

William L. Pak

Curriculum Vitae

Personal Data

Birthdate: September 27, 1932
Birthplace: Suwon, Korea
Citizenship: U.S.A.
Married: Marion L. Whitehouse (June 21, 1958-May 27, 2013)
Children: William L., Jr., b. 1961
Dorothy K., b. 1963

Education

A.B. summa cum laude	Physics	Boston University	1955
Ph.D.	Physics	Cornell University	1960

Academic Positions

Instructor in Physics, Stevens Institute of Technology	1960-61
Assistant Professor of Physics, Stevens Institute	1961-64
Assistant Professor of Biology, Purdue University	1965-67
Associate Professor of Biology, Purdue University	1967-72
Professor of Biology, Purdue University	1972-87
Paul F. Orefice Distinguished Professor of Biological Sciences, Purdue University	1987-2015
Paul F. Orefice Distinguished Professor, Emeritus, Purdue University	2016-

Postdoctoral and Visiting Positions

Postdoctoral Fellow (biophysics: J. Platt) University of Chicago	1963-65
Visiting Scientist (visual electrophysiology: T. Tomita) Keio University, Tokyo, Japan	1967
Visiting Scientist (visual behavior: K. Götz) Max-Planck Institute of Biological Cybernetics, Tübingen, Germany	1971
Visiting Professor (molecular biology: J. Hirsh) Harvard Medical School	1984
Visiting Professor, Roche Foundation Fellow (molecular biology: W. Gehring), University of Basel	1984-85

Honors and Awards

Augustus Howe Buck Scholar, Boston University	1952-55
Phi Beta Kappa	1955
Public Health Service Career Development Award	1966-71
Collegium of Distinguished Alumni, Boston University College of Arts and Sciences	1974
Herbert Newby McCoy Award for Research, Purdue University	1982
Roche Research Foundation Award	1984
Fight for Sight Citation for Outstanding Achievement in Basic Research	1986

National Institutes of Health MERIT Award	1989
Friedenwald Award, Association for Research in Vision and Ophthalmology	1995
Keynote address, 6 th Annual Behavioral and Molecular Neuroscience Symposium, Meharry Medical College	1996
William L. Pak 70 th Birthday Symposium, Dept. of Biological Sciences, Purdue U., and former students and associates.	2002
Inducted into Wall of Fame, IU School of Medicine-Lafayette on the campus of Purdue U.	2010
William L. Pak 80 th Birthday Symposium, Dept. of Biological Sciences, Purdue U., and former students and associates.	2012
Journal of Neurogenetics Vol 26, No 2 (Special Issue in Honor of 80 th Birthday) “Bill Pak’s Vision: Neurogenetics of Phototransduction”	2012

Professional Services

1. Panels, Conferences, Journals

Panel, Instructional Scientific Equipment Program, National Science Foundation	1966 (Feb.)
Visual Sciences B Study Section, National Institutes of Health	1972-75
Organizer and instructor, the inaugural course on “Neurobiology of <i>Drosophila melanogaster</i> ,” Cold Spring Harbor Laboratory	1973-75 (summers)
National Alumni Council, Boston University	1980-90
Journal of Neurogenetics, Editorial Board	1982-88, 2007-present
Advisory Board	1988-2006
Chairman, Special Study Section, Div. of Research Grants, National Institutes of Health, ad hoc	1977
Genetics Study Section, National Institutes of Health, ad hoc	1983 (Feb.)
Vision Research Review Committee, National Eye Institute	1986-91
Special Study Section, Div. of Research Grants, National Institutes of Health, ad hoc	1989 (May)
Co-organizer, Cold Spring Harbor Meeting on Molecular Neurobiology of <i>Drosophila</i>	1989 (Oct.)
National Eye Institute Special Emphasis Grant Review Panel, ad hoc	2006 (Aug.)
National Eye Institute K99 Review Panel, ad hoc	2007 (Mar.)
National Eye Institute Special Emphasis Grant Review Panel, ad hoc	2014 (Mar.)

2. Site Visits

For Div. of Research Grants, NIH:	
U. of Utah College of Medicine, Salt Lake City, UT	3/26/73
Washington U. School of Medicine, St. Louis, MO	7/12/73
Brandeis U., Waltham, MA	12/5-7/83
Harvard U., Cambridge, MA	3/19-21/86
For Vision Research Review Committee, NEI, NIH:	
Harvard U., Cambridge, MA	10/27/87
Massachusetts Inst. of Tech., Cambridge, MA	10/28/87
U. of Rochester, Rochester, NY	10/29/87
Louisiana State U., New Orleans, LA	8/25-26/88

Jules Stein Eye Inst., U. of California, Los Angeles, CA	10/19-20/88
Harvard U., Cambridge, MA	3/15/91
For other agencies:	
Stanford U. School of Medicine, Palo Alto, CA (NINCDS, NIH)	2/16-18/78
Yale U., New Haven, CT (Genetics Study Section, NIH)	12/15-16/82

3. *External Referee for Tenure Promotions/Hires (other than own students)*

Marine Biological Laboratory, Woods Hole	1976
University of California, Santa Barbara	1976
University of Massachusetts at Boston Harbor	1976
University of California, Berkeley	1977, 1979
Johns Hopkins University	1977
Stanford University	1977
Temple University	1978
University of Edinburgh	1985
Albert Einstein College of Medicine	1986
Bandeis University	1986
Baylor College of Medicine	1994
Johns Hopkins University	1994
University of California, San Diego	1994
Yale University	1994
Temple University	1995
University of Texas Southwestern Medical Center	1995
University of Utah	1995
Johns Hopkins University	1997
Vanderbilt University	1997
University of Notre Dame	1999
Vanderbilt University	1999
University of Cambridge, England	2000
University of Connecticut	2000
Dartmouth College	2001
Case Western Reserve University	2005
Vanderbilt University	2006
Dusquesne University, Pittsburgh, PA	2006
Boston University	2008
Colorado State University	2010
Okinawa Institute of Sci. & Tech. Int'l. Graduate Univ., Japan	2011

University and Department Services

1. *Department*

Director, Biophysics Training Program	1969-75
Convener, Biophysics Area	1969-79
Departmental Council	1969-81, 1999-00
Director, Vision Research Training Program	1975-80
Department Head Search Committees	1975, 1980
Director, Vision Research Center	1980-85, 1987-90

Convener, Neurobiology and Physiology Area	1972-92, 1999-00
Convener, Neurobiology Faculty Search Committees	1986-87, 1988-89, 1989-90, 1994-96
Convener, Faculty and Alumni Recognition Committee	1998-2014

2. University and College of Science

College of Science Promotions Committee	1976-78
College of Science Faculty Council	1977-80
Herbert Newby McCoy Award Selection Committees	1983-88
College of Science Dean Search Committee	1984-86
Distinguished Professor Evaluation Committees, ad hoc	1972, 1994, 1998, 1999, 2000, 2001, 2002, 2004, 2005, 2007, 2009, 2011
Phi Beta Kappa, Purdue Chapter	
Members Selection Committee	1986-99
Vice President	1999-00
President	2000-01
College of Science Faculty Awards Committee	2006-08

3. Indiana University School of Medicine

Academic Standards Committee	1994-1997
Indiana University School of Medicine-Lafayette (Lafayette Center for Medical Education)	
Center Performance Study Committee I	1997
Center Performance Study Committee II	1997-98
Director Search Committee	1997-98

Professional Organizations

Society for Neuroscience, Association for Research in Vision and Ophthalmology, Biophysical Society, American Association for the Advancement of Science, American Physiological Society, Genetics Society of America

Professional Travels and Outside Activities

1. Invited Speaker: National/International Meetings, Conferences, Symposia

Cold Spring Harbor, NY	Cold Spring Harbor Symposium on Quantitative Biology.	6/65
Osaka, Japan	56 th Retina Conference, Osaka U.	11/22/67
Tucson, AZ	2nd International Conference on Photosensitization in Solids, U. of Arizona.	1/29-31/68

Brighton, UK	International Union of Physiological Sciences/International Society on Clinical ERG.	7/19-23/71
Toronto, Canada	Session chair and 2 presentations. 16 th Annual Meeting of Biophysical Society.	2/24-27/72
Bochum, Germany	Special Session on Biochemistry and Physiology of Visual Pigments, 6 th International Congress on Photobiology.	8/27-30/72
Sarasota, FL	Invited paper and contributed paper, Association for Research in Vision and Ophthalmology.	4/25-29/74
Sarasota, FL	Session chair and 2 presentations. Annual Meeting of Association for Research in Vision and Ophthalmology.	4-26-29/76
Guildford, UK	Meeting on Visual Sensitivity and Adaptation, U. of Surrey (sponsored by British Photobiology Society).	9/20-23/78
Boston, MA	Work Session on Prospects for Research in Neurogenetics, Neurosciences Research Program, Massachusetts Inst. of Tech.	10/22-24/78
Bombay, India	International Conference on Development and Behavior of <i>Drosophila melanogaster</i> , Tata Inst. of Fundamental Research.	12/19-22/79
Anaheim, CA	Federation of the American Societies for Experimental Biology.	4/14-22/80
Kyoto, Japan	International Conference on Neurons and Behavior.	8/6/80
Kyoto, Japan	Session moderator & presentation. Symposium on Physiology of Sensory Organs, 17 th International Congress of Entomology.	8/7/80
Norwich, UK	U. of East Anglia, Symposium of the Society of Experimental Biology.	9/8-10/81
Sarasota, FL	Session chair & 2 presentations. Association for Research in Vision and Ophthalmology.	5/1-6/83
Chicago, IL	25 th Annual National <i>Drosophila</i> Research Conference.	4/26-29/84
Cold Spring Harbor, NY	Neurobiology of <i>Drosophila melanogaster</i> , Cold Spring Harbor Laboratory.	7/8/84
Alicante, Spain	Two invited lectures, 6 th International Congress of Eye Research.	10/1-4/84
Bethesda, MD	Workshop on Invertebrate Models of the Genetic Bases of Behavior, National Institutes of Health.	12/13-14/84
Plymouth, NH	Gordon Conference on Biological Regulatory Mechanisms.	6/24-28/85
Nagoya, Japan	Symposium on the Molecular Genetics of the Retina, 7 th International Congress of Eye Research.	9/25-10/1/86
Cold Spring Harbor, NY	Invited paper and two posters, First Molecular Neurobiology of <i>Drosophila</i> Meeting, Cold Spring Harbor Laboratory.	10/6-9/86
Philadelphia, PA	Invited paper, and organize and chair Symposium on Molecular Genetics of Vision, 78 th Annual Meeting of American Society of Biological Chemists.	6/7-11/87
Santa Fe, NM	Invited paper and session chair, UCLA Symposium on the Molecular Biology of the Eye: Genes, Vision, and Ocular Diseases.	2/6-11/88
Mt. Hiei, Japan	21 st Yamada Conference on Molecular Physiology of Retinal Proteins.	5/29-6/3/88
San Francisco, CA	8 th International Congress of Eye Research.	9/5-8/88
Meriden, NH	Gordon Conference on Second Messengers and Protein Phosphorylation.	6/12-16/89
Saxtons River, VT	Federation of American Societies for Experimental Biology Summer Research Conference.	6/25-30/89
Tamarron, CO	UCLA Symposium on Molecular and Cellular Biology: Signal Transduction by G Proteins.	2/10-15/90

St. Louis, MO	Symposium on Molecular Biology and Immunology of Vision and Visual Disorders, Washington U.	4/5-6/90
Helsinki, Finland	Organize and chair symposium, 10 th International Congress of Eye Research.	7/29-8/4/90
Meriden, NH	Gordon Conference on Second Messengers and Protein Phosphorylation.	6/10-14/91
Katata, Japan	14 th Taniguchi International Symposium on Visual Science.	11/25-30/91
Tokyo, Japan	Open Lectures of the Keio Medical Association, Keio U. Medical School.	11/30/91
Stresa, Italy	International Congress of Eye Research.	9/20-25/92
Jerusalem, Israel	Workshop on Invertebrate Phototransduction.	7/13-19/99
Ft. Lauderdale, FL	5 th Annual Vision Research Conference, Animal Models of Retinal Degeneration.	4/27-28/01
Bäckaskog Castle, Sweden	International Conference on Invertebrate Vision.	8/7-12/01
Karlsruhe, Germany	International Workshop on Invertebrate Photoreceptors: Structural and Functional Organization of Signaling Cascades.	10/12-14/01
Geneva, Switzerland	15th International Congress of Eye Research.	10/6-10/02
Seoul, Korea	Invited lecture and moderator, First Korea-Japan <i>Drosophila</i> Symposium.	10/18/02
Bäckaskog Castle, Sweden	2 nd International Conference on Invertebrate Vision.	8/1-8/08
Würzburg, Germany	Erich Buchner Symposium.	9/28/09

2. Seminars

New Haven, CT	Dept. of Molecular Biology and Biophysics, Yale U.	4/65
University Park, PA	Dept. of Biophysics, Pennsylvania State U.	4/65
Cleveland, OH	Div. of Bioengineering, Case Inst. of Tech.	12/2/65
Knoxville, TN	Dept. of Zoology and Entomology, U. of Tennessee.	1/4/66
Ann Arbor, MI	Mental Health Research Inst., U. of Michigan.	2/24/66
Minneapolis, MN	Dept. of Zoology, U. of Minnesota.	4/1/66
Philadelphia, PA	Dept. of Biology, U. of Pennsylvania.	10/13/66
Tokyo, Japan	Dept. of Physiology, School of Medicine, Keio U.	10/23/67
Evanston, IL	Northwestern U.	10/18/68
Tübingen, Germany	Max-Planck-Institut für Biologische Kybernetik.	2/16/71
Bochum, Germany	Ruhr Universität.	4/5/71
Bad Nauheim, Germany	William G. Kerckhoff-Institut der Max-Planck-Gesellschaft.	4/7/71
Göttingen, Germany	Zoologisches Institut der Universität.	5/17/71
Paris, France	Pasteur Institut.	6/18/71
Chicago, IL	Depts. of Biophysics and Physiology, U. of Chicago.	3/10/72
Bloomington, IN	Div. of Optometry, Indiana U.	11/20/72
Philadelphia, PA	Dept. of Biology, Temple U.	2/4/74
Indianapolis, IN	Dept. of Physiology, Indiana U. School of Medicine.	2/22/74
Cold Spring Harbor, NY	Neurobiology of <i>Drosophila melanogaster</i> , Cold Spring Harbor Laboratory.	8/2-22/74
Pasadena, CA	Div. of Biology, California Inst. of Tech.	3/3/75

Los Angeles, CA	Dept. of Biology, UCLA.	3/5/75
Santa Barbara, CA	Dept. of Biological Sciences, UCSB	3/7/75
Santa Barbara, CA	Dept. of Biological Sciences, UCSB	2/23/76
New Haven, CT	Dept. of Biology, Yale U.	3/18/76
Syracuse, NY	Inst. for Sensory Research, Syracuse U.	2/21/77
Palo Alto, CA	Dept. of Neurobiology, Stanford U.	11/14/77
Würzburg, Germany	Institut für Genetik und Mikrobiologie, U. of Würzburg.	9/26/78
Tübingen, Germany	Max-Planck Institut für Biologische Kybernetik.	9/28/78
Zürich, Switzerland	Zoologisch-Verg. Anatomisches Institut, U. of Zürich.	10/2/78
Cambridge, UK	Dept. of Physiology, Cambridge U.	10/4/78
Cambridge, MA	Dept. of Biology, Massachusetts Inst. of Tech.	11/21/78
Waltham, MA	Dept. of Biology and Rosenstiel Basic Medical Sciences Research Center, Brandeis U.	11/22/78
New Haven, CT	Depts. of Human Genetics and Physiology, Yale U. School of Medicine.	11/28/78
Ann Arbor, MI	Interdepartmental Vision Seminar, U. of Michigan.	3/29/79
Hamilton, Ontario, Canada	Dept. of Biology, McMaster U.	4/16/79
Indianapolis, IN	Dept. of Physiology, Indiana U. School of Medicine.	11/29/79
Iowa City, IA	Dept. of Zoology, U. of Iowa.	4/4-5/80
Tokyo, Japan	Dept. of Physiology, Keio U. School of Medicine.	7/29/80
Okazaki, Japan	National Inst. for Basic Biology.	8/1/80
Kyoto, Japan	Dept. of Biophysics, Kyoto U.	8/2/80
Osaka, Japan	Dept. of Biology, Osaka U.	8/9/80
Fukuoka, Japan	Dept. of Biology, Kyushu U.	8/12/80
Chicago, IL	Dept. of Neurological Sciences and Physiology, Rush U.	12/12/80
Cambridge, UK	Kenneth Craik Club, U. of Cambridge.	9/11/81
Tübingen, Germany	Max-Planck Institut für Biologische Kybernetik.	9/14/81
Jülich, Germany	Inst. for Neurobiology, Nuclear Research Center.	9/16/81
Geneva, Switzerland	Dept. of Physiology, U. of Geneva Medical School.	9/18/81
Madison, WI	Dept. of Genetics, U. of Wisconsin.	4/19/82
Boston, MA	Dept. of Neurobiology, Harvard U. Medical School.	5/10/82
Amman, Jordan	Dept. of Biology, U. of Jordan.	5/22/82
Urbana, IL	Neural and Behavioral Biology Seminar Series, U. of Illinois.	3/2/83
Indianapolis, IN	Biophysics Group, Indiana U.-Purdue U. at Indianapolis.	3/11/83
Marseille, France	Institut de Neurophysiologie et de Psychophysiologie, CNRS.	5/31/83
Zürich, Switzerland	Instit. of Zoology and Comparative Anatomy, U. of Zürich.	6/2/83
Boston, MA	Dept. of Neurobiology, Harvard Medical School.	4/4/84
Ithaca, NY	Dept. of Genetics, Cornell U.	6/4/84
Boston, MA	Dept. of Biological Chemistry, Harvard Medical School.	6/11/84
Waltham, MA	Dept. of Biology, Brandeis U.	6/12/84
Basel, Switzerland	Dept. of Cell Biology, U. of Basel.	11/29/84
Tübingen, Germany	Max-Planck-Institut für Biologische Kybernetik.	12/3/84
Bochum, Germany	Dept. of Animal Physiology, Ruhr U.	1/17/85
Jülich, Germany	Institute for Neurobiology, Nuclear Research Center.	1/18/85
Stanford, CA	Dept. of Neurobiology, Stanford U.	3/27/85
Pasadena, CA	Div. of Biology, California Inst. of Tech.	3/29/85
East Lansing, MI	Dept. of Biochemistry, Michigan State U.	10/15/85

Chicago, IL	Dept. of Ophthalmology, Northwestern U. School of Medicine.	11/15/85
Los Angeles, CA	Jules Stein Eye Inst., U. of California.	2/5/86
Santa Barbara, CA	Dept. of Biological Sciences, U. of California.	2/7/86
Sendai, Japan	Research Center for Applied Information Sciences, Tohoku U.	9/22/86
Tokyo, Japan	Dept. of Physics, U. of Tokyo.	9/24/86
Detroit, MI	Dept. of Biological Sciences, Wayne State U.	12/1/86
Urbana, IL	School of Life Sciences, U. of Illinois.	2/12/87
Seoul, Korea	Seoul National U.	6/7/88
Daejeon, Korea	Korea Advanced Inst. of Science and Tech.	6/14/88
Rochester, MI	Eye Research Inst., Oakland U.	11/3/88
Indianapolis, IN	Dept. of Ophthalmology, Indiana U. School of Medicine.	11/23/88
Chicago, IL	Dept. of Ophthalmology, Northwestern U.	1/20/89
Seattle, WA	Depts. of Biochemistry and Ophthalmology, U. of Washington.	4/11/89
Eugene, OR	Inst. of Neuroscience, U. of Oregon.	4/13/89
Portland, OR	Vollum Inst. of Advanced Biomedical Research, Oregon Health Sciences U.	4/14/89
Pittsburgh, PA	Dept. of Biological Sciences, Carnegie Mellon U.	4/19/89
Cambridge, MA	Dept. of Genetics and Ophthalmology, Harvard U.	4/19-21/90
Dayton, OH	Biochemistry Dept., Wright State U.	3/8/91
Indianapolis, IN	Dept. of Biochemistry and Molecular Biology, Indiana U. School of Medicine.	10/21/91
DeKalb, IL	Dept. of Biochemistry, Northern Illinois U.	10/25/91
Indianapolis, IN	Indiana U.-Purdue U. at Indianapolis.	11/6/92
Nashville, TN	Pharmacology Dept., Vanderbilt U.	12/15/92
Dallas, TX	Dept. of Pharmacology, U. of Texas Southwestern Medical Center.	10/21/93
Baltimore, MD	Dept. of Biological Chemistry, Johns Hopkins U. School of Medicine.	3/1/94
Buffalo, NY	Dept. of Biological Sciences, SUNY at Buffalo.	10/27/94
Shanghai, China	Academia Sinica at Shanghai.	10/18/96
Beijing, China	Academia Sinica at Beijing.	10/30/96
Beijing, China	College of Life Sciences, Beijing U.	10/31/96
Yongin City, Korea	Kyunghee U.	11/11/96
Seoul, Korea	Seoul National U.	11/13/96
Iowa City, IA	Dept. of Biology, U. of Iowa.	9/9-10/99
Rahway, NJ	Merck and Company.	5/10-11/00
Cold Spring Harbor, NY	Neurobiology of <i>Drosophila melanogaster</i> , Cold Spring Harbor Laboratory.	7/8-10/00
Cold Spring Harbor, NY	Neurobiology of <i>Drosophila melanogaster</i> , Cold Spring Harbor Laboratory.	7/7-9/01
Yongin City, Korea	Dept. of Genetic Engineering, Kyunghee U.	10/15/02

3. Special Lectures

Urbana, IL	Two lectures and a seminar, Dept. of Physiology and Biophysics, U. of Illinois.	4/3-5/74
Jerusalem, Israel	Two lectures, Dept. of Physiology, Hadassah Medical School and The Inst. of Life Sciences, Hebrew U.	5/25-26/82
Berkeley, CA	Two lectures, Dept. of Biochemistry, U. of California.	3/25-26/85

Santa Cruz, CA	Two lectures, U. of California at Santa Cruz.	2/10-11/92
Nashville, TN	Keynote speaker, 6 th Behavioral and Molecular Neurosci. Symp, Meharry Medical College	7/18-20/96
Hefei, China	Two lectures, Dept. of Biology, U. of Science and Technology of China.	10/21-25/96

4. Workshops, Panels, Collaborations

Cold Spring Harbor, NY	Max Delbruck Course on Phycomyces.	8/4-24/65
Chicago, IL	Panel, Instructional Scientific Equipment Program, National Science Foundation.	2/10-11/66
Yellow Springs, OH	Charles F. Kettering Research Laboratory. Collaborate on experiment.	6/13-17/66
Columbus, OH	Panel discussion, 19 th Annual AIBS Meeting and Symposium on Mathematics Requirements.	9/6/68
Heidelberg, Germany	EMBO Workshop on Chromosome Microdissection, Microcloning, and Microinjection in <i>Drosophila</i> .	6/5-17/83
Champaign, IL	Workshop on DNA Sequencing Analysis, Bethesda Research Laboratories.	7/30-8/1/85
Cold Spring Harbor, NY	Co-organizer, 3rd Molecular Neurobiology of <i>Drosophila</i> Meeting, Cold Spring Harbor Laboratory.	10/4-8/89
Bethesda, MD	<i>Drosophila</i> Workshop, National Eye Institute.	4/18-19/91
Bethesda, MD	Working Group on Mapping the <i>Drosophila</i> Genome, National Institutes of Health.	3/10/92
Asilomar, CA	Chair session, 3 rd Visual System Development Workshop, U. of Southern California.	7/29-31/96

5. Others (Regional meetings, consultations, contributed papers, posters, etc.)

Galesburg, IL	Honors exam committee, Dept. of Physics, Knox College.	5/65
Houston, TX	11th Annual Meeting of Biophysical Society.	2/22-24/67
Ann Arbor, MI	Mental Health Research Inst., U. of Michigan. Confer with colleagues.	5/27/67
La Jolla, CA	Salk Institute. Consult with colleagues.	7/14-20/68
Los Angeles, CA	13 th Annual Meeting of Biophysical Society.	2/26-3/1/69
Sarasota, FL	Paper, Association for Research in Ophthalmology.	4/19-22/69
Sarasota, FL	Paper, Association for Research in Ophthalmology.	5/1-5/70
Los Angeles, CA	U. of California School of Medicine. Consult with colleagues.	6/1-6/70
München, Germany	Zoologisches Institut der Universität. Consult with colleagues.	2/25-26/71
Stockholm, Sweden	Karolinska Institutet. Consult with colleagues.	6/28/71
Munich, Germany	Paper, 25th International Congress of Physiological Sciences.	7/25-31/71
Sarasota, FL	Two papers, Association for Research in Vision and Ophthalmology.	4/24-28/72
Tübingen, Germany	Max-Planck-Institut für Biologische Kybernetik. Consult with colleagues.	8/24-26/72
Jülich, Germany	Institut für Neurobiologie, Kernforschungsanlage. Consult with colleagues.	8/31/72
Sarasota, FL	Two papers, Association for Research in Vision and Ophthalmology.	5/3-7/73

Cold Spring Harbor, NY	Cold Spring Harbor Laboratory. Confer with Dr. Robert Pollack regarding details of projected new course (Neurobiology of <i>Drosophila melanogaster</i>).	5/8/73
Mexico City	6th Meeting of American Society for Neurochemistry.	3/10-14/75
Sarasota, FL	Paper, Association for Research in Vision and Ophthalmology.	4/28-5/2/75
New York, NY	5th Annual Meeting of Society for Neuroscience.	11/2-6/75
Seattle, WA	20 th Annual Meeting of Biophysical Society.	2/25-27/76
New Orleans, LA	21 st Annual Meeting of Biophysical Society.	2/15-18/77
Sarasota, FL	Four papers, Annual Meeting of Association for Research in Vision and Ophthalmology.	4/25-29/77
Anaheim, CA	7 th Annual Meeting of Society for Neuroscience.	11/6-10/77
Washington, DC	Paper, 22 nd Annual Meeting of Biophysical Society.	3/27-30/78
Sarasota, FL	Paper and poster, Annual Meeting of Association for Research in Vision and Ophthalmology.	4/30-5/5/78
Indianapolis, IN	Annual Fall Meeting of Physiologists in the Indiana State-wide Medical Education System, Indiana U. School of Medicine.	11/3/78
Indianapolis, IN	Discipline Meetings of the Indiana State-Wide Medical Education System, Indiana U. School of Medicine.	5/29/79
Pasadena, CA Duarte, CA San Francisco, CA	Consult with colleagues at California Inst. of Tech., City of Hope National Medical Center, and U. of California School of Medicine.	4/14-22/80
Denver, CO	25 th Annual Meeting of Biophysical Society.	2/22-25/81
Chicago, IL	22 nd Annual <i>Drosophila</i> Conference.	4/24-25/81
Sarasota, FL	Two papers, Annual Meeting of Association for Research in Vision and Ophthalmology.	4/26-30/81
Boston, MA	26 th Annual Meeting of Biophysical Society.	2/14-17/82
Waltham, MA	Consult with colleagues at Dept. of Biology, Brandeis U.	5/11/82
Minneapolis, MN	Annual Meeting of Society for Neuroscience.	10/31- 11/5/82
Boston, MA	Paper and poster, Annual Meeting of Society for Neuroscience.	11/5-11/83
Bethesda, MD	Confer with staff members, National Eye Institute.	12/7-8/83
Sarasota, FL	Annual Meeting of Association for Research in Vision and Ophthalmology.	4/30-5/4/84
Sarasota, FL	Annual Meeting of Association for Research in Vision and Ophthalmology.	5/6-10/85
Dallas, TX	15 th Annual Meeting of Society for Neuroscience.	10/19-24/85
Beverly Shores, IN	Lecture, Joint Vision Retreat, Dept. of Biological Sciences, Purdue U. and Dept. of Ophthalmology, Northwestern U.	11/23/85
San Francisco, CA	Annual Meeting of Biophysical Society.	2/9-13/86
Sarasota, FL	Annual Meeting of Association for Research in Vision and Ophthalmology.	4/28-5/2/86
Santa Barbara, CA	Consult with colleagues at U. of California and with officials at Retinitis Pigmentosa International Foundation.	7/20-29/86
Washington, DC	16th Annual Meeting of Society for Neuroscience.	11/9-14/86
Sarasota, FL	59 th Annual Meeting of Association for Research in Vision and Ophthalmology.	5/4-8/87
Cold Spring Harbor, NY	Poster, 2nd Molecular Neurobiology of <i>Drosophila</i> Meeting, Cold Spring Harbor Laboratory.	10/4-6/87
New Orleans, LA	17 th Annual Meeting of Society for Neuroscience.	11/14-18/87

Baltimore, MD	34 th Annual Meeting of Biophysical Society.	2/18-21/90
Sarasota, FL	Annual Meeting of Association for Research in Vision and Ophthalmology.	4/29-5/2/90
New Orleans, LA	Annual Meeting of American Society for Biochemistry and Molecular Biology.	6/3-7/90
Sarasota, FL	Annual Meeting of Association for Research in Vision and Ophthalmology.	4/28-5/3/91
Cold Spring Harbor, NY	Molecular Neurobiology of <i>Drosophila</i> Meeting, Cold Spring Harbor Laboratory.	9/25-29/91
Indianapolis, IN	Physiology Teaching Workshop, Indiana U. School of Medicine.	10/1/93
Washington, DC	23 rd Annual Meeting of Society for Neuroscience.	11/7-12/93
Indianapolis, IN	National Board of Medical Examiners Item Writing Workshop, Indiana U. School of Medicine.	11/18/93
Gary, IN	Problem-based, alternative pathway to medical education, Northwest Center for Medical Education, Indiana U. School of Medicine. Observer.	1/5/94
Chicago, IL	Society for Advancement of Chicanos and Native Americans in Science Annual Conference.	3/25-26/94
Ft. Lauderdale, FL	Annual Meeting of Association for Research in Vision and Ophthalmology.	5/14-19/95
San Diego, CA	26 th Annual Meeting of Society for Neuroscience.	11/11-16/95
Indianapolis, IN	Conference on Competency-based Curriculum, Indiana U. School of Medicine.	3/16/96
Chicago, IL	Meeting of Association of American Medical Colleges Central Group on Educational Affairs.	4/18-20/96
Washington, DC	Meeting of Assoc. of Neuroscience Departments and Programs.	4/21-22/96
New Orleans, LA	27 th Annual Meeting of Society for Neuroscience.	10/25-30/97
Ft. Lauderdale, FL	Annual Meeting of Association for Research in Vision and Ophthalmology.	5/10-15/98
Los Angeles, CA	28 th Annual Meeting of Society for Neuroscience.	11/7-15/98
Indianapolis, IN	Discuss collaborative project with colleagues at Dow Agrosiences.	12/17/99
Indianapolis, IN	Indiana U. School of Medicine Faculty Development Conference.	8/3/00
New Orleans, LA	30 th Annual Meeting of Society for Neuroscience.	11/4-9/00
Lake Tahoe, CA	6 th Lake Tahoe Symposium: Integrating Genomics, Epigenomics, Proteomics, and Phenomics in Drug Discovery and Diagnosis.	1/27-2/1/02
Montreal, Canada	Human Proteome Organisation 2 nd Annual World Congress.	10/8-11/03
Washington, DC	Experimental Biology 2004 Symposium.	4/17-21/04
Washington, DC	35 th Annual Meeting of Society for Neuroscience.	11/12-16/05

Teaching History

Semester/Year	Course
Purdue University	
Spring 2014	LCME 507, Human Neuroscience (with Bridges, Rosen, and Walker, course director)
Spring 2013	LCME 507, Human Neuroscience (with Bridges, Rosen, and Walker, course director)
Spring 2012	LCME 507, Human Neuroscience (with Bridges, Rosen, course director)

Spring 2011	LCME 507, Human Neuroscience (with Bridges, Rosen, and Walker, course director)
Spring 2010	LCME 507, Human Neuroscience (with Bridges, Rosen, and Walker, course director)
Spring 2009	LCME 507, Human Neuroscience (with Bridges, Rosen, and Walker, course director)
Spring 2008	LCME 507, Human Neuroscience (with Bridges, Rosen, and Walker, course director)
Spring 2007	LCME 507, Human Neuroscience (with Bridges, Rosen, and Walker, course director) BIOL 695S, Special Lectures in Neuroscience (TRP channels)
Fall 2006	LCME 503, Medical Physiology (Pak, course director, with Anderson, Bridges, Camarillo, and Rosen)
Spring 2006	LCME 507, Human Neuroscience (with Bridges, Rosen, and Walker, course director)
Fall 2005	LCME 503, Medical Physiology (Pak, course director; with Anderson, Bridges, Camarillo, and Rosen)
Spring 2005	LCME 507, Human Neuroscience (with Bridges, Rosen, and Walker, course director) BIOL 562, Neural Systems (with Powley and Sahley)
Fall 2004	LCME 503, Medical Physiology (course director; with Anderson, Bridges, Camarillo, and Rosen)
Spring 2004	LCME 507, Human Neuroscience (Pak, co-director with Jaeger; with Bridges) BIOL 562, Neural Systems (with Powley and Sahley)
Fall 2003	LCME 503, Medical Physiology (Pak, course director; with Bridges, Geddes, and Rosen)
Spring 2003	LCME 507, Human Neuroscience (Pak, co-director with Jaeger; with Bridges) BIOL 562, Neural Systems (with Powley and Sahley)
Fall 2002	LCME 503, Medical Physiology (Pak, course director; with Bridges, Geddes, and Rosen)
Spring 2002	LCME 507, Human Neuroscience (Pak, co-director with Jaeger; with Bridges)
Fall 2001	LCME 503, Medical Physiology (Pak, course director; with Bridges, Geddes, and Rosen)
Spring 2001	BIOL 504/BMS 533, Human Neuroscience (Pak, co-director with Jaeger; with Bridges)
Fall 2000	BIOL 503, Introduction to Neurobiology (with Geng, Rane, and Rosen) BIOL 539, Medical Physiology (with Bridges, Geddes, and Rane)
Spring 2000	BIOL 504/BMS 533, Human Neuroscience (Pak, co-director with Jaeger; Bridges)
Fall 1999	BIOL 539, Medical Physiology (with Geddes and Rane)
Spring 1999	BIOL 504/BMS 533, Human Neuroscience (Pak, co-director with Jaeger; with Bridges)
Fall 1997	BIOL 539, Medical Physiology (Pak, course director; with Bridges, Geddes, and Rane) BIOL 553, Human Physiology (with Bridges, Geddes, and Rane) BIOL 696, Seminars in Neurobiology (with Rane: Store-operated channels)
Fall 1996	BIOL 539, Medical Physiology (Pak, course director; with Bridges, Geddes, and Rane) BIOL 553, Human Physiology (with Bridges, Geddes, and Rane)
Fall 1995	BIOL 539, Medical Physiology (Pak, course director; with Bridges, Rane, and Strong)
Spring 1995	BIOL 539, Medical Physiology (Pak, course director; with Bridges, Rane, and Strong)
Fall 1994	BIOL 553, Human Physiology (Pak, course director; with Bridges, Rane, and Strong)
Fall 1993	BIOL 553, Human Physiology (Pak, course director; with Bridges, Rane, and Strong)
Fall 1992	BIOL 553, Human Physiology (Pak, course director; with Bridges, Rane, and Strong)
Fall 1991	BIOL 553, Human Physiology (Pak, course director; with Bridges, Rane, and Strong)
Fall 1990	BIOL 553, Human Physiology (Pak, course director; with Bridges, Rane, and Strong)
Spring 1990	BIOL 696, Seminars in Neurobiology
Fall 1989	BIOL 553, Human Physiology (Pak, course director; with Bridges, Carter, and Strong)
Fall 1988	BIOL 553, Human Physiology (Pak, course director; with Bridges, Carter, and Strong)
Fall 1987	BIOL 553, Human Physiology (Pak, course director; with Froehlich and Nakajima)
Fall 1986	BIOL 553, Human Physiology (Pak, course director; with Froehlich and Nakajima)
Fall 1985	BIOL 553, Human Physiology (Pak, course director; with Froehlich, Nakajima, and Winfree)
Fall 1983	BIOL 553, Human Physiology (Pak, course director; with Froehlich and Nakajima)

Fall 1982	BIOL 553, Human Physiology (Pak, course director; with Froelich and Nakajima)
Fall 1981	BIOL 553, Human Physiology (Pak, course director; with Froelich and Nakajima)
Spring 1981	BIOL 696, Seminars in Neurobiology
Fall 1980	BIOL 553, Human Physiology (Pak, course director; with Anderson and Babbs)
Fall 1979	BIOL 553, Human Physiology (Pak, course director; with Anderson and Babbs)
Spring 1979	BIOL 554, Human Physiology II (with Mittenthal, Pinto, and Wong)
Fall 1978	BIOL 553, Human Physiology (Pak, course director; with Anderson and Babbs) BIOL 556, Physiology (with Maher, Mittenthal, and Pinto)
Fall 1977	BIOL 553, Human Physiology (Pak, course director; with Anderson and Babbs)
Fall 1976	BIOL 553, Human Physiology (Pak, course director; with Anderson and Babbs) BIOL 556, Physiology (with Mittenthal and Pinto)
Fall 1975	BIOL 553, Human Physiology (Pak, course director; with Babbs) BIOL 556, Physiology (with Ostroy)
Fall 1974	BIOL 553, Human Physiology (Pak, course director; with Anderson and Babbs)
Fall 1973	BIOL 553, Human Physiology (Pak, course director; with Mittenthal) BIOL 556, Physiology (with Ostroy)
Fall 1972	BIOL 553, Human Physiology (Pak, course director; with Clark and Ostroy) BIOL 556, Physiology (with Ostroy)
Fall 1971	BIOL 553, Human Physiology (Pak, course director; with Ostroy and Pinto) BIOL 556, Physiology (with Ostroy)
Fall 1970	BIOL 553, Human Physiology (Pak, course director; with Ostroy and Pinto) BIOL 556, Physiology (with Ostroy)
Spring 1970	BIOL 657, Neurobiology (with Altman)
Fall 1969	BIOL 696, Seminars in Neurobiology
Spring 1969	BIOL 657, Neurobiology (with Altman)
Spring 1968	BIOL 657, Neurobiology (with Svaetichin)
Spring 1967	BIOL 657, Neurobiology (with Jacobson)
Spring 1966	BIOL 657, Neurobiology (with Jacobson)
Stevens Institute of Technology	
Summer 1963	Physics 25, Sophomore Physics I
Spring 1963	Physics 26, Sophomore Physics II Physics 139, Introduction to Electromagnetic Theory
Fall 1962	Physics 25, Sophomore Physics I Physics 51, Intermediate Mechanics
Spring 1962	Physics 26, Sophomore Physics II
Fall 1961	Physics 25, Sophomore Physics I Physics 51, Intermediate Mechanics
Spring 1961	Physics 16, Freshman Physics II
Fall 1960	Physics 35, Modern Physics for Engineers

Research Funding History

Sponsor	Grant number	Title	Dates	Amount
NIGMS	NOT-GM-08-13	Supplement to GM-1080-550 (N. Gautam, PI). G protein subunit functions. Subcontract to William L. Pak.	2009-11	\$82,128

NI Mental Health	R01 MH075041	Molecular analysis of synaptic transmission mutants	2006-11	\$1,609,796
	R01 MH49727	Molecular analysis of synaptic transmission	1994-99	\$1,013,182
National Eye Institute	R01 EY000033	Molecular genetic dissection of photoreceptor function	2003-09	\$2,153,144
	R56 EY000033		2009-11	\$343,125
	R01-EY000033	Molecular genetic dissection of photoreceptor function	1999-2003	\$1,468,582
	R37-EY000033	MERIT Award: Molecular genetic dissection of photoreceptor function	1989-99	\$3,029,976
	R01 EY000033	Genetics of photoreceptor excitation and degeneration	1984-89	\$867,745
	R01 EY000033	Genetic dissection of the phototransduction process	1979-84	\$524,380
	R01 EY000033	Sensory excitation and information flow in the retina	1974-79	\$291,337
	R01 EY000033	Sensory excitation and information flow in the retina	1969-74	\$208,538
	R01 EY04767	Structure-function studies of a <i>Drosophila</i> opsin protein	1987-92	\$547,295
	R01 EY04767	Isolation of genes involved in photoreceptor function	1983-87	\$212,321
	R01 EY03381	Mechanism of prolonged excitation in photoreceptors	1980-83	\$96,732
	R01 EY02590	Conductance fluctuations in photoreceptors of limulus	1978-79	\$20,632
	P30 EY02723	Center grant: Interdisciplinary studies of visual processes	1980-91	\$1,055,825
	T32 EY07008	Research training: Visual physiology and chemistry	1980-85	\$728,655
	T32 EY07008	Research training: Visual physiology and chemistry	1975-80	\$303,354
	K03 EY31813	Career Development Award: Excitation mechanisms in the retina	1969-71	\$73,472
	K03 NB31813	Career Development Award: Primary processes in visual reception	1966-69	\$66,560
NSF	BNS-8715059	Molecular study of photoreceptor function	1988-92	\$215,324
	BNS-8311203	Excitation mechanism in the photoreceptors	1984-88	\$259,692
	BNS80-15599	Excitation mechanism in the photoreceptors	1980-83	\$129,000
	BNS77-18647	Excitation mechanisms in the visual pathway	1977-80	\$109,057
	BMS75-19839	Excitation mechanisms in the visual pathway	1975-77	\$60,000
	GB-35316	Excitation mechanisms in the visual pathway	1972-75	\$105,000
	GB-24666	Excitation mechanisms in the visual pathway	1970-72	\$48,800
	GB-8140	Excitation mechanisms in the visual pathway	1968-70	\$46,500
	GB-4312	Mechanism of phototransduction in the vertebrate retina	1965-68	\$73,700
Dow Agrosciences	1119980238	Insecticide-resistant <i>Drosophila</i> mutant lines	1998-99	\$52,423
RP Foundation	93-154	Molecular genetic studies of retinal degenerations: <i>Drosophila</i> genes and	1993-96	\$252,200

Fighting Blindness		mammalian counterparts		
Showalter Trust	6056	Video microscope image processing	1987-89	\$70,000

Research Training Record

Doctoral Students Trained

Name	Date of Ph.D.	Present Position
Adnan A.S. Alawi	1972	Professor, Dept. of Biological Sciences, U. of Jordan
John A. Ward	1972	Division of Natural Sciences, Incarnate Word College, San Antonio, TX
Nancy White Custer	1972	Retired from teaching
Sandra R. Grabowski	1973 *1973-76	Deceased
Geraldine Waloga	1975	Adjunct Associate Research Professor, Boston U. School of Medicine
Chun-Fang Wu	1976	Professor, Dept. of Biology, U. of Iowa
Mei-Ven Marian Chang Lo	1977 *1977-79	Attending Anesthesiologist, Alexian Medical Center, San Jose, CA
Denis C. Larrivee	1979 *1984-85	Part owner and director, private company
Michael J. Wilcox	1980	Research Professor, Dept. of Anatomy, U. of New Mexico
Ruthann Nichols	1983	Associate Professor, Dept. of Biochemistry, U. of Michigan Medical School
Nancy J. Scavarda	1983	Co-owner, private company
Norbert E. Kremer	1983	Research Biologist, VA Hospital, Northport, NY
Edwin C. Johnson	1984	Head, Electrophysiology Division, SIBIA Neurosciences Inc., La Jolla, CA
Debra Scarborough Leonard	1986	
Brian T. Bloomquist	1988 *1989-90	Manager, Global External R&D, Eli Lilly and Co., Indianapolis, IN
Jaeseung Yoon	1990 *1990-92	Professor, Dept. of Genetic Engineering, Kyunghee U.; and President and CEO, PanGen Biotech Inc., Korea
Paulo A. Ferreira	1993 *1993-94	Associate Professor, Dept. of Ophthalmology and Neurosciences, Duke U.
Lin Chen	1994	Private practice in ophthalmology
Wencheng Liu	1995	Assistant Professor, Dept. of Neurology and Neuroscience, Weill Cornell Medical College
Michael T. Pearn	1995	Deceased
Chenjian Li	1997	Alex and Shirley Aidekman Family Professor of Neurology, Mt. Sinai School of Medicine

Bharath Srinivasan	1998	
Hosuk S. Lee	2001	Assoc. Prof., Sogang U., Seoul, Korea

*Dates as Postdoc

M.S. Students Trained

Name	Date of Degree
Robert J. Boes	1967
Frances M. Kelly Delagi	1967
John W. Pflum	1971
Louis J. West	1973
William N. Pickle III	1987
Lydia R. Randall Strong	1988
Constance Russell Brewer	1994
Tasha VonNiederhausern Merrill	2001
Cong Wei	2005
Eric Harness	2006

Former Postdoctoral Associates

Name	Dates of Training	Present Position
Joseph Grossfield	1967-71	Deceased
Lawrence H. Pinto	1970-72	Professor Emeritus, Dept. of Neurobiology & Physiology, Northwestern U.
Michael C. Deland	1971-74	
Baruch Minke	1973-75	Professor, Dept. of Physiology, Hebrew U., Jerusalem
Thomas Labhart	1975	Sr. Research Associate, Inst. of Zoology, U. of Zurich
Rudolf H. Schinz	1975-79	
Robert S. Stephenson	1976-81	Professor, Dept. of Biological Sciences, Wayne State U.
Fulton Wong	1977-79	Professor, Dept. of Ophthalmology, Duke U.
Hiroyuki Matsumoto	1979-80 *1980-85	Professor, Dept. of Biochemistry and Molecular Biology, U. of Oklahoma
Theodore Homyk, Jr.	1980-83	Sr. Laboratory Specialist, Dept. of Biology, U. of Virginia
Joseph E. O'Tousa	1980-83 *1983-85	Professor, Dept. of Biological Sciences, U. of Notre Dame
Peter M. O'Day	1981-82	Research Professor, Inst. of Neuroscience, U. of Oregon
Kunio Isono	1981-83	Associate Professor, Tohoku U., Japan
Phillip P. Franciskovich	1982-84	Part owner and director, private company
Koichi Ozaki	1985-87	Professor, Shimane U., Japan
Mamiko Ozaki	1985-87	Professor, Kobe U., Japan
Stephan Schneuwly	1986-89	Professor, Inst. of Zoology, U. of Regensburg, Germany
Randall D. Shortridge	1986-90	Associate Professor, Dept. of Biological Sciences, SUNY

		at Buffalo
Gregore Koliantz	1986-93 *1993-98	Dept. of Agronomy, Purdue U.
Joachim Bentrop	1987-90	Associate Professor, Institut für Zoologisches, Universität Karlsruhe, Germany
Toshiko Ono	1988-89	
Martin G. Burg	1988-93 *1993-99	Assoc. Professor, Dept. of Biomedical and Health Sciences, Grand Valley State U.
Craig R. Lending	1989-90	Dept. of Biological Sciences, SUNY at Brockport
Rama Kannan-Piotto	1990-91	Ecole Supérieure de Biotechnologie de Strasbourg (ESBS), Illkirch, France
Sergei Shukolyukov	1993-94	Senior Scientist, Russian Academy of Sciences
Yuhong Guan	1994-95	Deceased
Eugene Semenov	1994-97	Deceased
Chaoxian Geng	1995-97 *1997-2000 **2000-02	Lead Research Specialist, Dow AgroSciences, Indianapolis, IN
Young Seok Hong	1996-99	Assistant Professor, Dept. of Tropical Medicine, Tulane U.
Hung-Tat Leung	1996-02 *2002-06 **2006-08	Assoc. Professor, Dept. of Biology, Grambling State U.
Guohua Li	2002-04	Student, Mercer U.
Julie Tseng-Crank	**2004-06	Unigen/USA, Lacey, WA
Junko Kitamoto	2005	
Cecon Mahapatra	2006-08	Research Scientist, Dept. of Forestry and Natural Resources, Purdue U.
Azamat Aslanukov	2007-10	
Eunju Kim	2008-2013	Research Lab Specialist, IntMed-Geri, University of Michigan
Shikoh Shino	2008-2013	

* As Assistant Research Scientist

**As Associate Research Scientist

Visiting Faculty

Name	Dates	Affiliation
Gunnar Svætichen (deceased)	1968	Instituto Venezolano
Motohiko Murakami	1968-69	Keio University, Japan
Baruch Minke	1980-81	Hebrew University, Israel
Adnan A. Alawi	1986-87	University of Jordan (Fulbright Fellow)
Erich Buchner	1990-91	University of Wurzburg, Germany
Jing Liu	1992-93	U. of Science and Technology of China
Robert Brush (deceased)	1997	Dept. of Psychology, Purdue University (Faculty Fellow for Study in a Second Discipline)

Laboratory Technicians

Name	Dates
Vincent P. Rozzi	1965-66
Hilary G. Helmrich	1966-68
Martha Oliver Honeycutt	1967-70
Margaret Anderson	1968-69
Jalanda Jackson	1968-69, 1972-74
Sajida A. Ahmed	1968-70
Kay S. Arnold	1968-70
Alice Lin Huang	1969-70
Sally Timberlake	1970-71
Andrea Coggeshall	1970-72
Kellie J. Lidington	1970-73
Anna Lee	1971-72
Christine M. Healey	1973
Sherry Conrad	1973-78
Ross Lepera	1974-75
Beth Mieling	1974-75
Mary Look	1975-77
Charlotte Tubis	1975-77
Vivian Dumas	1976
Marjorie Busching	1976-77
Linda Sidorsky	1976-80
Mary Ann Scott	1977-78
Ruthann Nichols	1977-79
Jessica Ringgold Miller	1977-79
Carol Mathews Jones	1978-80
Lydia Randall Strong	1979-99
Pattie J. Thrapp	1980
Frances J. Piaszynski	1980-83
Quentin N. Pye	1980-86
William N. Pickle III	1983-87
Nancy E. Link	1984-85
Valorie Bowman	1985-92
Karen Phillips	1986-87
Marcia H. Perdew	1987-91
Sue Ann Ascough	1987-97
John D. Bowman	1987-2001
Qian Wei Tan	1988-91
Sigrid Buchner	1990-91
Eric Harness	2001-06
Vicki Croy	2006-2014

Operations Coordinators

Name	Dates
Lucy Winchester	1972-81
Carol Wilson	1981-82
Catherin Trimm	1981-84
Barbara Petty	1984-93

Winifred Walter	1994
Ann Pellegrino	1994-99
Sara Dykes McPhail	2000-03
Paul Grover	2004-06
Kim Gilbert	2006-08
Donna Miller	2008-11
Deana Galema	2012-15

Undergraduate Students Trained/Employed

Name	Dates
Bruce M. Bissonnette	1965-66
David B. Martin	1966-68**
Linda Kwolek Hershey	1968**
Patricia A. Medvick	1968-69
Von A. Jennings	1968-70** (Honors)
Don Jessup	1970-71*
Stephen A. Schultz	1970-72** (Honors)
Gregory L. Freeman	1971-73** (Honors)
Philip Hamilton	1975-76
Irmgard Brenner	1976
Lynn Murray	1976
Kimberley Goodrich Fisher	1976-77
Jeffrey Esterman	1977
Bruce Fuller	1977
Patrick McPherron	1977
Ping Chun Seto	1978
Arline Shippee	1978
Theresa Mobley	1979*
Patricia A. Hamilton	1979-81
Stephen G. Davis	1979-82
Anthony Birgoni	1980*
Maureen McCurdy Hillard	1980*
Rich Patty	1980*
Cindy Pondo	1980*
Scott Tremlett	1980*
John Dilley	1981*
Briana Swain	1982**
Latifah Ahmad	1983*
Lori Elmore	1983*
Robert Dutcher	1984*
Marco Floreani	1984*
Mark Jackson	1984*
Patty Tavormina	1985*
Lashorn Mansel	1986*
Renee Caldanaro	1986-87*
Robyne Kline Emby	1986-88**
Lorene Clement	1987*
Mike Eggleton	1987*

Sarah Horton	1987**
Darrin Kerr	1987*
Mei Chee Lee Pagliaro	1987**
Christan Steward	1987*
Jim Verhoeven	1987-88*
Bryan W. Rowland	1987-89*
Richard Lauder	1988*
Edward Little	1988-89*
Mildred Fox	1989*
Rose Moody	1989*
Kari Palek	1989*
Simin Shoghi	1989*
Tova Johns	1989-90*
Richard D. Moulton	1989-91** (Honors)
Diane Imel	1989-92
Angela Richards	1990*
Tracy Sin	1990*
Taina Li Connelly	1991*
Stanley Imel	1991*
Diane Minor	1991*
Sharon Ruffin	1991-92*
Michael Cavaletto	1992*
Marcia Lau	1992*
John G. Andre	1992-93**
Charles A. Festel	1992-93** (Honors)
Ashley Arvin	1993*
Tara Booth	1993*
Julie A. Nelson	1993-94***
Gracie Davis	1994*
Christine Ellis	1994***
Jeremy Hayes	1994*
Keith Taylor	1994 (MARC/AIM)
Jennifer Wargel	1994**
Steve Amos	1995*
Amy Evrard Desmarais	1995*
Benjamin Monroe	1995*
Karen Orduz	1995 (MARC/AIM)
C. Matthew Sharkey	1995**
Robina Chowdhery	1995-96**
Lisa Kennedy	1995-96*
Elizabeth Morelli	1995-96*
Kirsten Nielsen	1995-96***
Swati Singh	1995*-96**
Rosana Amador-Miranda	1996 (MARC/AIM)
David Julovich	1996-98***
Leandro Espinoza	1997 (MARC/AIM)
Mojgan Savabi	1997**
Stacy Kim	1997-98***
Sarah Claeys	1998*
Anthony R. Dirr	1998*

Ellen Considine	1998-99*
Mai-Phuong Le	1998-99*
Erin Wilson	1998-99*
Eric Thompson	1999*
Ranjini Vijayargghavan	1999*
Adel Bakhtiarova	1999-2001**
Dana Behneman	1999-2001*
Sarah Munchel	1999-2001***
Alison Eggert	2000*
Rengin Soydaner	2000*
Justin Knoy	2000-01*
Kennita Jobe	2001 (MARC-AIM)
Lindsay Steirer	2001-03***
Erin Chase	2002-03*
Michael S. Aho	2002-05*
Diana Herrera	2003*
Traci Kruer	2003*
Kent Williams	2003**
Aaron Dukes	2003-05**
Eric Wagoner	2004*
Brittany Anderson	2005*
Alexander Patrevito	2005-06*
Joanna Reiman	2005-06**
Jon Kasperan	2006-09*
Stephanie Sarver	2006-09***
Justin Gardner	2010**
Jason Hadley	2010**
Janki Mundrawala	2010**
Chelsea Plummer	2010*
Justin Gardner	2010-2012**
Wendell Smith	2010-2012***
Amanda Peabody	2010-2013**
Babak Tehrani	2011-2012**
Christina Castro	2011 (SROP)
Jing Li	2012-2013**
Stephanie Neace	2012-2013**
Melissa Hayes	2013**

* Undergraduate assistant (paid for job)

** Research participant (research for credit)

***Both

Publications

Pak WL, Ozaki S, Roe BP, and Greisen KI (1961). Momentum spectrum of muons. Phys. Rev. 121:905-907.

Pak WL and Greisen KI (1962). Nuclear interactions of high energy cosmic rays. Phys. Rev. 126:1668-1670.

Pak WL and Cone RA (1964). Isolation and identification of the initial peak of the early receptor potential. Nature 204:836-838.

- Pak WL (1965). Some properties of the early electrical response in the vertebrate retina. Cold Spring Harbor Symp. Quant. Biol. 30:493-499.
- Pak WL and Ebry TG (1965). Visual receptor potential observed at sub-zero temperatures. Nature 205:484-486.
- Pak WL and Ebry TG (1966). Early receptor potentials of rods and cones in rodents. J. Gen. Physiol. 49:1199-1208.
- Pak WL and Boes RJ (1967). Rhodopsin: Responses from transient intermediates formed during its bleaching. Science 155:1131-1133.
- Pak WL, Ebry TG, and Rozzi VP (1967). Effect of changes in the chemical environment of the retina on the two components of the early receptor potential. Nature 214:109-110.
- Pak WL (1968). Rapid photoresponses in the retina and their relevance to vision research. Photochem. Photobiol. 8:495-503.
- Pak WL and Helmrich HG (1968). Absence of photodichroism in the retinal receptors. Vision Res. 8:585-589.
- Pak WL, Grossfield J, and White NV (1969). Nonphototactic mutants in a study of vision in *Drosophila*. Nature 222:351-354.
- Murakami M and Pak WL (1970). Intracellularly recorded early receptor potential of vertebrate photoreceptors. Vision Res. 10:965-975.
- Pak WL, Grossfield J, and Arnold KS (1970). Mutants of the visual pathway of *Drosophila melanogaster*. Nature 227:518-520.
- Alawi AA and Pak WL (1971). On-transient of insect electroretinogram: Its cellular origin. Science 172:1055-1057.
- Cone RA and Pak WL (1971). The early receptor potential. pp. 345-365. In W. Loewenstein (ed.), Handbook of Sensory Physiology, Vol. I. Principles of Receptor Physiology. Springer-Verlag, New York.
- Alawi AA, Jennings V, Grossfield J, and Pak WL (1972). Phototransduction mutants of *Drosophila melanogaster*. pp. 1-21. In G.B. Arden (ed.), The Visual System: Neurophysiology, Biophysics, and Their Clinical Applications. Plenum, New York.
- Grabowski SR, Pinto LH, and Pak WL (1972). Adaptation in retinal rods of axolotl: Intracellular recordings. Science 176:1240-1243.
- Deland MC and Pak WL (1973). Reversibly temperature sensitive phototransduction mutant of *Drosophila melanogaster*. Nature New Biol. 224:184-186.
- Ostroy SE and Pak WL (1973). Protein differences associated with a phototransduction mutant of *Drosophila*. Nature New Biol. 243:120-121.
- Pak WL, Grabowski SR, and Pinto LH (1973). Receptor adaptation and receptor interactions: Some results of intracellular recordings. pp. 225-228. In H. Langer (ed.), Biochemistry and Physiology of Visual Pigments, Springer-Verlag, New York.
- Ostroy SE and Pak WL (1974). Protein and electroretinogram changes in the alleles of the *norpA*^{P12} *Drosophila* phototransduction mutant. Biochim. Biophys. Acta 368:259-268.

- Ostroy SE, Wilson M, and Pak WL (1974). *Drosophila* rhodopsin: Photochemistry, extraction and differences in the *norpA*^{P12} phototransduction mutant. *Biochem. Biophys. Res. Commun.* 59:960-966.
- Pak WL and Lidington KJ (1974). Fast electrical potential from a long-lived, long-wavelength photoproduct of fly visual pigment. *J. Gen. Physiol.* 63:740-756.
- Pinto LH and Pak WL (1974). Light-induced changes in photoreceptor membrane resistance and potential in gecko retinas. I. Preparations treated to reduce lateral interactions. *J. Gen. Physiol.* 64:26-48.
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