

**Faculty of Health
Department of Psychology
PSYC 4080 6.0 A: NEUROPSYCHOLOGY OF ABNORMAL BEHAVIOUR
Wednesday/8:30-11:20am/ Online via Zoom
Fall & Winter 2021-2022**

This course will be delivered synchronously via Zoom. All lectures, class activities, group discussions, and quizzes will take place online during the scheduled course hours. It is expected that students will attend all classes and actively participate in activities and discussions.

Instructor Information

Instructor: Kristina Gicas, Ph.D., C.Psych.

Email: kgicas@yorku.ca

Office Hours: Available by appointment, upon request. Office hours can be used to clarify course-related questions, connect on ideas, ask questions about graduate school, find support for managing the course, and/or request links to other university resources.

Course Prerequisite(s): Course prerequisites are strictly enforced

- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C.
- HH/PSYC 2021 3.00 (Statistical Methods I) or HH/PSYC 2020 6.00 (Statistical Methods I and II)
- HH/PSYC 2030 3.00 (Introduction to Research Methods) or substitutes
- HH/PSYC 2240 3.00 (Biological Basis of Behaviour)
- HH/PSYC 3140 3.00 (Abnormal Psychology)
- Students must be in an Honours program in Psychology and have completed at least 84 credits

Course Credit Exclusions

Please refer to [York Courses Website](#) for a listing of any course credit exclusions.

Course website: [eClass](#)

All course materials will be available on the course eClass site, unless otherwise indicated by the instructor. The site will be your central access point for course materials.

Course Description

This is a seminar-style course that provides an advanced introduction to the study of brain-behaviour relationships. The overarching objective of this course is to provide students with a survey of major clinical neuropsychological disorders that impact attention, memory, language, executive functions, processing speed, visual-spatial abilities, and motor functions. Students can expect to learn: i) how disrupted neuroanatomy and neurophysiology relate to specific patterns of cognitive, emotional, and other behavioural features; ii) basic approaches and issues related to evaluation of various neuropsychological disorders; iii) neuropsychological

approaches to treatment of major disorders; iv) current issues and trends in the broader field of clinical neuropsychology; and v) multicultural and diversity-related considerations in clinical neuropsychology. Readings for this course will be drawn from various sources and combine classical neuropsychological theories with cutting-edge research in clinical neuroscience.

Program Learning Outcomes

Upon completion of this course, students should be able to:

1. Demonstrate in-depth knowledge in the neuropsychology of abnormal behaviour.
2. Critically evaluate, synthesize and resolve conflicting results in neuropsychology of abnormal behaviour.
3. Articulate trends in neuropsychology of abnormal behaviour.
4. Locate research articles and show critical thinking about research findings in neuropsychology of abnormal behaviour.
5. Express knowledge of neuropsychology of abnormal behaviour in written form.
6. Engage in evidence-based dialogue with course director and peers.
7. Demonstrate an ability to work with others, including those with diverse backgrounds and perspectives.
8. Discuss brain-behaviour issues from a diversity-centred approach.

Commitment to Intersectionality

The course instructor acknowledges that every individual represents multiple sociocultural identities, driven by systems of privilege and oppression, that intersect to uniquely shape one's world view. The instructor is committed to creating a safe, respectful, and inclusive learning environment that seeks to minimize systemic forces of oppression, including but not limited to classism, racism, ableism, and transphobia. All individuals participating in this course are invited to join in this commitment to help foster mutual respect within a diversity-oriented learning community.

Required Text

All assigned readings will be available online through the York University library or as documents posted in eClass. Assigned readings will be supplemented with videos, internet resources, podcasts and/or discussions as deemed relevant by the instructor. It is recommended that you download an electronic version of the following textbook as there will be several chapters assigned from this book and it can be additionally used as supplementary resource (optional readings from this text are indicated on the *Course Schedule* below.

- *The Little Black Book of Neuropsychology: A Syndrome-Based Approach* (2011). M. R. Schoenberg & J. G. Scott.

Course Requirements and Assessment:

Assessment	Date of Evaluation (if known)	Weighting
Attendance & participation	September 15th – April 6th	10%
Neuroanatomy and methodology quiz	September 29th	15%
Critical reflections	October 6th – March 2nd	15%
Seminar leader	October 6th – March 2nd	20%
Gimme 5 infographic presentation	March 9th – March 23rd	10%
Written grant proposal	April 6th (confirm topic by Feb 9th)	30%
Total		100%

Description of Assignments

Attendance and participation (10%). Due to the heavy discussion-based component of this course, attendance at all scheduled classes is mandatory. Absences will only be excused in the case of extenuating circumstances with appropriate documentation. Students are expected to actively engage in discussions and in-class activities each week. The grade will be based on attendance in class AND the general quality of contributions. **Purpose:** To become co-creators of new knowledge through active participation in evidence-based dialogue with peers and the instructor.

Neuroanatomy and methodology quiz (15%). Students will be quizzed on neuroanatomy and methods in neuropsychology based on course content covered in Weeks 2 and 3. The quiz will take place during scheduled class time and it will be a closed-book quiz. The format will be multiple choice and short answer questions. **Purpose:** To demonstrate foundational knowledge in (1) structural neuroanatomy and (2) the methods used to assess neuroanatomical functions.

Critical reflections (10 in total; 15%). Students will be required to complete a worksheet based on an assigned reading for the week. The worksheet will require students to critically appraise and reflect upon the reading and respond to a given set of prompts/questions. Students must post their worksheet responses in the weekly discussion forum on eClass no later than 9pm on the Tuesday evening prior to class. Worksheet responses will be evaluated on the basis of completeness, thoughtfulness, and degree of critical analysis. Students are strongly encouraged to post their responses early and review the responses by their peers prior to coming to class. Students should use their critical reflections as a way to prepare to actively engage in class discussions and activities. There will be a total of 14 critical reflections assigned throughout the year (see Course Schedule below) and students must complete 10 of 14 critical reflections to fulfill requirements for this component of the course. Students may complete any 10 critical reflection worksheets of their choosing. **Purpose:** To develop critical thinking skills as it applies to evaluating scientific literature and to stimulate class discussions.

Seminar leader (20%). Students will be required to take the lead for a portion of one of the class seminars, covering a topic related to the content covered that week (see *Course Schedule* below for weekly topics). The presentation and discussion will focus on a specific question

related to the content being covered that week; recommendations are provided below (see *Seminar Topic Ideas*). Students may choose a focus that is not included on the list, but this must be pre-approved by the course instructor. With a specific question in mind, students will review the existing literature to determine how researchers have addressed this question (what are the key studies and what is known), the current state of the evidence (methodological and conceptual limitations of the evidence, gaps in the literature), and implications for future research. Students MUST confirm their question/topic with the instructor no later than one week in advance of their scheduled presentation.

Students will have 30 minutes total to lead the seminar (~15-20 minutes for an oral presentation, ~10-15 minutes for discussion and/or class learning activity). Students will prepare a power point presentation for the oral presentation component and can structure the discussion/activity component in any way they choose. Students will be evaluated on the content and clarity of their slides, oral presentation skills, as well as creativity and relevance of the discussion/activity component. **Purpose:** To demonstrate ability to synthesize and critically appraise neuropsychological literature and to effectively communicate knowledge of neuropsychology using active and passive instructional strategies.

Written grant proposal (30%). Students will work in pairs to conceptualize a research proposal that addresses a question about brain-behaviour relationships related to one of the neurocognitive disorders covered in class. The research topic and question must be approved by the instructor in advance of drafting the proposal (no later than February 9th, worth 1% of overall grant proposal grade). The research proposal will follow the format of a typical funding application that students would submit at the graduate level, including a background section to support the research question, a clear hypothesis, a methods section, and anticipated outcomes. Students will be provided with details on how to structure the proposal in early January. **Purpose:** To develop basic research design knowledge in neuropsychology, including conceptual and methodological approaches; to demonstrate ability to effectively communicate neuropsychological knowledge in written form; and to gain experience working in a collaborative role with peers.

GIMME-5 infographic presentation (10%). Students working in pairs on the grant proposal will create an infographic that communicates their general proposal idea and study design. Student pairs will have 5 minutes total to present their infographic to the class. Students will be marked on the clarity and organization of their infographic, as well as their ability to orally communicate their ideas in a concise yet engaging way that is accessible to a lay audience. An additional 5 minutes will be reserved for questions and students are expected to use the feedback they receive from their peers to refine their proposal. Students who are observing presentations are expected to be engaged and actively participate in providing peer feedback. In early January, students will sign up for presentation time slots scheduled in March. **Purpose:** To demonstrate ability to effectively communicate neuropsychological concepts to a general lay audience in written/visual and oral formats.

Class Format and Attendance Policy

Weekly attendance is mandatory. All students are expected to attend lectures and actively participate in course activities and group discussions via Zoom during specified course hours (Wednesdays 8:30am-11:20am EST). Attendance will be documented based on the list of students that are signed into each Zoom session for the full class. Absences will be excused based on extenuating circumstances with appropriate documentation. All classes will be recorded (audio and video) and posted to the eClass website.

Grading as per Senate Policy

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Assignments and tests* will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 89, B+ = 75 to 79, etc.)

For a full description of York grading system see the York University Undergraduate Calendar – [Grading Scheme for 2021-22](#)

Missed Quiz/Late Assignment

For any missed quiz or late assignment, students MUST do the following two tasks within 48 hours of the original deadline or it will result in a grade of zero for the missed quiz or late assignment.

1. Complete the following online form which will be received and reviewed in the Psychology undergraduate office. At this time, due to COVID-19 an Attending Physician's Statement (APS) is not required, however, a reason for missing an evaluated component in the course must be provided. [HH PSYC: Missed Tests/Exams Form](#)
2. Promptly notify the course instructor of a missed quiz or late assignment and arrange for an alternative date to complete the work if they wish to receive marks for those course components. The date will be mutually agreed upon by the course instructor and student. Make-up quizzes will be in the same format as the original quiz with entirely alternate content. Late assignments without a legitimate reason for missing the deadline will be subject to a late penalty of 10% per day from the original deadline (or from an agreed upon alternative deadline, if applicable).

Examples of legitimate reasons for missing a quiz or assignment deadline may include physical or mental illness that emerged suddenly or unexpectedly and is severe enough to prevent a student from attending the Zoom lecture online, or a family emergency that prevents attendance. This does not cover all possible legitimate scenarios. Reasons for missed quizzes or deadlines will be evaluated on a case-by-case basis.

Students are strongly encouraged to contact the instructor in advance if they foresee any barriers to, or have concerns about, completing the required course components.

Add/Drop Deadlines

For a list of all important dates please refer to: [Fall/Winter 2021-22 Important Dates](#)

	Fall (Term F)	Year (Term Y)	Winter (Term W)
Last date to add a course without permission of instructor (also see Financial Deadlines)	Sept. 21	Sept. 21	Jan. 23
Last date to add a course with permission of instructor (also see Financial Deadlines)	Oct. 5	Oct. 26	Feb. 7
Drop deadline: Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 12	Feb. 11	18-Mar
Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – see note below)	Nov. 13 - Dec. 7	Feb. 12 - April 10	March 19 - April 10

Add and Drop Deadline Information

There are deadlines for adding and dropping courses, both academic and financial. Since, for the most part, the dates are **different**, be sure to read the information carefully so that you understand the differences between the sessional dates below and the [Refund Tables](#).

You are strongly advised to pay close attention to the "Last date to enrol without permission of course instructor" deadlines. These deadlines represent the last date students have unrestricted access to the registration and enrolment system.

After that date, you must contact the professor/department offering the course to arrange permission.

You can drop courses using the registration and enrolment system up until the last date to drop a course without receiving a grade (drop deadline).

You may [withdraw from a course](#) using the registration and enrolment system after the drop deadline until the last day of class for the term associated with the course. When you withdraw from a course, the course remains on your transcript without a grade and is notated as 'W'. The withdrawal will not affect your grade point average or count towards the credits required for your degree.

Electronic Device Policy

This course will be delivered in an online format and therefore electronic devices (e.g., tablets, laptops) are permitted during class time for course-related purposes. It is expected that you would complete tests/exams in a manner that does not require consulting an unauthorised source during an examination.

Academic Integrity for Students

York University takes academic integrity very seriously; please familiarize yourself with [Information about the Senate Policy on Academic Honesty](#).

It is recommended that you review Academic Integrity by completing the [Academic Integrity Tutorial](#) and [Academic Honesty Quiz](#)

Test Banks

The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the Senate Policy on Academic Honesty. In particular, buying and attempting to sell banks of test questions and/or answers may be considered as “Cheating in an attempt to gain an improper advantage in an academic evaluation” (article 2.1.1 from the Senate Policy) and/or “encouraging, enabling or causing others” (article 2.1.10 from the Senate Policy) to cheat.

Academic Accommodation for Students with Disabilities

While all individuals are expected to satisfy the requirements of their program of study and to aspire to do so at a level of excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to do so. The university encourages students with disabilities to register with Student Accessibility Services (SAS) to discuss their accommodation needs as early as possible in the term to establish the recommended academic accommodations that will be communicated to Course Directors as necessary. **Please let the instructor know as early as possible in the term if you anticipate requiring academic accommodation so that your accommodation needs within the context of this course can be discussed.**

<https://accessibility.students.yorku.ca/>

Excerpt from Senate Policy on Academic Accommodation for Students with Disabilities

1. Pursuant to its commitment to sustaining an inclusive, equitable community in which all members are treated with respect and dignity, and consistent with applicable accessibility legislation, York University shall make reasonable and appropriate accommodations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs. This policy aims to eliminate systemic barriers to participation in academic activities by students with disabilities.

All students are expected to satisfy the essential learning outcomes of courses.

Accommodations shall be consistent with, support and preserve the academic integrity of the curriculum and the academic standards of courses and programs. For further information please refer to: [York University Academic Accommodation for Students with Disabilities Policy](#).

Course Materials Copyright Information

These course materials are designed for use as part of the PSYC 4080 course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.

Copying this material for distribution (e.g. uploading material to a commercial third-party website) may lead to a violation of Copyright law. [Intellectual Property Rights Statement](#).

Course Schedule

This schedule is a tentative guideline and is subject to change by the instructor. Students are expected to complete assigned readings BEFORE the material is covered in class.

Fall 2021 Semester		
Week/Date	Topic(s)	Required Readings
Week 1/ Sept 8 th	<ul style="list-style-type: none"> Course overview Introduction to clinical neuropsychology 	None.
Week 2/ Sept 15 th	<ul style="list-style-type: none"> Neuroanatomy Tutorial Part I Neuroimaging 	Bigler, E. (2015). Structural Image Analysis of the Brain in Neuropsychology Using Magnetic Resonance Imaging Techniques. <i>Neuropsychology Review</i> , 25, 224-249. OPTIONAL: Ch. 3 Little Black Book
Week 3/Sept 22 nd	<ul style="list-style-type: none"> Neuroanatomy Tutorial Part II Basic assessment approaches 	Casaletto, K. & Heaton, R. (2017). Neuropsychological Assessment: Past and Future. <i>JINS</i> , 23, 778-790.
Week 4/Sept 29 th	*Neuroanatomy/methodology quiz* <ul style="list-style-type: none"> Class activity 	None.
Week 5/Oct 6 th	*Critical reflection #1 due* <ul style="list-style-type: none"> Neurodevelopmental disorders and neurodiversity Seminar leader 1. <i>Silina Boshmaf</i> Seminar leader 2. <i>Rose Mohammad Hossini</i>	Antshel, K. M. & Russo, N. (2019). Autism spectrum disorders and ADHD: Overlapping phenomenology, diagnostic issues, and treatment considerations. <i>Current Psychiatry Reports</i> , 21: 34. Sonuga-Barke, E. & Thapa, A. (2021). The neurodiversity concept: is it helpful for clinicians and scientists? <i>Lancet Psychiatry</i> , 8, 559-561.
Week 6/Oct 13 th	**Reading Week – Classes Cancelled**	
Week 7/Oct 20 th	*Critical reflection #2 due* <ul style="list-style-type: none"> Aphasias/Apraxias/Agnosias Seminar leader 1. <i>Cristina Fabrizio</i> Seminar leader 2. <i>Paula Sampson</i>	(1) Ch.9 Little Black Book (pgs. 201-212) (2) Ch.12 Little Black Book (pgs. 267-279)
Week 8/Oct 27 th	*Critical reflection #3 due* <ul style="list-style-type: none"> Traumatic brain injury Seminar leader 1. <i>Tamiko Issacs</i> Seminar leader 2. <i>Linta Mubarika</i>	Silverberg et al. (2011). Etiology of the post-concussion syndrome: physiogenesis and psychogenesis revisited. <i>NeuroRehabilitation</i> , 29, 317-329. OPTIONAL: Ch. 21-25 Little Black Book
Week 9/Nov 3 rd	*Critical reflection #4 due* <ul style="list-style-type: none"> Cognitive aging Seminar leader 1. <i>Tunde Caceres</i> Seminar leader 2. <i>Stephanie Mestre</i>	Stern, Y. (2009). Cognitive reserve. <i>Neuropsychologia</i> , 47(10), 2015-2028.

Week 10/Nov 10th	<p>*Critical reflection #5 due*</p> <ul style="list-style-type: none"> • Dementia <p>Seminar leader 1. <i>Samaha Begum</i></p> <p>Seminar leader 2. <i>Ilaria De Camillis</i></p>	<p>Kapasi, A. et al. (2017). Impact of multiple pathologies on the threshold for clinically overt dementia. <i>Acta Neuropathologica</i>, 134, 171-186.</p> <p>OPTIONAL: Ch. 14 Little Black Book</p>
Week 11/Nov 17th	<p>*Critical reflection #6 due*</p> <ul style="list-style-type: none"> • Parkinson's disease and Lewy body disease <p>Seminar leader 1. <i>Marley Leslie</i></p> <p>Seminar leader 2. <i>Ugne Rakauskaitė</i></p>	<p>Aldridge, G. M. et al. (2018). Parkinson's disease dementia and dementia with lewy bodies have similar neuropsychological profiles. <i>Frontiers in Neurology</i>, 9: 123.</p> <p>OPTIONAL: Ch. 19 Little Black Book</p>
Week 12/ Nov 24th	<p>*Critical reflection #7 due*</p> <ul style="list-style-type: none"> • Stroke and cerebrovascular disease <p>Seminar leader 1. <i>Azumi Suzuki</i></p> <p>Seminar leader 2. <i>Janay Semple</i></p>	<p>Telgte, A. ter et al. (2018). Cerebral small vessel disease: from a focal to a global perspective. <i>Nature Reviews Neurology</i>, 14(7), 387-398.</p> <p>OPTIONAL: Ch. 13 Little Black Book</p>
Week 13/Dec 1st	<p>*Critical reflection #8 due*</p> <ul style="list-style-type: none"> • Multiple sclerosis <p>Seminar leader 1. <i>Dusan Prelo</i></p> <p>Seminar leader 2. <i>Farmehr Asefzadeh</i></p> <p>Seminar leader 3. <i>Sohina Dhillon</i></p>	<p>Santangelo, G. et al. (2019). Cognitive reserve and neuropsychological performance in multiple sclerosis: a meta-analysis. <i>Neuropsychology</i>, 33(3), 379-390.</p> <p>OPTIONAL: Ch. 20 Little Black Book</p>
Winter 2021 Semester		
Week 1/Jan 12th	<ul style="list-style-type: none"> • Re-orientation to course • Developing a research question and proposal • Librarian presentation 	<p>Ch.7 APA Handbook. Developing testable and important research questions.</p>
Week 2/Jan 19th	<p>*Critical reflection #9 due*</p> <ul style="list-style-type: none"> • Epilepsy <p>Seminar leader 1. <i>Ashley Dasilva</i></p> <p>Seminar leader 2. <i>Zaheia Nasr</i></p>	<p>Stafstrom, C. E. & Carmant, L. (2015). Seizures and epilepsy: an overview for neuroscientists. <i>Cold Spring Harbor Perspectives in Medicine</i>, 5, a022426.</p> <p>OPTIONAL: Ch. 20 Little Black Book</p>
Week 3/Jan 26th	<p>*Critical reflection #10 due*</p> <ul style="list-style-type: none"> • Substance use disorders <p>Seminar leader 1. <i>Shams Karajah</i></p> <p>Seminar leader 2. <i>Shelby Prokop-Millar</i></p>	<p>Cadet, J. & Bisagno, V. (2016). Neuropsychological consequences of chronic drug use: relevance to treatment approaches. <i>Frontiers in Psychiatry</i>, 6.</p>
Week 4/Feb 2nd	<p>*Critical reflection #11 due*</p> <ul style="list-style-type: none"> • Special topic: The neuropsychology of homelessness 	<p>Gicas, K. et al. (2017). Structural brain markers as differentially associated with neurocognitive profiles in socially marginalized people with multimorbid illness. <i>Neuropsychology</i>, 31(1), 28-43.</p>

Week 5/Feb 9th	<p>*Critical reflection #12 due*</p> <p>*Last day to confirm grant proposal topic*</p> <ul style="list-style-type: none"> • Schizophrenia <p>Seminar leader 1. <i>Regina Slonimsky</i></p> <p>Seminar leader 2. <i>Najma Idrees</i></p> <p>Seminar leader 3. <i>Carly Hadfield</i></p>	Davis, J. et al. (2016). A review of vulnerability and risks for schizophrenia: beyond the two hit hypothesis. <i>Neuroscience and Biobehavioural Reviews</i> , 65, 185-194.
Week 6/Feb 16th	<p>*Critical reflection #13 due*</p> <ul style="list-style-type: none"> • Neuropsychology of everyday functioning <p>Seminar leader 1. <i>Seth Petel</i></p> <p>Seminar leader 2. <i>Ana Acancini</i></p> <p>Seminar leader 3. <i>Isabelle Ferreira</i></p>	Morgan, E. & Heaton, R. (2009). Neuropsychology in Relation to Everyday Functioning. <i>In Neuropsychological Assessment of Neuropsychiatric and Neuromedical Disorders</i> . (chapter posted in eClass)
Week 7/Feb 23rd	**Reading Week – Classes Cancelled**	
Week 8/Mar 2nd	<p>*Critical reflection #14 due*</p> <ul style="list-style-type: none"> • Interventions in neuropsychology <p>Seminar leader 1. <i>Alina Elahie</i></p> <p>Seminar leader 2. <i>Arshvir Goraya</i></p> <p>Seminar leader 3. <i>Chenyue Zhang</i></p>	Kivipelto et al. (2018). Lifestyle interventions to prevent cognitive impairment, dementia, and Alzheimer disease. <i>Nature Reviews Neurology</i> , 14, 653-666.
Week 9/Mar 9th	<ul style="list-style-type: none"> • Discussion of sample grants <p>*GIMME-5 presentations*</p> <p>1. 3.</p> <p>2. 4.</p>	None.
Week 10/Mar 16th	<p>*GIMME-5 presentations*</p> <p>1. 4.</p> <p>2. 5.</p> <p>3. 6.</p>	None.
Week 11/Mar 23rd	<p>*GIMME-5 presentations*</p> <p>1. 4.</p> <p>2. 5.</p> <p>3. 6.</p>	None.
Week 12/Mar 30th	<ul style="list-style-type: none"> • Class time reserved for grant writing • Open question/discussion period 	None.
Week 13/Apr 6th	<p>*Grant proposal due*</p> <ul style="list-style-type: none"> • Course wrap-up • Current trends in neuropsychology 	None.

Suggested Seminar Topic Ideas

Neurodevelopmental disorders and neurodiversity	<ul style="list-style-type: none"> • How stimulant medications works in ADHD • Theories/models of executive dysfunction in ADHD • Mirror neurons in autism • Social cognition in autism
Aphasias/Apraxias/Agnosias	<ul style="list-style-type: none"> • Novel interventions for aphasia/apraxias/agnosias • Primary progressive aphasia • Bilingualism and aphasia • Prosopagnosia and what it teaches us about facial processing
Traumatic brain injury	<ul style="list-style-type: none"> • Link between cognitive decline/dementia in moderate/severe TBI • Chronic traumatic encephalopathy (CTE) in athletes • Predictors of recovery from concussion • Biomarkers in TBI
Cognitive aging	<ul style="list-style-type: none"> • Patterns of brain and/or cognitive changes across the lifespan • Predictors of healthy/successful aging • Theoretical models of cognitive aging • Decision-making or social cognition in aging
Dementia	<ul style="list-style-type: none"> • Risk factors and outcomes in vascular dementia • Link between depression and dementia • Biomarkers in Alzheimer's disease • Mild cognitive impairment – what is it? • Frontotemporal dementia
Parkinson's disease and Lewy body disease	<ul style="list-style-type: none"> • Role of gut-brain axis in Parkinson's disease • Patterns of cognitive and motor change with Parkinson's dementia • Cognitive outcomes from deep brain stimulation in Parkinson's disease • Effects of medication on regulating the dopaminergic system and compulsivity
Stroke and cerebrovascular disease	<ul style="list-style-type: none"> • Neglect syndromes • Link between depression and stroke • Impact of cerebral small vessel disease • Predictors of recovery from stroke
Multiple sclerosis	<ul style="list-style-type: none"> • Role of the cerebellum in MS • Clinical course and cognition in pediatric MS • Role of viral infection in MS
Epilepsy	<ul style="list-style-type: none"> • Surgical outcomes in epilepsy • Cognition and psychosocial functioning in childhood epilepsy • Methods for examining language lateralization in epilepsy patients • Pharmacological and non-pharmacological treatments in epilepsy
Substance use disorders	<ul style="list-style-type: none"> • Effects of opioid use and overdoses • Korsakoff's syndrome in alcohol use disorder • Models of addiction (e.g., Addictions Neuroclinical Assessment) • Predictors of relapse in addicted populations • Impacts of polysubstance use
Schizophrenia	<ul style="list-style-type: none"> • Link between substance-induced psychosis and schizophrenia • Role of cannabis use in psychotic disorders • Cognitive interventions for psychosis

Neuropsychology of everyday functioning	<ul style="list-style-type: none"> • Novel measures of real-world functioning • Predictors of driving ability in clinical populations • Cognition and health care service utilization • Relationship between cognition, quality of life, and community functioning in healthy or clinical populations
Interventions in neuropsychology	<ul style="list-style-type: none"> • Effects of computerized cognitive training in healthy persons – does it really work? • Effects of physical exercise on brain and/or cognition • Virtual reality interventions to improve cognition • Impact of the MIND diet on cognitive outcomes

Updated September 15, 2021