University of Manitoba

Psychobabble

Department of Psychology

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Welcome

Welcome to the third issue of *Psychobabble*! Last year, the Department of Psychology published its first two issues of *Psychobabble* and, this year, we intend to produce three issues. In the first of these issues, we introduce our new academic staff members: Drs. Glenwright, MacKenzie, Montgomery, Starzyk, and Yu, who bring new research expertise and teaching skills to our Developmental, Clinical, School, Social-Personality, and Behavioural Analysis areas, respectively. We are delighted that these individuals have joined our department and look forward to the contributions that they will make to our research and educational programmes.

This issue also provides information on our programmes of study, which have recently undergone restructuring. Like previous issues, this issue includes our regular 'columns' on departmental research programmes (this time, those of Drs. Tammy Ivanco and Joe Pear), updates from Ms. Cheryl Harasymchuk and Ms. Lauren Unik, on activities of our graduate and undergraduate associations, accomplishments of our distinguished graduates, this time featuring Dr. Paul Currie, and last, but not least, we once again call upon our friends to help support our various scholarship and aid programmes.

We are very proud of the programmes we offer, our honours and graduate students, our support staff, and our academic staff and their accomplishments. Academic faculty and students have received numerous prestigious awards from within the university and from professional societies and significant funding from federal granting agencies. We hope you will take the time to browse our web page to learn more about our department and about our long and distinguished history. We know you'll be impressed!

Harvey Keselman
Head

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• Programmes of Study ••••••••••••••••••••••••

The Department of Psychology at the University of Manitoba was officially established in 1946, although psychology courses had been taught in one form or another prior to 1900. Our Ph.D. programme was officially initiated in 1964, and professional training in clinical psychology began in 1967. Today, our department is the largest academic unit in the university. The Department of Psychology, the University of Manitoba, and the Greater Winnipeg community combine to provide outstanding opportunities for both basic and applied research. In most areas of psychological interest, research opportunities are limited only by the creativity and initiative of the investigator.

The main facilities of the Department of Psychology are housed in the Duff Roblin Building which is linked directly to several University libraries, other Arts and Science departments, and the Psychological Service Center, which is a mental health clinic operated by the Department's Clinical Psychology Training Program. The Department includes approximately 37,000 square feet of space for offices, laboratories, and classrooms. Basic research facilities are housed in over 100 dedicated research rooms. Laboratories are maintained for the study of cognitive and brain sciences, psychological health, quantitative analysis and modeling, and social behaviour. The Department also hosts a large computer lab maintained by a crew of three excellent computer technicians, integrated animal care facilities under the supervision of a dedicated animal care technician, and a field station at which avian behaviour may be studied.

For our undergraduate students we offer a comprehensive programme including foundation courses in many subfields of Psychology which may culminate in either an Honours or a general four-year degree. Graduate study in the Department of Psychology at the University of Manitoba is offered at both the M.A. and the Ph.D. levels. The primary purpose of the programme is to provide training in specialized areas such as Behavioural Neuroscience, Clinical Psychology, Applied Behavioural Analysis, Cognitive Psychology, Developmental Psychology, Social and Personality Psychology, School Psychology, and Quantitative Methods. The M.A. programme is designed both to provide a broad foundation in the scientific approach to psychology and to assist students in developing specialized skills. The Ph.D. programme provides a higher degree of specialization coupled with more intensive training in research and application. An apprenticeship-style training model is used so students have the flexibility to generate an individualized programme of study based on their own specific research interests.

Applied Behaviour Analysis

Applied Behaviour Analysis (ABA) involves the systematic application of learning principles and techniques to assess and improve individuals' covert and overt behaviours in order to help them function more fully in society. Training in the experimental analysis of behaviour (basic research on behaviour) is also provided. The Department of Psychology offers research and applied training at both the M.A. and Ph.D. levels in ABA. Students have the opportunity to receive supervised training in the practice of ABA with varied clientele and especially with persons with developmental disabilities and/or autism.

Brain & Cognitive Sciences

Graduate study in this area offers students a unique opportunity for research training in both neuroscience and cognitive psychology. The Department boasts a number of faculty members who investigate human psychology from a biological perspective, providing students with opportunities to investigate the physiological processes underlying learning, memory, visual perception, and visuomotor control. The Department's behavioural neuroscientists offer training in neuropsychology, developmental neuroscience and psychobiology, cardiovascular psychobiology and stress, neurotoxicology, psychopharmacology, neurological impairments, and fMRI. This area also hosts

several specialists in the experimental study of human mental processes. The Department's cognitive scientists provide expertise in the domains of language processes, visual and auditory perception and selective attention, and memory. Faculty in the Brain and Cognitive Science area receive funding from a variety of sources, resulting in cutting-edge laboratories utilizing modern and diverse techniques. During both M.A. and Ph.D. training, students will develop their ability to think critically and work independently, while still being able to successfully collaborate and work as part of a team. The course requirements in this area are structured around a flexible core curriculum that permits specialization and concentration of research during graduate training. Students will also be given the opportunity to collaborate with faculty from other areas in Psychology and in related social, behavioural, and biomedical sciences.

Clinical Psychology

The Clinical Psychology Training Programme is a doctoral programme accredited by both the American and Canadian Psychological Associations. The Clinical Programme follows the scientist-practitioner model. Students are given a solid grounding in both the science of psychology and clinical practice. There is an early and continuous integration of science, theory with practice, and research training with clinical training. The Programme includes Generalist and Behavioural streams. The Program's primary center of clinical training is at the Psychological Service Centre (PSC). The PSC is a large, active clinic at the University of Manitoba serving approximately 200 clients each year from the Greater Winnipeg area. Additional training is available throughout Winnipeg and other nearby communities at a wide range of sites including hospitals, clinics, prisons, and schools. Graduates of the Programme are employed in academic, clinical, community, government, school, and private practice settings and conduct a wide range of clinical, research, and administrative functions. Clinical faculty members' research interests and expertise encompass a wide range of research problems and methodologies. Areas of interest include clinical health psychology, child abuse, mood and anxiety disorders, aging and mental health, clinical neuropsychology, community mental health, among other topics.

Developmental

The interests and expertise of the core faculty of the Developmental Psychology Programme encompass a broad approach to developmental issues. A variety of topic areas are represented by faculty research interests, and projects cover age groups ranging from infants to the elderly, and both normal and exceptional populations. Methodologies vary as well, and experimental, correlational, and ABA designs are represented in the work of the developmental faculty. The graduate training model has a strong apprenticeship core, but breadth is encouraged by having students take developmental courses offered by faculty members other than their advisors. Students also have ample opportunities for contact with faculty members from other areas of the Department, and it is possible to combine a specialty in developmental psychology with complementary work in other content areas. Interested prospective graduate students should contact individual developmental area faculty members to get information regarding their research programs.

Methodology

Members of the area have expertise in a broad range of topics in measurement, research design, and statistical analysis. Topics such as classical and robust estimation and testing, meta-analysis methodology, mixed-effects modeling, parametric and nonparametric regression analyses and diagnostic procedures, the analysis of repeated or longitudinal data, and simultaneous statistical inference are of particular research interest. Training in this area includes practical applications as well as theoretical analysis.

School Psychology

We offer an M.A. degree in School Psychology that is designed to meet the specific requirements for registration and licensing for school psychologists in Manitoba. The programme incorporates training in several areas including interpersonal relationships, intervention and consultation, research, ethics and standards, and supervision. This training ensures that our programme matches or exceeds the requirements of other programs in Canada and facilitates licensing of our graduates in other jurisdictions.

Social and Personality Psychology

Social and personality psychology are scientific fields that seek to understand how people think about, influence, and relate to one another, and how they strive to satisfy personal needs and goals in the wider world. These aims, which are common to both fields, are nevertheless pursued with a different emphasis in each. The emphasis in social psychology is on external situational and environmental factors that may affect social or personal functioning; whereas the emphasis in personality psychology is on relatively durable attributes within the person - including some that may be unique to each individual and others that may be universal to the species or to all living organisms. Training in social and personality psychology at the advanced undergraduate, M.A., and Ph.D. levels emphasizes critical thinking and the creative generation of research hypotheses and proposals. Such training occurs through a wide range of seminars and independent research projects with a faculty advisor. Current research interests of the social-personality psychology faculty include biases in social perception, intergroup relations and social justice, validity of personality judgments, attributions, academic motivation and achievement, perceptions of control, the origin and organization of social attitudes, health and related self-perceptions and behaviours, self-esteem, body image, close relationships, cross-cultural psychology, and the social psychology of science.

Faculty

John Adair	Bob Altemeyer	Dan Bailis
Jessica Cameron	Brian Cox	Rayleen DeLuca
Warren Eaton	Jim Forest	Melanie Glenwright
Steve Holborn	Cam Huynh	Tammy Ivanco
Lorna Jakobson	Ed Johnson	Harvey Keselman
Joanne Keselman	Richard Kruk	Jason Leboe
Mike LeBow	Les Leventhal	Corey MacKenzie
Barry Mallin	Jonathan Marotta	David Martin
Garry Martin	Maria Medved	Todd Mondor
Janine Montgomery	Marian Morry	Jim Nickels
Ron Niemi	Joe Pear	Raymond Perry
Tim Racine	Gerry Sande	Jim Shapiro
Murray Singer	Katherine Starzyk	Bruce Tefft
Mike Thomas	Jacquie Vorauer	John Whiteley
Linda Wilson	Roger Wilson	Dickie Yu

New Graduate Students

The department welcomed a number of bright and talented new students to our graduate programme this year.

Applied Behaviour Analysis programme: Michael Rogers

Brain and Cognitive Sciences programme: Marc Wallace and Ryan Wilson.

Clinical programme: **Tiffany Helgason, Judy Kienas, Amber Mather, Colleen Murphy, Margaret Penfold, Gabriel Schnerch,** and **Lisa Thouas**.

Developmental programme: **Amy De Jaeger, Debra Lall** and **Samantha Lewycky**

Social-Personality programme: **Simmi Mann** and **Jessica Scholz**.

School Psychology programme: **Lina Barkas, Deborah**

• GASP •••••••

Graduate Association of Students of Psychology

As President of GASP, I am interested in maintaining the momentum that Kathleen Fortune (former GASP president) began last year by continuing to increase a community spirit among graduate students, both new and old, across all areas within the department. My first task was to help new students with their transition into the graduate programme by distributing an information manual before classes began, offering tours of the campus, and organizing a welcome dinner in their honour. In order to bridge together students from various areas in the department and integrate new students with existing ones, I believe that informal social events and regular attendance at colloquia and thesis defenses should be promoted. In addition to being a source of fun and interest, these events also serve to provide a support network for students. As well, they encourage enthusiasm for research and scholarship.

An important goal of GASP is to represent graduate students' concerns and needs at departmental meetings. A GASP executive committee was created to help serve this role, consisting of Kathy Bent, Lori Doan, Danielle Labossiere, Kelley Robinson, and Jady Wong. I would like to persuade students to contact me with any matters they would like to see attended to or any ideas they may have for the department.

Please stay tuned to the updated GASP website at http://home.cc.umanitoba.ca/~gasp/about.html for information on upcoming events.

Cheryl Harasymchuk
President

• UPSA • • • •

Undergraduate Psychology Students Association

The executive members of UPSA are looking forward to serving students in the 2006-2007 academic year. The main goals of the organization are to provide important information to undergraduates about how to make the most of their time in the psychology department at the University of Manitoba and create social cohesion within the department among undergraduate students, graduate students, and faculty members. Similar to last year, UPSA plans to provide several academic services for undergraduates including a volunteer tutoring programme with one-on-one and group tutoring sessions, the "Careers in Psychology" lecture series, a graduate/undergraduate student mentoring programme in conjunction with GASP, and a GRE preparation seminar in September. In addition to academic events, UPSA will also be organizing a fundraising evening at Rumor's Comedy Club in November, fundraising bake sales, wine and cheese socials for students and faculty, movie nights, and regular social gatherings for undergraduates.

Members stay informed about UPSA events and seminars through a weekly mailing list or by visiting the interactive UPSA website at http://home.cc.umanitoba.ca/~upsa. The website is updated daily during the academic year and is home to a message board where students can interact online about UPSA events, the psychology department, and university life in general.

We are always looking for feedback and assistance from faculty to better serve undergraduates. If you are interested in helping out with UPSA in the upcoming academic year, please e-mail the executive at umanitoba.upsa@gmail.com or stop by our office in P224 Duff Roblin.

Lauren Unik
President

New Faculty

Melanie Glenwright

Developmental Psychology programme

My research examines how children understand different kinds of figurative language including sarcasm, verbal irony, and metaphor. People use sarcasm for two main reasons: to soften a criticism and to be humorous. My research shows that children recognize sarcasm's ability to soften a criticism by 5 to 6 years of age, but they don't begin to recognize sarcasm's humour until 9 to 10 years of age. My current research examines the social and cognitive factors that support the development of sarcasm comprehension. My research is also aimed at identifying cues that can help children better understand sarcasm so that parents and teachers can use this information to communicate more effectively with children.

My research on children's impressions of sarcasm has been featured in The National Post, The Globe and Mail, and The Discovery Channel. I have written a chapter for an edited book entitled *Irony in language and Thought: A Cognitive Science Reader* that contains seminal publications concerning figurative language processing.

My secondary programme of research concerns how children with autism understand ambiguous language and I have a paper in press in the *Journal of Autism and Developmental Disorders.*

One of my current research projects investigates how children and adolescents interpret conflicting information and how this skill is supported by the ability to think about two concepts simultaneously. I am also interested in children's understanding of people's intentions when they create objects, known as the design stance.

Corey Mackenzie

Clinical Psychology programme

I would like to thank everyone for the warm welcome to the Department and the University! I'm a registered clinical psychologist with expertise in cognitive assessment and cognitive-behavioural and mindfulness-based psychotherapy with adults and older adults suffering from mood, anxiety, and adjustment-related concerns. I have two primary clinical lines of research. The first focuses on social psychological factors influencing mental health service utilization among underserved populations in general, and older adults in particular. In contrast to the frequently held belief that older adults are less likely to seek help than younger adults because of treatment-related stigma, my most recent work in this area suggests that older adults have more positive attitudes toward seeking help than younger adults. Interestingly, however, older individuals appear to have preferences for bringing mental health concerns to primary care professionals, rather than mental health professionals. My second clinical line of research involves the biopsychosocial impact of chronic stress on at-risk groups, including caregivers of older adults with dementia and teachers. Together with colleagues at Baycrest and the University of Toronto, I have designed and evaluated the effectiveness of several cognitive-behavioural and mindfulness-based stress-reduction interventions for caregivers and teachers. I am also interested in the impact of chronic stress on caregivers' cognitive abilities. Two pilot studies, which are currently under review, suggest that in addition to experiencing physical and mental health problems, caregivers have impaired cognition. I am actively looking for students and collaborators to work with here in Winnipeg. For more information check out my website at: http://home.cc.umanitoba.ca/~mackenz0/

Janine Montgomery

School Psychology programme

Individuals with Asperger syndrome (AS) are characterized by average to superior intelligence, while at the same time, experiencing severe and pervasive deficits in social interaction. While many individuals with AS report that they keenly desire social relationships, the combination of repeated social failures and intelligence sufficient to appreciate these failures increases the risk for developing depression, anxiety, and even suicide ideation. Various researchers have suggested that deficits in executive functions and Theory of Mind account for the social difficulties in autism spectrum disorders (which include autism and AS). Theory of Mind is commonly described as an individual's ability to perceive that other people have thoughts, intents, desires, and beliefs that differ from their own. Executive functions refer to higher order thinking process such as planning, self-monitoring, inhibition, and regulation of emotion. My current research involves an examination of the contributions of deficits in Theory of Mind, executive functions, and the emerging construct of emotional intelligence to the social difficulties of individuals with AS.

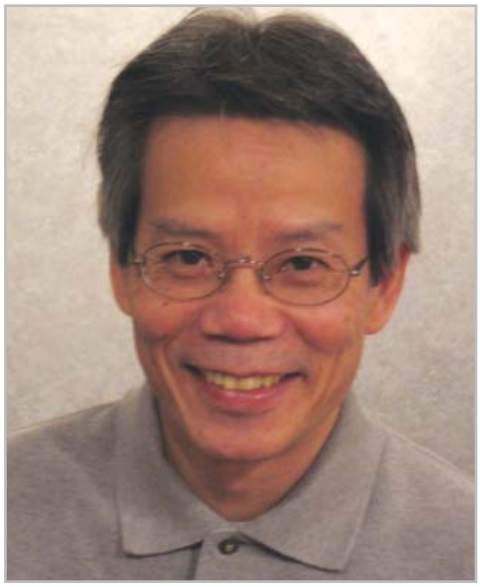
While my current focus is on understanding the difficulties of those with AS, individuals with other social cognitive disorders also experience significant difficulties in relating to other people. Repeated failures in social situations may predispose individuals with social cognitive deficits, such as attention deficit/hyperactivity disorder, autism, high functioning autism, pervasive developmental disorder – not otherwise specified, AS, and nonverbal learning disabilities to the development of maladaptive outcomes. My broader research interests are aimed towards gathering information about individuals with social-cognitive deficits in order to 1) better understand individual characteristics and needs and 2) design appropriate interventions based on individual strengths. This programme of research includes examinations of best practices for assessment and intervention, measurement issues pertaining to diagnosis and treatment, diagnostic issues, inter-professional collaboration, prevention of co-morbid disorders, resiliency, and early intervention programs.

Katherine Starzyk

Social-Personality Psychology programme

I am happy to be a new faculty member in Personality and am seeking undergraduate and graduate students to join my lab, beginning Fall, 2007. I have three areas of research interest. In one, I focus on the factors that influence people's ability to make valid personality judgments of others. One relevant factor is acquaintance: The degree to which you know or are familiar with another person. I have developed a measure of acquaintance and demonstrated this measure relates to people's ability to make valid personality judgments. I am now interested in understanding how acquaintance develops and why we make more valid judgments for people we know well, versus poorly. In a second area, I focus on understanding factors that determine how people remember group harms and respond to reparations (e.g., apology, financial compensation, land) for group harms that happened decades or centuries ago. Informed by scholarly work in law and history, and using experimental methodology, I examine how support for reparations depends on psychological factors. The central factor I focus on is the perception of privity: a causal connection between a past harm and a historical victim group's current suffering. I intend to investigate how both situational factors and individual difference variables affect people's tendency to perceive privity, and to elaborate how the perception of privity relates to support for reparations. Finally, I am interested in how people's ability to reduce cognitive dissonance changes as a function of the personal importance of an issue. For more information, please see: http://home.cc.umanitoba.ca/~starzyk/. Thanks for the warm welcome!

• New Faculty



Dickie Yu

Applied Behavioural Analysis programme

My research is concerned with individuals with developmental disabilities, including autism, and falls in three areas.

One research area is aimed at developing effective procedures to allow individuals with severe and profound intellectual disabilities to express their preferences. Being able to determine the preferences of individuals reliably will allow caregivers to present more preferred items and activities to enrich the environments and quality of life for this population.

The second area is concerned with early intervention with children with autism. Early intensive behavioral intervention, based on Applied Behaviour Analysis principles and procedures, has been shown to be quite effective in helping children with autism. I'm currently conducting a longitudinal study of preschool-age children receiving such an intervention. This study should allow us to learn more about factors that influence the effectiveness of the intervention and its long-term effects for the children.

The third research area is concerned with the prevalence of autism spectrum disorders (ASD) in Canada. Knowing how the prevalence of ASD varies across time and geographic regions is vital for service providers, service planners, and researchers. My research team has been tracking the prevalence of ASD in Manitoba for the last three years and will continue to do so over the next five years. We've also worked with researchers from other regions in Canada to establish a national database.

My research programme is housed at the St. Amant Research Centre, located near the Fort Garry Campus, and is supported by the Canadian Institutes of Health Research, Manitoba Family Services and Housing, The Winnipeg Foundation, and St. Amant Foundation.

Department Colloquia

FRIDAY, OCTOBER 13

John P. Zubek Memorial Lecture

Dr. J. Bruce Overmier

Department of Psychology,
University of Minnesota

"Ulcers: Are they Nobel-er in the gut or the mind?"

FRIDAY, OCTOBER 27

Dr. Warren Eaton

Department of Psychology,
University of Manitoba

"Can infant locomotor development be influenced by season of birth?"

FRIDAY, NOVEMBER 3

Dr. Ulrich Mueller

Department of Psychology,
University of Victoria

Why do preschoolers fail executive function tasks? The roles of inhibition and disinhibition."

FRIDAY, NOVEMBER 24

Dr. Jason Leboe

Department of Psychology,
University of Manitoba

"When working harder doesn't pay: Negative consequences of elaborate encoding."

FRIDAY, DECEMBER 1

Dr. Tim Racine

Department of Psychology,
University of Manitoba

"The development of social understanding within parent-child interaction."

Unless otherwise noted, all colloquia will take place from 3:00-4:00 pm in Room P412 Duff Roblin Building.

Prior to each talk, members of the department will have an opportunity to meet speakers over coffee between 2:30 and 3:00 pm in the Department of Psychology Lounge.

• Spotlight on Research

Tammy Ivanco

Brain and Cognitive Sciences programme

Given the high incidence of brain injury, disease, and neurodevelopmental disorders, two of the most difficult health-related questions that neuroscientists ask are "How can we assess the damaged brain?" and, more importantly, "How can we fix the damaged brain?" We know that the brain is 'plastic', or able to change its structure, with growth and development. Further, the brain changes its structure following experience or damage.

Within a Psychology Department, we are interested in how the brain produces behaviour. It is clear that an understanding of how the brain is modified throughout the lifetime is a complex question that can only be answered by investigating the complete package with various models under similar conditions using behavioural, cellular, and molecular level measurements. My research programme attempts to meet the challenge of understanding functional brain plasticity using a multifaceted and multidisciplinary approach with normal and damaged brain models. Generally we aim to examine the basis of learning in 1) undamaged brains, 2) models of developmental disorders, including Fragile X Mental Retardation Syndrome and Autism, and 3) models of adult and neonatal stroke.

Currently, we are doing many exciting things related to these three areas. We have been examining some tasks that allow us to tease out the effects of learning, from activity. This is fundamentally important because it is widely assumed that learning and activity produce very different changes in the brain, but few tasks really separate out activity and learning. We have also been examining how things such as climbing a mountain might influence your brain. Mountain climbers often suffer from high altitude headaches and sometimes have more severe problems that resemble some of the symptoms associated with oxygen deprivation to the brain, which we know occurs with stroke. We have been working with a rodent model of Fragile X Mental Retardation syndrome, and have been looking at how the brain is affected by drugs. We have also been working with an animal model of autism and are evaluating how the brain of this model differs from the brain of a normal rat. The lab has been working with other researchers to understand more about how the vascular system and neurons interact, how sickness influences learning, and how small differences between animals lead to big changes in the brain.

Selected Relevant Publications:

Larson, S.J., Hartle, K., Ivanco, T.L., (submitted). Acute administration of interleukin-1β disrupts motor learning. *Neurobiology of Learning and Memory.*

Derksen, M., Ward, N.L., Hartle, K., & Ivanco, T.L. (submitted). MAP2 and synaptophysin protein expression following motor learning suggests dynamic regulation and distinct alterations coinciding with synaptogenesis. *Neurobiology of Learning and Memory.*

Wallace, M., Hartle, K.D., Snow, W., Ward, N.L., & Ivanco, T.L., (submitted). Hypoxia alters the Morphology of Striatal Neurons in CD1 Mice. *Neuroscience.*

Balasubramaniam, J., Xue, M., Buist, R.J., Ivanco, T.L., Natiuk, S. & Del Bigio, M.R., (2005). Persistent motor deficit following infusion of autologous blood into the periventricular region of neonatal rats. *Experimental Neurology – November 3 E-pub. 197:122-132.*

• Spotlight on Research ••••••••••••••••••••••••

Joseph Pear

Applied Behaviour Analysis programme

My main research focus is on Computer-Aided Personalized System of Instruction (CAPSI). The research has centered on the following issues: overall characteristics of CAPSI, ways to develop higher-order thinking in undergraduates using CAPSI, ways to improve the accuracy and quality of peer reviewing (a central and unique feature of CAPSI), the effects of feedback on student performance, the effects of peer reviewing on the learning of the reviewers, the effectiveness of feedback on student performance as learners and as peer reviewers, procrastination and ways to reduce it, and student reactions to CAPSI.

One of the most striking features in a course using CAPSI is the amount of writing that students do, and the amount of feedback that they receive on their writing. Our data shows that they write more and receive much more feedback than possible in a traditional course (Pear & Crone-Todd, 2002).

Most university education focuses on lower thinking levels. I have prepared, with the assistance of my graduate and honours students, operational definitions of thinking levels based on Bloom's Taxonomy. Instructing students to answer at a higher level, combined with reinforcement for higher-level answers, increases the thinking level at which students answer questions.

It is also desirable to know how accurate peer feedback is and how its accuracy can be improved. Martin, Pear, and Martin (2002a) noted that in a CAPSI-taught course peer reviewers frequently produced false negatives (defined as "passes" on answers that did not completely demonstrate mastery). However, peer reviewers often gave correct expository feedback—indicating that error detection had occurred. We also demonstrated that the accuracy of test-writers and of peer reviewers increased as the course progressed indicating the importance of training for accuracy.

Martin, Pear, and Martin (2002b), found that feedback in a CAPSI-taught course is effective, as demonstrated by improved answers on later tests. Feedback that directly addresses students' answers vis-à-vis specific questions produced higher scores on midterm and final exams than non-specific (e.g. "correct", "good job", "incorrect") feedback. In addition, feedback source or quality is important: students complied more with teaching assistants' and instructor's feedback (about 70%) than with peer reviewer feedback (about 60%), indicating the importance of developing ways to improve compliance.

Students overwhelmingly report that they learn a considerable amount by peer reviewing. Moreover, we find a positive correlation between the amounts of peer reviewing students do and their marks on objectively scored final exams (Springer & Pear, submitted). Further research will be directed at detecting and measuring a clear causal connection between peer reviewing and learning, and examining ways to increase its strength.

Selected Relevant Publications:

Martin, T.L., Pear, J.J., & Martin, G.L. (2002a). Analysis of proctor marking accuracy in a computer-aided personalized system of instruction course. *Journal of Applied Behavior Analysis*, *35*, 309-312.

Martin, T.L., Pear, J.J., & Martin, G. L. (2002b). Feedback and its effectiveness in a computer-aided personalized system of instruction course. *Journal of Applied Behavior Analysis*, *35*, 427-430.

Pear, J.J., & Crone-Todd, D.E. (2002). A social constructivist approach to computer-mediated instruction. *Computers & Education*, *38*, 221-231.

Springer, C.R., & Pear, J.J. (submitted) Performance measures in courses using computer-aided personalized system of instruction.

• Student Research

Tyler Wereha
MA student

Ever wonder why the outside of the Duff Roblin building sometimes smells like a barn? It may be because the building contains the Avian Behaviour Laboratory, home to a flock of 50 wild mallard ducks. I am interested in the evolutionary underpinning of both animal and human behaviour, and for my Master's thesis, I have been looking at the mechanisms mediating attachment among ducklings.

Many studies conducted in the Avian Behaviour Laboratory have found that individually tested ducklings have a preference for the largest brood available to them. In fact, ducklings prefer broods of unfamiliar ducklings over the brood that they have been raised with, if the unfamiliar brood is larger than their own brood. There may be several reasons that ducklings would prefer to be in larger broods, all of which are related to survival. Other ducklings provide benefits such as warmth and protection: the more ducklings the better.

For my Master's thesis I wanted to see whether entire broods of ducklings, rather than individually tested ducklings, exhibit a preference for larger broods as well. I found that broods of ducklings are attracted to other broods of ducklings, and prefer larger broods to smaller ones. The pervasive nature of this attraction for larger broods may be rooted in the great survival benefits afforded to the members of large broods.

Kathy Bent
Ph.D. Student

Self-identity for an Aboriginal person living in Canada can be a difficult cognitive process because of a complex array of interrelated factors. Some of these factors are common to the non-Aboriginal population when it comes to self-conception but some factors relate only to Aboriginal people because of circumstances related to the loss of their cultural traditions through the colonization process and other discriminatory practices (i.e., racism) they face as a result of being a minority group. I am interested in exploring the factors that contribute to the conception of Aboriginal people's identities and self-esteem. I have completed an honours thesis on Aboriginal single female parent's self-esteem and a M.A. on Aboriginal women's health and wellness issues. Both studies found significant effects of culture on self-esteem and overall health and wellness which warrants further investigation into the role of Aboriginal culture enrichment on self-identity and self-esteem. In addition to this work, I am a Research Associate with the Prairie Women's Health Centre of Excellence where I have had the privilege of carrying out more research relating to women's health. I am also affiliated with Athabasca University and have just written a course on Aboriginal women's health and wellness that I hope will be offered to students shortly. Perhaps my biggest joy, however, has come from the many community research projects I have worked on these past few years including projects for the Aboriginal Justice Inquiry's Child Welfare Initiative, the First Nations Child and Family Caring Society and the Centre of Excellence for Child Welfare.

• Our Distinguished Alumni ••••••••••••••••••

Dr. Paul J. Currie

Assistant Professor of Psychology and Behavioral Neuroscience
Barnard College, Columbia University, New York

I completed my B.A. (Hons) in psychology at Queen's University followed by a M.A. and Ph.D. at the University of Manitoba. As a graduate student, under the supervision of Dr. Linda Wilson, my research in behavioural neuroscience focused on the neural control of ingestive behaviour. I studied the role of two key neurotransmitter systems, noradrenergic and serotonergic, in relation to feeding motivation and dietary macronutrient selection in genetically obese (ob/ob) mice, a widely used animal model of obesity.

After completing my doctoral degree in 1992, I pursued postdoctoral training at the Clarke Institute of Psychiatry, University of Toronto and then accepted a research fellowship at Wayne State University, Detroit. I am currently an Assistant Professor of Psychology and Behavioral Neuroscience at Barnard College, Columbia University in New York where I teach undergraduate and graduate level courses in neuropharmacology and neuroscience. In 2003, I received the Gladys Brooks Faculty Excellence in Teaching Award. As part of my interest and commitment to diversity in education, I am currently involved in a National Science Foundation sponsored initiative (Project Kaleidoscope) to promote women and minorities in the sciences.

I am an active member of several professional societies, an ad hoc reviewer of numerous journals in my field, and have organized and chaired various symposia at national and international conferences. I have also served as an editorial consultant in textbook and interactive DVD development targeting undergraduate neuroscience education.

Eating is influenced by many factors ranging from physiological processes, to emotional arousal and social situations. In addition to monoamine neurotransmitter function, over the past decade my research has broadened to include a focus on brain neuroactive peptides such as neuropeptide Y and urocortin, specifically in relation to eating, motivational arousal and metabolic signaling. This work has been supported by the National Institutes of Health, the National Science Foundation, the Sherman Fairchild Foundation, and the Howard Hughes Institute. My students have also received fellowships from these same federal and private agencies. One current NIH-funded line of research in my lab focuses on the action of ghrelin, a recently identified brain-gut peptide. The central hypothesis under investigation is that ghrelin plays an important role in the regulation of emotional and feeding motivational states, eliciting both anxiogenic and orexigenic behaviours. Overall, this work is aimed at identifying feeding circuits that may be anxiety-based, and ultimately, at enhancing our understanding of the neural mechanisms associated with disordered eating. Related lines of research are currently being conducted collaboratively at the New York Obesity Research Centre, St. Luke's-Roosevelt Hospital. (http://bc.barnard.columbia.edu/~pcurrie).

Selected Relevant Publications:

Currie, P.J., Coiro, C.D., Rigsbee, E., Swann-Sternberg, T., Freeman-Daniels, E., Anolik, S., Hinchcliff, K., & Chin, V. (in press). Orexigenic and anxiogenic action of ghrelin: Focus on discrete regions of the hypothalamus. *Brain Research*.

Currie, P.J., Mirza, A., Fuld, R., Park, D., & Vasselli, J.R. (2005). Ghrelin is an orexigenic and metabolic signaling peptide in the arcuate and paraventricular nuclei. *American Journal of Physiology*, 289, R353-R358.

Currie, P.J., Braver, M., Mirza, A., & Sricharoon, K. (2004). Sex differences in the reversal of fluoxetine-induced anorexia following raphe injections of 8-OH-DPAT. *Psychopharmacology*, *172*, 359-364.

Currie, P.J. (2003). Integration of hypothalamic feeding and metabolic signals: Focus on Neuropeptide Y. *Appetite, 41*, 335-337.

Currie, P.J., Coiro, C.D., Niyomchai, T., Lira, A., & Farahmand, F. (2002). Hypothalamic paraventricular 5-hydroxytryptamine: receptor specific inhibition of NPY-stimulated eating and energy metabolism. *Pharmacology, Biochemistry & Behavior, 71*, 709-716.