

# BC UNDERGRADUATE NEUROSCIENCE EXPRESS



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Welcome to Spring Semester 2009 at BC. We hope you are enjoying your classes and other academic endeavors. We are pleased to present a new edition of the BC Undergraduate Neuroscience Express. This newsletter is intended to update you about BC Neuroscience Interest Group meetings, developments in our education and research programs, and related neuroscience information. This issue contains an overview of upcoming events, links to community activities, synopses of neuroscience developments, and summer research opportunities. Enjoy the newsletter! We look forward to seeing you at our upcoming events.

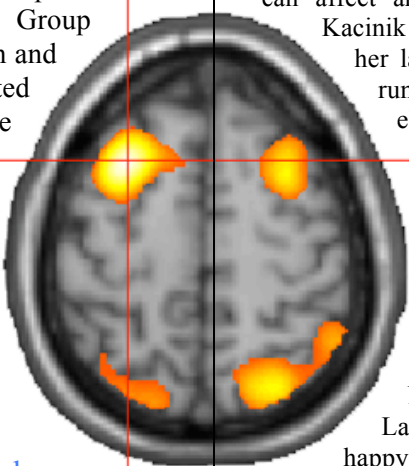
## Meet Dr. Natalie Kacinik

Newest BC Psychology Faculty Member  
with Neuroscience Research Interests

Natalie Kacinik comes to BC following a position as a postdoctoral researcher and lecturer at the University of California, Davis. She is originally from Toronto, Canada and has Bachelor's and Master's degrees in Psychology from the University of Western Ontario, in London, Ontario. She then moved to southern California in order to complete her graduate education and receive a PhD from the University of California, Riverside.

Professor Kacinik's areas of expertise are Psycholinguistics and Cognitive Neuroscience. Her research is aimed at understanding how the mind and brain process language, ranging from simple individual words like TABLE or DOG, to complex figurative expressions such as "a bird in the hand is better than 2 in a bush". She's also interested in memory and attentional processes as they relate to language comprehension, in addition to more social aspects of communication like discourse, theory of mind, and pragmatics.

These issues are investigated behaviorally using methods from cognitive psychology (e.g., word recognition and priming procedures), and techniques from cognitive neuroscience like visual half-field presentation, event-



related potentials (ERPs), and structural MRI. Most of her research has been done with neurologically normal individuals, but she is also particularly interested in how various brain injuries and disorders across the lifespan (e.g., autism, schizophrenia, strokes, and Alzheimer's disease) can affect an individual's communication abilities. Dr.

Kacinik is in the process of ordering equipment for her lab and getting her research program up and running. She has submitted an order for a 64 electrode Biosemi ERP system, in addition to purchasing a couple of additional computers for behavioral testing purposes.

At BC, Dr. Kacinik is teaching Introductory Psychology and a graduate seminar that takes a broad perspective on Language and Communication, but she has also previously taught courses on Neuropsychology and Aging, Cognitive Neuroscience, and the Psychology of Language. Professor Kacinik is excited and happy to be part of the Psychology Department and Neuroscience community at BC and the greater CUNY system. She has enjoyed the warm welcome received thus far and looks forward to becoming more involved and meeting other students and fellow faculty with a shared interest in neuroscience.

FOR MORE INFORMATION, JOIN US:

## SPRING 2009 FEATURED SPEAKER Dr. Natalie Kacinik

*Investigating the Cognitive and Neural Bases for  
Understanding Language*

**Tuesday April 30 at 4:00PM, JAMES 5109**

**PLEASE PLAN TO ATTEND!**

**Professors Rabin and Walder will be available  
to answer questions about the neuroscience  
curriculum after the talk.**

## NEUROSCIENCE JOURNALS OF INTEREST

**Our favorites include:** *Neuron; Brain; Nature Neuroscience; Biological Psychiatry; Human Brain Mapping; Cerebral Cortex; Journal of Cognitive Neuroscience; Journal of Neuroscience; Behavioral Neuroscience; Journal of Computational Neuroscience; Journal of Psychiatry and Neuroscience.*

For more neuroscience journals, see:

<http://thalamus.wustl.edu/journals.html>



## NEUROSCIENCE IN THE NEWS

<http://www.medicalnewstoday.com/sections/neurology/>

### Potential Pathway For Drug Intervention

A newly identified molecular pathway that directs stem cells to produce glial cells yields insights into the neurobiology of Down's syndrome and a number of central nervous system disorders characterized by too many glial cells according to recent study by researchers at the Salk Institute for Biological Studies. **Read Article:**

<http://www.medicalnewstoday.com/articles/142276.php>

### Penn Neuroscientists Find That The Unexpected Is A Key To Human Learning

The human brain's sensitivity to unexpected outcomes plays a fundamental role in the ability to adapt and learn new behaviors, according to a new study by a team of psychologists and neuroscientists from the University of Pennsylvania. **Read Article:**

<http://www.medicalnewstoday.com/articles/142282.php>



### How Brain Records Memories Highlighted In 'Mind-Reading' Experiment

It may be possible to "read" a person's memories just by looking at brain activity, according to research carried out by Wellcome Trust scientists. In a study published in the journal *Current Biology*, researchers show that our memories are recorded in regular patterns, a finding which challenges current scientific thinking. **Read Article:**

<http://www.medicalnewstoday.com/articles/142221.php>

## \* BC SPRING 2009 COLLOQUIA SERIES \*

- 2/4: **Merri Rosen, Ph.D.**, New York University  
*Late development of auditory processing: Neural correlates and the role of experience*
- 2/4: **Keith Schneider, Ph.D.**, Rochester Center Brain Imaging  
*Probing attention and perception through high-resolution fMRI of the human subcortex*
- 2/9: **Bradley Vines, Ph.D.**, University of British Columbia
- 2/11: **Liat Levita, Ph.D.**, Weill Medical College of Cornell Univ  
*Nucleus accumbens - A walk on the aversive side*
- 2/17: **Evangelia Chrysikou, Ph.D.**, University of Pennsylvania  
*Floating footballs and flammable chairs: Behavioral & neuroimaging evidence on dynamic categorizations in semantic memory during goal-oriented action*
- 2/23: **Theresa Szabo, Ph.D.**, Brandeis University  
*Effects of temperature acclimation on a central neural circuit and its behavioral output*
- 2/24: **Anja Soldan, Ph.D.**, Brandeis University  
*Effects of temperature acclimation on a central neural circuit and its behavioral output*
- 3/2: **Robert Duvoisin, Ph.D.**, Oregon Health & Science Univ.  
*Signaling, distribution, and function of group-III metabotropic glutamate receptors*
- 3/9: **Paul Forlano, Ph.D.**, Northwestern University  
*Fish as model systems for steroidal influences on brain and behavior*
- 3/18: **Gidon Felsen, Ph.D.**, Cold Spring Harbor Laboratory  
*Neural substrates of sensorimotor decisions in rats*
- 3/27: **Paul Locher, Ph.D.**, Montclair State University  
*Pictorial balance is indispensable in the visual arts: A tribute to Rudolf Arnheim*

- 4/6: **Catherine Lord, Ph.D.**, University of Michigan  
*Trajectories in development of autism spectrum disorders*
- 4/29: **Rachel Marsh, Ph.D.**, Columbia University  
*The role of frontostriatal systems in the development of bulimia nervosa*
- 5/6: **Damian Stanley, Ph.D.** New York University  
*The neural basis of implicit race bias and its contribution to trust Estimations*

## LOCAL COLLOQUIA

- **NYU Neuroscience Colloquia:**  
<http://www.cns.nyu.edu/colloquia/>
- **Columbia University Neuroscience Seminars:**  
<http://neuroscience.columbia.edu/index.php?page=12>
- **New York Neuropsychology Group:**  
<http://www.nyng.org/events.html>
- **SUNY Downstate – Colloquium Series:**  
<http://138.5.102.101/grad/gradan01.htm>
- **New York Neuroscience Network Logs:**  
<http://nyc-neuro-net.blogspot.com/>

## SUMMER RESEARCH OPPORTUNITIES

Below you will find links to websites with available summer research programs. We encourage you obtain more information about programs of interest prior to applying, and we are available to discuss specific placements as you gather information.



- (1) The American Physiological Society Undergraduate Summer Research Fellowships:  
<http://www.the-aps.org/education/ugsrf/SumResLINKs.htm>
- (2) Listing of a wide range of Neuroscience Internship Opportunities (including in NYC and at the NIH):  
<http://www.psych.westminster.edu/psybio/internops.htm>
- (3) Summer Internships in the Neurosciences:  
<http://www2.cedarcrest.edu/academic/bio/kfitzgerald/neuroscience/internships.html>
- (4) Summer Undergraduate Research Programs:  
<http://www.aamc.org/members/great/summerlinks.htm>
- (5) Summer Honors Undergraduate Research Program, specifically for students belonging to minority groups:  
<http://www.hms.harvard.edu/dms/diversity/shurpintro.html>
- (6) NYU Center for Neural Science Summer Research:  
<http://www.cns.nyu.edu/undergrad/surp/>
- (7) Summer Internships at the Weizmann Institute:  
<http://www.yu.edu/faculty/babich/Summer%20Internships/Summer%20Internships%202007.pdf>
- (8) Albert Einstein College of Medicine Summer Undergraduate Research Program: <http://www.aecom.yu.edu/phd/summer.htm>
- (9) NSF Research Experience for Undergrads (at Baruch):  
<http://www.baruch.cuny.edu/psychology/research/reustudent.htm>

## DIRECTORY OF GRADUATE TRAINING PROGRAMS IN THE NEUROSCIENCES

<http://www.andp.org/programs/gradgeo.htm>

## CONTACT US

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