

September, 2017

## CURRICULUM VITAE

Michael Stuart Loop

Address: Department of Optometry & Vision Science (FKA/ Vision Science;Physiological Optics)  
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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 (FKA Physiological Optics)  
Neurobiology and Psychology  
University of Alabama at Birmingham  
Birmingham, Alabama

1997-2011 Associate Professor of Vision Sciences (FKA 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, 2017-18); 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).  
UABSO Course Planning Retreat (Jul, 2014)  
Faculty Affairs Committee (secretary Sep 24- Dec, 2015/member 2016-17)  
Curriculum Integration and Education Outreach Committee ( 2015-2017)  
Faculty Advisory Committee (2015 - ??)  
Executive Committee liaison (2017-18)

**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, 2006-2016)  
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 – 8/2014)  
Faculty Senate/alt. (9/2014 – 8/2015)  
Faculty Senate (9/2015 – 8/2017)  
Faculty Senate (Finance subcommittee 9/2015 – 8/2017)

**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 2004-17)  
Newton BBS / Ask A Scientist program (2005 – Feb 2015/finis).

**Honors and Awards:**

AOSA Excellence in Basic/Vision Science Instruction Award (Apr 2016)  
AOSA Excellence in Basic/Vision Science Instruction Award (Apr 2015)  
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, paper reading judge (2/2009)  
Central Alabama Regional Science & Engineering Fair (3/09)  
The Altamont School, paper reading judge (2/2016)

Science Camp  
The Altamont School (2001-06)

Altamont Parent Association / 12<sup>th</sup> 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)
- G12 Short Term Adaptation in Photoreceptors  
Co-PI (T. KRAFT-PI) EY 023601  
April 1, 2014 – March 31, 2019

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) [scheduled hours: ]
- 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 to15 Psychophysical Measurement of Visual Function (VS ever changing number)[scheduled hours: ]
- 2013 Central Visual Processing (VIS 456/756): color vision and suprathreshold psychophysics, Lab  
Central Visual Processing (VIS 763-SI): color vision and suprathreshold psychophysics, Lab
- 2014 VIS 456/756: Cones & (normal) color vision, abnormal color vision, lab [scheduled hours: ]
- 2015 VIS 456/756: Cones & (normal) color vision, abnormal color vision, lab [scheduled hours: ]
- X, 2016-17 BaSCO//”Nicotine’s effect upon normal color vision” [scheduled hours: 1]

Students:

Minority High School Summer Research Apprentices

Jonathan Shorts (1982)  
Carol Kao (1984 – 2<sup>nd</sup> Place)  
Gretchen Horton (1986 – Westinghouse Science Talent Search Award)  
Constance Fears (1996)

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	(2014)

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)
Micah Kinney	(2016)

Postdoctoral Students

Douglas Smith	(1977-78)
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Graduate Committees:

Larry Stanford	Ph.D., 1979
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
Dewanna Keeton	M.S., 1993

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, 2015
Terin Dupre	PhD, 2015, 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.
46. McKeown, A.S., Kraft, T.W. & Loop, M.S. (2015) Increased visual sensitivity following periods of dim illumination. Investigative Ophthalmology and Visual Science, 56(15): 1864-1871.

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 ridecmelineatus*) 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 anisometropic amblyopia. *Journal of Optometry and Physiological Optics*, 61: 87P.

- A28. Wesson, M. D. and M. S. Loop. (1985) Temporal contrast sensitivity parameters in anisometropic 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 stimulus 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.
- A62. Gwynn, W. A. & M.S. Loop (2014) Studies of the Effect of Nicotine on Color Vision in Color Deficient Humans. American Academy of Optometry, Nov. 2014, Denver.
- A63. Kinney, M. J. & M. S. Loop (2015) The Relative Sensitivities of the Luminance and Color-opponent Systems Predicts Normal Color Discrimination Performance. American Academy of Optometry, Oct 2015. New Orleans.
- A64. Kraft, K.W., M.S. Loop & A.S. McKeown (2016) Short term adaptations in rods triggered by retinoid release. International Society for Eye Research. September, Tokyo.

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.
- T16. 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. "Determining what an animal sees with visually evoked potentials" , CVMNAH, Tuskegee University, October, 2009.
- T19. "From humans to goldfish; color is what the eye sees best...and how we know" Sigma Xi, September 2011.
- T21. "How the snake finds the mouse's head" , UAB Herpetology Club, December, 2011.
- T22. "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, 2<sup>nd</sup> & 4<sup>th</sup> Grades, January, 1991.
- "Visual Illusions." Epic School, 2<sup>nd</sup> Grade, January 1992.
- "Visual Illusions." Trussville, 4<sup>th</sup> Grade, February 1992.
- "Reptiles – to know them is to be impressed." Greenwood Middle School, 7<sup>th</sup> Grade, March 1992.
- "Visual Illusions and Animal Eyes." Edgewood Elementary, 1<sup>st</sup> Grade, March 1994.
- "Visual Neurophysiology." The Altamont School, Upper Grades, April 1995.

“Snakes – Why They’re Like They Are.” Epic School, 2<sup>nd</sup> Grade, December, 1995.

“Your brain guesses what you see.” Briarwood Christian School Science Club, January 1996.

“Reptiles of Alabama.” Edgewood Elementary, 3<sup>rd</sup> Grade, September, 1996.

“Reptiles of Alabama.” Epic School, 1<sup>st</sup> 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, 5<sup>th</sup> Grade, January, 1998.

“Understanding Snakes” Epic School, 4<sup>th</sup> Grade, March, 1998.

“Reptiles of Alabama” BSA Troop 320, October 1998.

“Reptiles of Alabama” Epic School, 4<sup>th</sup> Grade, January, 1999.

“Visual Perception” Epic School, 2<sup>nd</sup> 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, 2<sup>nd</sup> Grade, April 2001.

“Using Numbers to Study Perception” Altamont Math Camp, 3-5<sup>th</sup> 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 (grades 10-12), February, 2004.

“Venomous snakes of Alabama”, BSA Troop 318. March, 2004.

“Visual Illusions” Altamont School / Psychology (grades 10-12), December, 2004.

“The Brain & Color Vision” Altamont School / Psychology (grades 10-12), 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 (grades 10-12), May, 2006.

“The Brain & Color Vision” Altamont School / Psychology (grades 10-12), 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 (grades 10-12), April, 2007.

“The Brain & Color Vision” Altamont School / Psychology (grades 10-12), 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.

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

“Color vision, ‘color blindness’ & color vision adaptation” Altamont School / Psychology (grades 10-12), February, 2014.

“Good snake/Bad snake: Identifying Alabama venomous snakes: talk & test” Cub Scout Pack 253, (St Peter’s Anglican Church), October, 2014.

“Color vision, ‘color blindness’ & color vision adaptation” Altamont School / Psychology (grades 10-12), October, 2014

“Determining what an animal sees with visually evoked potentials” University of Alabama /pre health professional group, November, 2014.

“How to test an animal’s vision using operant conditioning” Altamont School/Psychology (grades 10-12), Nov 2015.

“Good snake/Bad snake: Identifying Alabama venomous snakes: talk & test” Cub Scout Pack 63, (Canterbury United Methodist Church), January, 2016.

Sensation & Perception, introduction & color vision Altamont School / Psychology (grades 10-12), April, 2016

“Good snake/Bad snake: Identifying Alabama venomous snakes: talk & test” BSA Troop 53, (St Peter’s Church), April, 2016.

“Visual Illusions & Predictions” Altamont Project Week/ Psychology, October, 2016.

“The Neuron” Altamont / Psychology (grades 10-12), October, 2016.

“Psychfriday”(McCollough Effect), Hoover library (~100 area high school students), March 3, 2017.

### 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 (speak 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.
61. "Manscaping" hair styling demo/model 1/21/2014, abc33-40 (live)
62. "If we're presumed innocent, what is the point of an arrest record?" 5 Jul, 2014, Tusc. News
63. Interview re Faculty Senate vs. R.Watts, 7 January 2015 abc 33-40 (taped)
64. "Customer Creations/TIPS", 5/17/2016, Atlantic Coral Enterprise newsletter.

## *Citation Bandwidth (citing journals)*

*139(4-15-2013)*

"Now, a paper posted on the preprint server bioRxiv on 5 July, authored by senior employees at several leading science publishers (including Nature's owner, Springer Nature), calls on journals to downplay the figure in favour of a metric **that captures the range of citations that a journal's articles attract** (V. Lariviere et al. Preprint at bioRxiv <http://doi.org/bmc2>; 2016)". (Nature, 2016, 535, 210-211

[and what's good of a journal must surely be good of an author; n'est-ce pas?]

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 imeni 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).