

Stan Schein publications, updated 5-21-12

S Herr, IT Ngo, TM Huang, K Klug, P Sterling, Stan Schein. Cone synapses in macaque fovea: II. Dendrites of OFF midget bipolar cells exhibit inner densities similar to their outer synaptic densities in basal contacts with cone terminals. *Visual Neuroscience* 2011, 28, 17-28.

S Schein, IT Ngo, TM Huang, K Klug, P Sterling, S Herr. Cone synapses in macaque fovea: I. Two types of non-S cones are distinguished by numbers of contacts with OFF midget bipolar cells. *Visual Neuroscience* 2011, 28, 3-16.

H Liu, L Jin, SBS Koh, I Atanasov, S Schein, L Wu, ZH Zhou. Atomic structure of human adenovirus by cryoEM reveals interactions among protein networks. *Science* 2010, 329, 1038-1043.

X Zhang, M Boyce, B Bhattacharya, X Zhang, S Schein, P Roy, ZH Zhou. Bluetongue virus coat protein VP2 contains sialic acid-binding domains, and VP5 resembles enveloped virus fusion proteins. *Proc Natl Acad Sci USA* 2010, 107, 6292-7.

P Ge, J Tsao, S Schein, TJ Green, M Luo, ZH Zhou. Cryo-EM model of the bullet-shaped vesicular stomatitis virus. *Science* 2010, 327, 689-693.

S Schein. Architecture of clathrin fullerene cages reflects a geometric constraint – the head-to-tail exclusion rule – and a preference for asymmetry. *J Mol Biol* 2009, 387, 363-375.

S Schein, T Friedrich. A geometric constraint, the head-to-tail exclusion rule, may be the basis for the isolated-pentagon rule (IPR) in fullerenes with more than 60 vertices. *Proc Natl Acad Sci USA* 2008, 105, 19142-19147.

S Schein, M Sands-Kidner, T. Friedrich. The physical basis for the head-to-tail rule that excludes most fullerene cages from self assembly. *Biophysical J* 2008, 94, 938-957.

S Schein, M Sands-Kidner. A geometric principle may guide self assembly of fullerene cages from clathrin triskelia and from carbon atoms. *Biophysical J* 2008, 94, 958-976.

S Schein, KM Ahmad. Efficiency of synaptic transmission of single-photoreceptor to rod bipolar dendrite. *Biophysical J* 2006, 91, 3257-3267.

S Schein, KM Ahmad. A clockwork hypothesis: Synaptic release by rod photoreceptors must be regular. *Biophysical J* 2005, 89, 3931-3949.

S Schein, P Sterling, IT Ngo, TM Huang, S Herr. Evidence that each S cone in macaque fovea drives one narrow-field and several wide-field blue-yellow ganglion cells. *J Neurosci* 2004, 24, 8366-8378.

K Klug, S Herr, IT Ngo, P Sterling, S Schein. Macaque retina contains an S-cone OFF midget pathway. *J Neurosci* 2003, 23, 9881-9887.

AA Sadun, V Carelli, SR Salomao, A Berezovsky, PA Quiros, F Sadun, AM DeNegri, R Andrade, M Moraes, A Passos, P Kjaer, J Pereira, ML Valentino, S Schein, R Belfort. Extensive investigation of a large Brazilian pedigree of 11778/Haplogroup J Leber hereditary optic neuropathy. *Am J Ophthalmol* 2003, 136, 231-238.

KM Ahmad, K Klug, S Herr, P Sterling, S Schein. Cell density ratios in a foveal patch in macaque retina. *Vis Neurosci* 2003, 20, 189-209.

AA Sadun, V Carelli, SR Salomao, A Berezovsky, P Quiros, F Sadun, AM DeNegri, R Andrade, S Schein, R Belfort. A very large Brazilian pedigree with 11778 Leber's hereditary optic neuropathy. *Trans Am Ophthalmol Soc* 2002, 100, 169-77; discussion 178-9.

S Herr, KJ Klug, P Sterling, S Schein. Inner S-cone bipolar cells provide all of the central elements for S cones in macaque retina. *J Comp Neurol* 2003, 457, 185-201.

K Migdale, S Herr, K Klug, K Ahmad, K Linberg, P Sterling, S Schein. Two ribbon synaptic units in rod photoreceptors of macaque, human, and cat. *J Comp Neurol* 2003, 455, 100-112.

C Burris, K Klug, IT Ngo, P Sterling, S Schein. How Müller glial cells in macaque fovea coat and isolate the synaptic terminals of cone photoreceptors. *J Comp Neurol* 2002, 453, 100-11.

P Lapuerta and SJ Schein. A schematic eye of macaque monkey based on Scheimpflug photography. *Vision Res* 35, 2245-2254, 1995.

D Calkins, SJ Schein, Y Tsukamoto, and P Sterling. Private lines from M and L cones in macaque fovea use different numbers of synapses. *Nature* 371, 70-72, 1994.

D Calkins, SJ Schein, Y Tsukamoto and P Sterling. Ganglion cell circuits in primate fovea. In *Proceedings of the XIIth Symposium of the International Research Group for Color Vision Deficiencies*. Ed. B. Lee. New York: Plenum Press (1994).

R Desimone, J Moran, SJ Schein and M Mishkin. A role for the corpus callosum in visual area V4 of the Macaque. *Visual Neurosci* 10, 159-171, 1993.

Y Tsukamoto, P Masarachia, S.J Schein and P Sterling. Gap junctions between the pedicles of macaque foveal cones. *Vision Res* 32, 1809-1815, 1992.

SJ Schein and R Desimone. Spectral properties of V4 neurons in the Macaque. *J Neurosci* 10, 3369-3389, 1990.

SJ Schein. Anatomy of macaque fovea and spatial densities of neurons in foveal representation. *J Comp Neurol* 269, 479-505, 1988.

R Desimone and SJ Schein. Visual properties of neurons in area V4 of the macaque: Sensitivity to stimulus form. *J Neurophysiol* 57, 835-868, 1987.

SJ Schein and FM de Monasterio. Mapping of retinal and geniculate neurons onto striate cortex of macaque. *J Neurosci* 7, 996-1009, 1987.

R Nakamura, SJ Schein and R Desimone. Visual responses from cells in striate cortex of monkeys rendered chronically 'blind' by lesions of nonvisual cortex. *Exp Br Res* 63, 185-190, 1986.

R Desimone, SJ Schein, J Moran and LG Ungerleider. Contour, colour and shape analysis beyond the striate cortex. *Vision Res* 25, 441-452, 1985.

MB Shapiro, SJ Schein and FM de Monasterio. Regularity and structure of the spatial pattern of blue cones of macaque retina. *J Am Stat Assn* 80, 803-814, 1985.

FM de Monasterio, EP McCrane, JK Newlander and SJ Schein. Density profile of blue-sensitive cones along the horizontal meridian of macaque retina. *Invest Ophthal Vis Sci* 26, 289-302, 1985.

EP McCrane, FM de Monasterio, SJ Schein and RC Caruso. Non-fluorescent staining of primate blue cones. *Invest Ophthal Vis Sci* 24, 1449-1455, 1983.

FM de Monasterio and SJ Schein. Spectral bandwidths of color-opponent cells of geniculo-cortical pathway of macaque monkeys. *J Neurophysiol* 47, 214-223, 1982.

SJ Schein, RT Marrocco and FM de Monasterio. Is there a high concentration of color-selective cells in area V4 of monkey visual cortex? *J Neurophysiol* 47, 193-213, 1982.

FM de Monasterio, SJ Schein and EP McCrane EP. Staining of blue-sensitive cones of the macaque retina by a fluorescent dye. *Science* 213, 1278-1281, 1981.

FM de Monasterio, SJ Schein. Protan-like spectral sensitivity of foveal Y ganglion cells of the retina of macaque monkeys. *J Physiol Lond* 299, 385-396, 1980.

PH Schiller, JG Malpeli and SJ Schein. The composition of the geniculo-striate input to the superior colliculus of the rhesus monkey. *J Neurophysiol* 42, 1124-1133, 1979.

SJ Schein, B Kagan and A Finkelstein. Colicin K acts by forming voltage-dependent channels in phospholipid bilayer membranes. *Nature* 276, 159-163, 1978.

D Oertel, SJ Schein and C Kung. A potassium conductance activated by hyperpolarization in Paramecium. *J Membr Biol* 53, 169-185, 1978.

D Oertel, SJ Schein and C Kung. Separation of membrane currents using a Paramecium mutant. Nature 268, 120-124, 1977.

SJ Schein. Calcium channels in Paramecium aurelia. *Prog Clin Biol Res* 15, 105-118, 1977. Book also titled *Cellular Neurobiology*, R Kelly, Z Hall, CF Fox, eds. New York: Alan R Liss , pp. 105-118, 1977.

SJ Schein, M Colombini and A Finkelstein. Reconstitution of a voltage-dependent, anion-selective channel obtained from Paramecium mitochondria. *J Membr Biol* 30, 99-120, 1976.

SJ Schein. Nonbehavioral selection for pawns, mutants of Paramecium aurelia with decreased excitability. *Genetics* 84, 453-468, 1976.

SJ Schein. Calcium channel stability measured by gradual loss of excitability in pawn mutants of Paramecium aurelia. *J Exp Biol* 65, 725-736, 1976.

SJ Schein, MVL Bennett and G Katz. Altered calcium conductance in pawns, behavioral mutants of Paramecium aurelia. *J Exp Biol* 65, 699-724, 1976.