

Clinical Neuropsychology Stream

*Clinical & Clinical Developmental Psychology
Program*

2018 - 2019

Our mission

The mission of the Clinical Neuropsychology Stream (CNS) is to ensure that students achieve excellence in the science and practice of clinical neuropsychology by taking an integrative approach to understanding brain-behaviour relations and professional issues in clinical neuropsychology.

The CNS truly embraces the principles of a scientist-practitioner model and the development of evidence-based intervention, assessment, and research practices. The CNS offers opportunities to engage in clinically relevant research related to the field of neuropsychology, across the lifespan. As well, the CNS values the systematic development of clinical skills, offering a variety of theoretical and technical approaches to psychological treatment and assessment, including “hands-on” training through our in-house York University Psychology Clinic, as well as external practica and internships.

Goals and Objectives

The overarching goal of the Clinical Neuropsychology Stream is to educate scientist-practitioners in clinical neuropsychology.

Specific goal	1. To ensure that students have essential knowledge and skills for clinical neuropsychology practice.
Objectives	1.1 Knowledge of human neuroanatomy, neuropsychology and neurology. 1.2 Knowledge of principles of neuropsychological assessment and intervention.
Competencies expected (i.e. skills, attitudes, knowledge)	1.1.1 Ability to apply knowledge of brain and behaviour to clinical cases. 1.1.2 Skill and expertise in the administration and interpretation of neuropsychological assessment techniques and in the formulation of rehabilitation interventions. 1.1.3 Ability to communicate neuropsychological findings and formulations orally and in writing.
Means used to assess outcomes & minimum achievements expected	Evaluation component of individual courses (see course outlines) and practica, and performance on Clinical Competency Examination and internship.
Actual outcomes since last self-study	<ul style="list-style-type: none"> • Modal course grade in required courses 2017 - 2018: A • Modal Practicum II and Practicum III grades 2017 - 2018: Pass • Clinical Competency Exam pass rate prior to internship 2016 - 2017: 100% • Modal internship grade 2017 - 2018: Pass • Attendance rate for Rounds series 2017 - 2018: 90%
Additional comments	Training activities are designed to provide students with theoretical and practice-relevant neuropsychological knowledge and skills applicable to clinical cases and disorders.

Specific goal	2. To ensure that students achieve excellence in the science of clinical neuropsychology.
Objectives	2.1 Students contribute to the scientific literature and knowledge base in fields related to clinical neuropsychology
Competencies expected (i.e. skills, attitudes, knowledge)	2.1.1 Ability to design and carry out research on issues relevant to clinical neuropsychology 2.1.2 Writing scientific papers for publication 2.1.3 Preparing research material for visual and oral presentation to the scientific community
Means used to assess outcomes & minimum achievement expected	<ul style="list-style-type: none"> • Research practicum course grade • MA thesis related to neuropsychology • MA Oral exam pass within 24 months of entry • PhD dissertation related to neuropsychology • PhD Oral exam pass • Publications and presentations reported in annual student reports and CV
Actual outcomes since last self-study	<ul style="list-style-type: none"> • Modal MA research practicum grade 2017 - 2018: A/A+ • Proportion of neuropsychology-related M.A. theses 2017- 2018: 100% • MA thesis pass rate 2017 - 2018: 100% • Proportion of PhD dissertations related to neuropsychology 2017 - 2018: 100% • PhD oral exam pass rate: 100% • Proportion of students conducting an empirical study for minor area paper 2017- 2018: 60% • Percentage of students with peer-reviewed publications: 50% • Percentage of students with refereed conference presentations: 60% • Percentage of students conducting research on internship: N/A
Additional comments	See also statistics and research design requirements of the Clinical Psychology program

Stream Requirements

	C	CD
Completion of the Clinical Psychology Program (C)	X	
Completion of the Clinical-Developmental Psychology Program (CD)		X
Clinical Neuroanatomy	X	X
Human Neuropsychology: History and Syndromes	X	X
Principles of Neuropsychological Assessment	X	
Cognitive Neurorehabilitation	X	Encouraged
Applied Pediatric Neuropsychology		X
MA thesis and/or Minor Area Paper relevant to CNP	X	X
Dissertation topic relevant to CNP	X	X
Regular attendance of Neuropsychology Rounds	X	X
One external practicum with supervision in neuropsychological assessment	X	X
CPA-Accredited internship with major rotation/experience in CNP	X	X
Clinical competency examination on neuropsychological assessment case	X	

Training Resources

The **York University Psychology Clinic** (YUPC) is a state-of-the-art Psychology Clinic at York University that is affiliated with the Clinical and Clinical-Developmental areas of Psychology. The YUPC provides an opportunity to obtain additional experience with Core, Affiliate, or Adjunct faculty at York University in neuropsychological assessment and other services provided by clinical neuropsychologists.

Members of the Neuropsychology Stream have affiliations with a number of specialized research centres at York University, including the **YorkU Centre for Aging Research & Education**, the **York Institute for Health Research**, and the **Centre for Vision Research**.

York University also offers a top-notch **fMRI facility** that is available for use by our students and faculty.

Our location in the Toronto area provides students with access to a diverse range of practicum opportunities, including: Toronto Western Hospital, Sunnybrook Hospital, Toronto Rehabilitation Institute, The Hospital for Sick Children, and Holland-Bloorview Kids Rehabilitation Hospital.

The **Psychology Resource Centre** provides students and faculty with access to a library of psychological literature, and approximately 12,000 psychological measures, which may be borrowed for individual practice or clinical usage.

The Institute for Social Research at York University offers **Statistical Consulting Service** to graduate students, on a broad range of qualitative and quantitative methods.

Applications, Admissions & Enrollment - Adult Clinical Neuropsychology Program

Academic Year/Cohort	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Positions/Training Capacity	6	0	4	3	4	4	4
Applications - post-BA entry	26	19	18	17	14	31	32
Applications - post-MA entry	3	2	7	5	3	3	7
Interviewed/Short-Listed	22	13	18	11	9	20	15
Offered Admission	6	0	4	3		4	2
Offers as % Applications (Automatically Calculated)	21%		16%	14%		12%	5%
Accepted Offer/Enrolled	6	0	4	3	2	1	2
<i>Of those Enrolled:</i>							
Males	0	0	2	1	1	0	0
Self-Identify as Diverse (ie., minority, disability, LGBTQ)	0	0	2	1	0	0	0
From Outside of Province	0	0	1	0	0	0	0
From Outside of Canada	0	0	0	0	0	0	0
External Scholarship/Fellowship	2	0	2	2	2	1	
Internal Scholarship/Fellowship	6	0	4	2	2	1	
First Year Tuition & Fees	\$5,527	\$5,525	\$5,527	\$5,527	\$5,527	\$5,527	\$5,527

Current Student Activities Over Past 7 Years - Adult Clinical Neuropsychology Program

Academic Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Total Full-Time Students	11	11	13	14	16	16	19
Total Part-Time Students	1	0	1	3		1	3
Total Number of Students (Automatic)	12	11	14	17	16	17	22
Males	0	0	0	2	4	4	4
Age Range				23-51	23-51	23-51	23-52
Self-Identify as Diverse (ie, minority, disability, LGBTQ)				7	5	5	7
Co/Authors of Papers at Professional/Scientific Meetings	9	9	9	15	10	13	13
Co/Authors of Articles in Referred Journals	7	9	10	13	12	10	11
Members/Affiliates in Professional/ Scientific Societies	9	8	9	12	10	13	15
Teaching Assistantship	9	8	12	13	12	16	16
Research Assistantship	3	3	6	4	5	7	2
External Scholarship/Fellowship	6	6	10	9	10	12	14
Internal Scholarship/Fellowship	2	5	5	4	2	7	10
Worked more than 20 Hours/week	0	0	0	0	0	0	0
Withdrew from Programme						0	0

PROGRAMME GRADUATES OVER PAST 7 YEARS - Adult Clinical Neuropsychology Program

Academic Year/Cohort	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Graduated - Fall	2	1	0	1	0	1
Graduated - Spring	1	0	1	0	1	0
Total Graduates for Year (Automatically Calculated)	3	1	1	1	1	1
Self-Identify as Aboriginal	0	0	0	0	0	0
Average Time to Completion in Years - Post BA-entry	7.7	7	7.2	8	7.6	7.9
Average Time to Completion in Years - Post MA-entry (or N/A)	4	0	0	0	0	5.6
Total Number of Graduates in Preceding 7 Years	3	4	5	5	5	6
Males in Preceding 7 Years					0	0
Licensed in Preceding 7 Years					5	6
Licensed as % Graduates (Automatically Calculated)					100%	100%

INTERNSHIP APPLICATIONS OVER PAST 7 YEARS - Adult Clinical Neuropsychology Program

Academic Year of Internship	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Total Applicants for that Year	2	1	3	2		1	3
Applicants for 2nd (or +) Time	0	0	0	0		0	0
Withdrew from APPIC Match (if applicable)	0	0	0	0		0	
Matched to Half-Time Internship	0	0	0	0		0	0
Matched to Full-Time Internship	2	1	3	2		1	3
CPA or APA Accredited Internship	2	1	3	2		1	3
Accredited Match as % Applicants (Automatically Calculated)	100 %	100 %	100 %	100%		100 %	100 %
APPIC, Non-Accredited Internship	0	0	0	0		0	0
Non-APPIC, Non-Accredited	0	0	0	0		0	0
<i>Of those who Matched:</i>							
Internship Outside of Province	0	0	0	0		0	1
Internship Outside of Canada	0	0	2	1		0	0
Mean Practicum Hours on AAPI -->Assessment & Intervention	2,125	1,968	1,369	1,703		1,800	
-->Supervision							
-->Support							
Mean Total Hours (Automatic)	2,125	1,968	1,369	1,703		1,800	
Stipend	\$28,000	\$25,500	\$24,500	\$26,750		\$31,205	

CURRENT FACULTY - PROFESSIONAL ACTIVITIES OVER THE PAST YEAR - Adult Clinical Neuropsychology

	Core Faculty	Complementary	Adjunct/P-T
Authors/co-authors of papers at professional/scientific meetings	7		
Authors/co-authors of articles in refereed journals	7		
Member of journal editorial board	5		
Thesis supervisor	7	8	3
Recipient of grants or contracts	6		
Members in professional or research societies	7		
Engaged in professional practice or practice-related consultation	3		16
Registered in jurisdiction	7		3
Tenured	7		
Untenured	0		
Total Number of Faculty	7	8	16

**CURRENT FACULTY - PROFESSIONAL ACTIVITIES OVER THE PAST YEAR - Clinical
Developmental Neuropsychology**

	Core Faculty	Complementary	Adjunct/P-T
Authors/co-authors of papers at professional/scientific meetings	3		
Authors/co-authors of articles in refereed journals	3		
Member of journal editorial board	3		
Thesis supervisor	3	8	3
Recipient of grants or contracts	3		
Members in professional or research societies	3		
Engaged in professional practice or practice-related consultation	3		16
Registered in jurisdiction	3		3
Tenured	2		
Untenured	1		
Total Number of Faculty	3	8	16

APPLICATIONS, OFFERS, AND ENROLLMENTS OVER PAST 7 YEARS - Clinical Developmental Neuropsychology

Academic Year/Cohort	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Positions/Training Capacity	6	0	4	3	4	4	3
Applications - post-BA entry	26	19	18	17	14	31	16
Applications - post-MA entry	3	2	7	5	3	3	1
Interviewed/Short-Listed	22	13	18	11	9	20	4
Offered Admission	6	0	4	3		4	2
Offers as % Applications (Automatically Calculated)	21%		16%	14%		12%	12%
Accepted Offer/Enrolled	6	0	4	3	2	1	2
<i>Of those Enrolled:</i>							
Males	0	0	2	1	1	0	0
Self-Identify as Diverse (ie., minority, disability, LGBTQ)	0	0	2	1	0	0	0
From Outside of Province	0	0	1	0	0	0	0
From Outside of Canada	0	0	0	0	0	0	0
External Scholarship/Fellowship	2	0	2	2	2	1	0
Internal Scholarship/Fellowship	6	0	4	2	2	1	0
First Year Tuition & Fees	\$5,527	\$5,525	\$5,527	\$5,527	\$5,527	\$5,527	\$5,527

APPLICATIONS, OFFERS, AND ENROLLMENTS OVER PAST 7 YEARS - Adult Clinical Neuropsychology Program

Academic Year/Cohort	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Positions/Training Capacity	6	0	4	3	4	4	4
Applications - post-BA entry	26	19	18	17	14	31	16
Applications - post-MA entry	3	2	7	5	3	3	1
Interviewed/Short-Listed	22	13	18	11	9	20	4
Offered Admission	6	0	4	3		4	2
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Accepted Offer/Enrolled	6	0	4	3	2	1	2
<i>Of those Enrolled:</i>							
Males	0	0	2	1	1	0	0
Self-Identify as Diverse (ie., minority, disability, LGBTQ)	0	0	2	1	0	0	0
From Outside of Province	0	0	1	0	0	0	0
From Outside of Canada	0	0	0	0	0	0	0
External Scholarship/Fellowship	2	0	2	2	2	1	0
Internal Scholarship/Fellowship	6	0	4	2	2	1	0
First Year Tuition & Fees	\$5,527	\$5,525	\$5,527	\$5,527	\$5,527	\$5,527	\$5,527

PROGRAMME GRADUATES OVER PAST 7 YEARS - Clinical Developmental Neuropsychology

Academic Year/Cohort	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Graduated - Fall	2	1	0	1	0	0
Graduated - Spring	1	0	1	0	1	0
Total Graduates for Year (Automatically Calculated)	3	1	1	1	1	
Self-Identify as Aboriginal	0	0	0	0	0	0
Average Time to Completion in Years - Post BA-entry	7.7	7	7.2	8	7.6	0
Average Time to Completion in Years - Post MA-entry (or N/A)	4	0	0	0	0	0
Total Number of Graduates in Preceding 7 Years	3	4	5	5	5	0
Males in Preceding 7 Years					0	
Licensed in Preceding 7 Years					5	
Licensed as % Graduates (Automatically Calculated)					100%	

STUDENTS' ACTIVITIES OVER PAST 7 YEARS - Developmental Neuropsychology

Academic Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Total Full-Time Students	11	11	13	14		16	21
Total Part-Time Students	1	0	1	3		1	0
Total Number of Students (Automatic)	12	11	14	17		17	21
Males	0	0	0	2		4	2
Age Range				23-51		23-51	23-52
Self-Identify as Diverse (ie, minority, disability, LGBTQ)				7		5	5
Co/Authors of Papers at Professional/Scientific Meetings	9	9	9	15		13	14
Co/Authors of Articles in Referred Journals	7	9	10	13		10	9
Members/Affiliates in Professional/ Scientific Societies	9	8	9	12		13	14
Teaching Assistantship	9	8	12	13		16	16
Research Assistantship	3	3	6	4		7	14
External Scholarship/Fellowship	6	6	10	9		12	9
Internal Scholarship/Fellowship	2	5	5	4		7	10
Worked more than 20 Hours/week	0	0	0	0		0	0
Withdrew from Programme						0	1

Core Faculty

The Core Faculty of the Clinical Neuropsychology Stream are all registered psychologists with specialty training in neuropsychology or pediatric neuropsychology. They are also members of the Clinical or the Clinical Developmental areas of Psychology.

Dr. Mary Desrocher

Associate Professor (Clinical Developmental)

- Normative development of spatial memory, autobiographical memory, social cognition, and executive functions in children and adolescents
- Memory function in children with Type 1 diabetes
- Social cognition and executive function in children with Fetal Alcohol Spectrum Disorders
- Memory, executive function, and social cognition in youth with seizure disorders
- Executive function and social cognition in children and youth with strokes

Dr. Walter Heinrichs

Professor (Clinical)

- Neural, symptomatic and functional correlates of preserved and impaired cognition in schizophrenia
- Development of practical cognition measures for neuropsychological patients
- History and theories of schizophrenia
- Quantitative research synthesis (meta-analysis)

Dr. Norman Park

Associate Professor (Clinical)

- Memory and other cognitive processes associated with performance of skilled everyday actions
- Different memory systems involved in learning and performing skilled actions with novel tools
- Cognitive rehabilitation
- Participants studied: Amnesic, Parkinson's disease, healthy undergraduates, and older individuals

Dr. Jill B. Rich

Associate Professor (Clinical)

- Primary research focus is on different aspects of memory processing (e.g. semantic memory, implicit memory, source memory, prospective memory) and cognition in healthy young individuals, normal aging, and mild cognitive impairment
- Clinical neuropsychological specialization in differential diagnosis of dementia

Dr. Shayna Rosenbaum

Professor (Clinical)

- Research program examines how different types of memory (primarily episodic and spatial) are represented in the brain, and how these types of memory relate to each other and to non-mnemonic abilities, such as decision-making
- Methods include combining sensitive behavioural paradigms with structural and functional MRI, and multivariate statistical analysis in healthy adults (young and older) and neurological populations (primarily with memory impairment due to hippocampal or frontal lobe damage)
- Development of real-world clinical measures to detect the basis of changes to memory when normal brain function is disrupted

Dr. Christine Till

Associate Professor (Clinical Developmental)

- Cognitive and behavioural phenotypes associated with demyelinating disease
- Structural and functional neuroimaging changes in youth with CNS dysfunction
- Longitudinal modeling of cognitive changes associated with brain insult
- Children's environmental health
- Cognitive rehabilitation

Dr. Gary Turner

Associate Professor (Clinical)

- Neural correlates of higher cognitive (i.e. executive control) functions in normal aging, brain injury and disease
- Neurorehabilitation interventions to enhance cognitive functioning in normal aging and neurological populations
- Integration of brain and behavioural measures in neuropsychological assessment
- Assessment of cognitive capacity in real-world settings

Dr. Magdalena Wojtowicz

Assistant Professor (Clinical Developmental)

- Cognitive dysfunction, neural functioning, and mechanisms of recovery in neurological disorders
- Mild traumatic brain injury and sport-related concussion across the lifespan
- Factors influencing sport participation in youth
- Athlete-related research (i.e., performance, biopsychosocial outcomes of sport)

Clinical Neuropsychology Stream Core Faculty



Pictured above; Top row left to right: Magdalena Wojtowicz, Christine Till, Norm Park, Walter Heinrichs. Second row left to right: Shayna Rosenbaum, Mary Desrocher, Jill Rich, Gary Turner.

The Clinical Neuropsychology faculty bring connections to a broader community of researchers and clinicians who contribute expertise that is invaluable to the students of our stream.

Students supervised by Affiliate Faculty from the Clinical and Clinical Developmental Psychology programs may also take part in the Clinical Neuropsychology Stream. Current Affiliate Faculty include:

Dr. Jim Bebko {Clinical Developmental}

Dr. Adrienne Perry {Clinical Developmental}

Dr. Rebecca Pillai-Riddell {Clinical Developmental}

Dr. Maggie Toplak {Clinical Developmental}

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