Neuroscience and psychoanalysis in theory and practice. What scientific evidence exists to support the techniques and assumptions of psychoanalysis? How has psychoanalysis affected neuroscience? How does the brain host the mind? This 10 week course will ask these and other questions through a study of both classic and contemporary research.

<u>Textbook: Cognitive Neuroscience: Biology of the Mind, 4th Edition (Gazzaniga, Ivry, Mangun).</u> <u>Textbook Copyright Disclaimer.</u>

The course runs for 10 weeks from 7:15-8:30pm on the following dates:

- September 10: JB. **Psychoanalysis and Neuroscience: definitions and relationship.**Required reading: Broca, PP (1861): "Loss of Speech, Chronic Softening and Partial Destruction of the Anterior Lobe of the Brain." Michl et al (2012) "Neurobiological underpinnings of shame and guilt: a pilot fMRI study."

 Optional reading: Szreter (2014), "The Prevalence of Syphilis in England and Wales on the Eve of the Great War: Re-visiting the Estimates of the Royal Commission on Veneral Diseases 1913-1916."
- September 17: JB. **Conscious and unconscious processes**. *Required reading*: Wood et al (1995). "The Cocktail Party Revisited: How frequent are attention shifts to one's name in an irrelevant auditory vhannel?" Libet (1985): "Unconcious cerebral initiative and the role of conscious will in voluntary action." *Recommended:* Grillner (2009). "Measured Motion: Searching for Simplicity in Spinal Locomotor Networks."
- September 24: JB. **Anxiety and Trauma.** *Required reading*: Kandel et al (2014). "The Molecular and Systems Biology of Memory." Pollak et al (2010). "Neurodevelopmental Effects of Early Deprivation in Post-Institutionalized Children." *Optional reading:* Makinodon et al (2012). "A Critical Period for Social Awareness -- Dependent oligodendrocyte maturation and myelination." Van der Kolk (2000), "Posttraumatic stress disorder and the nature of trauma." <u>Dialogues Clin Neurosci</u>. 2000 Mar; 2(1): 7–22.
- October 1: AG. **Attention & Memory**. *Required reading:* (p. 499-511): Erdelyi (2006). *Optional textbook reading:* Chapter 7 & Chapter 9.
- October 8: (Yom Kippur-No Classes)
- October 15: JB. **Freud and the Project of Free Speech.** Required reading: Freud (1891) Aphasia, excerpts. Freud (1905) Jokes and their Relation to the Unconscious, excerpts. Albin (2018) "Tourette syndrome: a disorder of the social decision-making network." Optional reading: Fridriksson et al (2016) "Revealing the dual streams of speech processing."

- October 22: AG. **Emotion, Action, & Motivation**. Required reading: Posner (2005). Optional textbook reading: Chapter 8, Chapter 10, & Chapter 12
- October 29: JB. *The Female Brain* and Other Narratives of Biological Determinism. *Required reading:* Brizendine (2006) *The Female Brain*, excerpts. Aurbach et al (2015) "Fibroblast growth factor 9 is a novel modulator of negative affect."
- November 5: JB. Conclusions and Remaining Questions, JB part of course. Required reading: TBA.
- November 12: AG. **Sensation & Object Perception**. *Required reading:* Raz (2007). *Optional textbook reading:* Chapter 5 & Chapter 6.
- November 19: AG. **Social Cognition**. *Required reading:* Andersen (2012) & Freud (1895). *Optional outside reading:* Freud (1895) Full Manuscript. *Optional textbook reading:* Chapter 11, Chapter 13, & Chapter 14.
- November 26 (Thanksgiving Break-No Classes)

September 10

September 17

September 24 ?? AG

October 1

October 8 (Yom Kippur-No Classes)

October 15

October 22

October 29 AG

November 5

November 12 AG

November 19

November 26 (Thanksgiving Break-No Classes)