COURSE DESCRIPTION

Lectures will focus on current theories on the neurobiology of psychiatric and neurological disorders (e.g.,

ORAL PRESENTATIONS

Each student will give one classroom presentation on a recently published article. (Presentation dates and articles are listed under the "Student Presentations" sections of the course schedule below). The presentations should be in Power Point (or similar) format and approximately 20-25 minutes in length (MAX = 25 min; you can't go over this limit or it can reduce the time available to the next presenter or, if you are the last presenter of the day you won't have time to finish). You should include a summary of the relevant background information, specific purpose of the study, methods (with a primary focus on behavioral methods) and results of the article. You should also discuss the relevance of the article to our understanding of psychopathology.

PRESS RELEASE: SHORT WRITTEN REPORT

The short, written report will be based on the paper used for your oral presentation. It should be written using the format of a media news release (maximum length is 2 pages). Your press release is due one week prior to your oral presentation and should be sent to me as an e-mail attachment. Press releases will be put on the PSYC 473 Web site as a means to prepare your fellow students for the oral presentation.

CLASS PARTICIPATION

1. **EVALUATION OF PRESS RELEASE.** All students are expected to read and provide a broad, informal critique of **each** press release (PR). Your evaluation should take the form of a short paragrapg24 12 -10c28.-1 TfET

referencing style; the referencing style does NOT have to be APA; use your favorite and be consistent). Your paper should illustrate how the research findings might further our understanding of the neurobiology of a given psychopathology.

The term paper is due by midnight, **April 5** (1% deduction for every day a paper is late). Please email your paper to me using the following file name: YourLastName_TermPaper_Psyc473.doc

Examples of term paper topics.

- Current support for the dopamine theory of schizophrenia
- GABA involvement in schizophrenia
- Glutamate hypothesis of schizophrenia
- Neurodevelopmental aspects of schizophrenia
- Neurodevelopmental aspects of autism
- Neurobiology of attention deficit disorder
- Impact of early life adversity of the development of neural systems that regulate stress reactivity
- Gene-environment interactions and psychopathology (e.g., affective disorders)
- Neural adaptations following long-term administration of antidepressant drugs
- Cytokines, the immune system and depression
- Animal models of drug addiction, anxiety, schizophrenia, depression, post-traumatic stress disorder,

Statement on Academic Integrity

The following statement on academic integrity builds on a definition approved by Senate and is designed to make students aware of the importance of the concept and the potential consequences of departing from the core values of academic integrity. It is highly recommended that this statement be included on all course syllabi. Instructors may also consider including this statement with each assignment.

Academic Integrity is constituted by the six core fundamental values of honesty, trust, fairness, respect, responsibility and courage (see www.academicintegrity.org). These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities http://www.queensu.ca/secretariat/policies/senate/report-principles-and-priorities).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1 http://www.queensu.ca/artsci/academic-calendars/regulations/academic-regulations/regulation-1), on thcm BT 4cm BT 4cm49 (

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DATE	SECTION TOPIC STRESS, ANXIETY AND DEPRESSION	
Mon. Jan. 28	LECTURE: Neurobiology of affective disorders	
DATE/ PRESENTERS	**STUDENT PRESENTATIONS**	**READERS**
Thurs. Jan 31	Heshmati et al,, (2018) Cell-type-specific role for nucleus accumbens neuroligin-2 in depression and stress susceptibility. *PNAS 115* (5) 1111-1116. Wang et al., (2016) Depression-like behavior in rat: Involvement of galanin receptor subtype 1 in the ventral periaqueductal gray. *PNAS, 113* (32) E4726-E4735.	
Mon. Feb 4	Hodes, et al., (2014) Individual differences in the peripheral immune system promote resilience versus susceptibility to social stress. 16136–16141. Kleinridders, et al., (2015) Insulin resistance in brain alters dopamine turnover and causes behavioral disorders. *PNAS, 112,* 3463-3468.	
Thurs. Feb7	Wang et al., (2015) Norbin ablation results in defective adul4.6 (i) -Q q 0.242 589.92 cm BT 49 Tm /TT321.7 ,6-10.T	

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DATE	SECTION TOPIC - NEUROBIOLOGY OF SCHIZOPHRENIA	

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PSYC 473 - NEUROBIOLOGY OF PSYCHIATRIC DISORDERS - 2019

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DATE	SECTION TOPIC - NEUROBIOLOGY OF CHILDHOOD PSYCHIATRIC DISORDERS	
Thurs. March 7	LECTURE: Neurobiology of childhood psychiatric disorders	
DATE/ PRESENTERS	STUDENT PRESENTATIONS	READERS
Mon. March 11	Schaafsma, et al., (2017) Sex-specific gene-environment interactions underlying ASD-like behaviors. PNAS, 114, 1383-1388. Bhattacherjee, et al., (2017) Neuronal cytoskeletal gene	

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