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CURRICULUM VITAE
Katherine V. Fite

ADDRESS: Dr. Katherine V. Fite, Emeritus Professor
University of Massachusetts, Amherst, MA 01003
Department of Psychological and Brain Sciences
Telephone: (413) 549-5473, email: kfite@psych.umass.edu

EDUCATION: Ph.D. - Brown University, 1969, Experimental Psychology
M.S. - Brown University, 1967, Experimental Psychology
B.S. - Florida State University, 1963, Psychology (Honors)

PROFESSIONAL APPOINTMENTS:

Professor Emeritus, University of Massachusetts, 2007 - present
Professor, University of Massachusetts 1981-2007
Director, Neuroscience and Behavior Program, University of Massachusetts Amherst, l994 - 2001
Director, Sensory Systems Program, NATIONAL SCIENCE FOUNDATION, l991-l992
Visiting Associate Professor, Anatomy and Psychiatry, SUNY at Stony Brook, l976-l977
Associate Professor, University of Massachusetts, 1975-1980
Assistant Professor, University of Massachusetts, 1970-1974
NIH Postdoctoral Fellowship, Brown University, l969-l970
NIH Pre-doctoral Fellowship, Brown University, 1964-1968

ADMINISTRATIVE EXPERIENCE:

Director, Neuroscience and Behavior Program (l994-2001): Dr. Fite was instrumental in establishing an interdepartmental, interdisciplinary doctoral program in Neuroscience and Behavior at the University of Massachusetts Amherst in l986 and negotiated substantial financial commitments from the University administration. Dr. Fite also initiated a one-year "fast-track" MSc. degree designed for students completing the undergraduate Neuroscience Concentration at UMass Amherst

Director, Sensory Systems Program, National Science Foundation: Division of Integrative Biology and Neuroscience (1991-1992). Major administrative responsibilities included:

• Administration of $5,000,000 in research grant funds, with major responsibility for the review, evaluation, and funding of grant applications relating to the neural and behavioral correlates of sensory systems, as well as representation of NSF in a variety of inter-divisional, cross-directorate, and federal interagency initiatives (National Institutes of Health, National Aeronautics and Space Administration, Department of Agriculture, Air Force Office of Research, Department of Energy).

• Participation in the development and implementation of policies relating to neuroscience-based activities in the Division of Integrative Biology and Neuroscience, graduate fellowships and a variety of NSF cross-directorate initiatives; representation of NSF in the development and coordination of several, new federal interagency initiatives including, "The Human Brain Project" and the NASA "Neurolab" Shuttle Missions; participation in NSF outreach activities to the neuroscience research community with regard to existing programs, funding opportunities, and new initiatives.

Founding Editor: ***Visual Neuroscience*** : An international peer-reviewed scientific journal devoted to

publication of research articles relating to the neural correlates of vision established in 1986. ***Visual Neuroscience*** is published by Cambridge University Press.

AWARDS AND DISTINCTIONS:

Katherine V. Fite Distinguished Alumnus Lecture, Neuroscience and Behavior Program, 2010-
Director, Sensory Systems Program, **National Science Foundation**, 1991-1992
UMASS Distinguished Research Faculty Fellowship Award, l988-l989
Founding Editor: ***Visual Neuroscience*** (Cambridge University Press), 1986 -1990
U.S.- China Distinguished Visiting Scholar, co-sponsored by the National Academy of Sciences and Chinese *Academia Sinica* at the Institute of Biophysics, Bejing PRC - 1985
Research Career Development Award, National Institute of Mental Health, 1977-1982
NIH Postdoctoral Fellowship, 1968-1970
NIH Predoctoral Fellowship, 1963-1967

Major Citations:

American Men and Women of Science
Who's Who in American Women
Who's Who in the World
Who's Who in Science and Technology

RESEARCH AND SCHOLARLY INTERESTS:

Visual Neuroscience and Comparative Neuroanatomy: Neuroanatomical, neurophysiological, and behavioral correlates of vision; comparative functional anatomy of retina and subcortical visual pathways; interface between visual and serotonin systems and the role of light stimulation in mood and affective disorders.

SELECTED PUBLICATIONS: (1991-2006) .

Montgomery, N. and **Fite, K. V.** Ascending tectofugal pathways: cells of origin and topography in *Rana pipiens. Visual Neuroscience*, l991, 7: 479-486.

Fite, K.V. Mapping the visual brain. *Visual Neuroscience* , l991, 4: 1-2

Montgomery, N. M., **Fite, K. V.** and Li, Z. Anatomical evidence for an intergeniculate leaflet in *Rana pipiens*. *Neuroscience Letters*, l991, 133: 105-108.

Montgomery, N. M. and **Fite, K. V.** Organization of ascending projections from the optic tectum and mesencephalic gray in Rana pipiens., *Visual Neuroscience*, 1991, 5: 459 -478.

Fite, K. V., Bengston, L. and Donaghey, B. Age, sex and light damage in the avian retina: A model system. In P. Bagnoli and W. Hodos, (eds). THE CHANGING VISUAL SYSTEM: Maturation and Aging in the Central Nervous System. Plenum Press, l991, pp. 283-294.

Hodos, W., Miller, R. F. and **Fite, K. V**. Age-dependent changes in visual acuity and retinal morphology in pigeons. *Vision Research*, l991, 31: 669-677

Hodos, W., Miller, R. F., **Fite, K. V**., Porciatti, V., Holden, A. O., Lee, J. Y., and Djamgoz, M. B. A. Life-span changes in the visual acuity and retina of birds. In P. Bagnoli and W. Hodos, (eds) *THE CHANGING VISUAL SYSTEM: Maturation and Aging in the Central Nervous System.* Plenum Press,

1991, 137-148.

Fite, K. V., Bengston, L., Taggert, G., Montgomery, N., and Tyler, C. Metabolic correlates of optokinetic stimulation in the frog, *Rana pipiens. Journal of Comparative Neurology*, l992, 316: 459-466.

Fite, K. V., Bengston, L. and Donaghey, B. Experimental light damage increases lipofuscin in the retinal pigment epithelium of Japanese quail (Coturnix Japonica). *Experimental Eye Research,* l993, 57: 449-460.

Fite, K. V., Bengston, C. L. and Cousins, F. Drusen-like deposits in the outer retina of Japanese quail. *Experimental Eye Research* , l994, 59: 417-424.

Tyler, C., **Fite, K. V**. and DeVries, G. Distribution of GAD-immunoreactivity in the retina and central visual system of *Rana pipiens*. *Journal of Comparative Neurology*, l995, 353: 439- 450.

Montgomery, N. M., **Fite**, **K. V.** and Li, Z. Segregation of optic axons based on central target: the medial optic tract in *Rana pipiens. Neuroscience Letters* , l995, 195: 199-202.

Basil, J., Kamil, A.C., Balda, R. P. and **Fite, K. V**. Differences in hippocampal volume among food storing Corvids. *Brain Behavior and Evolution* , l996, 30: 156-164.

Li, Z., **Fite, K. V.**, Montgomery, N. M and Wang, S. R. Single unit responses to visual, whole-field stimulation in the pretectum of *Rana pipiens. Neuroscience Letters* , l996, 218: 193-197.

Aller, M. I., Janusonis, S., **Fite, K. V**., and Fernandez-Lopez, A. Distribution of the GABA-A receptor complex b2/3 subunits in the brain of the frog, *Rana pipiens. Neuroscience Letters*, l997, 225: 65-68.

Janusonis, S. and **Fite, K. V**. NMDAR1-like immunoreactive fibers appear in the ipsilateral optic tract during optic nerve regeneration in *Rana pipiens. Neuroscience Letters*, l997, 236: 1-4.

Li, Z.. and **Fite, K. V.** Distribution of GABA-like immunoreactive neurons and fibers in the central visual nuclei and retina of frog, *Rana pipiens. Visual Neuroscience*, l998,15: 995-1006.

Montgomery, N. M., Tyler, C. and **Fite, K. V.** Organization of the optic nerve, optic chiasm and innervation of multiple target nuclei in *Rana pipiens. Journal of Comparative Neurology. l998,402: 222-237.*

Fite, K. V., Blaustein, A., Bengston, L. and Hewitt, H. Evidence suggesting retinal light damage in *Rana cascadae*, a declining amphibian species. *Copeia*, l998, 4: 906-914

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Fite, K. V., Janusonis, S., Foote, W. and Bengston, L. Retinal afferents to the dorsal raphe nucleus in rats and Mongolian gerbils. *Journal of Comparative Neurology*, 1999, 414: 469-484.

Janusonis, S., **Fite, K. V**. and Foote, W. Topographic organization of serotonergic dorsal raphe neurons projecting to the superior colliculus in the Mongolian gerbil**.** *Journal of Comparative Neurology*, 1999, 413, 342-355.

Fite, K. V. and Janusonis, S. Retinal projection to the dorsal raphe nucleus in the Chilean degus. *Brain Research*, 2001, 895: 139-145.

Li, Z. and **Fit**e, **K. V**. GABAergic visual pathways in the frog, *Rana pipiens*. *Visual Neuroscience*, 2001, 18: 1-8

Janusonis, S. and **Fite, K. V.** Diurnal variation of c-Fos expression in subdivisions of the dorsal raphe nucleus of the Mongolian gerbil (*Meriones unguiculatus*). *Journal of Comparative Neurology*, 2001, 440: 31-42.

Fite, K. V. and Janusonis, S. Retinal afferents to the parabrachial nucleus. *Brain Research*, 2002, 941: 9-14.

Janusonis, S., **Fite, K. V.**, and Bengston, L. Subdivisions of the dorsal raphe nucleus projecting to the lateral geniculate nucleus and primary visual cortex of the Mongolian gerbil. *Neuroreport*, 2003, 14: 459-462

Fite, K. V., Birkett, M., Smith, A., Janusonis S. and McLaughlin S. Retinal ganglion cells projecting to the dorsal raphe and lateral geniculate complex in Mongolian gerbils. *Brain Research*, 2003, 973: 146-150.

Fite, K. V., Wu. P., Bellemer, A. Photostimulation alters c-Fos expression in the dorsal raphe nucleus. *Brain Research*, 2005, 1031: 245-252.

Birkett, M. and Fite, K.V. Diurnal variation in serotonin immunoreactivity in the dorsal raphe nucleus, *Brain Research*, 2005, 1034: 180-184.

Anderson, D. R., Fite, K.V., Petrovich, N. and Hirsch, J. Cortical activation while watching video montage; An fMRI study. *Media Psychology*, 2006, 8: 7-24

RESEARCH GRANTS - COMPETITIVE AWARDS

National Institutes of Health: (R01 awards)
Analysis of Retinal Projections to the Frog Diencephalon, 1971-1974
The Non-Mammalian Fovea, 1974-1976
Genetic Eye Defect and Amelanosis in the Chicken, 1978-1981-l985
Microiontophoresis of the Pretectal and Accessory Optic Systems; 1987-l990,
Experimental Analysis of Aging in the Vertebrate Retina, 1987-1995
Predoctoral Training Grant in Neuroscience and Behavior, 2000-2004

National Science Foundation:
Biological and Behavioral Studies of Anuran Vision, 1974-1977
Neurobiological and Behavioral Studies of Anuran Vision, 1977-1982
Pretectal and Accessory Optic Pathways, 1985-1988
Pretectal and Accessory Optic Systems: Neuroanatomical Investigations, 1989-1992
Neuroanatomical Organization of the Central Visual Pathways in *Rana pipiens*, 1991-1996
Neuroanatomical Analysis of a Direct Optic Pathway to the Brainstem, 2001-2005
Neuroanatomical Analysis of a Direct Optic Pathway to the Brainstem, 2001-2006

National Institutes of Mental Health:

Temporal and Spatial Acuity in the Great Horned Owl, 1971-1972

NIH Research Career Development Award: Neuropsychology and Behavior of Vertebrate Vision, 1977-1982

Fight for Sight, Inc. (Nat1ional Council to Combat Blindness):"The Origin of Retinal Dystrophy: An Experimental Analysis Utilizing Embryonic Eye Transplantation," 1980- 981

The Whitehall Foundation:
Mapping of Central Visual Areas Mediating Optokinetic Nystagmus, 1983-1984
Retinal Projections to the Brainstem: An Interface Between Vision and Serotonergic System, 1997- 2000

Sandoz Research Institute : Cyclosporin A and Uveitis, 1989-1990

University of Massachusetts: Competitive awards
Faculty Research Grants: 12 research awards, 1970 - 1997
UMASS/Baystate Medical Center Collaborative Research Program: 1995-1996, 1998-2002
Healy Endowment/Public Service Award: 1997-1998

JOURNAL ARTICLE REVIEWS:

Animal Learning and Behavior, Behavioral Brain Research, Brain Behavior and Evolution, Brain Research, Brain Research Bulletin, Copeia, Current Eye Research, Experimental Brain Research, Experimental Eye Research, Investigative Ophthalmology and Visual Science, Journal of Comparative Neurology, Journal of Comparative and Physiological Psychology, Journal of Chemical Neuroanatomy, Journal of Comparative Physiology, Journal of Experimental Biology, Journal of Neurophysiology, Journal of Neuroscience, Nature, Neuroscience, Neuroscience Letters, Physiology and Behavior, Science, Vision Research, Visual Neuroscience

TEACHING AND RESEARCH SUPERVISION:

Undergraduate Courses

Introductory Psychology	Brain, Mind, and Behavior
Psychology as a Natural Science	Visual Perception and the Brain
Comparative Psychology	Brain, Evolution and Behavior
Introductory Topics in Neuroscience	Neurohistology
Honors Seminar in Neuroanatomy	Seminar in Behavioral Neuroscience
Seminar in Visual Neuroscience	

Graduate Courses

Brain Development and Behavior	Mapping the Brain: Brain Imaging
Neuroanatomical Techniques	The Visual System in Evolution
Proseminar in Neuroscience & Behavior	Foundations of Neuroscience
The Visual Brain	Fundamentals of Neuroanatomy

POST-RETIREMENT COMMUNITY SERVICE:

Board of Directors, League of Women Voters Amherst 2015- present
Board of Directors, Amherst Survival Center, 2007-2010
Introduction to Patient Advocacy Course (UMass School of Public Health) 2007-2008
Town of Hadley Agricultural Commission, 2005-2007
Senior Health Advisory Committee, Town of Amherst, 2010 -2015
Dakin Pioneer Valley Animal Shelter Development Committee, 2010 - 2012
Area Salvation Army Representative, Unit #205, 2007- 2015