Curriculum Vitae

Toru Shimizu (April 1, 2022)

CURRENT POSITION

Associate Dean for Faculty Affairs
College of Arts and Sciences
University of South Florida

CONTACT INFORMATION

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Tampa, Florida 33620
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Website: http://psychology.usf.edu/faculty/tshimizu/

EDUCATION

1981 B.A. Psychology, Keio University, Tokyo, Japan
Advisor: Dr. Takashi Ogawa

1984 M.S. Psychology, University of Maryland, College Park
Concept formation of topological space in the pigeon (*Columba livia*),
Advisor: Dr. William Hodos

1986 Ph.D. Psychology, University of Maryland, College Park
Reversal learning performance after selective lesions of the wulst in pigeons (*Columba livia*), Advisor: Dr. William Hodos

1986-1990 Post-doctoral Neuroscientist, Neurosciences, University of California, San Diego
Advisor: Dr. Harvey J. Karten

EMPLOYMENT HISTORY

2020-present Associate Dean for Faculty Affairs, College of Arts and Sciences, University of South Florida

2013-2020 Department Chair, Psychology, University of South Florida

2010-2012 International collaborator of the Centre for Advanced Research on Logic and Sensibility, Keio University, Tokyo, Japan

2009 Visiting Professor, Psychology, Keio University, Tokyo, Japan

2002-present Professor, Psychology, University of South Florida

2001 Visiting Associate Professor, Psychology, Keio University, Tokyo, Japan

2000 Special Invited Lecturer, Psychology, Keio University, Tokyo, Japan

1999 Visiting Associate Professor, Psychology, Keio University, Tokyo, Japan

1999	Visiting Associate Professor, Lehrstuhl für Verhaltensforchung, Fakultät für Biologie, Universität Bielefeld, Bielefeld, Germany
1997	Founding Faculty Member, Neuroscience Program, University of South Florida Health Sciences Center
1997	Visiting Associate Professor, Psychology, Keio University, Tokyo, Japan
1996-2002	Associate Professor Psychology, University of South Florida
1992-	Member, Institute for Biomolecular Science, University of South Florida
1991-1996	Assistant Professor, Psychology, University of South Florida
1990-1991	Assistant Research Neuroscientist, Neurosciences, University of California, San Diego
1990	Lecturer, Psychology, Keio University, Tokyo, Japan
1986-1990	Post-doctoral Neuroscientist, Neurosciences, University of California, San Diego
1984-1986	Research Assistant, Psychology, University of Maryland, College Park
1983-1984	Laboratory Instructor, Psychology, University of Maryland, College Park
1981-1982	Teaching Assistant Psychology, University of Maryland, College Park
1980	Teaching Assistant, Psychology, Keio University, Tokyo, Japan

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science (Fellow since 2018)
Association for Psychological Science (Fellow since 2021)
Comparative Cognition Society
J. B. Johnston Club of Evolutionary Neuroscience
Society for Neuroscience

SCHOLARSHIPS, AWARDS, and HONORS

2019	Outstanding Faculty Award, University of South Florida
2018	Fellow of the American Association for the Advancement of Science
2009	Sabbatical Award, University of South Florida
2003	President's Award for Faculty Excellence, University of South Florida
1998-1999	Sabbatical Award, University of South Florida
1997	Group Achievement Award, Phase 1A Shuttle/Mir Science Program National Aeronautics and Space Administration
1995	Teaching Incentive Program Award, University of South Florida

1991 Travel Fellowship, for the NATO meeting "The Changing Visual System: Maturation and Aging in the Central Nervous System" in Viterbo, Italy, NATO Advanced Study Institute

1986 Travel Fellowship, for the NATO meeting "The Evolutionary Biology of Intelligence" in Poppi, Italy, NATO Advanced Study Institute

1986 Honorable Mention for the Jack Bartlett Award (Ph.D. thesis proposal), Psychology, University of Maryland

1985 Travel Fellowship, for the annual Society for Neuroscience meeting, Psychology, University of Maryland, College Park

1984 Teaching Assistant Award, University of Maryland, College Park

GRANTS and CONTRACTS

2016-2021 **National Institutes of Health**
Development and Neurobiology of Categorization
P.I.: V.M. Sloutsky (with T. Shimizu as consultant)

2014 **USF CAS Internal Award**
The role of bird behavior in the spread of the West Nile virus
$1,500
P.I.: T. Shimizu

2012 **USF Graduate Student Challenge Grant**
Variation in Hippocampal-Dependent Behaviors and Neurogenesis during a Range Expansion
Student Name: S. Leilani Kellogg (with T. Shimizu as supervisor)

2010 **USF Office of Undergraduate Research**
Distribution of the Glucocorticoid Receptor in the House Sparrow Brain and Correlation with mRNA Expression
Student Name: David Nicholson (with T. Shimizu as supervisor)

2009-2013 **National Science Foundation**
The Magnetic Sense of Homing Pigeons and its use in Map Navigation
$450,000
P.I.: V. Bingman (with T. Shimizu as co-Investigator)

2009-2012 **University of South Florida**, Interdisciplinary Research Development Grant
Does Traumatic Brain Injury Precipitate Alzheimer's Disease?
$50,000
P.I.: T. Shimizu

2009 **Japan Society for the Promotion of Science / NIH**
Non-laminar Neuroarchitecture for Cognitive Ability
Invitation Fellowship for Research in Japan (Short-term)
$20,000 - S-09713
P.I.: T. Shimizu

2005-2006 **University of South Florida,** Established Researcher Grant
Neural Mechanisms of Sensory Integration
$4,220
P.I.: T. Shimizu

2004-2010 **National Institutes of Health** (National Institute on Aging)
Modulation of age-related changes in the auditory system
$1,250,000 - R01 AG07554-15
P.I.: J. Willott (with T. Shimizu as co-PI)

2004 **National Science Foundation,** Research Experience for Undergraduates Supplement
Neural Analysis of Visual Discrimination
$ 6,250 - IBN-0091869
P.I.: T. Shimizu

2002 **National Science Foundation** and **National Institute of Health**
The Avian Brain Nomenclature Forum
$28,000 ($15,000 from NSF, $13,000 from NIH)
P.I.: E. Jarvis

2001-2005 **National Science Foundation**
Neural Analysis of Visual Discrimination
$285,000 - IBN-0091869
P.I.: T. Shimizu

2001 **Japan Society for the Promotion of Science / NIH**
Behavioral and Anatomical Effects of Cerebral Ischemia in Birds
$10,500 (short-term fellowship RC-20137003)
P.I.: T. Shimizu

1999-2000 **University of South Florida,** Research and Creative Scholarship Grant
Neural Mechanisms of Visual Recognition
$7,350
P.I.: T. Shimizu

1998 **University of South Florida,** Faculty Development Award
Neural Mechanisms of Visual Recognition
$1,000
P.I.: T. Shimizu

1997 **Japan Society for the Promotion of Science / NIH**
An Avian Model for Ischemia
$10,000 - (short-term fellowship RC-29637030)
P.I.: T. Shimizu

1995-1998 **National Aeronautics and Space Administration**
Effects of Weightlessness on the Avian Visuo-vestibular System: Immunohistochemical Analysis
$117,253 – NAG 2-1000
P.I.: T. Shimizu

1995 **National Science Foundation,** Research Experience for Undergraduates Supplement
Neural Substrates for Visual Recognition in Birds
$6,250 – IBN-9209538
P.I.: T. Shimizu

1994 **National Science Foundation,** Research Experience for Undergraduates Supplement

Neural Substrates for Visual Recognition in Birds
$6,250 – IBN-9209538
P.I.: T. Shimizu

1994 **Sigma Xi Grant-In-Aid**
Conspecific Discrimination in Pigeons and the Effects of Thalamic Lesions
$400
P.I.: T. J. Borgatti under supervision of T. Shimizu

1993-1995 **National Science Foundation**
Neural Substrates for Visual Recognition in Birds
$204,181 – IBN-9209538
P.I.: T. Shimizu

1993 **National Science Foundation**, Research Experience for Undergraduates Supplement
Neural Substrates for Visual Recognition in Birds
$5,000 – IBN-9209538
P.I.: T. Shimizu

1988-1991 **Office of Naval Research**
The Role of Lamination in Neocortical Function
$371,760 - N00014-88-K-0504
P.I.: H. J. Karten

1988-1993 **National Institute of Neurological Disorders and Stroke**
DVR: Visual Pathways and the Origin of Neocortex
$1,303,780 - NS24560
P.I.: H. J. Karten

TEACHING and MENTORING

Courses:

1991-2020 University of South Florida

Undergraduate Courses:
1. Physiological Psychology
2. Comparative Psychology
3. Psychology of Learning
4. Neuropsychology Lab Course (Directed Study)

Graduate Courses:
1. Physiological Psychology
2. Psychology of Learning
3. Methods in Neuroscience – Microscopy and Histology

Graduate Seminars:
1. Advanced Neuroscience
2. Evolution of Mind and Consciousness
3. Sex and the Brain
4. Comparative Neuroanatomy
5. How to Succeed in Academia
6. Sex in the Brain
7. Mind and the Movies
8. Neuroethics

1999	Keio University, Tokyo, Japan, Neuroanatomy Laboratory
1990	Keio University, Tokyo, Japan, Comparative Neurobiology
1983-84	University of Maryland, College Park, Laboratory Instructor, Learning and Motivation
1981-82	University of Maryland, College Park, Teaching Assistant, Comparative Neuroanatomy, Introductory Psychology, Methodology of Neuroanatomy
1980	Keio University, Tokyo, Japan, Instructor, Experimental Psychology Laboratory

Visiting Researchers:

1. Dimitri V. Lychakov, Russian Academy of Science (Summer, 1997)
2. Shigeru Watanabe, Keio University (Spring, 2003)
3. Hans-Joachim Bischof, Bielefeld University, Germany (Spring 2011, Summer 2012, Spring 2013)

Pre- or Post-doctoral Advisees:

1. Uwe Hahmann, Konstanz University, Germany, (Summer 1993)
2. Sven Kröner, Ruhr University of Bochum, Germany, (Summer 1994 - Fall 1994)
3. Taylor Johnson, Tufts University (Spring 2004)
4. Rebecca Markham, Florida International University (Spring 2005)
5. Douglas Barron (Summer 2014 – Summer 2015; Current position: Assistant Professor at Arkansas Tech University)

Graduate Advisees:

Ph.D.

1. Philip Holbdy (Fall 1995 - Fall 1998), Cerebral lateralization of language in homosexual and heterosexual men
2. Michael L. Brazas (Fall 1998 - Spring 2005), Cognitive load theory and programmed instruction (co-advised with Dr. M. dePerczel Goodwin), Current position: Supervisor, IS Training Team, BayCare Health System, Tampa, Florida (Fall 2005 - present)
3. Scott A. Husband, (Fall 1998 - Summer 2004), Anatomy and function of the nucleus accumbens in the pigeon (*Columba livia*). Current position: Associate Professor, University of Tampa, Florida (Fall 2006 - present)
4. Antonio V. Laverghetta (Spring 1999 - Spring 2002), Parallel processing in the visual system of the zebra finch, Current position: Associate Professor, Cameron University, Oklahoma (Fall 2005 - present)
5. Amy L. Osmon (Spring 2005 - Fall 2008), Investigation of visual fields and visually-mediated behavior in the bonnethead shark (*Sphyrna tiburo*) (co-advised with Dr. D. Mann), Current position: Associate Professor, Daytona State College, Florida (Fall 2007 - present)
6. Debborah Colbert (Spring 2006 - Summer 2008), Performance abilities, interaural intensity level cues, and usage of auditory evoked potential techniques to determine sound conduction pathways (co-advised with Dr. D. Mann), Current position: Vice President of Animal Conservation, Association of Zoos and Aquariums (Fall 2008 - present)
7. Tadd Patton (Fall 2008 - Summer 2010), An anatomical investigation of higher visual structures in the pigeon (*Columba livia*). Current position: Associate Professor, University of Augusta, Georgia (Fall 2010 - present)
8. Ahmet Kerim Uysal (Fall 2011 - Summer 2017), Effects of an early life immune challenge on body growth, personality, mating behaviors, and brain development of zebra finches. Current position: Post-doctoral Associate, Baylor College of Medicine, TX.

9. S. Leilani Kellogg (Summer 2011 - Summer 2017), An anatomical study of the hyperpallium densocellulare in the pigeon (*Columba livia*). Current position: Visiting Instructor USF Psychology

M.A.

1. Scott A. Husband (Fall 1994 - Summer 1998)
2. Michael L. Brazas (Fall 1994 - Spring 1998), Species discrimination based on visual and auditory stimuli in the zebra finch (*Taeniopygia guttata castanotis*), Outstanding Master's Thesis Prize from College of Arts and Sciences, USF, October 1998
3. Antonio V. Laverghetta (Fall 1994 - Fall 1998), The effects of thalamic lesions on stationary and moving object perception in the pigeon (*Columba livia*)
4. Alexia N. Bowers (Fall 1996 - Spring 2000), Projections of a secondary visual area in the pigeon
5. Amy L. Osmon (Spring 2000 - Summer 2004), The organization of the visual system in the bonnethead shark (*Sphyrna tiburo*)
6. Tadd B. Patton (Fall 2003 - Summer 2006), Altered features of female pigeons (*Columba livia*) elicit preference behavior in male pigeons
7. S. Leilani Kellogg (Fall 2010 - Spring 2012), Behavioral and histological effects of traumatic brain injury on Alzheimer's disease transgenic mice

Undergraduate Advisees:

Honors

1. Michael L. Brazas (Fall 1993 - Summer, 1994), Graduate Program at USF
2. Karin M. Radcliffe (Fall 1995 - Summer, 1996), Stetson School of Law
3. Megan Dailey (Fall 1996 - Fall 1997)
4. Italo Masiello (Fall 1996 - Summer 1997), Graduate Program at Karolinska Institute, Sweden
5. Mary Newman (Spring 1997 - Summer 1998), Graduate Program at USF
6. Brian Cornwell (Spring 1998 - Spring 1999), Graduate Program at Emory University
7. Ketan Bakriwala (Fall 2006 - Spring 2007), Pennsylvania College of Optometry
8. Abigail Harper (Spring 2008 -Summer 2008), University of Alabama
9. Melynda Brown (Spring 2008 - Fall 2008)
10. Asef Mahmud (Spring 2008 - Fall 2008), A new digital imaging protocol for signal detection and distribution analysis in histological samples, Medical School at USF
11. Frank Fishburn (Spring 2008 - Spring 2009), Differential responding to real-time and delayed self-videos in *Columba livia,* Graduate program at Georgetown University
12. Brittany Zurschmit (Fall 2009, In complete)
13. Minh Tran (Spring 2019 - Fall 2019)

Laboratory Assistants:

1. N. Ruth Abert (Summer 1992 - Spring 1994), Graduate Program at University of South Carolina
2. Scott A. Husband (Summer 1992 - Summer 1994), Graduate Program at USF
3. K. Svensen (Fall 1992)
4. Georgetta L. Bosco (Spring 1993 - Fall 1994), REU grant supplement (NSF), Graduate Program at University of West Florida
5. Tadd B. Patton (Summer 1993 - Spring 1995), Graduate Program at Georgia State University
6. Tracy J. Borgatti (Summer 1993 - Spring 1995), PAR scholarship, May 1994, Grants-in-Aid of Research Award from Sigma Xi, July 1994, Graduate Program at USF
7. J. Croake (Summer 1993 - Fall 1993)
8. S. Stanciu (Summer 1993)
9. M. Wai-Wang (Fall 1993 - Spring 1994)

10. G. Soto (Fall 1993)
11. T. Islam (Spring 1994)
12. D. Styers (Spring 1994)
13. J. Graziano (Spring 1994)
14. K. Clarke (Spring 1994 - Summer 1994)
15. S. Elias (Spring 1994 - Fall 1994), Graduate Program at Auburn University
16. C. Noetzel (Spring 1994 - Fall 1994)
17. S. Shadrick (Spring 1994 - Fall 1994), Graduate Program at Western Kentucky University
18. K. Powell (Spring 1994 - Fall 1995), REU grant supplement (NSF)
19. A. Woods (Fall 1995)
20. S. Henry Hsiao (Fall 1995 - Spring 1997)
21. A. Rundus (Spring 1996)
22. A. Badey (Spring 1996), Graduate Program at Florida International University
23. M. Dailey (Spring 1996 - Fall 1997)
24. L. Amiri (Summer 1996), Graduate Program at USF
25. K. B. Cline (Summer 1996 - Spring, 1997), Graduate Program at University of New Orleans
26. N. Clark (Fall 1996 - Spring 1997), Graduate Program at Northwestern University
27. P. Cameron (Fall 1996 - Summer 1997)
28. J. Miskel (Summer 1997 - Spring 1998), Graduate Program at USF
29. S. Blackmon (Summer 1997 - Spring 1998)
30. A. Anguas (Summer 1997 - Spring 1998)
31. G. D. Lunsford (Fall 1997), Graduate Program at USF
32. B. Cornwell (Spring 1998 - Summer 1999)
33. B. Marsh (Spring 1998)
34. M. E. Lynch (Spring 1998)
35. Danna Horowitz (Fall 1999 - Summer 2001)
36. Kari DeBoskey (Fall 2001 - Summer 2002)
37. Steve Nodine (Summer 2002)
38. Svetlana Ustyuzhanin (Fall 2002)
39. Justine VandenBosche (Spring 2003 - Fall 2004)
40. Antonio Perry (Spring 2003 - Summer 2003), Graduate program at USF
41. Karen Drapala (Spring 2003 - Summer 2003)
42. Melissa Nelson (Summer 2003- Fall 2003)
43. Joshua Jackson (Summer 2003 - Fall 2003)
44. Sarah Stone (Summer 2003 - Spring 2004)
45. Trang Van (Spring 2004 - Spring 2004)
46. Vanessa Fischer (Spring 2004 - Spring 2005)
47. Gabrielle Szafranski (Summer 2004 - Summer 2005)
48. Sophia Delgado/Jones (Fall 2005 - Fall 2006)
49. Joshua Nadeau (Fall 2005)
50. Christin McKay (Summer 2007 - Fall 2007)
51. Jennifer Miller (Summer 2007 - Summer 2008)
52. Amanda Bunton (Spring 2009 - Summer 2010), Graduate program at Southern Illinois University
53. David Nicholson (Spring 2009 - Summer 2010), Graduate program at Emory University
54. Carmen Sanchell Lee (Spring 2010 - Spring 2012), School of Architecture graduate program at USF
55. Robert Ries (Spring 2010 - Spring 2013), Computer Science Graduate program at USF
56. Pattie Scime (Spring 2010 - Spring 2011), Mental Health Counseling Graduate Program, Western Kentucky University
57. Althea Thomas (Spring 2011 - Spring 2012), CSD Graduate program at USF

58. Alicia Chechele (Summer 2012 - Spring 2013), Neuroscience Graduate program, University of Florida
59. Brandttanner Martin (Spring 2013 - spring 2014)
60. David Howard (Summer 2014 - summer 2015)
61. Manuela Florez (Spring 2015 - Summer 2017)
62. Alexandra Gryzbowski (Spring 2015 - Fall 2015)
63. Alexandra Krajcevska (Spring 2015 - Summer 2017)
64. Eshtar Oraha (Spring 2015 - Summer 2015)
65. Amanda Oram (Spring 2015 – Summer 2017)
66. Bianca Sarubbi (Spring 2015 - Fall 2015)
67. Samantha Schwartz (Spring 2015 - Summer 2017)
68. Yeisa Torres (Spring 2015 - Summer 2017)
69. Aaron Ellis (Fall 2018 - Spring 2019)
70. Brooke Bonsack (Summer 2019 - Spring 2020)
71. Minh Tran (Fall 2018 - Spring 2020)

Ph.D. dissertation committee membership:

1. Jack Darkes (Goldman, Summer 1992 - Spring 1994)
2. C. A. Vance (I/O, Fall 1992 - Spring 1993)
3. K. A. Smith (Spring 1994)
4. S. Menon (I/O, Spring 1994)
5. D. Socci (Arendash, Biology, Fall 1991 - Fall 1995)
6. A. Thatcher-Benza (Clinical, Spring 1994 - Spring 1999)
7. J. B. Morris, Jr. (Clinical, Spring 1994 - Summer, 1996)
8. B. J. Blume (Clinical, Spring 1994 - Fall 1996)
9. G. Cox (Fall 1994 - Spring 1996)
10. D. S. Artman (Fall 1994 - Fall 1995)
11. P. Takalkar (Fall 1994 - Spring 1996)
12. C. L. Fishback (Fall 1994 - Summer 1996)
13. P. Van Katwyk (I/O, Fall 1994 - Fall 1996)
14. K. W. Cook (Spring 1995 - Spring 1996)
15. D. King (Arendash, Biology, Spring 1996 - Fall 2000)
16. D. Miles (I/O, Summer 1996 - Summer 1998)
17. M. Rose (Summer 1996 - Fall 1997)
18. A. Prince (Fall 1996 - Summer 1999)
19. L. E. Bennett (Fall 1996 - Spring 1997)
20. B. Fowler (Clinical, Fall 1996 - Spring 2001)
21. K. Schneider (Spring 1997 - Fall 1998)
22. M. B. Zia Mian (Spring 1997 - Fall, 1997)
23. K. B. Bjugstad (Arendash, Biology, Fall 1997 - Fall 1998)
24. G. W. Behner (Fall 1997)
25. H. Belanger (Cimino, Fall 1997 - Fall 2000)
26. L. A. Olson (I/O, Fall 1997 - Spring 1999)
27. D. L. Riddle (Spring 2000 - Summer 2000)
28. N. Ali (Cimino, Spring 1998 - Fall 1998)
29. B. P. Kolitz (Summer 1998 - Spring 2000)
30. S. J. Familo-Hopek (Summer 1998 - Fall 1999)
31. S. M. Rioux (I/O, Fall 1998)
32. L. L.Foster (I/O, Fall 1998 - Summer 1999)
33. W. V. Chaves (I/O, Spring 2000 - Fall 2000)
34. C. Kubisiak (I/O, Spring 2000 - Spring 2003)
35. Martha J. Sutton (I/O, Spring 2000 - Spring 2005)
36. Thomas R. Gordon (Coovert, Summer 2000 - Fall 2000)
37. Jerry A. Miller (Fall 2001 - Spring 2004)
38. Kimberly Richards (Spring 2002 - Spring 2004)
39. D. R. Newson, Jr. (Spring 2002)

40. T. McPhail (I/O, Fall 2002)
41. Melissa F. Schulz (Rohrer, Spring 2003 - Spring 2004)
42. Angeline Goh (Spector, Spring 2003 - Fall 2006)
43. Tom King (I/O, Spring 2003 - Summer 2006)
44. M. Scott Young (Kinder, Spring 2004 - Fall 2004
45. Jason R. Read (I/O, Spring 2004 - Spring 2005)
46. Patrick Connel (I/O, Spring 2004 - Fall 2005)
47. Adam M. Campbell (Diamond, Spring 2003 - Spring 2004)
48. Rex M Philpot (Kirstein, Spring 2002 - Summer 2004)
49. Kelli-Lee Harford (Clinical, Fall 2005 - Summer 2007)
50. Tim Willis (Coovert, Fall 2005 - Spring 2008)
51. Kirstie H. Stansfield (Kirstein, Summer 2005 - Fall 2007)
52. Briony Catlow (Kirstein, Spring 2007 - Fall 2008)
53. Kimberly A. Badanich (Kirstein, Summer 2007 - Fall 2008)
54. Kelli Taylor (Rohrer, Fall 2007 - Spring 2008)
55. Noah Sulman (Sanocki, Fall 2008 - Spring 2011)
56. Antoniette M. Maldonado-Devincci (Kirstein, Summer 2010 - Summer 2011)
57. Andrea Liebl (Lynn, Biology, Fall 2010 - Summer 2013)
58. Amora Mayo-Perez (Borlongan, Biomedicine, Summer 2012 In Complete)
59. Holly Kilvitis (Lynn, Richards, Biology, Fall 2012 - Fall 2017)
60. Ryan Dullaghan (Borman, Summer 2013)
61. Jeffrey Annis (Malmberg, Fall 2013 - Summer 2014)
62. Adriana R. Uruena (Kirstein, Fall 2013 - Fall 2014)
63. Heather Soder (Potts, Fall 2015 - Fall 2017)
64. Mona Fathollahi (Kasturi, Sakar, Computer Science, Spring 2014 - Summer 2016)
65. Jessica Hoffman (Kirstein, Summer 2016 – Summer 2018)
66. Hung Nguyen (Borlongan, Integrated Biomedical Sciences Program, USF Morsani College of Medicine, Fall 2016 - Summer 2019)
67. Bryan Benitez (Goldman, Spring 2019 - present)
68. Daniel Faraci (Goldman, Spring 2021 - present)

Ph.D. dissertation committee membership outside University of South Florida:

1. Taichi Kusayama, Keio University, Tokyo, Japan (Watanabe, Spring 2005)
2. Thomas Nathaniel, Ruhr-Universität Bochum, Germany (Troje, Fall, 2005)
3. Lars Dittrich, Ruhr-Universität Bochum, Germany (Güntürkün, Fall, 2009 In Complete)
4. Matthew Murphy, Tufts University, Massachusetts (Cook, 2009 - 2014)
5. Sascha Helduser, Ruhr-Universität Bochum, Germany (Güntürkün**,** Spring, 2012 In Complete)

Ph.D. dissertation defense chairperson:

Maren Jensen (Arendash, Spring 2006)

M.A. thesis committee membership:

1. B. J. Blume (Clinical, Spring 1992 - Spring 1993)
2. A. Thatcher-Benza (Clinical, Spring 1992 - Fall 1993)
3. J. B. Morris, Jr. (Clinical, Spring 1993 - Spring 1994)
4. D. Artman (I/O, Fall 1993 - Spring 1994)
5. K. W. Cook (Summer 1994)
6. E. Rafla-Yuan (Fall 1994 - Spring, 1996)
7. K. B. Bjugstad (Kirstein, Fall 1994 - Spring, 1995)
8. V. M. McKinney (D. Nelson, Spring 1992 - Fall 1995)
9. Rex M Philpot (Kirstein, Fall 1995 - Fall 1997)
10. L. L.Foster (Spring 1996 - Spring 1997)
11. D. L. Riddle (Spring 1996 - Fall 1996)
12. W. V. Chaves (Fall 1996 - Spring 1997)

13. S. J. Familo-Hopek (Fall 1996)
14. S. Hall (Spring 1997 - Spring 1998)
15. Tracy J. Borgatti (Cimino, Spring 1997 - Summer 1999)
16. M. J. Puls (Fall 1997)
17. L. Amiri (Spring 1998 - Fall 1999)
18. K. M. Alfano (Summer 1999 - Summer 2001)
19. K. Hoffman (Spring 2000 - Fall 2000)
20. J. Horn (Spring 2001 - Spring 2002)
21. Kimberly A. Badanich (Kirstein, Spring 2002 - Fall 2005)
22. Andrew Biga (Summer 2003 - Spring 2004)
23. Kirstie H. Stansfield (Kirstein, Spring 2004 - Spring 2005)
24. Debborah Colbert (Partan, Spring 2005 - Fall 2005)
25. Briony Catlow (Kirstein, Fall 2005)
26. Antoniette Maldonado (Kirstein, Fall 2006 - Fall 2007)
27. Joshua R. Kuhlman (Martin, Biology, Spring 2009 - Spring 2010)
28. Idan Ariel (Goldman, Fall 2009 - Fall 2011)
29. Steven Fiske (Sanocki, Fall 2010 - Summer 2011)
30. Jeff Annis (Malmberg, Fall 2010 - Fall 2011)
31. Heather Soder (Potts, Spring 2013 - Spring, 2015)
32. Steven Schultz (Sanocki, Fall 2014 - Summer 2016)
33. Savannah Dalrymple (Diamond, Summer 2016 - Summer 2017)
34. Colleen O'Leary (Potts, Spring 2017 Incomplete)
35. Xiao Qiu (Ramirez, Zimmerman School of Advertising and Mass Communications, Spring 2017)

Undergraduate Honors thesis committee membership:

1. J. Cameron (Kirstein, Fall 1994 - Spring 1995)
2. D. Peckham (Kirstein, Fall 1998 - Fall 1999)
3. Naomi Watanabe (Bryant, Fall, 2007 - Spring 2008)
4. Kent Alipour (Kirstein, Spring 2008 - Spring 2008)
5. Brittany Zurschmit (Fall 2009 - Incomplete)
6. Laura Brown (Kirstein, Fall 2009)
7. Brian Koerper (Halonen/Diamond, Fall 2010 - Spring 2011)
8. Mohammed Islam (Sulman/Sanocki, Fall 2010 - Summer 2012)
9. Kevin M. Potter (Susan Mooney in English, Fall 2012-Spring 2013)

Undergraduate Directed Studies

1. Akbar Qayum (Spring, 2015)

UNIVERSITY GOVERNANCE

University of South Florida

1. Department Activity

2013-2020	Department Chair
2012-2013	Alumni committee
2010-2013	Associate Department Chair
2011	Grievance Committee
2010	Visiting Assistant Professor Search Committee
2009	Department Chair Search Committee
2008	Strategic Planning Committee
2008	By-laws Committee
2007	Promotion and Tenure Evaluation Committee for Dr. Salomon
2006-2008	Evaluation Committee

2006-2008	Executive Committee (Member at large)
2005	Promotion and Tenure Evaluation Committee for Dr. Kirstein (Chair)
2005	Industrial/Organization Assistant Professor Search Committee
2004	Grievance Committee
2003-2006	Colloquium Committee
2002-2003	Assistant Professor Search Committee
2002	Promotion and Tenure Evaluation Committee for Dr. Diamond (Chair)
2002	Graduate Admissions Committee
2001-2002	Assistant Professor Search Committee
2001	Experimental Psychology Assistant Professor Search Committee (St. Petersburg Campus)
2000-2001	Department Chair Search Committee
1999-2002	Department Future Committee
1999-2000	Senior Professor Search Committee
1999-2002	Colloquium Committee
1998	Cognitive Psychology Assistant Professor Search Committee
1997-1998	Graduate Program Committee
1996-1997	Biopsychology Assistant/Associate Professor Search Committee (Chair)
1995-1996	Industrial/Organization Assistant Professor Search Committee
1994-1997	Colloquium Committee
1993-1994	Library Committee Representative
1992-1993	Biopsychology Assistant Professor Search Committee (Chair)
1991-1992	Equipment Committee
1991-1992	Experimental Assistant Professor Search Committee

2. University Activity

2020-present	Associate Dean, College of Arts and Sciences
2019	Consolidation Committee for Curriculum Cluster K11: Program Alignment in the NATURAL SCIENCES & MATHEMATICS
22019-	Graduate and Professional Student Success Committee
2017-2018	USF Tampa Strategic Plan Committee
2015-	Research Advisory Committee
2014	Academic Affiliation Advisory Committee for the Center of Innovation on Disability and Rehabilitation Research
2012-2014	Core Facility Liaison for College of Arts and Sciences (CAS)
2007	Division of Comparative Medicine Advisory Council
2006	Judge for the 5th CAS Graduate Student Research Symposium
2006	Outside Chair for a Ph.D. defense for Maren Jensen (Biology)
2004-2006	College of Arts and Sciences Graduate Committee
2004	Judge for the 4th CAS Graduate Student Research Symposium
2003	Reviewer for the Internal Awards
2003 (7/22)	Panelist for CAS Summer Proposal Writing Workshop
2003	College of Arts and Sciences Graduate Committee (alternate member)
2003	Distinguished University Professor Discipline Committee
2001-	Institutional Animal Care and Use Committee (alternate member)
1997-	Neuroscience Program Education Committee
1996-2002	PSY/CSD Building Program Committee
1995	Search Committee for Director of Animal Laboratory Resource
1992	Neuroscience Seminar Series (Neuro Lunch) (Organizer)
1992-1996	Institutional Animal Care and Use Committee
1992-1995	Vivarium (LSA Annex) Renovation Committee

PUBLIC SERVICE

1. General Community

1999	Co-organizer, Brain Awareness Day at the Museum of Science and Technology, Hillsborough County, Florida

2. Professional Community

2019	Reviewer, Academic Program Review for Department of Psychology at University of Maryland, Baltimore County
2014-2015	NSF Review Panelist
2014-2015	Reviewer, American Psychological Foundation/Council of Graduate Departments of Psychology Graduate Research Scholarship
2011	Organizer, Keio-USF Psychology Seminar, December 2nd – 3rd, at USF Sponsored by by the Centre for Advanced Research on Logic and Sensibility, Keio University, Japan, and Department of Psychology and the Center of Excellence for Aging and Brain Repair, USF
2011	Organizer, Keio-USF Psychology Seminar, January 28th – 29th, at USF Sponsored by by the Centre for Advanced Research on Logic and Sensibility, Keio University, Japan, and Department of Psychology and the Center of Excellence for Aging and Brain Repair, USF
2010	Organizer, Keio-USF Biopsychology Seminar, January 15th – 16th, at USF Sponsored by by the Centre for Advanced Research on Logic and Sensibility, Keio University, Japan, and Department of Psychology and the Center of Excellence for Aging and Brain Repair, USF
2006	Session Chair, Social Cognition as a Higher Brain Function, August 1st – 3rd, at Keio University, Tokyo, Japan
2006	Session Chair, Integration of Comparative Neuroanatomy and Comparative Cognition, August 27th -28th, at Keio University, Tokyo, Japan
2003-2004	Co-organizer, Festshrift for Drs. W. Hodos and H. J. Karten, June 5th – 6th, 2004 at University of Maryland, College Park
2002	Co-organizer, Avian Brain Nomenclature Forum, July 18th – 22nd, 2002, at Duke University, in Durham, North Carolina
1994	Co-Chair, Local Organizing Committee for the annual meeting of International Behavioral Neuroscience Society
1993-1995	Secretary/Treasurer, Tampa Bay Chapter of Society for Neuroscience
1994-present	Administrator, listserve *Avi-eaters,* for avian neurobiologists
1993	Member, Local Organizing Committee for the annual meeting of International Behavioral Neuroscience Society
1990-1991	Chair/Organizer, Neuroscience Seminar Series, University of California, San Diego

3. Advisory and Technical Committee

2012-	Editorial Board, Comparative Cognition & Behavior Reviews
2002-2006	Editorial Board, Brain Research 'Main Journal'
2003-	Associate, Behavioral and Brain Sciences

4. Journal Article Reviews

Annals of the New York Academy of Sciences, Behavioral and Brain Sciences, Behavioral Brain Research, Behavioral Neuroscience, Behavioural Processes, Brain, Behavior and Evolution, Brain Research Bulletin, Brain Research 'Main Journal', Brain Structure and Function, Cognitive, Affective, and Behavioral Neuroscience, Cognitive Brain Research, Experimental Brain Research, Hippocampus, Japanese Psychological Research, Journal of Cognitive Neuroscience, Journal of Comparative Neurology, Journal of Comparative

Physiology – A, Journal of Chemical Neuroanatomy, Journal of Experimental Psychology: Animal Behavior Processes, Journal of Neurobiology, Journal of Neurophysiology, Journal of Neuroscience, Journal of Neuroscience Methods, Journal of Vision, Life Sciences, Nature, NeuroReport, Neuroscience, Neuroscience Letters, Neuroscience and Biobehavioral Reviews, Physiology and Behavior, Physiology and Learning, Psychological Reports, Public Library of Science Biology, Visual Neuroscience, Zoo Biology

5. Grant Application Reviews

American Psychological Foundation/Council of Graduate Departments of Psychology
National Institutes of Health
National Science Foundation Review Panel
American Health Assistance Foundation
U.S. Civilian Research and Development Foundation (2001)
Natural Sciences and Engineering Research Council of Canada (2008, 2010, 2011)
Health Science Agency of New Zealand
Marsden Fund of the Royal Society of New Zealand
Volkswagen Foundation (2010)
Chilean National Research Funding Competition (2010)

6. Book Reviews

Brooks/Cole Publishing Company, Minerva Publishing Company, Japan (1999), McGraw-Hill Companies (1999, 2006), Wadsworth Publishing Company (2000, 2004), Houghton Mifflin Company (2001, 2002), Oxford University Press (2012)

7. Promotion and Tenure Reviews

Department of Psychology, University of Alberta, Canada (1999) for Dr. D. Wylie
Department of Psychology, Georgia Regents University (2015) for Dr. T. Patton

8. Science Award Reviews

Science Award of TUBITAK (Scientific and Technological Research Council of Turkey) (2007) for Dr. O. Güntürkün.
Tier 2 Canada Research Chair renewal nomination (2018) for Dr. A. Iwaniuk at University of Lethbridge

INVITED TALKS

1. **Shimizu, T.** (1984). Graduate education in the U.S.A. Japanese Society for Basic Psychology, Tokyo, Japan.

2. **Shimizu, T.** (1984). Topological concept formation in pigeons. Department of Psychology, Keio University, Tokyo Japan.

3. **Shimizu, T.** (1986). Topological concept formation of pigeons. NATO Advanced Study Institute, Poppi, Italy.

4. Karten, H. J. and **Shimizu, T.** (1990). Functional significance of neural circuits and lamination of the neocortex: An evolutionary view. Workshop on Visual Structures and Integrated Functions, University of Southern California.

5. Wakita, M., **Shimizu, T.**, and Watanabe, S. (1990). Color discrimination after lesions in the pars ventralis of the lateral geniculate nucleus in birds (*Columba livia*). Japanese Society for Physiological Psychology and Psychophysiology.

6. **Shimizu, T.** (1990). Concurrent processing in the telencephalon: A bird's eye view. J.B. Johnston Club Annual Meeting, St. Louis.

7. **Shimizu, T.** (1990). Evolution of the visual system and cognitive abilities. Department of Psychology, Tokiwa University, Mito, Japan.

8. **Shimizu, T.** (1990). Parallel processing of the avian visual system. Institute for Life Science, Sophia University, Tokyo, Japan.

9. **Shimizu, T.** (1990). Evolution of the neocortex and visual system. Mita Philosophy Society, Tokyo, Japan.

10. **Shimizu, T.** (1990). Comparative studies of the avian visual system and its significance. Department of Psychology, Keio University, Tokyo, Japan.

11. **Shimizu, T.** (1990). What can we learn from birds? Department of Psychology, California State University, Northridge, California.

12. **Shimizu, T.** (1990). What can we learn from birds? Department of Psychology, Auburn University, Alabama.

13. **Shimizu, T.** (1990). Connections of the avian dorsal ventricular ridge. Department of Biology, California Institute of Technology, Pasadena, California.

14. **Shimizu, T.** (1991). What can we learn from birds? Center for Neural Science, New York University, New York.

15. **Shimizu, T.** (1991). What can we learn from birds? Department of Psychology, Princeton University, New Jersey.

16. **Shimizu, T.** (1991). What can we learn from birds? Department of Psychology, University of South Florida, Tampa.

17. **Shimizu, T.** (1991). Cholera toxin mapping of retinal projections. NATO Advanced Study Institute, Viterbo, Italy.

18. **Shimizu, T.** (1992). What can we learn from birds? Division of Social Sciences, New College of the University of South Florida, Sarasota.

19. **Shimizu, T.** (1993). General pattern of sensory processing in the vertebrate forebrain. Brazilian Neurosciences and Behavior Society, FESBE annual meeting, Caxambu, Brazil.

20. **Shimizu, T.** (1993). Evolution of visual cognition. Department of Psychology, Keio University, Tokyo, Japan.

21. **Shimizu, T.** (1994). Effects of weightlessness on the avian visuo-vestibular system. Investigators working group meeting, National Aeronautics and Space Administration, Ames Research Center, California.

22. **Shimizu, T.** (1994). From dinosaurs to birds to mammals: Evolution of the central visual pathways. Department of Biology, University of South Florida, Tampa.

23. **Shimizu, T.** (1995). Visual cognition in pigeons and visual brain pathways. Department of Biology, University of South Florida, Tampa.

24. **Shimizu, T.** (1995). Effects of weightlessness on the avian visuo-vestibular system. Investigators working group meeting with Russian scientists, National Aeronautics and Space Administration, Ames Research Center, California.

25. **Shimizu, T.** (1996). The avian visual telencephalon: Organization and possible function. The Avian Brain and Behaviour Meeting. Tihany, Hungary.

26. Katz, J. S., Cook, R. G., Cavoto, B. R., & **Shimizu, T.** (1997). Visual texture discrimination following visual system lesions in pigeons. *Fourth Annual Meeting of the Cognitive Neuroscience Society.*

27. Brazas, M. & **Shimizu, T.** (1997). Species discrimination in the zebra finch. International Conference on Comparative Cognition. Melbourne, Florida.

28. **Shimizu, T.** (1997). Evolution of the vertebrate forebrain: when, how, and why. International Conference on Comparative Cognition. Melbourne, Florida.

29. **Shimizu, T.** (1997). Evolution of the vertebrate forebrain: when, how, and why. Department of Psychology, Keio University, Tokyo, Japan.

30. **Shimizu, T.** (1999). Evolving forebrains: The avian pattern and the mammalian pattern. Lehrstuhl für Verhaltensforchung, Fakultät für Biologie, Universität Bielefeld, Bielefeld, Germany.

31. **Shimizu, T.** (1999). Evolving forebrains: The avian pattern and the mammalian pattern. Symposium on the avian brain. Chiba University, Japan.

32. **Shimizu, T.** (2000). New Directions of Cognitive and Behavioral Neurosciences. Department of Psychology, Keio University, Tokyo, Japan.

33. **Shimizu, T.** (2000). Books in Psychology. Psychology Undergraduate Honors Program, University of South Florida, Tampa.

34. **Shimizu, T.** (07/27/2001). Evolution of attention networks: Rethinking visual processing in birds. Comparative Cognition Conference, Japanese Society for Animal Psychology, Keio University, Tokyo, Japan.

35. **Shimizu, T.** (06/12/2003). The pallium by any other name would not smell as sweet: The new nomenclature of the avian brain. Department of Psychology, Keio University, Tokyo, Japan.

36. **Shimizu, T.** (08/22/2003). Neural analysis of visual discrimination. XXVIII International Ethological Conference, Florianopolis, Brazil.

37. **Shimizu, T.** (01/15/2004). Neuroscience in psychology. Undergraduate Psychology Association/Psi Chi, University of South Florida, Tampa.

38. **Shimizu, T.** (11/30/2004). Evolution of the brain: A bird's eye view. Department of Biology, Florida International University, Miami.

39. **Shimizu, T.** (12/17/2004). Neural analysis of visual discrimination: Examination of ZENK expression. Department of Psychology, Keio University, Tokyo.

40. **Shimizu, T.** (05/09/2005). Neural analysis of visual discrimination. Symposium. Vision Sciences Society, Sarasota, FL.

41. **Shimizu, T.** (06/09/2005). Perception of social signals in pigeons. Lehrstuhl für Verhaltensforchung, Fakultät für Biologie, Universität Bielefeld, Bielefeld, Germany.

42. **Shimizu, T.** (03/22/2006). The most efficient neural design in nature: Introduction to the avian vision. Departments of Psychology and Philosophy, Keio University, Tokyo, Japan.

43. **Shimizu, T.** & Husband, S. A. (03/23/2006). The avian nucleus accumbens: Location and organization. Departments of Psychology and Philosophy, Keio University, Tokyo, Japan.

44. **Shimizu, T.** (08/01/2006). Perception of social signals in pigeons. International Symposium on Social Cognition as Higher Brain Function. Keio University, Tokyo, Japan.

45. **Shimizu, T.** (08/27/2006). The avian brain revisited: A new understanding of vertebrate brain evolution. International Symposium on Integration of Comparative Anatomy and Cognition. Keio University, Tokyo, Japan.

46. **Shimizu, T.** (08/31/2006). The avian brain revisited: A new understanding of vertebrate brain evolution. Annual Meeting of Society of Evolutionary Studies, Tokyo, Japan.

47. **Shimizu, T.** (06/07/2007). The most efficient neural design in nature: Introduction to the avian vision. Departments of Computer science & Engineering, University of South Florida, Tampa.

48. **Shimizu, T.** (12/19/2007). The growing impact of foreign-born post-doctoral fellows in the United States. Global Center for Excellence symposium. Keio University, Tokyo, Japan.

49. **Shimizu, T.** (02/28/2008). The evolution of human sexuality, Department of Biology, University of South Florida, Tampa.

50. **Shimizu, T.**, Izawa, E., & Watanabe, S. (05/08/2009). Neural substrates for animal intelligence: Why are crows smart? Kagoshima University, Kagoshima, Japan.

51. **Shimizu, T.** (05/23/2009). The origins and evolution of intelligence. The keynote speech at the Inaugural Symposium of the Center for Research on Human Intelligence, Tokyo, Japan.

52. **Shimizu, T.** (10/15/2009). Evolution of visual telencephalic regions and their role in courtship in birds. Karger Workshop, J.B. Johnston Club, Chicago, IL.

53. **Shimizu, T.** (04/8/2011). Inside the avian brain. Department of Psychology, Queen's University, Kingston, Ontario, Canada.

54. **Shimizu, T.** (07/12/2011). Hodology of the mesopallium and hyperpallium. University of Antwerp, Belgium.

55. **Shimizu, T.** (09/12/2011). Brain evolution for logic and sensibility. Global Centre for Excellence symposium, Keio University, Tokyo, Japan.

56. **Shimizu, T.** (09/19/2011). Progress in "sensitive period" studies and the contributions of comparative neuroscience. Division of Animal behavior and Intelligence, Hokkaido University, Sapporo, Japan.

57. **Shimizu, T.** (09/21/2011). The anatomy of imprinting: The organization of the avian cerebrum. The 82nd annual meeting of the Zoological Society of Japan, Asahikawa, Hokkaido, Japan.

58. **Shimizu, T.** (10/07/2011). Do animals have human-like “minds”? Department of Psychology, Augusta State University, Georgia.

59. **Shimizu, T.** (05/15/2012). Birds and humans: the origins of cognition. Biopsychology Symposium, Keio University, Tokyo, Japan.

60. **Shimizu, T.** (12/21/2013). Into the minds of animals: Brain-imaging and connectome approaches. The keynote speech at the Evolution of Emotion Symposium sponsored by the Global Centre for Excellence and the Center for Research on Human Intelligence, Tokyo, Japan.

61. **Shimizu, T.** (07/28/2016). Evolution of cognition and emotion: Brain-scanning and connectome analyses. International Congress of Psychology, Yokohama, Japan.

62. **Shimizu, T.** (10/07/2017). The Origins of Avian Cognition and Emotion: Multiple Pulses of Cerebral Expansion in Evolution. Evolution of Brain Cognition, and Emotion Symposium, Keio University, Tokyo, Japan.

63. **Shimizu, T.** (06/27/2018). The Evolution of Brain and Behavior. The keynote speech at the Symposium on the Neural Mechanism for a Large-scale Migration, Keio University, Tokyo, Japan.

PUBLIC PRESS

Tiraby, Christopher (03/23/2003). Les Animaux Face A Leur Image. E=m6, VM Group, France.

Blakeslee, Sandra (02/01/2005). Minds of their own: Birds gain respect, *The New York Times*. (In addition, Washington Post, Los Angeles Times, PBS radio, BBC news, Asahi Shimbun, etc.)

Viegas, Jennifer (11/29/2005). Female pigeons love male sweet talk, *Discovery Online News*.

Bunch, Jenny (01/12/2006) Pigeons help researchers understand evolution of animal communication, *Research Online*, USF.

Boursnell, Kim (02/11/2008) Face recognition in pigeons, Outline production for Weird Connection, Discovery TV Channel.

Morell, Virginia (07/05/2013) Into the minds of birds, *Science, 341* (6141), 22-25.

BOOKS

Lazareva, O. F., **Shimizu, T.**, & Wasserman, E. A. (Editors) (2012). *How Animals See the World: Comparative Behavior, Biology, and Evolution of Vision.* New York: Oxford University Press.

Watanabe, S., Hofman, M. A., & **Shimizu, T.** (Editors) (2017). *Evolution of Brain, Cognition, and Emotion in Vertebrates.* New York: Springer.

ARTICLES

1. Watanabe, S., Hodos, W., Bessette, B. E. B., & **Shimizu, T.** (1986). Interocular transfer in parallel visual pathways in pigeons. *Brain, Behavior and Evolution, 29,* 184-195.

2. **Shimizu, T.** & Karten, H. J. (1988). Pattern recognition of birds: III. Neural system of pattern recognition. *Gengo, 17(6),* 14-19. (In Japanese).

3. **Shimizu, T.** & Hodos, W. (1989). Reversal learning in pigeons: Effects of selective lesions of the Wulst. *Behavioral Neuroscience, 103,* 262-273.

4. Karten, H. J. & **Shimizu, T.** (1989). The origins of neocortex: Connections and lamination as distinct events in evolution. *Journal of Cognitive Neuroscience, 1,* 291-301.

5. Britto, L. R. G., Keyser, K. T., Hamassaki, D. E., **Shimizu, T.**, & Karten, H. J. (1989). Chemically specific retinal ganglion cells collateralize to the pars ventralis of the lateral geniculate nucleus and optic tectum in the pigeon (*Columba livia). Visual Neuroscience, 3,* 477-482.

6. **Shimizu, T.**, Sugimoto, S., Suzuki, S., & Watanabe, S. (1989). Behavioral neurology. In T. Ogawa, S. Sugimoto, M. Sato, & T. Kawashima. (Eds.*), Handbook of Behavioral Psychology* (pp. 155-178). Tokyo: Baifukan. (In Japanese).

7. **Shimizu, T.** & Karten, H. J. (1990). Immunohistochemical analysis of the visual wulst of the pigeon (*Columba livia*). *Journal of Comparative Neurology, 300,* 346-369.

8. **Shimizu, T.** & Karten, H. J. (1991). Multiple origins of neocortex: Contributions of the dorsal ventricular ridge. In B. L. Finlay, G. Innocenti & H. Scheich (Eds.*), The neocortex: Ontogeny and phylogeny, NATO ASI series.* (pp. 75-86). New York: Plenum Press.

9. **Shimizu, T.** & Karten, H. J. (1991). Computational significance of lamination of the telencephalon. In M. A. Arbib & J. -P. Ewert (Eds.), *Visual Structures and integrated functions: Research notes in neural computing.* (pp. 325-337). New York: Springer-Verlag.

10. **Shimizu, T.** & Karten, H. J. (1991). Central visual pathways in reptiles and birds: Evolution of the visual system. In J. Cronly-Dillon & R. Gregory (Eds.*), Vision and visual dysfunction, vol. 2: Evolution of the eye and visual system*. (pp. 421-441). London: Macmillan Press.

11. Karten, H. J. & **Shimizu, T.** (1991). Are visual hierarchies in the brains of the beholders?: Constancy and variability in the visual system of birds and mammals. In P. Bagnoli & W. Hodos (Eds.), *The changing visual system: Maturation and aging in the central nervous system. NATO ASI series.* (pp. 51-59). New York: Plenum Press.

12. Wakita, M., Watanabe, S., **Shimizu, T.**, & Britto, L. R. G. (1992). Visual discrimination performance after lesions of the ventral lateral geniculate nucleus in pigeons (*Columba livia*). *Behavioural Brain Research, 51,* 211-215.

13. **Shimizu, T.** & Karten, H. J. (1993). The avian visual system and the evolution of the neocortex. In H. P. Zeigler & H-. J. Bischof (Eds.*), Vision, brain and behavior in birds.* (pp. 103-114). Cambridge, Massachusetts: MIT Press.

14. **Shimizu, T.**, Cox. K., Karten, H. J., & Britto, L. R. G. (1994). Cholera toxin mapping of retinal projections in pigeons (*Columba livia*), with emphasis on retinohypothalamic connections. *Visual Neuroscience, 11,* 441-446.

15. **Shimizu, T.** (1994). Significance of studies of the avian brain from three perspectives. *Brazilian Journal of Medical and Biological Research, 27,* 1479-1489.

16. **Shimizu, T.**, Cox, K., & Karten, H. J. (1995). Intratelencephalic projections of the visual wulst in birds (*Columba livia*). *Journal of Comparative Neurology, 359,* 551-572.

17. Woodson, W., **Shimizu, T.**, Wild, J. M., Schimke, J., Cox, K., & Karten, H. J. (1995). Centrifugal projections upon the retina: An anterograde tracing study in the pigeon retina (*Columba livia*). *Journal of Comparative Neurology, 362,* 489-509.

18. Borlongan, C. V., Shytle, R. D., Ross, S. D., **Shimizu, T.**, Freeman, T. B., Cahil, D. W., & Sanberg, P. R. (1995). (-)-Nicotine protects against systematic kanic acid-induced excitotoxic effects. *Experimental Neurology, 136,* 261-265.

19. Soha, J.A., **Shimizu, T.**, & Doupe, A. J. (1996). Development of catecholaminergic innervation of the song system of the male zebra finch. *Journal of Neurobiology, 29,* 473-489.

20. Leutgeb, S., Husband, S., Riters, L. V., **Shimizu, T.**, & Bingman, V. P. (1996). Afferent connections and cognitive functions of the pigeon neostriatum caudolaterale. *Brain Research, 730,* 173-81.

21. Mpodozis, J., Cox, K., **Shimizu, T.**, Bischof, H. -J., Woodson, W., & Karten, H. J. (1996). GABAergic inputs to the nucleus rotundus (pulvinar inferior) of the pigeon (*Columba livia*). *Journal of Comparative Neurology, 374,* 204-222.

22. **Shimizu, T.** (1998). Conspecific recognition in pigeons (*Columba livia*) using dynamic video images. *Behaviour, 135,* 43-53.

23. Borlongan, C. V., **Shimizu, T.**, Trojanowski, J. Q., Watanabe, S., Lee, V. M. -Y., Tajima, Y., Cahill, D. W., Freeman, T. B., Nishino, H., & Sanberg, P. R. (1998). Animal models of cerebral ischemia: Neurodegeneration and cell transplantation. In T. B. Freeman & H. Widner (Eds.), *Cell transplantation for neurological disorders: Toward reconstruction of the human cerebral nervous system.* (pp. 211-230). Totowa, NJ: Humana Press.

24. **Shimizu, T.** (1998). Animal brains and human brain. *Psychology World, 3,* 16-19. (In Japanese).

25. **Shimizu, T.** & Bowers, A. N. (1999). Visual pathways in the avian telencephalon: Evolutionary implications. *Behavioural Brain Research, 98,* 183-191.

26. Husband, S. & **Shimizu, T.** (1999). Efferent projections of the ectostriatum in pigeons (*Columba livia*). *Journal of Comparative Neurology, 406,* 329-345.

27. Laverghetta, A. V. & **Shimizu, T.** (1999). Visual discrimination in the pigeon (*Columba livia*): Effects of selective lesions of the nucleus rotundus. *NeuroReport, 10,* 981-985.

28. Borlongan, C. V., **Shimizu, T.**, & Sanberg, P. R. (2000). Comparative study on 3-nitropropionic acid neurotoxicity. In: P. R. Sanberg, H. Nishino, & C. V. Borlongan (Eds.), *Mitochondrial inhibitors and neurodegenerative disorders.* (pp. 93-106). Totowa, NJ: Humana Press.

29. **Shimizu, T.** (2000). Evolution of mind and brain. In S. Watanabe (Ed.), Comparative Cognitive Sciences of Mind. (pp. 27 – 81). Kyoto, Japan: Minerva. (In Japanese).

30. **Shimizu, T.** (2001). Evolution of the forebrain in tetrapods. In: G. Roth & M. F. Wulliman (Eds.), *Brain evolution and cognition.* (pp. 135 – 184). New York, New York: Wiley/Spektrum.

31. Husband, S. & **Shimizu, T.** (2001). Evolution of the avian vision. In: R. Cook (Ed.), *Avian Visual Cognition*. (http://www.pigeon.psy.tufts.edu/avc/husband/default.htm)

32. Brazas, M. & **Shimizu, T.** (2002). Significance of visual cues in choice behavior in the female zebra finch (*Taeniopygia guttata castanotis*). *Animal Cognition, 5,* 91-95.

33. **Shimizu, T.** (2002). Evolution of mind. In Japan Cognitive Science Society (Ed.), Dictionary of Cognitive Science. (pp. 280 – 281). Tokyo, Japan: Kyoritsu Press. (In Japanese).

34. Laverghetta, A. V. & **Shimizu, T.** (2003). Organization of the ectostriatum based on afferent connections in the zebra finch (*Taeniopygia guttata*). *Brain Research, 963,* 101-112.

35. **Shimizu, T.** (2003). Toward the answer, but still far to go. *Behavioral and Brain Sciences, 26,* 569-570.

36. **Shimizu, T.** (2004). Birds: Vision and visual system. In G. Adelman & B. H. Smith (Eds.), *Encyclopedia of Neuroscience, 3rd edition.* [CD-ROM]. New York, New York: Elsevier.

37. Reiner, A., Perkel, D. J., Bruce, L., Butler, A. B., Csillag, A., Kuenzel, W., Medina, L., Paxinos, G., Powers, A., **Shimizu, T.**, Striedter, G. F., Wild, J. M., Ball, G. F., Durand, S., Güntürkün, O., Lee, D. W., Mello, C. V., Powers, A., White, S. A., Hough, G., Kubikova, L., Smulders T. V., Wada, K., Douglas-Ford, J., Husband, S., Yamamoto, K., Yu, J., Siang, C., & Jarvis, E. D. (2004). Revised nomenclature for avian telencephalon and some related brainstem nuclei. *Journal of Comparative Neurology, 473,* 377-414.

38. Reiner, A., Perkel, D. J., Bruce, L., Butler, A. B., Csillag, A., Kuenzel, W., Medina, L., Paxinos, G., Powers, A., **Shimizu, T.**, Striedter, G. F., Wild, J. M., Ball, G. F., Durand, S., Güntürkün, O., Lee, D. W., Mello, C. V., Powers, A., White, S. A., Hough, G., Kubikova, L., Smulders T. V., Wada, K., Douglas-Ford, J., Husband, S., Yamamoto, K., Yu, J., Siang, C., & Jarvis, E. D. (2004). The Avian Brain Nomenclature Forum: A new century in comparative neuroanatomy. *Journal of Comparative Neurology, 473,* E1-E6.

39. **Shimizu, T.** (2004). Comparative cognition and neuroscience: Misconceptions about brain evolution. *Japanese Psychological Research, 46,* 246-254.

40. **Shimizu, T.**, Bowers, A. N., Budzynski, C. A., Kahn, M. C., & Bingman, V. P. (2004). What does a pigeon brain look like during homing? Selective examination of ZENK expression. *Behavioral Neuroscience, 118,* 845–851.

41. **Shimizu, T.** (2004). The nervous system (61 items). In S. Yamagishi, H. Morioka, & H. Higuchi (Eds.), *Dictionary of Ornithology.* Kyoto, Japan: Showado Press. (In Japanese).

42. Jarvis, E. D., Güntürkün, O., Bruce, L., Csillag, A., Karten, H. J., Kuenzel, W., Medina, L., Paxinos, G., Perkel, D. J., **Shimizu, T.**, Striedter, G. F., Wild, J. M., Ball, G. F., Douglas-Ford, J., Durand, S., Hough, G., Husband, S., Kubikova, L., Lee, D. W., Mello, C. V., Powers, A., Siang, C., Smulders, T. V., Wada, K., White, S. A., Yamamoto, K., Yu, J., Reiner, A., & Butler, A. B. (2005). Avian brains and a new understanding of vertebrate brain evolution. *Nature Reviews Neuroscience, 6,* 151-159.

43. Partan, S., Yelda, S., Price, V., & **Shimizu, T.** (2005). Female pigeons (*Columba livia*) respond to multisensory audio/video playbacks of male courtship behavior. *Animal Behaviour, 70,* 957-966.

44. **Shimizu, T.** (2006). Brain evolution by natural selection. *Behavioral and Brain Sciences, 29,* 23-24.

45. Willott, J. F., VandenBosche, J., **Shimizu, T.** & Ding, D. (2006). Effects of exposing DBA/2J mice to a high-frequency augmented acoustic environment on the cochlea and anteroventral cochlear nucleus. *Hearing Research, 216-217,* 138-145.

46. Willott, J. F., VandenBosche, J., **Shimizu, T.**, Ding, D., & Salvic, R. (2006). Effects of exposing gonadoectomized and intact C57BL/6J mice to a high-frequency augmented acoustic

environment: Auditory brainstem response thresholds and cytocochleograms. *Hearing Research, 221,* 73-81.

47. **Shimizu, T.** (2006). Public acceptance of evolution in Japan and the United States. *Kokoro (Mind), 16,* 1. (In Japanese).

48. **Shimizu, T.** (2007). The avian brain revisited: A new understanding of vertebrate brain evolution. *Iden (Heredity), Special issue 20,* 68-72. (In Japanese.)

49. Patton, T. B., Szafranski, G., & **Shimizu, T.** (2007). Perception of social signals in pigeons (*Columba livia*). In S. Watanabe, T. Tsujii, & J. Keenan (Eds.), *Comparative Social Cognition*. (pp. 45 - 60). Tokyo, Keio University Press.

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