

University of Pittsburgh

School of Medicine

# Mind-Body Seminar Series Mini-Elective 2019-2020

Course Dates: October 2019—April 2020

Noon-1pm

Class Year: MS1

<u>Course Director:</u> Jason Rosenstock, MD

Director, Medical Student Education

Department of Psychiatry

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### **Description:**

This seminar series focuses on psychosomatic medicine, the interconnections between "mind" and "body" that affect the care of patients in various medical specialties. Scheduled in conjunction with other first-year medical school courses, this mini-elective highlights behavioral and psychiatric aspects of core scientific areas such as neuroscience, genetics, and immunology. All of these disciplines relate to behavioral health, and in this series we will explore those connections.

Each seminar will be led by psychiatry residents and faculty who will present relevant topics informally and invite discussion about clinical challenges in mind-body medicine, particularly how what we know and learn about the basic science of illness translates into the assessment and management of real patients. This elective builds on first-year courses (especially Behavioral Medicine and Introduction to Psychiatry) and better prepares students for clinical encounters in third-year.

Readings will be suggested but not required; handouts or other materials may be distributed at sessions.

This mini-elective will be open to all students, not exclusive to those who register.

#### Objectives:

- Show medical students how the basic science of medicine can inform the understanding and management of mental health conditions
- Help medical students appreciate the relevance and value of psychiatry in medicine

#### Requirements:

- Attend at least 3 out of 5 scheduled course sessions
- Participate actively in class discussions
- Complete course evaluations

Office of Medical Education

www.omed.pitt.edu

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# COURSE OUTLINE: MS-I Mind-Body Seminar Series

Course Director: Jason Rosenstock, MD Associate Professor of Psychiatry Director, Medical Student Education

Western Psychiatric Institute and Clinic

### **Participating Faculty:**

Lauren Andrews, MD

Co-Chair, Mind Body Seminar Series PGY-2 Resident, Child Psychiatry

Sai Folmsbee, MD

Co-Chair, Mind Body Seminar Series PGY-2 Resident, General Adult Psychiatry

#### Location:

All sessions Scaife Hall from 12:00-12:55pm

All sessions are in Scaife Hall, Small Group Rooms and Alexis Harris (coordinator of minielective) will send out exact location confirmation closer to the date of session.

# **Dates & Corresponding Courses:**

Tuesday, October 22<sup>nd</sup> 2019 - Genetics

Tuesday, November 5th 2019 - Fuel Metabolism

Tuesday, February 4th 2020 - Immunology

Tuesday, March 3<sup>rd</sup> 2020 - Microbiology

Tuesday, April 28th 2020 - Neuroscience

Sample Session Topics:

#### **Genetics:**

The genetics of psychiatric disorders are complex; illnesses like schizophrenia and major depression have multifactorial etiologies. However, genetic factors have been linked to a range of illnesses, from autism to Alzheimer's. In this session, we'll review what genetics can tell us (and perhaps what it cannot) about the cause of mental illness.

# Suggested readings:

Eapen V. Genetic basis of autism: is there a way forward? Curr Opin Psychiatry 2011;24:226-36.

Glorioso C, Sibille E. Between destiny and disease: genetics and molecular pathways of human central nervous system aging. *Prog Neurobiol*. 2011;93:165-81.

#### Immunology:

Stress causes an immune response, which affects health in various ways. Inflammation contributes to cardiac risk in depressed individuals. People who have autoimmune-related thyroid problems are more likely to suffer from depression and anxiety. What exactly are the connections between the immune system and the central nervous system, and how do we think about these connections when assessing and managing patients with behavioral health or other conditions?

# Immunology continued

## Suggested readings:

Raison CL, Cowles MK, Miller AH. Immune system and central nervous system interactins. Chapter 1.13 in *Kaplan and Sadock's Comprehensive Textbook of Psychiatry* 9<sup>th</sup> edition. Eds. BJ Sadock, VA Sadock, P Ruiz (Lippincott: Philadelphia, 2009). Focus on the section entitled, "Relevance of immune-CNS interactions to psychiatric disorders."

http://www.hsls.pitt.edu/resources/books/ebooks?s=Psychiatry

# **Microbiology:**

Recent evidence has suggested that brain disorders like schizophrenia may have an infectious etiology, reflecting a gene/environment interaction. What organisms are involved, and how do they affect the brain? Numerous other infectious diseases have fascinating neuropsychiatric sequelae: chronic Lyme Disease sufferers who develop chronic fatigue, kids status post streptococcal infection who develop obsessive-compulsive disorder, prion disease and dementias, and of course the ravages of tertiary syphilis. Or, looked out from another perspective, how can behavioral health interventions help reduce the spread of HIV? Join us for this discussion of bugs and brains.

#### Suggested readings:

Kim SW, Grant JE et al. A possible association of recurrent streptococcal infections and acute onset of obsessive-compulsive disorder. J Neuropsychiatry Clin Neurosci. 2004; 16:252-60. <a href="http://neuro.psychiatryonline.org/cgi/content/full/16/3/252">http://neuro.psychiatryonline.org/cgi/content/full/16/3/252</a>

Brown AS, Derkits EJ. Prenatal infection and schizophrenia: a review of epidemiologic and translational studies. Am J Psychiatry. 2010; 167:261-80. <a href="http://ajp.psychiatryonline.org/cgi/content/full/167/3/261">http://ajp.psychiatryonline.org/cgi/content/full/167/3/261</a>

# **Neuroscience:**

Although both disciplines involve different ways or considering the brain and nervous system illness, neurology and psychiatry are closely related. Mind-body issues in neuroscience include epilepsy and personality type, neuropsychiatric sequelae of movement disorders, and neuro-oncology (e.g., "of course they're depressed—wouldn't you be?").

#### Suggested readings:

Allet JL and Allet RE (2006). Somatoform disorders in neurological practice. *Curr Opin Psychiatry* 19:413-20.

Garcia-Morales I, de la Pena M, and Kanner AM (2008). Psychiatric comorbidities in epilepsy: identification and treatment. *Neurologist* 14(Suppl1):S15-25.

Geschwind, N (2009). Personality changes in temporal lobe epilepsy. Epilepsy & Behavior 15:425-433.