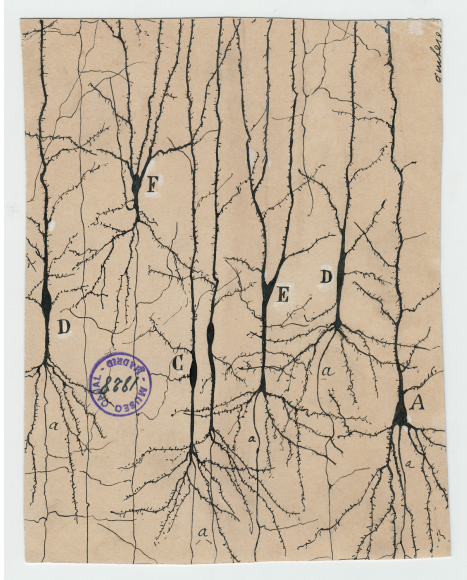


WEISMAN ART MUSEUM

Contact: Erin Lauderman, 612.625.9685, elauderm@umn.edu
 December 2016

The Beautiful Brain: The Drawings of Santiago Ramón y Cajal

January 28, 2017 through May 21, 2017



Santiago Ramón y Cajal, pyramidal neurons of the cerebral cortex, 1900, ink and pencil on paper. Courtesy of Instituto Cajal del Consejo Superior de Investigaciones

MINNEAPOLIS – The Weisman Art Museum at the University of Minnesota presents *The Beautiful Brain: The Drawings of Santiago Ramón y Cajal* (January 28, 2017 - May 21, 2017). The exhibition is the first to present and contextualize neuroscientist Santiago Ramón y Cajal’s drawings of the brain and brain cells. Considered the father of modern neuroscience, Cajal (1852-1934) attended an art academy in his early years and was an accomplished artist. He combined scientific and artistic skills to produce exceedingly detailed drawings to prove his theory that the brain is composed of individual cells rather than a single tangled web, which is the basis of neuroscience today. His theories were later proved through electron microscopy in the 1950s.

As a recipient of the Nobel Prize in Physiology or Medicine in 1906, neuroscientists consider Cajal as important to their discipline as Einstein is to physics. Cajal developed his view of the physical brain primarily by examining thin slices of the organ under a microscope. Though he studied dead tissues, Cajal constantly searched for new ways to explain movement, life, and energy. He even utilized stereoscopic photography to obtain three-dimensional images of nerve cells. The drawings in the exhibition are presented in four categories: Cells of the Brain, Sensory Systems, Neuronal Pathways, and Development and Pathology.

Cajal’s drawings, many appearing for the first time, will be accompanied by a selection of contemporary visualizations of the brain, photographs, historic books, and scientific tools. The historical books, all containing anatomical illustrations, and the contemporary neuroscience imagery provide historical context for the drawings. The contemporary neuroscience visualization and animations range from reconstructed MRI acquisitions to various micrographs (images taken from microscopic lenses)—showing the evolution of Cajal’s early hypothesis to modern day science.

WAM's exhibition seeks to reveal the interconnected relationship between art and science. This traveling exhibition was curated in collaboration with WAM's Director and Chief Curator Lyndel King and Drs. Alfonso Araque, Janet Dubinsky, and Eric Newman, neuroscientists at the University of Minnesota and leaders in the field of neuroscience. Dr. Araque was formerly at the Instituto Cajal in Madrid, where Cajal worked and where his drawings are housed. The resulting exhibition demonstrates the ways in which a university art museum can work with university faculty and researchers across disciplines, to utilize diverse collections and archives and create a compelling experience that relates and connects to the lives and interests of a diverse audience.



Santiago Ramón y Cajal, *Untitled* (self portrait), 1876.

After the debut at WAM, the exhibition will travel to university galleries and museums throughout the United States and Canada. This exhibition was organized by the Frederick R. Weisman Art Museum at the University of Minnesota in collaboration with the Instituto Cajal, Spanish National Research Council (CSIC) in Madrid, Spain.

Presenting Sponsor

Beverly N. Grossman

Additional Support

Accredited Investors Wealth Management
Department of Neuroscience, University of Minnesota

THE BOOK

ABRAMS has published a book to accompany the exhibition. It contains full color reproductions of all eighty of the exhibition drawings, commentary on each of the drawings, and essays on Cajal's life and scientific contributions, his artistic roots and achievements, and contemporary neuroscience imaging techniques.

RELATED PROGRAMS

Exhibition Preview Party January 27, 2017 | 7:00 – 10:00 p.m.

Dive into the interconnected web of brain science at the exhibition preview party for the exhibition [The Beautiful Brain: The Drawings of Santiago Ramón y Cajal](#). View a documentary on the father of neuroscience, Santiago Ramón y Cajal. Journey into the human brain for a glimpse of the inner workings of the mind in the Exploradome, presented by the Bell Museum of Natural History (viewings every 20 minutes). Draw your own neuron in the galleries

from slides projected on the wall—just like Cajal! Register at z.umn.edu/CajalParty

Alzheimer's Update with Dr. Karen Ashe February 1, 2017 | 7:00 p.m.

Co-sponsored with the Department of Neuroscience

Dr. Karen Ashe is director of the Grossman Center for Memory Research and Care at the University of Minnesota. For over 20 years, Dr. Ashe has been studying Alzheimer's disease. She will give an update on her research and findings and will discuss the next steps in curing this debilitating disease. **Register at z.umn.edu/Ashe**

Hippocrates Cafe with Jon Hallberg February 8, 2017 | 7:00 p.m.

Hippocrates Cafe illuminates health care through story and song, performed by leading Twin Cities' actors and musicians, incorporating equal measures of humor and reflection. Using a variety of materials, including poems, short stories, novels, scientific journals, and instrumental interludes, actors and musicians illuminate the history of neurology. Creator and director Jon Hallberg, MD, will host the show. **Register at z.umn.edu/WAMhip**

The Life and Scientific Times of Cajal | Lecture with Dr. Larry Swanson

March 8, 2017 | 7:00 p.m.

Co-sponsored with the Department of Neuroscience

University of Southern California professor Dr. Larry Swanson will discuss the life of scientist and artist Santiago Ramón y Cajal, including the importance of his research, and his impact on current brain research, brain mapping, and his fascinating rise to scientific prominence from humble beginnings to winning the Nobel Prize in 1906 for his neurological discoveries. **Register at z.umn.edu/Swanson**

Vision and Art | Lecture with Margaret Livingstone April 27, 2017

At Regis Center for Art

Dr. Livingstone, Harvard neurobiologist, will discuss how what we see when we look at a work of art depends ultimately on the cells in our eyes and our brains. She has led groundbreaking research into hormones and behavior, learning, dyslexia, and the neurobiology of vision, exploring how vision science can inform our understanding of visual art.

ABOUT WAM

Since its origin in 1934, the Weisman Art Museum has been a teaching museum for the University of Minnesota. Today, education remains central to the museum's mission to create art experiences that spark discovery, critical thinking, and transformation linking the University and the community. The Weisman Art Museum is located in Minneapolis on the University of Minnesota Twin Cities campus. Admission to exhibition galleries is always free.

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