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Curriculum Vitae
Pasko Rakic M.D., Ph.D.

Professor of Neurobiology and Neurology, Yale University School of Medicine

Degrees: M.D., Ph.D (1960-69) Medicine, Developmental Biology and Genetics, Univ. Belgrade
M.S. (1978) Honorary, Yale University, New Haven, Connecticut

Research Interests: Developmental Neurobiology; Cellular and Molecular Mechanisms of Neuronal Proliferation, Migration and Synaptogenesis; Genetic and Epigenetic Regulation of Neuronal Interactions during brain development and evolution: Neuropathology of brain disorders.

Professional Experience:

1961-62 Resident in Neurosurgery, University Hospital, Belgrade
1962-66 Clinical and Research Fellow in Neurosurgery, Harvard Medical School, Boston
1967-69 Assistant Professor of Dev. Biology & Genetics, Biological Institute, Belgrade
1969-78 Assistant to Associate Professor of Neuropathology, Harvard Medical School, Boston
1978- Dorys McConnell Duberg Chair in Neuroscience, Yale University
2001- Chairman, Department of Neurobiology, Yale University School of Medicine
2004- Director, Kavli Institute for Neuroscience, Yale University

Honors and Awards: Member, National Academy of Sciences, USA; American Academy of Arts and Sciences; Institute of Medicine; Croatian Academy of Arts and Sciences; Serbian Academy of Arts and Sciences; President, Society for Neuroscience, 1996; Kavli Neuroscience Prize; Bristol-Myers Squibb Neuroscience Award; Gerard Prize, SFN, 2002; Karl Spencer Lashley Award, Amer. Philosophical Society; Kreig Life Achievement; Fyssen International Science Prize, Paris; Numerous eponymic lectures in 28 countries including: Grass Foundation (SFN); Selby, Australian Academy of Science; Ariens Kappers (Royal Netherlands Academy), Sherrington Centennial (Oxford, UK); James Arthur (Am. Museum of Natural History); Darwin's Centennial (Cambridge, UK).

Science Citation Index (ISI Web of Knowledge)

N° articles: **350**

Sum of the Times Cited: **35,326**

h-index: **98**

Selected Representative Publications :

- Rakic, P. 1974 Neurons in the monkey visual cortex: Systematic relation between time of origin and eventual disposition. *Science* 183: 425-427
- Rakic, P., Stensaas, L.J., Sayre, E.P., Sidman, R.L. 1974 Computer-aided three-dimensional reconstruction and quantitative analysis of cells from serial electronmicroscopic montages of fetal monkey brain. *Nature* 250: 31-34
- Rakic, P. 1976 Prenatal genesis of connections subserving ocular dominance in the rhesus monkey. *Nature* 261: 467-471
- Schmechel, D.E., Rakic, P. 1979 Arrested proliferation of radial glial cells during midgestation in rhesus monkey. *Nature* 227: 303-305

- Rakic, P. 1981 Development of visual centers in the primate brain depends on binocular competition before birth. *Science* 214: 928-931
- Rakic, P., Riley, K.P. 1983 Overproduction and elimination of retinal axons in the fetal rhesus monkey. *Science* 209: 1441-1444
- Rakic, P., Riley, K.P. 1983 Regulation of axon numbers in the primate optic nerve by prenatal binocular competition. *Nature* 305: 135-137
- Rakic, P. 1985 Limits of neurogenesis in primates. *Science* 227: 1054-1056
- Nishimura, Y., Schwartz, M.L. Rakic, P. 1986 GABA and GAD immunoreactivity of photoreceptor terminals in primate retina. *Nature* 230: 753-756
- Rakic, P., Bourgeois, J.-P., Eckenhoff, M.E., Zecevic, N., Goldman-Rakic, P.S. 1986 Concurrent overproduction of synapses in diverse regions of the primate cerebral cortex. *Science* 232: 232-235
- Rakic, P. 1988 Specification of cerebral cortical areas. *Science* 241: 170-176
- Wikler, K.C., Rakic, P. 1991 Relation of an array of early-differentiating cones to the photoreceptor mosaic in the primate retina. *Nature* 351: 397-400
- Komuro, H. and Rakic, P. 1992 Selective role of N-type calcium channels in neuronal migration. *Science* 257: 806-809
- Komuro, H., Rakic, P. 1993 Modulation of neuronal migration by NMDA receptors. *Science* 260: 95-97
- Kuida, K., Zheng, T.S., Kuang, C.-Y., Yang, D., Rakic, P., Flavell, R.A. 1996 Decreased apoptosis in the brain and premature lethality in CPP32-deficient mice. *Nature*, 384: 368-372
- Yang, D., Kuan, C.-Y., Whitmarsh, A.J., Rincon, M. Zheng, T.S., Davis, R.J., Rakic, P., Flavell R.A. 1997 Absence of excitotoxicity-induced apoptosis in the hippocampus of mice lacking the Jnk3 gene. *Nature* 389: 865-870
- Qi, H., Rand, M.D., Wu, X., Sestan, N., Wang, W., Rakic, P., Xu, T., Artavanis-Tsakonas, D. 1999 Processing of the Notch ligand Delta by metalloprotease Kuzbanian. *Science* 283: 94-98
- Kuan, C.-Y., Yang, D.D., Semantha-Roy, D.R.T., Davis, R.J., Rakic, P., Flavell, R.A. 1999 The Jnk1 and Jnk2 protein kinases are required for regional-specific apoptosis during early brain development. *Neuron* 22: 667-676
- Sestan N, Artavanis-Tsakonas S., Rakic P 1999 Contact-dependent inhibition of cortical neurite growth by Notch signaling. *Science*, 286:741-745
- Kornack, R.D., Rakic, P. 2001 Cell proliferation without neurogenesis in the adult primate neocortex. *Science*, 294: 2127-2130
- Letinic, K., Zoncu, R. and Rakic, P. 2002 Origin of GABAergic neurons in the human neocortex. *Nature* 417: 645-649
- Li, M., Sarkisian, M.R., Mehal, W., Rakic, P., Flavell, RA. 2003 Phosphatidylserine receptor is required for clearance of apoptotic cells. *Science*, 302: 1560-1563
- Rakic P. 2004 Genetic control of cortical convolutions. *Science* 303: 1983-1984
- Sarkisian. M.R., Bartley, C.M., Nakamura, F., Flavell, R.A., Rakic, P. 2006 MEKK4 Regulates Neural Migration and Survival in the Developing Cerebral Cortex. *Neuron*. 52: 789-801
- Berghuis, P., Rajnicek, A.M., Morozov, Y.M., Ross, R.A., Mulder, J., Monory, K., Marsicano, G., Matteoli, M., Canty, A., Yanagawa, Y., Rakic, P., Lutz, B, Mackie, K., Harkany, T. 2007 Hardwiring the Brain: Endocannabinoids Control Axon Guidance. *Science*, 316: 1212-1216

- Bystron, I., Blakemore, C. , Rakic, P. 2008 Development of human cerebral cortex: Boulder Committee revisited. *Nature Review Neurosci.*, 9: 110-122
- Hashimoto-Torii, K., Torii, M. Sarkisian, M.R., Bartley C.B., Shen, J., Radtke, F. Gridley, T., Šestan, N., Rakic P. 2008 Interaction between Reelin and Notch signaling regulates neuronal migration in the cerebral cortex. *Neuron*. 60: 273-284
- Torii, M, Hashimoto-Torii, K, Levitt, P, and Rakic, P. 2009 Integration of neuronal clones in the radial cortical columns by EphA/ephrin-A signaling. *Nature*, 461: 524-528
- Amato S, Liu X, Zheng B, Cantley L, Rakic P, Ma H-Y. 2011 AMP-Activated Protein Kinase Regulates Neuronal Polarization by Interfering with PI 3-Kinase Localization. *Science*, 332: 247-251