 references.

Contact: Rachael Maynard at rlm2bc@virginia.edu

LEARNING ABOUT TEACHER-STUDENT INTERACTIONS

Jason Downer

Our lab is currently developing and investigating low-cost assessment tools to measure effective teaching in classrooms. Primary RA responsibilities will include coding videos of elementary classrooms using the CLASS observation measure, attending weekly coder meetings and helping with miscellaneous data-related tasks. All members of this coding team will be trained to reliability on CLASS-Upper Elementary. We are looking for individuals who can work for credit in spring 2012. Scheduled hours are flexible. If you are interested in more information or would like to submit your resume, please contact Catherine Worrell at clw8b@virginia.edu.

Contact: Catherine Worrell, clw8b@virginia.edu.

Website: <http://curry.virginia.edu/research/centers/castl/project/latsi>

MENTAL HEALTH LAW LAB

Richard Bonnie

The Institute for Law, Psychiatry and Public Policy is an interdisciplinary program in mental health law and forensic services that is engaged in academic programs, forensic evaluations, professional training, and public policy consultation and review. The Mental Health Law Lab is focused on researching effective means of implementing policy and interventions to improve outcomes for mental health consumers.

The Psychiatric Advance Directives project relates to increasing self determination and empowerment among people with serious mental illness by developing models to incorporate the facilitation of psychiatric advance directives into mental healthcare service

delivery systems, and researching the effects of psychiatric advance directives on rates of coercion among mental health systems and mental health outcomes.

The research assistant would primarily be involved in data collection activities, which include coordinating and conducting structured interviews of mental health consumers about their experiences with psychiatric advance directives and their mental health symptoms. This is a great opportunity for students to learn about mental health policy and recovery-oriented care.

Contact: Jessie Kostelnik, PhD, jaosj@virginia.edu

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