

Autism Seminar

Course #101-1-53

Sundays 10-12

The semester will start with introductory lectures, which will be followed by weekly presentations of scientific papers by the students. The goal of the seminar is to expose the students to current biological, neuroscientific, and cognitive research regarding autism. Research topics will include genetics, animal models, anatomy, post-mortem studies, sensory function, motor function, and cognitive function with a strong emphasis on neuroimaging studies. The necessary methodological background will be covered when discussing each of these topics. Each student will present a scientific paper (30% of the final grade) and write a final paper, which will contain a proposal for future autism research (70% of the final grade).

Attendance in **80%** of the classes is obligatory.

Passing grade is 56.

Instructions for how to build a presentation for your scientific paper can be found [here](#).

Instructions for how to write your final paper can be found [here](#).

There are no scheduled office hours. If you want to speak with me please email me first.

List of classes

Lesson 1: Introduction to autism – [Powerpoint](#)

Lesson 2: Introduction to autism research – [Powerpoint](#)

Lesson 3: Genetics – Introduction to genetics ,[Pinto et. al. Nature 2010](#) ,[Oroak et. al. Nature 2012](#)

Lesson 4: Animal models - [Silverman et. al. Nat Rev Neuro 2010](#) ,[Yizhar et. al. Nature 2011](#)

Lesson 5: Face processing - [Rutishauser Neuron 2013](#) ,[Dalton Nat Neuro 2005](#)

Lesson 6: Anatomy & Post-mortem studies – [Courchesne Neuron 2007](#) ,[Haar et. al. Creb Cor 2014](#)

Lesson 7: White matter & Functional connectivity - [Wolff et. al. AmJPsych 2013](#) ,[Dinstein et. al. Neuron 2011](#)

Lesson 8: Biological motion & Eye fixation - [Klin et. al. Nature 2009](#) ,[Klin Nature 2013](#)

Lesson 9: Sensory & Motor systems - [Bonneh et. al. Frontiers 2011](#) ,[Dinstein et. al. Neuron 2012](#) ,[Larson et. al. Brain 2008](#)

Lesson 10: Mirror system - [Dinstein et. al. 2010](#) ,[Depreto et. al. 2006](#)

Lesson 11: Theory of mind & Central coherence - [Senju et. al. Science 2009](#) ,[Lombardo et. al. Neuroimage 2011](#) ,[Happe & Frith review 2006](#)

Lesson 12: Biological theories of autism - [Bourgeron Curr Opin Neurobio 2009](#) ,[Belmonte et. al. Mol Psych 2004](#)