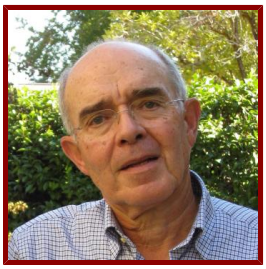
Stanford



Denis Baylor

Curriculum Vitae available Online

Bio

ACADEMIC APPOINTMENTS

- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Senior Scientific Officer, Howard Hughes Medical Institute, (2004-2005)
- Jury Member, Lasker Awards, (1999-2000)
- Medical Advisory Board, Howard Hughes Medical Institute, (1998-2001)
- Scientific Advisory Board, Howard Hughes Medical Institute, (1997-1998)
- Chairman, Department of Neurobiology, (1992-1995)

HONORS AND AWARDS

- Foreign Member, Royal Society of London (2003)
- Member, National Academy of Sciences, USA (1993)
- Fellow, American Academy of Arts and Sciences (1992)

PROFESSIONAL EDUCATION

- M.D., Yale Medical School , Medicine (1965)

Publications

PUBLICATIONS

- **Mentors: Doing science with Alan Hodgkin** *JOURNAL OF GENERAL PHYSIOLOGY*
  Baylor, D. A.
  2019; 151 (6): 706–7
- **Dynamics of cyclic GMP synthesis in retinal rods** *NEURON*
  Burns, M. E., Mendez, A., Chen, J., Baylor, D. A.
  2002; 36 (1): 81-91
- **Molecular mechanism of spontaneous pigment activation in retinal cones** *BIOPHYSICAL JOURNAL*
  Sampath, A. P., Baylor, D. A.
  2002; 83 (1): 184-193
- **Activation, deactivation, and adaptation in vertebrate, photoreceptor cells** *ANNUAL REVIEW OF NEUROSCIENCE*
  Burns, M. E., Baylor, D. A.
  2001; 24: 779-805

- **Modification of cyclic nucleotide-gated ion channels by ultraviolet light** *JOURNAL OF GENERAL PHYSIOLOGY*
  Middendorf, T. R., Aldrich, R. W., Baylor, D. A.
  2000; 116 (2): 227-252
- **Receptive-field microstructure of blue-yellow ganglion cells in primate retina** *NATURE NEUROSCIENCE*
  Chichilnisky, E. J., Baylor, D. A.
  1999; 2 (10): 889-893
- **Control of rhodopsin activity in vision** *EYE*
  Baylor, D. A., Burns, M. E.
  1998; 12: 521-525
- **The effect of recombinant recoverin on the photoresponse of truncated rod photoreceptors** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Erickson, M. A., Lagnado, L., Zozulya, S., Neubert, T. A., Stryer, L., Baylor, D. A.
  1998; 95 (11): 6474-6479
- **Mosaic arrangement of ganglion cell receptive fields in rabbit retina** *JOURNAL OF NEUROPHYSIOLOGY*
  Devries, S. H., Baylor, D. A.
  1997; 78 (4): 2048-2060
- **Molecular origin of continuous dark noise in rod photoreceptors** *BIOPHYSICAL JOURNAL*
  Rieke, F., Baylor, D. A.
  1996; 71 (5): 2553-2572
- **AN ALTERNATIVE PATHWAY FOR SIGNAL FLOW FROM ROD PHOTORECEPTORS TO GANGLION-CELLS IN MAMMALIAN RETINA** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Devries, S. H., Baylor, D. A.
  1995; 92 (23): 10658-10662
- **CONDUCTANCE AND KINETICS OF SINGLE CGMP-ACTIVATED CHANNELS IN SALAMANDER ROD OUTER SEGMENTS** *JOURNAL OF PHYSIOLOGY-LONDON*
  Taylor, W. R., Baylor, D. A.
  1995; 483 (3): 567-582
- **CALCIUM CONTROLS LIGHT-TRIGGERED FORMATION OF CATALYTICALLY ACTIVE RHODOPSIN** *NATURE*
  Lagnado, L., Baylor, D. A.
  1994; 367 (6460): 273-277
- **INTERACTIONS BETWEEN DIVALENT-CATIONS AND THE GATING MACHINERY OF CYCLIC GMP-ACTIVATED CHANNELS IN SALAMANDER RETINAL RODS** *JOURNAL OF GENERAL PHYSIOLOGY*
  Karpen, J. W., Brown, R. L., Stryer, L., Baylor, D. A.
  1993; 101 (1): 1-25
- **SYNAPTIC CIRCUITRY OF THE RETINA AND OLFACTORY-BULB** *CELL*
  Devries, S. H., Baylor, D. A.
  1993; 72: 139-149
- **CATION INTERACTIONS WITHIN THE CYCLIC GMP-ACTIVATED CHANNEL OF RETINAL RODS FROM THE TIGER SALAMANDER** *JOURNAL OF PHYSIOLOGY-LONDON*
  Zimmerman, A. L., Baylor, D. A.
  1992; 449: 759-783
- **CYCLIC GMP-ACTIVATED CHANNELS OF SALAMANDER RETINAL RODS - SPATIAL-DISTRIBUTION AND VARIATION OF RESPONSIVENESS** *JOURNAL OF PHYSIOLOGY-LONDON*
  Karpen, J. W., Loney, D. A., Baylor, D. A.
  1992; 448: 257-274
- **RAPID CHARGE MOVEMENTS AND PHOTOSENSITIVITY OF VISUAL PIGMENTS IN SALAMANDER RODS AND CONES** *JOURNAL OF PHYSIOLOGY-LONDON*
  Makino, C. L., Taylor, W. R., Baylor, D. A.

1991; 442: 761-780

- **SYNCHRONOUS BURSTS OF ACTION-POTENTIALS IN GANGLION-CELLS OF THE DEVELOPING MAMMALIAN RETINA** *SCIENCE*
  Meister, M., Wong, R. O., Baylor, D. A., Shatz, C. J.
  1991; 252 (5008): 939-943
- **VISUAL TRANSDUCTION IN CONES OF THE MONKEY MACACA-FASCICULARIS** *JOURNAL OF PHYSIOLOGY-LONDON*
  Schnapf, J. L., NUNN, B. J., Meister, M., Baylor, D. A.
  1990; 427: 681-713
- **EFFECTS OF MODIFIED CHROMOPHORES ON THE SPECTRAL SENSITIVITY OF SALAMANDER, SQUIRREL AND MACAQUE CONES** *JOURNAL OF PHYSIOLOGY-LONDON*
  Makino, C. L., Kraft, T. W., Mathies, R. A., Lugtenburg, J., MILEY, M. E., VANDERSTEEN, R., Baylor, D. A.
  1990; 424: 545-560
- **GATING KINETICS OF THE CYCLIC-GMP-ACTIVATED CHANNEL OF RETINAL RODS - FLASH-PHOTOLYSIS AND VOLTAGE-JUMP STUDIES** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Karpen, J. W., Zimmerman, A. L., Stryer, L., Baylor, D. A.
  1988; 85 (4): 1287-1291
- **SPECTRAL SENSITIVITY OF PRIMATE PHOTORECEPTORS** *VISUAL NEUROSCIENCE*
  Schnapf, J. L., Kraft, T. W., NUNN, B. J., Baylor, D. A.
  1988; 1 (3): 255-261
- **MOLECULAR MECHANICS OF THE CYCLIC-GMP-ACTIVATED CHANNEL OF RETINAL RODS** *COLD SPRING HARBOR SYMPOSIA ON QUANTITATIVE BIOLOGY*
  Karpen, J. W., Zimmerman, A. L., Stryer, L., Baylor, D. A.
  1988; 53: 325-332
- **SPECTRAL SENSITIVITY OF CONES OF THE MONKEY MACACA-FASCICULARIS** *JOURNAL OF PHYSIOLOGY-LONDON*
  Baylor, D. A., NUNN, B. J., Schnapf, J. L.
  1987; 390: 145-160
- **HOW PHOTORECEPTOR CELLS RESPOND TO LIGHT** *SCIENTIFIC AMERICAN*
  Schnapf, J. L., Baylor, D. A.
  1987; 256 (4): 40-?
- **ELECTRICAL SIGNALING IN VERTEBRATE PHOTORECEPTORS** *METHODS IN ENZYMOLOGY*
  Baylor, D. A., NUNN, B.
  1982; 81: 403-423
- **MEMBRANE CURRENT OF SINGLE ROD OUTER SEGMENTS** *VISION RESEARCH*
  Lamb, T. D., Baylor, D. A., Yau, K. W.
  1979; 19 (4): 385-385