



CENTRO DE BIOLOGÍA MOLECULAR "SEVERO OCHOA"

XXIV LECCIÓN CONMEMORATIVA EN HONOR DE SEVERO OCHOA

IMPARTIDA POR

Dr. Fred H. Gage

Salk Institute for Biological Studies, La Jolla, California

"Function and regulation of Neurogenesis in the Adult Hippocampus"

NOTA DE PRENSA

Fred H. Gage dirige el laboratorio de Genética del Salk Institute for Biological Studies, La Jolla, California. Se graduó en 1972 en la Johns Hopkins University, Universidad que le concedería el título de Doctor en 1976. Posteriormente, trabajó como director asociado de la escuela de neurociencia de la Texas Christian University. En 1981, aceptó una beca postdoctoral para trabajar en el laboratorio dirigido por Anders Björklund en Suecia. Allí adquirió conocimientos en el proceso de regeneración neural en el contexto de las lesiones del sistema nervioso. Posteriormente trabajó como Profesor Asociado en el departamento de histología de la Universidad de Lund. En 1985 regresa a los Estados Unidos para formar parte del departamento de Neurociencia de la Universidad de San Diego, California (UCSD), donde comenzó sus estudios acerca de terapia génica. Permaneció allí hasta 1995, momento en el que se unió al Salk Institute for Biological Studies en La Jolla, California. Fred H. Gage ha sido uno de los pioneros en el descubrimiento de la existencia de neurogénesis hipocampal adulta en seres humanos. Además, Gage y colaboradores demostraron que el ejercicio físico y el enriquecimiento ambiental son moduladores positivos del proceso de neurogénesis adulta. y ha recibido numerosos premios entre los que destacan el Max Planck Research Prize (1999), el Metropolitan Life Research Award (2001), el MetLife Award for Medical Research (2002) o el Keio Medical Science Prize (2008). Sus trabajos han sido publicados en algunas de las revistas científicas más prestigiosas tales como Cell, Nature y Science.

Denli AM, Narvaiza I, Kerman BE, Pena M, Benner C, Marchetto MC, Diedrich JK, Aslanian A, Ma J, Moresco JJ, Moore L, Hunter T, Saghatelian A, Gage FH. [Primate-specific ORF0 contributes to retrotransposon-mediated diversity](#). *Cell*. 2015 Oct 22;163(3):583-93.

Eriksson PS, Perfilieva E, Björk-Eriksson T, Alborn AM, Nordborg C, Peterson DA, Gage FH. [Neurogenesis in the adult human hippocampus](#). *Nat Med*. 1998 Nov;4(11):1313-7.

van Praag H, Kempermann G, Gage FH. [Running increases cell proliferation and neurogenesis in the adult mouse dentate gyrus](#). *Nat Neurosci*. 1999 Mar;2(3):266-70.

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Fred H. Gage is the Head of Genetics group at the Salk Institute for Biological Studies, La Jolla, California. After graduating in with a bachelor's degree in 1972 at Johns Hopkins University, Gage pursued graduate studies and continued to study the brain. His research focused in part on understanding functional recovery and regenerative responses of neurons following the introduction of lesions in specific brain regions. In 1976, after earning a Ph.D. from Johns Hopkins, Gage went to Texas Christian University, where he worked as an associate director of the school's neuroscience program. He left the university in 1981 after accepting a fellowship to study in Sweden with neuroscientist Anders Björklund, who was investigating the re-formation of neural pathways following brain lesioning. He subsequently served as an associate professor in the histology department at Lund University. In 1985 Gage returned to the United States to join the faculty in the department of neurosciences at the University of California, San Diego (UCSD), where he began studies of gene therapy. He remained at UCSD until 1995, when he joined the Salk Institute for Biological Studies in La Jolla, California. Gage and collaborators demonstrated for the first time the existence of adult hippocampal neurogenesis in humans. In addition, they showed that physical exercise and environmental enrichments are positive regulators of these processes. Gage received numerous awards and honours during his career, including the Max Planck Research Prize (1999) and the Keio Medical Science Prize Award (2008). He was a fellow of multiple organizations, including the [National Academy of Sciences](#) (2003) and the [American Academy of Arts and Sciences](#) (2005), and served as president of the Society for Neuroscience (2002) and codirector of the Kavli Institute for Brain and Mind (2015–).

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