

CURRICULUM VITAE

Michael Stuart Loop

Address: Department of Vision Sciences (aka Physiological Optics)
University of Alabama at Birmingham
924 South 18th Street
Worrell Building, Room 610
Birmingham, Alabama 35294-4390

Telephone: (205) 934-6751
Fax: (205) 934-5725
e-mail: loop@uab.edu

Place and Date of Birth: Pittsburgh, Pennsylvania - February 28, 1946

Education: The Florida State University

B.S. (Honors) 1968 (Psychology)
“Operant conditioning in snakes with water reinforcement: a preliminary study”

M.S. 1971 (Psychology)
“An investigation of the scotopic luminosity function in the cat employing a modified condition suppression technique”

Ph.D. 1972 (Psychology)
“A temporal contrast modulation function for the cat: evoked potential and behavioral determinations”

Family: Married, two daughters (8-12-74 & 1-20-83)
two sons (8-28-88 & 2-13-90)

Research and/or Professional Experience:

2011-present Associate Professor of Vision Sciences (aka Physiological Optics),
Neurobiology and Psychology
University of Alabama at Birmingham
Birmingham, Alabama

1997-2011 Associate Professor of Vision Sciences (aka Physiological Optics) &
Neurobiology
University of Alabama at Birmingham

1981-1997 Associate Professor of Physiological Optics & Psychology
University of Alabama at Birmingham
Birmingham, Alabama

- 1978-1981 Assistant Professor of Physiological Optics & Psychology
University of Alabama at Birmingham
Birmingham, Alabama
- 1975-1978 Visiting Assistant Professor (w/ P.H. Hartline)
Department of Physiology and Biophysics
University of Illinois at Urbana-Champaign
Urbana, Illinois
- 1974-1975 Sloan Foundation Postdoctoral Fellow (w/ S.M. Sherman)
Department of Physiology
University of Virginia School of Medicine
Charlottesville, Virginia
- 1972-1974 NIH Postdoctoral Fellow (w/ J.A. Jane)
Department of Neurological Surgery
University of Virginia School of Medicine
Charlottesville, Virginia
- 1968-1972 NSF Predoctoral Fellow (w/ M.A. Berkley)
Department of Psychology
Florida State University
Tallahassee, Florida
- 1968 Summer Student Aide (w/ D.D. Morris)
Division of Biological and Medical Research
Argonne National Laboratory
Argonne, Illinois
- 1967 NSF Undergraduate Research Participant (w/ J.C. Smith)
Department of Psychology
Florida State University
- 1966-68 Honors Program (w/ F.T. Crawford)
Department of Psychology
Florida State University
- 1962-66 Camp Counselor (Camp Marymount: Nature, Archery)
- 1961-64 Animal Caretaker (part-time)
Cumberland View Farms
Clinton, Tennessee
- 1961-1964 Oak Ridge High School
Oak Ridge, Tennessee

Center Affiliations:

Vision Science Research Center
Civitan International Research Center
Comprehensive Neuroscience Center

Professional Societies:

The Alabama Academy of Science

Research Interests:

Visual Perception
Animal behavior

Professional Service:

Ad hoc manuscript review:

Copeia
Herpetologica
Journal of Comparative and Physiological Psychology
Animal Learning and Behavior
Vision Research
Journal of Comparative Psychology
Laboratory Animal Science
Behavioral Brain Research
American Journal of Optometry and Physiological Optics
Clinical Vision Sciences,
Behavioral & Neural Biology
Visual Neuroscience,
Optometry and Vision Science
The Psychological Record
Perception & Psychophysics
Journal of Scientific Exploration
Canadian Journal of Zoology
BMC Neuroscience, Journal of Neuroscience,
Graefe's Archive for Clinical and Experimental Ophthalmology
Journal of Zoology
Animal Cognition
RETINA The Journal of Retinal and Vitreous Diseases
Experimental Eye Research
Experimental Biology and Medicine
Journal of Comparative Physiology A
Journal of Digital Imaging

Ad hoc grant review:

National Science Foundation,
National Eye Institute,
Veterans Administration,
Vision Science Research Center,
U.S. Civilian Research & Development Foundation (CRDF)
Sigma Delta Epsilon/ Graduate Women in Science (SDE/GWIS) (4/2008)

Departmental Committees:

Graduate Admissions (1979-1997)
Faculty Affairs (1982-1990; Chairman 1992-1996, 2005-07)
Graduate Council in Physiological Optics (1982-1984)
Tenure & Promotions (1981-Present)

School Committees:

Biomedical Research Support Grant (1979-1993);
Faculty Senate Salary Advisory (1979);

Vision Science Research (CORE) Advisory (1980-82, 1991-1994,);
Student Affairs/Admissions (1982-83, 1983-84, 1986-87, 1992-95, 1998-2012);
Council on Optometric Education Self Study (Graduate Program 1984, 1990;
Admission, 1994; Facilities, Students, 2001);
Dean's Policy Advisory (1995-1996);
School of Optometry Faculty Affairs (1996-98, 2002-2006);
Honor Council (1997-98, 2010-14);
Visiting Scholars Program Advisory Committee (1984-2000);
Strategic Planning Retreat-Student Affairs (2002).

University Committees:

Animal Resources Advisory (1979-1987)
Animal Costs (1982-1985)
Animal Use (1984-1987)
Grievance (1982-1984)
Search Committee/Dean of the School of Optometry (1985-1986)
New Programs/UAB Graduate Council (1985-1987)
Faculty & Staff Benevolent Fund (1986-1987)
Minority High School Student Research Apprentice Program Committee (1988-1989)
University-Wide Grievance Panel (1994-95, 1998-2000, 2006-2014)
Graduate Council Advisory Committee (1995-1997)
Graduate School Research Day (Judge, 2004)
Faculty Senate (6/2008 – 5/2010)
Faculty Policies & Procedures Committee (6/2008 – 5/2011)
Faculty Senate Ad Hoc/Research environment issues (2009-10)
Faculty Senate/alt. (6/2011-5/2013)
Faculty Policies & Procedures Committee/alt. (6/2011 – 5/2014)

Extramural:

Association of Schools and Colleges of Optometry - Curriculum Conference (1992);
Helen Keller International Art Show Judge (2002, 2004,2006);
Alabama Scholars Association (Affiliated Head/UAB, 2003-04, President 2004-
present),
Newton BBS / Ask A Scientist program (2005 – present).

Honors and Awards:

Class of 2010 Presenter, UABSO Convocation, May, 2010
Scout Master Range Champion (Camp Sequoyah, 2/2000)
Basic Health Teaching Award Nominee, UAB/AOSA, 1991, 1992, 1993
Distinguished Graduate Award/Psychobiology Program, FSU, 1981-82
Sloan Foundation Postdoctoral Fellow, 1974-75
NIH Postdoctoral Fellow, 1972-74
NSF Predoctoral Fellow, 1968-72
Argonne National Laboratory Summer Student Aide, 1968
NSF Undergraduate Research Participant, 1967
Honors Program The Florida State University, 1966-68
Honor Award, 1961 (Camp Marymount, Senior Camp)
Outstanding Camper Award, 1958 (Camp Marymount, Junior Camp)

Community Activities

Great Books Reading & Discussion Group (1988-1998)

Boy Scouts (Troops III, 57 & 28)
Assistant Scout Master (1988-2004)
Merit Badge Counselor (Reptile Study, Fishing)

Cub Scouts (Pack III)
Leader of various dens (1994-1999)

Cub Scout Summer Camp
Nature Counselor, (1996)
Webelos "Scientist & Naturalist" pins (2000)

Southside Baseball
Indians (AA) - Head Coach (1997, 7-5)
Diamondbacks (AA) – Head Coach (1998, 7-5)
Indians (AAA) – Assistant Coach (1999, 5-7)
Cardinals (AAA) – Assistant Coach (2000, -)
Orioles (Majors) – Assistant Coach (2000, +)
Athletics (Majors) – Assistant Coach (2001, -)

Science Fair Judge
International Science and Engineering Fair (Judge, 1994)
Epic School (1994, 1997)
Alabama Junior Academy of Sciences (Judge, 1995)
Hewitt Elementary (1998)
National Junior Science & Humanities Symposium(Judge, 2005),
The Altamont School (winter/2006)
Central Alabama Regional Science & Engineering Fair (3/08)
The Altamont School (2/2009)
Paper reading judge (2/2009)
Central Alabama Regional Science & Engineering Fair (3/09)

Science Camp
The Altamont School (2001-06)

Altamont Parent Association / 12th Grade Representative (2007-08)

Formula SAE practice staff, Barber Motor Speedway (January 2009, 2010)

Extramural Research Funding:

- G1 Psychophysical Effects of Visual Deprivation
Principal Investigator, NIMH: 1 R01 MH 28268; MH 30936; MH 32471
June 1, 1976 to June 30, 1979 (Direct: \$122,905)
- G2 Psychophysical Effects of Visual Deprivation
Principal Investigator, NEI: R01 EY 03303
August 1, 1979 to July 30, 1983 (Direct: \$134,597)
- G3 Photopic Spectral Sensitivity of the Cat (Rank #1)
Principal Investigator, NSF: BNS8207314
October 1, 1982 to March 31, 1985 (Direct: \$52,532)
- G4 Psychophysical Effects of Visual Deprivation
Principal Investigator, NEI: R01 EY 03303

- September 30, 1982 to September 29, 1984 (Direct: \$124,001)
- G5 Visual Reaction Time of the Cat (Rank #1.5)
Principal Investigator, NEI: R01 EY05576
December 1, 1984 to August 31, 1988 (Direct: \$47,324)
- G6 Small Instrumentation Program
Awardee, NEI: S15 EYO7905
August 1, 1988 to July 31, 1989 (Direct: \$8,100)
- G7 Spectral Sensitivity of Rats and Cats
Principal Investigator, NEI: RO1 EYO7324
September 1, 1988 to August 31, 1994 (Direct: \$109,566)
- G8 Temporal Dynamics of Visual Suppression
Principal Investigator, Southern Council of Optometry
November 1, 1995 to October 30, 1997 (Direct: \$3,500)
- G9 Color Thresholds in Human Dichromats
Principal Investigator, Southern Council of Optometry
December 1, 1997 to November 30, 1999 (Direct: ~\$825)
- G10 Ground Squirrel Color Thresholds
Principal Investigator, Southern Council of Optometry
May 1, 2000 to May 30, 2002 (Direct: ~\$825)
- G11 Color Vision Thresholds in Ground Squirrels
Principal Investigator NSF BNS 0076972
August 1, 2000 to July 31, 2002 (Direct: \$2,987)

Teaching: Course; University/Department

- 1971-72 Physiological Psychology (lab); Florida State University/Psychology
- 1972-73 Advanced Physiological Psychology (lab); Florida State University/Psychology
- 1975-76 Physiology of the Visual System (graduate); University of Illinois/Physiology and Biophysics
- 1977 Honors Biology (Nervous System and Behavior); University of Illinois/Physiology and Biophysics
- 1978-81 Visual Psychophysics and Physiology I (color vision);
Visual Perception;
Current Developments in Optometry and Visual Science;
Visual Psychophysics and Physiology II (Adaptation);
Color Vision: Graduate Core Seminar;
Comparative Neurobiology of Vision (Animal Psychophysics)
Visual Perception: Graduate Core Seminar;
Introduction to Physiological Optics: Graduate Core Seminar (color vision)
University of Alabama at Birmingham/Physiological Optics

- 1981-1985 Current Topics in Optometry and Visual Science (professional program)
- 1981-Present Visual Perception (professional program, (PO/VS 231))
- 1981-1999 Color Vision (graduate program)
 Visual Sensitivity and Resolution (graduate program, 1998)
 Visual Perception (graduate program)
 University of Alabama at Birmingham/Physiological Optics
- 1995-1997 Animal Behavior/UAB/Psychology
- 1996-2002 Medical Neuroscience (color vision)/UAB/Neurobiology
- 1999-2013 Retina and Subcortical Systems/Scotopic Vision & Intro Color Vision (Graduate Core)
 Central Visual Mechanisms I/Color Processing in the LGN (Graduate Core)
- Central Visual Mechanisms II/Color Vision, Binocular Sensitivities(to 2008),
 Suprathreshold Psychophysics (Graduate Core)
- 2002 Color Vision – Advanced Graduate Course (with Timothy Kraft)
- 2006,-12,-13 Psychophysical Measurement of Visual Function (VS ever changing number)
- 2013 Central Visual Processing (VIS 456/756): color vision and suprathreshold psychophysics
 Central Visual Processing (VIS 763-SI): color vision and suprathreshold psychophysics

Students:

Minority High School Summer Research Apprentices

- Jonathan Shorts (1982)
 Carol Kao (1984 – 2nd Place)
 Gretchen Horton (1986 – Westinghouse Science Talent Search Award)
 Constance (1996)
 Fears
 Darius Welch (1996)

Undergraduate Student Interns / Directed Individual Study

- Kenneth Winton, Birmingham Southern (1996)
 Mary Orr, Tulane (NSF / Summer Program in Neurobiology) (2005)
 Oluchi S. Nnorom, Biology, UAB (2005-06)
 Sheena Pullman (T. Gawne advisor), Oakwood College (NSF / Summer Program in
 Neurobiology) (2006)

Independent Study in Optometric Science

- Tom Hurst (1994)
 Darrell Witt (1994)

Graduate Research Apprentices/Rotations

- | | |
|---------------------------|-------------------------|
| David Edwards (1996) | Brian Mahalak (2004) |
| David Evans (1999) | Charu Tripathi (2004) |
| Richard Van Arsdel (1999) | Glen Rubin (2005) |
| Nichol Kirkland (2002) | Larezia Williams (2010) |

Crystal Gardner	(2003)	Kady Bruce	(summer, fall 2011)
Yancy York	(2003)	Terin Dupre	(fall, 2012)
Will Saxena	(2003)	Micah Kinney	(fall. 2013)

Honors Thesis Undergraduate
Mickey Martin (1991)

Senior Project (Biomedical Engineering)
Jack R Wimbish (May, 2009 with T Gawne)

Medical Student Summer Research Programs
D. Troy Curry (1983)

Masters Students

Elizabeth C. Smyly	(1979)
Kim Goldner Cohen	(1981)
Michael Wesson	(1981)
Robert R. Sandlin	(1985)
Shari R. Thomas	(1986)
Mark Veenhuis	(1986)
Bonnie Aiken	(1989)
Charlene Roberts	(1998)
Derek Van Veen	(2000)
Josh Shows	(2001)
Warren Gwynn	(2011 in prog)

Doctoral Students

Steven H. Schwartz	(1982)
Zijiang He	(1990)
Teng Leng Ooi	(1994)
Bruce Baldwin	(1996)
Troy Tevis	(1999)
Richard Van Arsdel	(2002)
Yancy York	(2006)
Brian Mahalak	(ouat)
Angel G Perez	(2012 in prog)

Postdoctoral Students

Douglas Smith	(1977-78)
---------------	-----------

Graduate Committees:

Larry Stanford	Ph.D., 1979	Dewanna Keeton	M.S., 1993
Paula Newsome	M.S., 1981		
Kevin Gross	M.S., 1981		
Peter Hitchcock	Ph.D., 1983		
James Hemmig	Ph.D., 1988		
Shari Thomas	Ph.D., 1988		
Alan Peaslee	M.S., 1989		
Yihong Zhang	Ph.D., 1990		
Richard Clendaniel	Ph.D., 1992		
Dwayne Godwin	Ph.D., 1992		

Patti Fuhr	Ph.D., 1994
David Merwine	Ph.D., 1996
Kyunghee Yoon	Ph.D., 1996
Ebony Sims	M.S., 1998
Sean H. Lee	M.S., 2003
Janene Sims	PhD, 2004
Patrick Clark	Ph.D., 2004
Jackie Collins	Ph.D., in prog.LOA
LaShandra Holmes	M.S., 2004
Jon Grossman	Ph.D., 2007
Kristen Bowles	MS, 2009
Glen Rubin	PhD, 2009
Naser Naser	PhD 2013
Chandra V. Mickles	MS, 2012
Ellen Bowman	PhD-SI in progress

Publications: [citations: through 2003 by SCI/2011 by Google scholar]

1. Morris, D. D. and M. S. Loop. (1969) Stimulus control of prey attack in naive rat snakes: A species duplication. Psychonomic Science, 15: 141-142. [12/9]
2. Loop, M. S. (1970) Effects of deprivation on the tongue flicking and orientation of young rat snakes to water. Psychonomic Science, 21: 49-51. [4/2]
3. Loop, M. S. (1970) The effects of feeding experience on the response to prey-object extracts in rat snakes. Psychonomic Science, 21: 189-190. [12/8]
4. Loop, M. S. and S. A. Scoville. (1972) Response of newborn *Eumeces inexpectatus* to prey-object extracts. Herpetologica, 28: 254- 256. [33/31]
5. Loop, M. S. and L. G. Bailey. (1972) The effect of prey size on the ingestion behavior of rodent-eating snakes. Psychonomic Science, 28: 167-169. [15/28]
6. Loop, M. S. and M. A. Berkley. (1972) Conditioned suppression as a psychophysical technique for the cat. Behavior Research Method and Instrumentation, 4: 121-124. [11/7]
7. Loop, M. S. (1974) The effect of relative prey size on the ingestion behavior of the Bengal monitor *Varanus bengalensis* (Sauria: Varanidae). Herpetologica, 30: 123-127. [9/14]
8. Loop, M. S. and M. A. Berkley. (1975) The temporal modulation sensitivity function of the cat: Behavioral measures. Vision Research, 15: 555-561. [19/15]
9. Berkley, M. A., M. S. Loop and C. Evinger. (1975) Temporal modulation sensitivity of the cat: Evoked potential estimates. Vision Research, 15: 563-568. [8/3]
10. Klein, J. and M. S. Loop. (1975) Headfirst prey ingestion by newborn *Elaphe* and *Lampropeltis*. Copeia, (2): 366. [8/11]

11. Kicliter, E. and M. S. Loop. (1976) A test of wavelength discrimination. Vision Research, 16: 951-956. [4/5]
12. Loop, M. S. (1976) Auto-shaping: A simple technique for teaching a lizard to perform a visual discrimination task. Copeia, (3): 574-576. [3/4]
13. Schroeder, D. M. and M. S. Loop. (1976) Trigeminal projections in snakes possessing infrared sensitivity. Journal of Comparative Neurology, 169: 1-13. [44/42]
14. Kicliter, E., M. S. Loop and J. A. Jane. (1977) Light-dark, wavelength and stripe orientation discrimination in the ground squirrel (*Citellus tridecemlineatus*) after posterior neocortical lesions. Brain Research, 122: 15-31. [4]
15. Loop, M. S. and S. M. Sherman. (1977) Visual discriminations during eyelid closure in the cat. Brain Research, 128: 329-339. [42/44]
16. Loop, M. S. and S. M. Sherman. (1977) Visual discriminations of cats with cortical and tectal lesions. Journal of Comparative Neurology, 174: 79-88. [22/20]
17. Loop, M. S. and S. M. Sherman. (1977) The effect of cortical lesions upon visual discriminations in binocularly deprived cats. Journal of Comparative Neurology, 174: 89-93. [6/6]
18. Hartline, P. H., L. Kass and M. S. Loop. (1978) Merging of modalities in the optic tectum: Infrared and visual integration in rattlesnakes. Science, 199: 1225-1229. (issue cover) [64/95]
19. Loop, M. S. and L. L. Bruce. (1978) Cat color vision: The effect of stimulus size. Science, 199: 1221-1222. [5/13]
20. Kass, L., M. S. Loop and P. H. Hartline. (1978) Anatomical and physiological localization of visual and infrared cell layers in tectum of pit vipers. Journal of Comparative Neurology, 182: 811-820.[27/29]
21. Loop, M. S., L. L. Bruce and S. Petuchowski. (1979) Cat color vision: The effect of stimulus size, shape, and viewing distance. Vision Research, 19: 507-513. [14]
22. Smith, D. C., R. Lorber, L. R. Stanford and M. S. Loop. (1980) Visual acuity following binocular deprivation in the cat. Brain Research, 183: 1-11. [17/22]
23. Loop, M. S., S. Petuchowski and D. C. Smith. (1980) Critical flicker fusion in normal and binocularly deprived cats. Vision Research, 20: 49-57. [15/13]
24. Loop, M. S., E. C. Smyly, C. L. Millican and C. F. Greifer. (1981) Acuity, luminance, and monocular deprivation in the cat. Behavioral Brain Research, 2: 323-334. [6/4]
25. Loop, M. S. and T. J. Frey (1981) Critical flicker fusion in Siamese cats. Experimental Brain Research, 43: 65-68. [7/8]
26. Wesson, M. D. and M. S. Loop (1982) Temporal contrast sensitivity in amblyopia. Investigative Ophthalmology and Visual Science, 22: 98-102. [7/10]
27. Schwartz, S. H. and M. S. Loop (1982) Evidence for transient luminance and quasi-sustained color mechanisms. Vision Research, 22: 445-447. [15/21]

28. Loop, M. S. and T. J. Frey (1982) Critical flicker frequency in monocularly deprived cats. Behavioral Brain Research, 6: 185-194. [1]
29. Loop, M. S. and T. J. Frey (1982) Spatial contrast sensitivity does not explain random figure discrimination latency. Perception & Psychophysics, 32: 32-36. [1/1]
30. Schwartz, S. H. and M. S. Loop. (1983) Differences in temporal appearance associated with activity in the chromatic and achromatic systems. Perception & Psychophysics, 33: 388-390. [4/10]
31. Loop, M. S. and C. L. Millican (1983) Increment thresholds in normal and binocularly deprived cats. Behavioral Brain Research, 9: 143-150. [2/2]
32. Schwartz, S. H. and M. S. Loop (1984) Effect of duration on detection by the chromatic and achromatic systems. Perception & Psychophysics, 36: 65-67. [8/6]
33. Loop, M. S., C. L. Millican and S. R. Thomas. (1987) Photopic spectral sensitivity of the cat. Journal of Physiology, 382: 537-553. [20/24]
34. He, Z. and M. S. Loop (1990) Peripheral field stimulation affects foveal flicker, but not color, sensitivity. Vision Research, 30: 1107-1110. [8/11]
35. Aiken, B. E. and M. S. Loop (1990) Visual reaction time of cats to different spatial frequencies. Visual Neuroscience, 5:557-564. [2/7]
36. He, Z. and M.S. Loop. (1991) Luminance sensitivity recovers quickly in monocularly deprived cats. Vision Research, 31: 1633-1637. [2]
37. He, J. and M.S. Loop. (1992) Spectral sensitivity of monocularly deprived cats. Visual Neuroscience, 9: 617-622. [1]
38. Ooi, T. L. and M. S. Loop. (1994) Visual suppression and its effect upon color and luminance sensitivity. Vision Research, 34: 2997-3003. [6/18]
39. Loop, M.S. and D. K. Crossman. (2000) High color vision sensitivity in macaque and humans. Visual Neuroscience, 17: 119-125. [5/9]
40. Loop, M. S., J. F. Shows, S. C. Mangel, and T. K. Kuyk. (2003) Colour thresholds in dichromats and normals. Vision Research, 43: 983-992. [6]
41. Van Arsdel, R. E. and M. S. Loop. (2004) Color vision sensitivity in normally dichromatic species and humans. Visual Neuroscience, 21: 685-692. [6]
42. Roberts, C. M. and M. S. Loop (2004) Goldfish color vision sensitivity is high under light adapted conditions. Journal of Comparative Physiology A, 190: 993-999. [1]
43. Baker, R.A., Gawne, T.J., Loop, M.S., & Pullman, S. (2007) Visual acuity of the midland banded water snake estimated from evoked telencephalic potentials. Journal of Comparative Physiology A, 193: 865-870.
44. York, Y. C. & Loop, M.S. (2008) Red light increment threshold as a measure of deficient color vision. Optometry & Vision Science, 85: 106-111. [1]

45. Tessler, F. N., Loop, M.S., Fineburg, N., McNamara, M.M. & McArthur, T..A. (2012) Does display magnification affect the ability of radiologists to perceive growth of lesions on CT? Journal of Digital Imaging, 25(2): 266-270.

Papers and Abstracts: (* podium presentation;)

- A1. Crawford, F. T. and M. S. Loop. (1967) Operant rate of snakes under water deprivation: Preliminary studies. Proceedings of the Psychonomic Society. Psychonomic Bulletin, 1: 36.
- A2. *Loop, M. S. (1970) Effects of deprivation on the tongue flicking and orientation of young rat snakes to water. Proceedings of the Southeastern Psychological Association.
- A3. *Loop, M. S. and S. A. Scoville. (1971) Response of newborn Eumeces inexpectatus to prey-object extracts. Proceedings of the American Society of Ichthyologists and Herpetologists.
- A4. *Loop, M. S. (1972) Twilight movement patterns of some Florida snakes and potential predators. Proceedings of the Southeastern Division, American Society of Ichthyologists and Herpetologists. The ASB Bulletin, 19: 81.
- A5. *Loop, M. S. and L. G. Bailey. (1972) The effect of prey size on the ingestion behavior of rodent eating snakes. Proceedings of the Southeastern Division, American Society of Ichthyologists and Herpetologists. The ASB Bulletin, 19: 81.
- A6. *Loop, M. S. (1972) The "Don't Tread on Me" phenomenon. Proceedings of the American Society of Ichthyologists and Herpetologists. **Google: "The Don't Tread On Me Phenomenon"**
- A7. *Loop, M. S. and M. A. Berkeley. (1972) A deLange characteristic for the cat employing a modified condition suppression technique. Proceedings of the Eastern Psychological Association.
- A8. *Loop, M. S. and M. A. Berkeley. (1972) Conditioned suppression as a method for obtaining stimulus magnitude estimates in the cat. Proceedings of the Southeastern Psychological Association Meeting.
- A9. *Loop, M. S. and M. A. Berkeley. (1972) Evoked potential and behavioral determinations of the temporal contrasts modulation function in the cat. Proceedings of the Association for Research in Vision and Ophthalmology.
- A10. *Loop, M. S. and L. F. Small. (1974) Disruption of tracking behavior by remembered spatial cues in the Tegu lizard. Proceedings of the Eastern Psychological Association.
- A11. *Loop, M. S., S. M. Sherman, D. D. Feeney and E. Kicliter. (1974) Visual discrimination in decorticate and binocularly deprived cats. Proceedings of the Association for Research in Vision and Ophthalmology.
- A12. Kicliter, E., M. S. Loop and J. A. Jane. (1974) Luminous flux, wavelength and stripe orientation discrimination in ground squirrels (Citellus ridcemlineatus) after posterior neocortical lesions. Proceedings of the Society for Neuroscience.

- A13. *Loop, M. S. and D. M. Schroeder. (1975) Some afferent connections of the trigeminal system in snakes possessing facial infrared receptors. *Proceedings of the American Association of Anatomists*. The Anatomical Record, 181: 413.
- A14. Hartline, P. H., M. S. Loop and L. Kass. (1977) Merging of modalities in the optic tectum: Infrared and visual integration in rattlesnakes. *Proceedings of the Society for Neuroscience*.
- A15. Kass, L., M. S. Loop and P. H. Hartline. (1977) Anatomical basis for visual and nonvisual integration in pit viper tectum. *Proceedings of the Society for Neuroscience*.
- A16. *Loop, M. S. and L. Bruce. (1977) Effect of target size on color discrimination in the cat. *Proceedings of the Society for Neuroscience*.
- A17. Smith, D. C. and M. S. Loop. (1978) Rapid restoration of visual abilities in the monocularly deprived adult cat. *Proceedings of the Association for Research in Vision and Ophthalmology*. Investigative Ophthalmology and Visual Science (supplement), 17: 294.
- A18. Smith, D. C., R. Lorber, A. Kirk and M. S. Loop. (1978) Visual acuity in visually deprived cats: Behavioral correlates of single-cell electrophysiology? *Proceedings of the Society for Neuroscience*.
- A19. Loop, M. S., S. Petuchowski and D. C. Smith. (1979) Effect of visual deprivation on CFF in the cat. Investigative Ophthalmology and Visual Science (supplement), 18: 244.
- A20. Smith, D. C. and M. S. Loop. (1979) Postcritical-period competitive interactions and visual acuity in monocularly deprived cats. Investigative Ophthalmology and Visual Science (supplement), 18: 248.
- A21. Loop, M. S. and T. J. Frey. (1981) Critical flicker fusion is abnormally low in Siamese cats. Investigative Ophthalmology and Visual Science (supplement), 20: 49.
- A22. Schwartz, S. H. and M. S. Loop (1981) Evidence for transient luminance and sustained color mechanisms. Investigative Ophthalmology and Visual Science (supplement), 20: 54.
- A23. Wesson, M. D. and M. S. Loop (1982) The relationship between temporal contrast sensitivity and visual acuity in amblyopia. Investigative Ophthalmology and Visual Science (supplement), 22: 88.
- A24. Schwartz, S. H. and M. S. Loop (1982) Chromatic and temporal appearance of long duration flashes. Proceedings of the American Academy of Optometry.
- A25. Schwartz, S. H. and M. S. Loop (1983) Effect of duration on detection by the chromatic and achromatic systems. Proceedings of the American Academy of Optometry.
- A26. Loop, M. S. and C. L. Millican (1984) Photopic spectral sensitivity of cats. Investigative Ophthalmology and Visual Science (supplement), 25: 222.
- A27. Wesson, M. D. and M. S. Loop. (1984) Temporal contrast sensitivity parameters in anisometric amblyopia. Journal of Optometry and Physiological Optics, 61: 87P.
- A28. Wesson, M. D. and M. S. Loop. (1985) Temporal contrast sensitivity parameters in anisometric and strabismic amblyopia. Investigative Ophthalmology and Visual Science (supplement), 26: 254.

- A29. Loop, M. S. and G. Horton. (1987) Reaction time and sensitivity of the cat to brief white and spectral increments. Society for Neuroscience Abstracts, 14: 1301.
- A30. Loop, M. S. and B. E. Aiken. (1988) Visual reaction time of the cat as a function of spatial frequency. Society for Neuroscience Abstracts, 15: 1252.
- A31. He, Z. and M. S. Loop. (1989) Peripheral field stimulation affects flicker, but not color, sensitivity. Society for Neuroscience Abstracts, 15: 625.
- A32. He, Z., M. S. Loop and T. Kuyk. (1990) The spectral sensitivity of long term monocularly deprived cats. Investigative Ophthalmology and Visual Science, (supplement) 31(4): 605.
- A33. He, Z. and M. S. Loop. (1990) Long term MD cat's deprived eye shows a rapid visual sensitivity increase after eye lid opening. Society for Neuroscience Abstracts, 16: 106.
- A34. Loop, M. S. and M. M. Martin. (1991) Dog and Cats: They may look different but they see the same. Society for Neuroscience Abstracts, 17: 848.
- A35. Marsh-Tootle, W.L. and M.S. Loop. (1992) Three-choice operant acuity testing of toddlers. Investigative Ophthalmology and Visual Science, (supplement) 33(4) 717.
- A36. Ooi, T.L. and M.S. Loop. (1992) Is the inhibitory effect of binocular rivalry nonselective? Investigative Ophthalmology and Visual Science, (supplement) 33(4) 1372.
- A37. Ooi, T.L. and M.S. Loop. (1992) Wavelength suppression characteristics during forced dominance of the contralateral eye. Proceedings of the American Academy of Optometry.
- A38. Ooi, T.L. and M.S. Loop. (1994) Visual sensitivity during interocular suppression. Investigative Ophthalmology and Visual Science, (supplement) 35(4): 1371.
- A39. Baldwin, J.B. and M.S. Loop. (1994) Manipulating rivalry dominance durations with flash suppression. Proceedings of the American Academy of Optometry, 62.
- A40. Baldwin, J.B. and M.S. Loop. (1995) Timing of rivalry suppression onset using a flash suppression technique. Investigative Ophthalmology and Visual Science, (supplement) 36, S370.
- A41. Baldwin, J.B. , M.S. Loop and D.J. Edwards. (1996) Magnitude and time course of interocular suppression is stimulus selective. Investigative Ophthalmology and Visual Science, (supplement). 37(3), S653. [1]
- A42. *Loop, M.S., J.B. Baldwin and D.J. Edwards. (1996) Permanent suppression is wavelength specific. Investigative Ophthalmology and Visual Science, (supplement), 37(3): S653.
- A43. Tevis, T.N. and M.S. Loop. (1997) Role of magno- and parvo-retinal ganglion cells in hyperacuity. Investigative Ophthalmology and Visual Science, 38(4): S643.
- A44. Kuyk, T.K. and M.S. Loop. (1998) Color thresholds in human dichromats. Investigative Ophthalmology and Visual Science, (Supplement) 39 (4): S162.
- A45. Baldwin, J.B. and M.S. Loop. (1998) Interocular suppression of suprathreshold stimuli probes. Investigative Ophthalmology and Visual Science, (Supplement) 39 (4) S614.

- A46. *Roberts, C.M. and M.S. Loop. (1999) Color vision thresholds in goldfish (*Carassius auratus*). Journal of the Alabama Academy of Sciences, 70 (1-2): 16.
- A47. *Tevis, T.N. and M.S. Loop (1999) Color and luminance channel involvement in multimodal integration. Optometry and Vision Science, 76, 27.
- A48. *Loop, M.S. and D. Evans. (2000) Color vision sensitivity in primates and goldfish. Journal of the Alabama Academy of Sciences, 71, 17.
- A49. Kuyk, T.K., J.F. Shows, R.E. Van Arsdel and M.S. Loop. (2000) Color vision in human dichromats. Investigative Ophthalmology and Visual Science, 41(4), p S807.
- A50. *Loop, M.S. (2001) Goldfish (*Carassius auratus*) see better than people (*Homo sapien*). Journal of the Alabama Academy of Sciences, 72, 83.
- A51. Loop, M. and R. Van Arsdel (2001) Human rod and cone sensitivity is the same early and late in the day. Investigative Ophthalmology and Visual Science, 42 (4), p S106.
- A52. Van Arsdel, R. and M.S. Loop. (2002) Color thresholds in normal dichromats. Journal of Vision, 2(7), p 138a.
- A53. Mahalak, B., A. Yildirim, Y. York and M. Loop. (2004) Color enhances brightness, even at threshold. Optometry and Vision Science, 81, p 131.
- A54. York, Y., A. Yildirim, B. Mahalak, and M. Loop. (2004) Are all subjects with red/green deficits insensitive to red light? Optometry and Vision Science, 81, p 132.
- A55. *Rubin, G.R., M.S. Loop and T.W. Kraft. (2006) Assessment of rod and cone function using flicker ERG in RCS rats. Investigative Ophthalmology and Visual Science, abstract 4735.
- A56. Pullman, S.M., T.G. Gawne and M.S. Loop (2006) Using visual evoked potentials to determine snake visual acuity. Annual Biomedical Research Conference for Minority Students, abstract 1406.
- A57. *Tessler, F.N., M. Loop, N.S. Fineberg and M.M. McNamara (2007) Does display magnification affect the ability of radiologists to perceive growth of lesions? Radiological Society of North America.
- A58. *Rubin, G.R., M. S. Loop and T.W. Kraft (2008) Comparisons between ERG and behaviorally determined CFF in a rodent model of retinal degeneration (2844). Investigative Ophthalmology and Visual Science, Suppl. 49(4).
- A59. *Loop, M.S., J.R. Wimbish and T.J. Gawne (2010) Acuity and spectral sensitivity of the midland banded water snake determined with visually evoked potentials. Journal of the Alabama Academy of Sciences, 81 (2), p 59.
- A60. Kraft, T.W., G.R. Rubin, M.S. Loop, V. Wotring & Y. Wen (2010) Reversible adaptations in photoreceptors surviving retinal degeneration. XIV International Symposium on Retinal Degeneration, Mont-Tremblant, Quebec, Canada .

- A61. Naser, N. T., M.S. Loop, T. Than, S. Varghese & E. E. Hartmann (2011) Color vision: effects of nicotine gum in non-smokers. Investigative Ophthalmology and Visual Science, Suppl. 52:4902.

Invited Presentations:

- T1. "Observations on the phylogeny, ontogeny, and stimulus control of headfirst prey ingestion by rodent-eating snakes." Symposium: Perception and Feeding Behavior in Snakes. Proceedings of the American Society of Ichthyologists and Herpetologists, 1975.
- T2. "The mesopic luminosity functions of the cat: A conditioned suppression study." Symposium: Animal Psychophysics. Proceedings of the Midwestern Psychological Association, 1977.
- T3. "Critical flicker fusion in normal and visually deprived cats." Psychobiology Program, Florida State University, 1982.
- T4. "Color and brightness changes are seen at different times." Department of Psychology, Florida State University, 1982.
- T5. "Photopic spectral sensitivity functions: Man 2; Cat ?." Proceedings of the American Academy of Optometry, 1983.
- T6. "Modern Laboratory Techniques in Behavioral Neuroscience." Psychobiology and Neuroscience Program. Florida State University, April 1987.
- T7. "I am not studying cat color vision: an autobiography." School of Optometry, University of Missouri at St. Louis, November 1987.
- T8. "Peripheral visual field stimulation affects some, but not all, central field visual discriminations". Armstrong Laboratory, September 1994.
- T9. "What the eye sees and how the brain processes it" (with T. Kraft). Public/Private Partnerships for Achieving Energy Cost Control, 1994 Energy Symposium, November, 1994.
- T10. "Why they call it psychophysics." Birmingham Astronomical Society, July 1995.
- T11. "Cat color vision: the never ending story." Department of Neurobiology and Behavior, SUNY/Stony Brook, December, 1995.
- T12. "Parallel Processing in the Retinocortical System: Visual Perception and Muller's Doctrine of Specific Nerve Energies." Institute of Neurobiology, University of Puerto Rico, September, 1996.
- T13. "Animal Vision: Methods and Results." Phi Sigma (Biology Honor Society) Department of Biology, UAB, May 2000.
- T14. "Color is What the Visual System Sees Best." Department of Neurobiology, UAB, February 2002.

- T15. "Really 'mad scientists' use wild animals." American Association of Laboratory Animal Science Meeting, Birmingham, AL, March 2006.
- T 16. On "Illusionary stimuli can be used to identify retinal blind spots". Retinal Disease Journal Club, Department of Ophthalmology, March 2008
- T 17. "Visual illusions are a wrong guess by your brain about what's out there" Alabama Teaching of Psychology Work Shop. Samford University, April, 2008.
- T 18. "Reorganization of visual processing is related to eccentric viewing in patients with macular degeneration" Systems Neuroscience Journal Club / Comprehensive Neuroscience Center, April, 2009.
- T 19. "Reorganization of visual processing is related to eccentric viewing in patients with macular degeneration" Retinal Disease Journal Club / Department of Ophthalmology, April, 2009.
- T 20. "Determining what an animal sees with visually evoked potentials" , CVMNAH, Tuskegee University, October, 2009.
- T21. "From humans to goldfish; color is what the eye sees best...and how we know" Sigma Xi, September 2011.
- T22. "How the snake finds the mouse's head" , UAB Herpetology Club, December, 2011.
- T23. "Facts to guide care of color deficient patients that somebody (possibly me) likely neglected to tell you" UABSO Continuing Education, December, 2012.

Science Talks for 'Grades' K-20

- "What animals see." Teacher Workshop. Going School, Roebuck, Ala., 1983.
- "Cat color vision." Altamont School, Birmingham, 1985.
- "Reptiles - to know them is to be impressed." Thompson High School, Alabaster, Ala., 1987.
- "Reptiles of Alabama." Hall Kent School, Birmingham, Summer 1987.
- "Reptiles - to know them is to be impressed." Pell City High School, December, 1987.
- "Reptiles of your yard and the world." Green Valley School, Hoover, Alabama, May 1988.
- "Color vision and visual illusions." 4-H Vision Education Program, 4-H Center, April, 1989.
- "Reptiles of your yard and the world." Epic School, Birmingham, Alabama, April, 1989.
- "Reptiles of your yard and the world." Helena School, October 1989.
- "Reptiles of your yard and the world." Epic School, November, 1989.
- "Optical Illusions." Alabama 4-H VisiCamp, 4-H Center, July, 1990.
- "Visual Illusions." Epic School, 2nd & 4th Grades, January, 1991.
- "Visual Illusions." Epic School, 2nd Grade, January 1992.
- "Visual Illusions." Trussville, 4th Grade, February 1992.
- "Reptiles – to know them is to be impressed." Greenwood Middle School, 7th Grade, March 1992.
- "Visual Illusions and Animal Eyes." Edgewood Elementary, 1st Grade, March 1994.
- "Visual Neurophysiology." The Altamont School, Upper Grades, April 1995.
- "Snakes – Why They're Like They Are." Epic School, 2nd Grade, December, 1995.
- "Your brain guesses what you see." Briarwood Christian School Science Club, January 1996.
- "Reptiles of Alabama." Edgewood Elementary, 3rd Grade, September, 1996.
- "Reptiles of Alabama." Epic School, 1st Grade, September, 1996.

"Visual Perception"/Science Night. Simmons Middle School, November 1996.
 "Your Brain Guesses What You See." Briarwood Christian School Science Club, March 1997.
 "Reptiles of Alabama." Epic School, Kindergarten, October 1997.
 "Reptiles of Alabama." Barrett Elementary, 5th Grade, January, 1998.
 "Understanding Snakes" Epic School, 4th Grade, March, 1998.
 "Reptiles of Alabama" BSA Troop 320, October 1998.
 "Reptiles of Alabama" Epic School, 4th Grade, January, 1999.
 "Visual Perception" Epic School, 2nd Grade, February, 1999.
 "Visual Psychophysics" Governor's School Students (H.S. Seniors), June, 1999.
 "Reptiles of Alabama" BSA Tiger Cubs, April, 2001.
 "Reptiles of Alabama" EPIC School, 2nd Grade, April 2001.
 "Using Numbers to Study Perception" Altamont Math Camp, 3-5th Grades, June, 2002.
 "How I Became a Scientist" Altamont Career Day, Grades 8-12, January, 2003.
 "Color Vision Testing" BSA Troop 312, November, 2003.
 "Visual Illusions" & "The Brain & Color Vision" Altamont School / Psychology (grades10-12),
 February, 2004.
 "Venomous snakes of Alabama", BSA Troop 318. March, 2004.
 "Visual Illusions" Altamont School / Psychology (grades10-12), December, 2004.
 "The Brain & Color Vision" Altamont School / Psychology (grades10-12), December, 2004.
 "Visual Illusions" (3) Mt Brook High School / AP Anatomy & Physiology (upper grades), April, 2005.
 "Operant Conditioning" Altamont School / Psychology (grades 10-12), February, 2006.
 "Visual Illusions" Altamont School / Psychology (grades10-12), May, 2006.
 "The Brain & Color Vision" Altamont School / Psychology (grades10-12), May, 2006.
 "How to deal with snakes without going to the hospital", BSA Troop 28, June, 2006
 "How well do animals see and how do we know" Biomedical Engineering/UAB (101/701),
 September, 2006.
 "You don't see light, you see what your brain is doing" Psychology/UAB (Sensation & Perception),
 October, 2006.
 "Operant Conditioning" Altamont School / Psychology (grades 10-12), January, 2007.
 "Visual Illusions" Altamont School / Psychology (grades10-12), April, 2007.
 "The Brain & Color Vision" Altamont School / Psychology (grades10-12), April, 2007.
 "Operant Conditioning" Altamont School / Psychology (grades 10-12), February, 2008.
 "Color vision, 'color blindness' & color vision adaptation" Altamont School / Psychology (grades 10-
 12), April, 2008.
 "Color vision, 'color blindness' & color vision adaptation" Altamont School / Psychology (grades 10-
 12), November, 2008.
 "Identifying Alabama venomous snakes: talk & test" Cub Scout Pack 253 (St Peter's Anglican
 Church), November, 2008 .
 "Color vision and distribution statistics" Altamont School / Psychology (grades 10-12), March, 2009.
 "Identifying Alabama venomous snakes: talk & demo" Altamont School (grade 8), October, 2009.
 "Good snake/Bad snake: Identifying Alabama venomous snakes: talk & test" Cub Scout Pack 63
 (Canterbury U. M. Church),October, 2009.
 "Color vision, 'color blindness' & color vision adaptation" Altamont School / Psychology (grades 10-
 12), October, 2009.
 "Good snake/Bad snake: Identifying Alabama venomous snakes: talk & test" Boy Scout Troop 21
 (Bluff Park, AL), February, 2010.
 "Good snake/Bad snake: Identifying Alabama venomous snakes: talk & test" Altamont School
 (multiple classes upper school), October, 2010.
 "Color vision, 'color blindness' & color vision adaptation" Altamont School / Psychology (grades 10-
 12), October, 2010.
 "Scientists study the world to find out what's going on (how the snake finds the mouse's head)"
 Green Acres School/career day, May, 2011.
 "Good snake/Bad snake: Identifying Alabama venomous snakes: talk & test" Cub Scout Pack 253,

- (St Peter's Anglican Church), September, 2011.
- "Color vision, 'color blindness' & color vision adaptation" Altamont School / Psychology (grades 10-12), November, 2011.
- "Good snake/Bad snake: Identifying Alabama venomous snakes: talk & test" Cub Scout Pack 63, (Canterbury United Methodist Church), April, 2012.
- "Operant Conditioning" Altamont School / Psychology (grades 10-12), September, 2013.
- "Good snake/Bad snake: Identifying Alabama venomous snakes: talk & test" Altamont School/biol. (two classes, ninth grade), October, 2013

Media coverage:

1. "To the Oak Ridger". ~1960 (dogs & boa constrictors), The Oak Ridger.
2. "Nine ashtrays". 1970, The y Illini.
3. Cat color vision. 1978, Ranger Rick's nature magazine.
4. "To the Oak Ridger". 1979 (cats & IR), The Oak Ridger.
5. "Katzen können doch Farben sehen. 1980, Das Tier.
6. "Cats see big blocks of colour". 1979, New Scientist.
7. "Color-blind cats?". 1979, Harvard Magazine.
8. "Sometimes art can play tricks as well as be beautiful". ~1980, B'ham Post Herald.
9. "Cats seem to have right idea about TV". 1982, B'ham News (punch-lines).
10. "Through cats eyes". 1982, Harvard Magazine.
11. "Shelby County's outdoors provides good place to catch the Great Spirit". 1983, Shelby County Outdoors.
12. "If you want to get serious about fishing, you may find yourself in a serious boat". 1983, Shelby County Outdoors.
13. "When cats go to the eye doctor". 1986, Medical Center News.
14. "Valley goes to dogs...and everything else". 1987, Shelby County Reporter.
15. "How we see what we see; vision a complex function". 1988, Times-Record (Fayette, AL).
16. "How we see what we see". 1988, Hamilton Progress (Hamilton,AL).
17. "Painful choices in pet protection vs. research". 1988, The Wall Street Journal.
18. "Using cats in lab tests". 1988, The Wall Street Journal.
19. "'No' to recantation. 1988, The Scientist.
20. 4-H Visi-Camp. 1989, Daily Home (Talladega, AL).
21. "Animal protection". 1990, The Journal of NIH Research (Advice and Dissent).
22. "Neuroscience graduate program produces first Ph.D. recipient". 1990, UAB Reporter.
23. "Science in a cage". 1993, The American Legion..for God and Country.
24. "What's wrong with the old vision, mission". 1995, UAB Reporter.
25. "Program viability standards are dubious criteria". 1996, UAB Reporter.
26. "'WF' might as well be called 'F'". 1996, Kaleidoscope.
27. "Doesn't make any sense". 1996, Kaleidoscope.
28. "Where'd that surplus come from?". 1996, UAB Reporter.
29. "Writer borrows a few words about tenure...". 1996, UAB Reporter.
30. "For lowest cost health care, it's best to shop around". 1996, UAB Reporter.
31. "Is it better to retreat or to charge for change?". 1996, UAB Reporter.
32. "What to do? Is the question, not what is wrong?". 1996, UAB Reporter.
33. "More Birmingham secrets". 1995-96, Child Times.
34. "Backing comments with cold cash quiets talk". 1997, UAB Reporter.
35. "Who's taking bigger bites of the apple?". 1997, UAB Reporter.
36. "Who gains, and what, as grant costs increase?". 1997, UAB Reporter.
37. "Grant-derived salary of PI depletes federal funds". 1997, UAB Reporter.
38. "Mandatory cost sharing for research is needed". 1997, UAB Reporter.

39. "Round of applause for teachers, please". 1997, UAB Reporter.
40. "Budget numbers don't add up, writer says". 1998, UAB Reporter.
41. "Writer disputes trickle-down funding". 1998, UAB Reporter.
42. "A view to hunting". 1999, UAB Newswatch.
43. "What the human eye can't see, goldfish can". 1999, Los Angeles Times.
44. "Records law not enforced". 2003, B'ham News.
45. "Summer science". 2003, B'ham News.
46. "Member Profile". 2003, The Alabama Observer.
47. "Lawyers believe judges ignore law". 2004, B'ham News.
48. "Big Apple bites". 2007, SaltWater Sportsman.
49. "Green Day?". 2007, Times Daily.
50. "Question confusion". 2008, B'ham News.
51. Driver's Side (regarding auto hazard lights).5/2008, B'ham News.
52. "Grants at work" The EyeSight Foundation of Alabama, 7/2008
53. "Sneaking up on snakes" 9/2008, B'ham News
54. Classroom Clips (spoke to science students at Altamont School) 12/2008. B'ham News.
55. "Accident reconstruction firm VEAR from Birmingham filling niche" 3/2009, B'ham News.
56. "What's transparent is patent nonsense". 7/09, B'ham News.
57. "Give teachers students' tests" 4/10, B'ham News.
58. "Boa constrictor in cage" picture 2013 "Petpix" abc3340
59. "Crayfish in skull" picture 9/10/13 "Petpix" abc3340
60. "UA statement on sororities, race was ridiculous" 9/2013, B'ham News.

Citation Bandwidth (citing journals)

139(4-15-2013)

Acta Biotheoretica
 Acta Neurobh.
 Acta Ophthalmol
 African Journal of Ecology
 African Zoology
 American Review of Physiology
 American Zoologist
 Amphibia-Reptilia
 Anatomical Record
 Animal
 Animal Behaviour
 Animal Learning B
 Animal Learning and Behavior
 Annual Review of Psychology
 Archit. Bio.
 Australian & New Zealand Journal of Ophthalmology
 Australian Journal of Psychology
 Australian Journal of Zoology
 Autonomic Neuroscience-Basic and Clinical
 Behaviour
 Behavioral and Brain Sciences
 Behavioral Biology
 Behavioral Brain Research
 Behavioral Neuroscience
 Biological Cybernetics
 Biological Reviews.

Biological Reviews Cambridge Phil. Society
Biosensors and Bioelectronics
Brain and Behavior
Brain, Behavior and Evolution
Brain Research
Canadian Journal of Physiology and Pharmacology
Canadian Journal of Psychology
Canadian Journal of Zoology
Cell Tissue Research
Cerebral Cortex
Chemoecology
Comparative Biochemistry and Physiology. A
Condor
Consciousness and Cognition
Copeia
Cortex
Current Biology
Developmental Brain Research
Documenta Ophthalmologia
Ecology
Ecological Monographs
Ethology
Ethology, Ecology and Evolution
Evolutionary Ecology
Experimental Biology
Experimental Brain Research
European Journal of Neuroscience
Fortschritte der Veterinärmed
Frontiers in Human Neuroscience
Genetics
Graefes Archive for Clinical and Experimental Ophth.
Great Basin Naturalist
Herpetologi
Herpetologica
Human Factors
Human Neurobiology
IEEE Trans. Systems Man and Cybernetics
Investigative Ophthalmology and Visual Science
Japanese Journal of Ophthalmology
Journal of Chemical Ecology
Journal of Cognitive Neuroscience
Journal of Comparative Neurology
Journal of Comparative Physiology A
Journal of Comparative Psychology
Journal of Ethology
Journal of Environmental Biology
Journal Evolutionary Biochemistry and Physiology
Journal of Experimental Biology
Journal of Experimental Psychology Human
Journal of Experimental Zoology
Journal of General Physiology
Journal of Herpetology
Journal Hirnfor.

Journal of Morphology
Journal of the Optical Society A
Journal of Physiology (Lond.)
Journal of Neurophysiology
Journal of Neuroscience
Journal of Neuroscience Methods
Journal of Vision
Journal of Theoretical Biology
Journal of Vision
Journal of Zoology
Lab Med
Learning & Behavior
Lecture Notes in Computer Science
Naturwissen
Naturwissenschaften
Netherlands Journal of Zoology
Neuron
Neuroscience
Neuroscience Research
Neurotoxicology and Teratology
New Scientist
Oecologia
Ophthalmic and Physiological Optics
Ophthalmic Research
Optometry
Optometry and Vision Science
Perception
Perception and Psychophysics
Philosophical Transactions of the Royal Society B-Biological
PLoS one7
Proceedings National Academy Sci. USA
Progress in Brain Research
Psychologia
Sciences
Sleep
Physical Therapy
Physiology and Behavior
Physiological Review
Physiological Zoology
Proceedings of The Japan Academy Series B-Physical and Biological Sciences
Proceedings of the Royal Society of London B
Prog. Brain
Progress in Brain Research
Psychological Record
Psychonomic Science
Psychophysiology
Restorative. Neurology and Neuroscience
Science
Scientific American
Seminars in Cell & Developmental Biology
Sleep
Transactions of the American Ophthalmological Society
Trends in Neuroscience
Vision Research
Visual Neuroscience

Zeitschrift Fur Tierpsychologie
Zhurnal Vysshei Nervnoi Deyatelnosti imeri I P Pavlova
Zoo Biology
Zoologischer Anzeiger
Zoologische Jahrbacher

Consulting

Application of psychophysical knowledge and measurement to non-laboratory situations.

Continuing Education

“Automotive lighting: testing and requirements” SAE Professional Development Program, October, 2006, (.65 CEU).