

HARVEY B. LILLYWHITE

Curriculum Vitae

(March, 2016)

Address: Department of Biology
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Gainesville, Florida 32611-8525

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Date of Birth, Citizenship: December 1, 1943 (Arizona, USA); Citizen of USA

Marital Status: Married; 2 children

Education: PhD, University of California, Los Angeles, 1970
(George A. Bartholomew, supervisory chair)
MA, University of California, Los Angeles, 1967
BA, University of California, Riverside, 1966 (with honors)

Appointments & Professional Experience:

1984 to present	<i>Professor</i> , Dept of Biology, University of Florida, Gainesville (122 Bartram Hall, Gainesville, FL 32611-8525; departmental phone 352-392-1175) <i>Affiliate Associate Curator</i> (Herpetology), Florida Museum of Natural History
Fall 2013	<i>Short-term Research Fellow</i> (JSPS), Kyoto University, Japan
1998 to 2012	<i>Director</i> , University of Florida Marine Laboratory at Seahorse Key
Fall 2011; Fall 2012	<i>Visiting Scientist</i> , School of Earth & Environmental Sciences, James Cook University, Townsville, Queensland, Australia
2008 to 2015	<i>Research Expeditions</i> , southern Mexico, Costa Rica (14), Australia (2)
2005, 2006, 2007, 2009	<i>Research Expeditions</i> , Orchid Island (Lanyu), Taiwan
Aug 1993 to Feb 1994	<i>Fulbright Fellow</i> (CIES: Indo-American program), supporting field and laboratory research in India (Banaras Hindu University; Madras Crocodile Bank Centre for Herpetology)
1992-1997	<i>Senior Research Associate</i> (National Research Council), NASA-Ames Research Center, Moffett Field, California (1992-93 + summers 1994-97)
Summer 1991	<i>Research Fellow</i> , Dept of Zoology, University of New England, Armidale, NSW, Australia
" "	<i>Research Expedition</i> to Swain Reefs, Australian Great Barrier Reef
Oct, Nov 1990	<i>Research Expedition</i> , Thailand
May 1989	<i>Research Expedition</i> , central Philippines
Jan-Feb 1988	<i>Research Expedition</i> , Philippines and Thailand

Mar-April 1986	<i>Research Expedition</i> , central Philippines
Jan-Feb 1985	<i>Research Expedition</i> , central Philippines
1982-1984	<i>Professor</i> , Departments of Systematics & Ecology and Physiology & Cell Biology, University of Kansas, Lawrence
August 1983	<i>Research Expedition</i> , central Philippines
June-July 1981	<i>Research Expedition</i> , Australian Great Barrier Reef and Fiji
1979-1980	<i>Visiting Scientist</i> , Scripps Institution of Oceanography, University of California at San Diego (sabbatical leave)
1976-1982	<i>Associate Professor</i> , Departments of Systematics & Ecology and Physiology & Cell Biology, University of Kansas, Lawrence
1975-1976	<i>Visiting Lecturer</i> , Dept of Zoology, Monash University, Clayton, Victoria, Australia
July 1976	<i>Research Expedition</i> , Papua New Guinea
1971-1976	<i>Assistant Professor</i> , Department of Physiology and Cell Biology, University of Kansas, Lawrence
1970-1971	<i>NSF Postdoctoral Fellow</i> , Dept of Zoology, University of California, Berkeley (with Paul Licht)
Summer 1968	<i>Training</i> in development of miniature telemetry systems: Biocom, Inc., Culver City, California
Oct 1966 - Oct 1970	<i>Blood Technician</i> , Veterans Administration Hospital, West Los Angeles

Teaching Experience:

University of Florida

1. Animal Physiology; Physiology & Molecular Biology of Animals
2. Reptilian Functional Morphology
3. Integrated Principles of Biology
4. Herpetology (team participant)
5. Biology of Snakes
6. Graduate seminars in physiology, herpetology, ecology, conservation, climate change

University of Kansas

1. Biology of Organisms
2. Comparative Animal Physiology
3. Mammalian Physiology (team participant)
4. Respiration Physiology (team participant)
5. Human Physiology
6. Herpetology (team participant)
7. Graduate seminars in herpetology, ecology and physiology

Monash University

Physiological Ecology and Honours Student Supervision

Research Interests:

General: Adaptation of structure and function and the physiological ecology of vertebrates, especially reptiles and amphibians. The interface of physiology with ecology, behavior, morphology, and evolutionary biology.

Current research: (1) Multidisciplinary investigations of behavior, physiology and ecology of insular populations of cottonmouth snakes and their mutualism with colonial nesting birds in the Cedar Keys of Florida. Increasing emphasis on aspects of community ecology related to climate change and persistence of the Seahorse Key bird rookeries. (2) Water balance, drinking behavior, and distribution of sea snakes, with emphasis on macroecology related to climate change. (3) Gravitational adaptation and cardiovascular physiology of vertebrates. (4) Water and thermal relations of amphibians and reptiles, with emphasis on transepidermal exchange. (5) Structure and function of vertebrate integument, with current emphasis on integrative studies of skin structure, lipid secretions, water permeability and climatic adaptation in arboreal frogs, in addition to plasticity of the skin permeability barrier in squamate reptiles. (7) Long-term interests in animal coloration, disturbed environments, fire ecology, and conservation.

Professional Affiliations:

Society Memberships:

Society for Integrative and Comparative Biology (past member of Executive Committee)
American Physiological Society
Ecological Society of America (past section editor)
American Society of Ichthyologists and Herpetologists (recent member of Board of Governors; recent Chair of Robert K. Johnson Award Committee; past section editor)
Society for the Study of Amphibians and Reptiles
American Association for the Advancement of Science
Sigma Xi
International Society for Gravitational Physiology (past)
American Society for Gravitational and Space Biology (past)

Associations:

Fellow of Explorers Club
Behavioral and Brain Sciences Associate (since 1989)
Affiliate Associate Curator (Herpetology), Florida Museum of Natural History
National Association of Marine Laboratories; Southern Association of Marine Laboratories
Organization of Biological Field Stations

Other Affiliations:

Phi Beta Kappa
Wilderness Society
Desert Protective Council (Life Member)
League of Conservation Voters
The Nature Conservancy
National Parks and Conservation Association
World Wildlife Fund
Cultural Survival
Southern Utah Wilderness Alliance

Awards and Distinctions:

Recipient of 5 undergraduate scholarships
 NSF undergraduate research award
 Phi Alpha Mu, social sciences honorary
 B.A. with honors
 Phi Beta Kappa
 NSF Trainee and Summer Trainee (UCLA)
 NSF Postdoctoral Fellow (UC Berkeley, 1970-71)
 Visiting Lecturer, Monash University (Australia) (1975-1976)
 Research Fellow, San Diego Zoo and Wild Animal Park (1979-1980)
 Recipient of 30+ university (internal) research grants
 Biomedical Sciences Support Grants, NIH (4)
 American Philosophical Society Research Awards, 1974 and 1988-89
 Faculty Development Fund Awards (2)
 NSF multi-user equipment award, joint investigator, 1978, \$60,000
 NIH grant, "Arterial Blood Pressure Regulation", 1979-1982, \$91,303 direct costs
 NSF grant, "Physiological Ecology of Sea Snakes", 1981, \$48,600 (co-investigator)
 NIH grant, "Arterial Blood Pressure Regulation", 1983-1985, \$90,406 direct costs
 NIH Small Instrumentation Grant, 1987, \$13,402
 NIH grant, "Arterial Blood Pressure Regulation", 1986-1989, \$150,070 direct costs
 Outstanding Service Award, American Society of Zoologists, 1988-89
 Research Fellow, University of New England, Armidale, NSW (Australia), 1991
 NSF Travel Grant, 1991 (Tokyo)
 National Research Council Senior Research Fellowship, NASA-Ames Research Center, 1992-97
 Fulbright Research Fellowship (Indo-American Program), 1992-93
 Awards of Recognition, National Aeronautics & Space Administration (NASA), 1995, '96, '97
 Professional Excellence Award, University of Florida, 1996 (based on research, teaching and service)
 NSF Travel Grant, 1999 (Calgary)
 STEP promotion in rank, 2001
 Disney Wildlife Conservation Fund award, 2001, 2002, 2003
 US Fish & Wildlife Service Challenge Award, 2003, 2005
 US Fish & Wildlife Service cooperative grant award, 2008
 Dozor Lectureship, 2002 (awarded but not activated)
 National Geographic Society, CRE research award, 2006
 Various research awards from private donors and foundations (\$34,300 in 2011-2012)
 Visiting Scholar, National Taiwan Normal University, Taipei, 2009
 Visiting Scientist, James Cook University, Sept-Nov, 2011; Sept-Oct, 2012
 NSF grant, "Freshwater Use by Sea Snakes", 2009-2013, \$474,996
 NSF grant, "Meeting: New Frontiers from Marine Snakes to Marine Ecosystems", 2011-2012, \$14,580
 Awards in 2011 to support symposium "New Frontiers from Marine Snakes to Marine Ecosystems", \$23,670 from SICB; \$3000 from UF; \$1000 from Sable Systems International; \$500 from Vida Preciosa, Inc.; \$200 from Gourmet Rodent.
 Grant from Florida Lighthouse Association, 2011-2012, \$15,393 (with matching funds from Univ. Florida)
 Japan Society for Promotion of Science Invitation Fellowship for Research in Japan (Short-term, FY2013).

Editorships:

Editor, Physiology Section, *Herpetological Review* (1975-1976)
 Editorial Board, *University of Kansas Science Bull.* (1974-1983)
 Editorial Board, *Copeia* (1978)
 Section Editor, *Copeia* (1978-1982)
 Section Editor, *Ecology and Ecological Monographs* (1982-1986)
 Editorial Board, *Amphibian and Reptile Conservation* (1997-present)
 Editorial Board, *Comparative Biochemistry and Physiology* (2002-present)
 Editorial Board, *BioScience* (Vertebrate Biology, 2003-present)

Oxford Series Advisory Board, *Ecological and Environmental Physiology Series* (2003 - present)
 Editorial Advisory Board, *Trends in Comparative Biochemistry and Physiology* (2005 - present)
 Editorial Guild, *Herpetological Conservation and Biology* (2008 – 2012?)
 Editorial Board, *Current Herpetology* (2014 – present)

Reviewer for Grants, Journals and Publishers:

Acta Oecologica
Acta Zoologica
American Journal of Physiology
American Midland Naturalist
American Zoologist
Anatomical Record
Applied Herpetology
Australian Journal of Zoology
Aviation, Space and Environmental Medicine
Behavioral and Brain Sciences
Belgian Journal of Zoology
Biodiversity and Conservation
Biological Invasions
Biological Journal of the Linnean Society
Bioscience
Biotropica
Bulletin of Alabama Museum of Natural History
Canadian Journal of Zoology
Comparative Biochemistry and Physiology
Copeia
Coral Reefs
Current Herpetology
Ecological Modelling
Ecology and Ecological Monographs
Ecoscience
Endangered Species Research
Ethology
Evolution
Functional Ecology
Herpetologica
Herpetological Natural History
Herpetological Review
Herpetological Journal
Holarctic Ecology
Hormones and Behavior
Integrative and Comparative Biology
Integrative Zoology
Journal of Animal Ecology
Journal of Animal Physiology and Animal Nutrition
Journal of Applied Physiology
Journal of Asia-Pacific Biodiversity
Journal of Biogeography
Journal of Comparative Physiology
Journal of Experimental Marine Biology and Ecology
Journal of Experimental Zoology
Journal of Experimental Biology
Journal of Herpetology
Journal of the Royal Society B
Journal of the Royal Society Open Science
Journal of the Royal Society Interface
Journal of Thermal Biology

Journal of Theoretical Biology
Journal of Morphology
Journal of Anatomy
Journal of Animal Behaviour
Journal of the Kansas Entomological Society
Marine Biology
Marine and Freshwater Research
Natural History
Naturwissenschaften
Paleobiology
Palaeontologia Electronica
Physiological Zoology
Physiological and Biochemical Zoology
Physiology and Behavior
PLoS ONE
Proceedings of the National Academy of Sciences (PNAS)
Proceedings of the Royal Academy, London
Royal Society Open Science
Science
Scientific Reports
South American Journal of Herpetology
The American Naturalist
Tissue and Cell
Transactions of the Illinois Academy of Science
Zacs
Zoo Keys
Zoological Studies
Zoologischer Anzeiger
Zoology

Oxford University Press
Merrow Publishing Co., Ltd., Watford Herts, England
Wadsworth Publishing Co., Belmont, California
Prentice-Hall Publishing Co., Englewood Cliffs, New Jersey
W.H. Freeman Co., New York
Academic Press, New York and London
University of California Press
University of Chicago Press
Chapman and Hall
Krieger Publishing Co., Melbourne, Florida
MacGraw-Hill Publishing Co., New York
William C. Brown Co., New York
MacMillan Publishing Co., New York
Suwannee River Publishing Co.
SETAC Press
National Science Foundation
National Geographic Society
Fauna & Flora International.
Center for Field Research
Israel Science Foundation
Israel Academy of Science, Basic Research Foundation
Idaho State Board of Education
Florida State Department of Game & Freshwater Fish Commission
Committee on Laboratory Animals, Dalhousie University, Nova Scotia, Canada
Natural Sciences & Engineering Research Council of Canada
Various university research proposals and symposium volumes

Invited Lectures since 1990:

Intl Symposium "Survival 2000", Hyderabad (India), 1990 (invited speaker)
 Intl Symposium "Science and Technology for Peace, Prosperity and Progress", Jaipur (India), 1990 (invited speaker)
 13th annual All Florida Herpetology Conference, Gainesville, 1990 (invited speaker)
 Symposium "Nonmammalian Models for the Study of Cardiovascular and Renal Homeostasis", APS, ASZ & SEB joint mtg, Orlando, 1991 (invited speaker)
 University of Florida College of Medicine, Gainesville, 1991 (invited speaker)
 University of Illinois, Champaign-Urbana, 1991 (invited seminar)
 University of New England, Armidale, NSW (Australia), 1991 (invited seminar)
 Int'l Symposium "Neural Regulation of Arterial Blood Pressure in Vertebrates: Teleost to Mammal", 3rd Intl Congr Comparative Physiology & Biochemistry, Tokyo (Japan), 1991 (invited speaker)
 Int'l Symposium "Physiological Adaptation to Estuarine Environments", Canadian Soc of Zoologists, Antigonish, Nova Scotia (Canada), 1992 (invited speaker)
 Int'l Symposium "Control of Blood Volume in Vertebrates", Int'l joint mtg of SEB, APS, ASZ and CSZ, Cambridge (UK), 1992 (invited speaker)
 Idaho State University, Pocatello, 1992 (invited seminar)
 NASA-Ames Research Center, Moffett Field, California (invited seminar)
 University of California, Riverside, 1992 (invited seminar)
 University of California, Berkeley, 1993 (invited seminar)
 Banaras Hindu University, Varanasi (India), 1993 (invited seminar)
 Int'l Symposium "Comparative Cardiovascular Biology of Lower Vertebrates", XIV Federative Int'l Congress of Anatomy, Lisboa (Portugal), 1994 (invited speaker)
 Symposium "From Myxine to Man: The Physiology of Blood Volume Regulation", APS Intersociety Meeting, San Diego, 1994 (invited speaker)
 University of Akron, Williams' Lecture speaker, 1994 (invited honorary seminar)
 Int'l Symposium "Current Concepts in Gravitational Physiology", International Soc for Gravitational Physiology, Reno, 1995 (invited speaker)
 University of Nevada, Las Vegas, 1995 (invited seminar)
 NASA-Ames Research Center, NRC Associateship Program, 1995 (invited lecture)
 Joint Stanford University-NASA Ames Research Center cardiovascular working group, 1995 (invited lecture)
 18th annual All Florida Herpetology Conference, Gainesville, 1995 (invited speaker)
 Symposium on Hypergravity, ASGSB Annual Mtg, Washington, D.C., 1995 (invited speaker)
 Int'l Symposium "Water/Air Transitions in Biology", Varanasi (India), 1996 (invited speaker)
 Int'l Symposium on "Animal Adaptation", National Changhua University (Taiwan, ROC), 1996 (Keynote Speaker for two lectures)
 Int'l Symposium "Diving: Problems and Solutions", Society for Experimental Biology, Canterbury (England), 1997 (invited speaker)
 Int'l Symposium "Gravity and Living Systems", 5th World Congress Intl Soc Adaptive Medicine, Framingham, Massachusetts, 1997 (invited organizer and speaker)
 Symposium "Snake Ecology for the 21st Century", Texas Herpetological Society, Camp Tyler, 1997 (invited speaker)
 Int'l Symposium "Cardiac Rhythms in Animals: Regulation, Development and Environmental Influences", Muroran Institute of Technology, Muroran (Japan), March 1998 (invited speaker)
 Central Florida Herpetological Society, Orlando, June 1998 (invited speaker)
 Int'l International Herpetological Symposium, Cincinnati, June 1998 (invited speaker)
 Int'l Symposium (Featured Topic) "The Gravity of Circulation", Experimental Biology 99, Washington DC, April 1999 (invited speaker)
 Arizona State University West, April 1999 (invited seminar)
 Int'l Symposium "Integrative Ecophysiology of Amphibian Integument", 5th International Congress of Comparative Physiology and Biochemistry, Calgary, August 1999 (organizer and speaker)
 Int'l Conference on Biology of the Vipers, Uppsala, Sweden, May 2000 (invited speaker)
 University of Florida Veterinary College, August 2000 (invited seminar)
 University of Miami, October 2000 (invited seminar)
 51st Amer. Assoc. for Laboratory Animal Science National Meeting, Considerations for the Care and Use

of Viperid Snakes in Biomedical Research, November 2000 (invited speaker)
 University of Tennessee, November 2000 (invited seminar)
 University of Texas at Arlington, March 2001 (invited seminar)
 University of Arkansas, March 2001 (invited seminar)
 Int'l Conference of Comparative Physiology & Biochemistry, "How Animals Work", Session on
 "Ecophysiology and the Fabric of Biodiversity", Kasane, Botswana, August 2001 (invited
 speaker)
 University of California, Davis, April 2002 (invited lecture in seminar series "Frontiers in Physiology")
 Silver Anniversary of Annual Herpetological Conference, Gainesville, March 2002, "Fecal ballast and the
 ins and outs of snake digestion" (invited speaker)
 20th Annual Phi Zeta Research Emphasis Day, UF College of Veterinary Medicine, June 2002, "How
 animals work: a journal of mystery and discovery in science" (invited featured speaker)
 Sixth Int'l Congress of Comparative Physiology and Biochemistry, La Trobe University, Mt Buller,
 Australia, February 2003, "Snakes and islands: novel systems for integrating physiology and
 behavior" (invited speaker)
 Archbold Biological Station, April 3-4, 2003 (invited speaker)
 Int'l Society for Adaptive Medicine, Session on "Adaptations to Space", August 2003 (invited speaker)
 Snake Ecology Group 2004 Conference, "Physiological Ecology of Pit Vipers on Gulf Coast Islands," May
 2004 (invited speaker)
 3rd Int'l Conference of Comparative Physiology and Biochemistry in Africa, "Animals and Environments,"
 session on "Energy and Water in Extreme Environments", August 2004 (invited speaker)
 Brigham Young University, October 2004 (invited seminar)
 Southern Utah University, October 2004 (invited seminar)
 University of Miami, November 2004 (invited seminar)
 University of Nevada, Reno, March 2005 (invited seminar)
 Annual Herpetology Conference, Gainesville, FL, March 2005 (invited speaker)
 Nature Coast Birding and Wildlife Experience, October 2005 (keynote speaker)
 University of Florida, Gainesville, January 2006 (invited seminar)
 Valdosta State University, Valdosta, Georgia, February 2006 (invited seminar)
 Audubon Society, March 2006 (invited seminar)
 Francis Marion University, Florence, South Carolina, March 2006 (invited seminar)
 University of Texas – Pan American, April 2006 (invited seminar)
 National Museum of Marine Biology and Aquarium, Pingtung, Taiwan, June 2006 (invited lecture)
 National Taiwan University, Taipei, Taiwan, June 2006, (two invited lectures + workshop)
 Whitney Laboratory for Marine Bioscience, public lecture series, St. Augustine, Florida, October 2006
 (invited lecture)
 Florida Humanities Council, Cedar Key meeting, October 2006 (invited tour and lecture)
 Nature Coast Birding and Wildlife Experience, November 2006 (keynote speaker)
 University of Louisiana, Lafayette, January 2007 (invited speaker)
 Friends and Volunteers of the Refuges, February 2007 (featured speaker)
 Institute of Ecology & Evolutionary Biology, National Taiwan University, Taipei, June 2007 (invited
 seminar)
 14th European Congress of Herpetology, Portugal, September 2007 (invited speaker)
 2nd Biology of the Vipers Conference, Portugal, September 2007 (plenary speaker)
 31st Annual Herpetology Conference, Gainesville, FL, March 2008 (invited lecture)
 University of Kansas, Lawrence, May 2008 (invited seminar)
 Mara 2008, International Conference of Comparative Physiology & Biochemistry, Masai Mara National
 Reserve, Kenya. (invited session organizer and speaker)
 University of Florida History of Science Fall Colloquium, September, 2008 (invited speaker)
 University of Florida, Gainesville, October 2008 (departmental seminar)
 University of Texas, Arlington, January 2009 (invited seminar)
 University of Miami, March 2009 (invited seminar)
 32nd Annual Herpetology Conference, Gainesville, FL, March 2009 (invited speaker)
 IX World Congress of International Society for Adaptive Medicine, Taipei, Taiwan, August 2009 (invited
 symposium speaker)
 National Taiwan Normal University, August 2009, (Visiting Scholar invited lectures [2])
 Ohio State University, February 2010 (invited seminar)
 33rd Annual Herpetology Conference, Gainesville, FL, March 2010 (invited speaker)

Cedar Key Library, sponsored by Florida Fish and Wildlife Conservation Commission and Florida Sea Grant, April 2010 (invited lecture)
 Brigham Young University, March 2011 (invited seminar)
 2012 SICB meeting, Charleston, speaker in international symposium "New Frontiers from Marine Snakes to Marine Ecosystems"
 Mayport, FL, Florida Lighthouse Association, February 2012 (invited 'featured speaker')
 35th Annual Herpetology Conference, Gainesville, FL, March 2012 (invited speaker)
 James Cook University (Qld, Australia), October 2012 (invited seminar)
 36th Annual Herpetology Conference, Gainesville, FL, March 2013 (invited speaker)
 International Collective Arboreal Symposium, Baltimore, MD, August 2013 (invited keynote speaker)
 Nature Coast Paddling Festival, Cedar Key, 5 October 2013 (invited keynote speaker)
 Kyoto University, 18 October 2013, (invited seminar)
 37th Annual Herpetology Conference, Gainesville, FL, March 2014 (invited speaker)
 Georgia Institute of Technology, 24 February 2015 (invited seminar)
 38th Annual Herpetology Conference, Gainesville, FL, March 2015 (invited speaker)
 9th International Congress of Comparative Physiology & Biochemistry, Kraków, Poland (invited speaker and session co-chair)
 International Society for Adaptive Medicine, Yonago, Japan, May 2015 (invited speaker, but unable to attend; I did a manuscript to proceedings from the meeting)

Administrative Experience:

Student Aids Committee Chairman, 1973-1974
 Core Curriculum Committee, 1973-1975
 Biology TA Selection Committee, 1974
 Division Representative, United Fund Drive, 1974
 University Research Evaluation Subcommittee, 1974, 1977
 Committee on Tenure Considerations, 1973
 Graduate Admissions Committee Chairman, 1975-1978
 Admissions and Awards Committee, 1975, 1980-1981
 Promotions and Tenure Committee, 1976-1977
 Acting Department Chairman, Summer 1978 (Physiology & Cell Biology, U. of Kansas)
 Advisory member of Animal Space Committee, 1978-1979
 Member of Nominating Committee, Physiological Ecology Section of Ecological Soc of Amer (1978-1979)
 Member of Executive Committee, American Society of Ichthyologists & Herpetologists (1978-1982)
 Member of Starr Ranch Scientific Advisory Committee, Starr Ranch Audubon Sanctuary, San Juan Capistrano, California
 Member of Publication Policy Committee, American Society of Ichthyologists & Herpetologists (1980-82)
 Service on several faculty search committees (Univ of Kansas & Univ of Florida)
 College Promotions and Tenure Committee, 1981-1984
 University Animal Care Committee, 1981-1984
 College Chairpersons Review Committee, 1981-1984
 Graduate Admissions Committee, 1984-1986
 Chair, Departmental Animal Care Committee, 1987-1992; 1994-1998
 Member of Departmental Executive Committee, 1987-1989
 Member of Faculty Senate, Univ of Florida, 1987-1989
 Member of College LAS Animal Care Committee, Univ of Florida, 1987-1992; 1994 to present
 Member of College LAS International Studies Advisory Council, Univ of Florida, 1987
 Member of Executive Committee, Division of Comparative Physiology and Biochemistry, Amer Soc of Zoologists, 1987-1989
 Divisional Secretary, American Society of Zoologists, 1987-1989
 Evaluation Panel Member, Howard Hughes Predoctoral Fellowships, National Research Council, 1992, 1993, 1995
 International Scientific Advisory Committee, International Society for Adaptive Medicine, 1996-97
 Planning Committee, All Florida Herpetology Conference, 1996, 1997, 1998; 2001, 2002, 2003
 Member of Executive Committee, Society for Integrative and Comparative Biology, 1998-2002

Board of Governors, American Society of Ichthyologists and Herpetologists, Class of 2003
 Local Planning Committee, 20th Gravitational Physiology Meeting, International Society for Gravitational Physiology, Orlando, 1999
 Service on various Departmental, College and University committees (CLAS Animal Care Committee, CLAS International Advisory Committee, University Faculty Senate, Departmental Executive Committee, Graduate Admissions Committee, Mechanisms of Behavior Search Committee, Chair of Animal Physiologist Search Committee, Chair of Seahorse Key Advisory Council, Undergraduate Curriculum Committee)
 Organizer or co-organizer of ten international symposia
 Member of Nominating Committee, Society for Integrative and Comparative Biology, 2000-2001
 Member of Conservation Committee, Society for Integrative and Comparative Biology, 2000-present
 Member of Herpetological Animal Care and Use Committee, American Society of Ichthyologists and Herpetologists, 2000-present
 Member of Planning Team for Comprehensive Conservation Planning for the Lower Suwannee and Cedar Keys National Wildlife Refuges, 1999-2001
 Invited participant, state of Florida Ocean Research Priorities Summit, 2000. Also member of ongoing planning team to recommend priorities for ocean and coastal research in state of Florida.
 International Advisory Committee for the symposium “*Biodiversity and Ecophysiology of Animals*,” held in February of 2002, Banaras Hindu University, Varanasi, India.
 Member of Faculty Senate, University of Florida, 2002-2004
 Director, University of Florida Marine Laboratory at Seahorse Key, 1998-2012
 Chair, Seahorse Key Advisory Committee, 1998-2012
 International Advisory Committee for “*Third International Conference on Comparative Physiology and Biochemistry in Africa*, Ithala, South Africa, August 2004.
 Member of Executive Committee, World Congress of Herpetology, 2002-present
 Member of Planning Committee, 2006 *Comparative Physiology Conference: Integrating Diversity*
 Advisory Board Member, Florida Institute of Oceanography, 2005 – present
 Nominating Committee, CPB Division of Society for Integrative and Comparative Biology, 2006
 Member and Chair (2007) of Johnson Award Committee, American Society of Ichthyologists & Herpetologists, 2004 – 2007
 International Scientific Committee, 2nd Biology of the Vipers Conference, Porto, Portugal, 2007
 International Organizing Panel for 4th *International Conference in Africa for Comparative Physiology and Biochemistry*, Maasai Mara National Reserve, Kenya, July 2008
 International Scientific Committee, 3rd Biology of the Vipers Conference, Pisa, Italy, 2010
 Director, Board of Directors, Edward S. Stolarz Foundation, 2008 – present
 Organizer of international symposium and 2 workshops on “New Frontiers from Marine Snakes to Marine Ecosystems”, Soc. Integr & Comp. Biol. (SICB), Charleston, South Carolina, Jan 2012
 Advisory Board Member, Seahorse Key Marine Laboratory
 Scientific Panel Member (invited) for *Fire and Wildlife Strategic Management Plan Workshop*, San Diego County, California. March 13-14, 2013. (ongoing post-conference work to present, 2013)
 Member of departmental seminar committee, 2015-2016
 Invited workshop member, International Dark Sky Association 2015 annual general meeting, Phoenix.

Published Books:

2008. **LILLYWHITE, H.B.** *Dictionary of Herpetology*. Krieger Publishing Inc., Malabar, Florida. 376 pp. (“Outstanding Academic Title” in 2008)
2014. **LILLYWHITE, H.B.** *How Snakes Work. Structure, Function and Behavior of the World’s Snakes*. Oxford University Press (release in February, 2014)

Published Articles and Book Chapters: (ordered chronologically)

1968. **LILLYWHITE, H.B.** and P.F.A. MADERSON. Histological changes in the epidermis of the subdigital lamellae of *Anolis carolinensis* during the shedding cycle. *J. Morphol.* 125:379-402.

1969. **LILLYWHITE, H.B.** Miniature telemetry systems. Application notes, Biocom Memo 1007. Biocom, Inc., Culver City, California. (Technical Note)
1970. **LILLYWHITE, H.B.** Behavioral temperature regulation in the bullfrog, *Rana catesbeiana*. *Copeia* 1970:158-168.
1971. **LILLYWHITE, H.B.** Thermal modulation of cutaneous mucus discharge as a determinant of evaporative water loss in the frog, *Rana catesbeiana*. *Z. vergl. Physiol.* 73:84-104.
1971. **LILLYWHITE, H.B.** temperature selection by the bullfrog, *Rana catesbeiana*. *Comp. Biochem. Physiol.* 40A:213-227.
1973. **LILLYWHITE, H.B.,** P. LICHT, and P. CHELGREN. The role of behavioral thermoregulation in the growth energetics of the toad, *Bufo boreas*. *Ecology* 54:375-383.
1973. **LILLYWHITE, H.B.** (Review of) *The Temperature and Water Relations of Reptiles*, by J.L. Cloudsley-Thompson. *J. Syst. Zool.* 22:201-202.
1974. **LILLYWHITE, H.B.** and P. LICHT. Water movement over toad skin: functional role of epidermal sculpturing. *Copeia* 1974:165-171.
1974. **LILLYWHITE, H.B.** and F. NORTH. Perching behavior of *Sceloporus occidentalis* in recently burned chaparral. *Copeia* 1974:257-258.
1974. **LILLYWHITE, H.B.** How frogs regulate their body temperature. *Environment Southwest* No. 465, pp. 3-6.
1974. **LILLYWHITE, H.B.** and R. WASSERSUG. Comments on a postmetamorphic aggregate of *Bufo boreas*. *Copeia* 1974:984-986.
1974. SEIBERT, E., **H.B. LILLYWHITE,** and R. WASSERSUG. Cranial co-ossification in frogs: relationship to rate of evaporative water loss. *Physiol. Zool.* 47:261-265.
1975. **LILLYWHITE, H.B.** and P. LICHT. A comparative study of integumentary mucous secretions in amphibians. *Comp. Biochem. Physiol.* 51A:937-941.
1975. **LILLYWHITE, H.B.** Physiological correlates of basking in amphibians. *Comp. Biochem. Physiol.* 52A:323-330.
1976. **LILLYWHITE, H.B.** Abundance and diversity of lizards in a herbicide-treated environment. *Amer. Philos. Soc. Year Book* 1975:342-344.
1976. SEYMOUR, R.S. and **H.B. LILLYWHITE.** Blood pressure in snakes from different habitats. *Nature* 264:664-666.
1977. **LILLYWHITE, H.B.,** G. FRIEDMAN, and N. FORD. Color matching and perch selection by lizards in recently burned chaparral. *Copeia* 1977:115-121.
1977. BALDWIN, J., G. FRIEDMAN, and **H.B. LILLYWHITE.** Adaptations to temporary muscle anoxia in anurans: activities of glycolytic enzymes in muscles from species differing in their ability to produce lactate during exercise. *Australia J. Zool.* 25:15-18.
1977. **LILLYWHITE, H.B.** Effects of chaparral conversion on small vertebrates in southern California. *Biol. Conserv.* 11:171-184.
1977. **LILLYWHITE, H.B.** Animal responses to fire and fuel management in chaparral. Proceedings of the Symposium on the Environmental Consequences of Fire and Fuel Management in Mediterranean Ecosystems, pp. 368-373. USDA Forest Service, Washington, D.C.

1978. **LILLYWHITE, H.B.** and R.S. SEYMOUR. Regulation of arterial blood pressure in Australian tiger snakes. *J. Exp. Biol.* 75:65-79.
1979. **LILLYWHITE, H.B.** (Review of) Behavior and Neurology of Lizards, edited by N. Greenberg and P.D. MacLean. *Copeia* 1978:431-437.
1979. JOHNSON, R.N. and **H.B. LILLYWHITE**. Digestive efficiency of the omnivorous lizard *Klauberina riversiana*. *Copeia* 1979:431-437.
1980. **LILLYWHITE, H.B.** Behavioral thermoregulation in Australian elapid snakes. *Copeia* 1980:452-458.
1980. ROBERTS, J.B. and **H.B. LILLYWHITE**. Lipid barrier to water exchange in epidermis of reptiles. *Science* 207:1077-1079.
1980. NORTH, F. and **H.B. LILLYWHITE**. The function of burrow turrets in a gregariously nesting bee. *Southwest Naturalist* 25:373-378.
1981. GIBBONS, J.R.H. and **H.B. LILLYWHITE**. Ecological segregation, color matching and speciation in lizards of the *Amphibolurus decresii* species complex (Lacertilia: Agamidae). *Ecology* 62:1573-1584.
1981. **LILLYWHITE, H.B.** and L. SMITH. Haemodynamic responses to haemorrhage in the snake, *Elaphe obsoleta obsoleta*. *J. Exp. Biol.* 94:275-283.
1982. **LILLYWHITE, H.B.** Tracking as an aid in ecological studies of snakes. In N.J. Scott (ed.), Herpetological Communities: a Symposium of the Society for the Study of Amphibians and Reptiles and the Herpetologists' League, August 1977. U.S. Fish and Wildlife *Wildlife Research Report* 13, pp. 181-191.
1982. **LILLYWHITE, H.B.** Cannibalistic carrion ingestion by the rattlesnake, *Crotalus viridis*. *J. Herpetol.* 16:95.
1982. **LILLYWHITE, H.B.** and P.F.A. MADERSON. Skin structure and permeability. In C. Gans and F.H. Pough (eds.), *Biology of the Reptilia*, Vol. 12. Physiological Ecology. Academic Press, New York and London, pp. 397-442.
1983. **LILLYWHITE, H.B.** and F.H. POUGH. Control of arterial pressure in aquatic sea snakes. *Amer. J. Physiol.* 244:R66-R73.
1983. **LILLYWHITE, H.B.**, R. ACKERMAN, and L. PALACIOS. Cardiorespiratory responses of snakes to experimental hemorrhage. *J. Comp. Physiol.* 152:59-65.
1983. ROBERTS, J.B. and **H.B. LILLYWHITE**. Lipids and the permeability of epidermis from snakes. *J. Exp. Zool.* 228:1-9.
1984. POUGH, F.H. and **H.B. LILLYWHITE**. Blood volume and blood oxygen capacity of sea snakes. *Physiol. Zool.* 57:32-39.
1984. **LILLYWHITE, H.B.** and R. ACKERMAN. Hydrostatic pressure, shell compliance and permeability to water vapor in flexible-shelled eggs of the colubrid snake *Elaphe obsoleta*. In R.S. Seymour (ed.), *Respiration and Metabolism of Embryonic Vertebrates*, Junk, The Hague, pp. 121-135.
1984. **LILLYWHITE, H.B.** and A.W. SMITS. Lability of blood volume in snakes and its relationship to activity and hypertension. *J. Exp. Biol.* 110:267-274.
1984. **LILLYWHITE, H.B.** (Review of) *Behavioral Energetics. The Cost of Survival in Vertebrates. Science* 224:596.

1985. **LILLYWHITE, H.B.** Trailing movements and sexual behavior in *Coluber constrictor*. *J. Herpetol.* 19:306-308.
1985. SMITS, A.W. and **H.B. LILLYWHITE**. Maintenance of blood volume in snakes: dynamics of extravascular fluids in response to hypovolemia induced by hemorrhage. *J. Comp. Physiol.* B155:305-310.
1985. **LILLYWHITE, H.B.** Behavioral control of arterial pressure in snakes. *Physiol. Zool.* 58:159-165.
1985. **LILLYWHITE, H.B.** and K.P. GALLAGHER. Hemodynamic adjustments to head-up posture in the partly arboreal snake, *Elaphe obsoleta*. *J. Exp. Zool.* 235:325-334.
1985. **LILLYWHITE, H.B.** Postural edema and blood pooling in snakes. *Physiol. Zool.* 58:759-766.
1986. SMITS, A.W. and **H.B. LILLYWHITE**. Effects of hyperkalemia on thermoregulation and feeding behaviors of the lizard *Sauromalus hispidus*. *Copeia* 1986:518-520.
1987. **LILLYWHITE, H.B.** Circulatory adaptations of snakes to gravity. *Amer. Zool.* 27:81-95.
1987. **LILLYWHITE, H.B.** and W.W. BURGGREN. Introduction to the symposium on cardiovascular adaptations in reptiles. *Amer. Zool.* 27:3-4.
1987. **LILLYWHITE, H.B.** Temperature, energetics and physiological ecology. In R. Seigel, J. Collins and S. Novack (eds.), *Snakes: Ecology and Evolutionary Biology*. MacMillan Pub. Co., New York, pp. 422-477.
1987. **LILLYWHITE, H.B.** and B.R. STEIN. Surface sculpturing and water retention of elephant skin. *J. Zool.* (Lond.) 211:727-734.
1987. **LILLYWHITE, H.B.** Snakes under pressure. *Natural History* 96:59-67. (Reprinted in *Science Horizons Year Book* 1988 and *Science Annual* 1989, Franklin Watts, Grolier enterprises, Danbury, Connecticut.)
1988. **LILLYWHITE, H.B.** and P.F.A. MADERSON. The structure and permeability of integument. *Amer. Zool.* 28:945-962.
1988. DONALD, J.A. and **H.B. LILLYWHITE**. Adrenergic innervation of the large arteries and veins of the semi-arboreal ratsnake, *Elaphe obsoleta*. *J. Morphol.* 198:25-31.
1988. **LILLYWHITE, H.B.**, A.W. SMITS and M.E. FEDER. Body fluid volumes in the aquatic snake, *Acrochordus granulatus*. *J. Herpetol.* 22:434-438.
1988. **LILLYWHITE, H.B.** (Review of) *Biology of the Reptilia*, Vol. 16, Ecology B. Defense and Life History. *Copeia* 1988:1102-1104.
1988. **LILLYWHITE, H.B.** Snakes, blood circulation and gravity. *Scientific American* 256:92-98.
1989. KATTAN, G. and **H.B. LILLYWHITE**. Humidity acclimation and skin permeability in the lizard, *Anolis carolinensis*. *Physiol. Zool.* 62:593-606.
1989. DONALD, J.A. and **H.B. LILLYWHITE**. VIP-immunoreactive nerves in the pulmonary vasculature of the aquatic file snake, *Acrochordus granulatus*. *Cell Tissue Res.* 255:585-588
1989. DONALD, J.A. and **H.B. LILLYWHITE**. Adrenergic nerves and 5-HT-containing cells in the pulmonary vasculature of the aquatic file snake, *Acrochordus granulatus*. *Cell Tissue Res.* 256:113-118.
1989. **LILLYWHITE, H.B.** Unusual shedding behaviors in the aquatic snake, *Acrochordus granulatus*. *Copeia* 1989:768-770.
1989. **LILLYWHITE, H.B.** and J.A. DONALD. Pulmonary blood flow regulation in an aquatic snake. *Science* 245:293-295.

1990. DONALD, J.A., J.E. O'SHEA, and **H.B. LILLYWHITE**. Somatostatin and innervation of the heart of the snake *Elaphe obsoleta*. *Amer. J. Physiol.* 258 (Regulatory Integrative Comparative Physiology 27):R1001-R1007.
1990. DONALD, J.A., J.E. O'SHEA, and **H.B. LILLYWHITE**. Neural regulation of the pulmonary vasculature in a semi-arboreal snake, *Elaphe obsoleta*. *J. Comp. Physiol. B* 159:677-685.
1991. **LILLYWHITE, H.B.** Foreward to *The Snakes of Thailand and their Husbandry* (M.J. Cox, au.). Krieger Pub. Co., Melbourne, Florida.
1991. **LILLYWHITE, H.B.** Sauropods and gravity. *Natural History*. Dec 1991, p. 33.
1991. **LILLYWHITE, H.B.** The biology and conservation of acrochordid snakes. *Hamadryad* 16:1-9.
1992. **LILLYWHITE, H.B.** and A.W. SMITS. Cardiovascular adaptations of viperid snakes. In J.A. Campbell and E.D. Brodie, Jr. (eds.), *Biology of Pitvipers*, Selva, Tyler, Texas, pp. 143-153.
1992. BROWN, T.W. and **H.B. LILLYWHITE**. The autecology of the sidewinder, *Crotalus cerastes cerastes*. In J.A. Campbell and E.D. Brodie, Jr. (eds.), *Biology of Pitvipers*, Selva, Tyler, Texas, pp. 279-308.
1992. MILLARD, R.W., **H.B. LILLYWHITE**, and A.R. HARGENS. Cardiovascular system design and *Barosaurus*. *Lancet* 340:914.
1993. **LILLYWHITE, H.B.** and V. SANMARTINO. Permeability and water relations of hygroscopic skin of the file snake, *Acrochordus granulatus*. *Copeia* 1993:99-103.
1993. **LILLYWHITE, H.B.** and R.W. HENDERSON. Behavioral and functional ecology of arboreal snakes. In R.S. Seigel and J.T. Collins (eds.), *Snakes: Ecology and Behavior*, McGraw-Hill, New York, pp. 1-48.
1993. **LILLYWHITE, H.B.** Orthostatic intolerance of viperid snakes. *Physiol. Zool.* 66:1000-1014.
1993. YOUNG, B.A., **H.B. LILLYWHITE**, and R.J. WASSERSUG. On the structure of the aortic valves in snakes (Reptilia: Serpentes). *J. Morphol.* 216:141-159.
1993. **LILLYWHITE, H.B.** Subcutaneous compliance and gravitational adaptation in snakes. *J. Exp. Zool.* 267:557-562.
1993. **LILLYWHITE, H.B.**, R.E. BALLARD, and A.R. HARGENS. Gravity tolerance in snakes. *Research and Technology 1993* (NASA, Ames Research Center), pp. 194-195.
1994. KAM, Y-C and **H.B. LILLYWHITE**. Effects of temperature and water on critical oxygen tension of turtle embryos. *J. Exp. Zool.* 268:1-8.
1994. **LILLYWHITE, H.B.** and T.M. ELLIS. Ecophysiological aspects of the coastal-estuarine distribution of acrochordid snakes. *Estuaries* 17:53-61.
1994. **LILLYWHITE, H.B.** and J.A. DONALD. Neural regulation of arterial blood pressure in snakes. *Physiol. Zool.* 67:1260-1283.
1994. **LILLYWHITE, H.B.**, R.E. BALLARD, and A.R. HARGENS. Cardiovascular responses of snakes to hypergravity. *NASA Ames Research Center Research and Technology 1994* (TM-108858), pp 178-179.
1995. **LILLYWHITE, H.B.** and R.E. GATTEN, Jr. Physiology and Functional Anatomy. In C. Warwick, F.L. Frye, J.B. Murphy (eds.), *Health and Welfare of Captive Reptiles*, Chapman and Hall, London, pp. 5-31.
1995. **LILLYWHITE, H.B.** Evolution of cardiovascular adaptation to gravity. *J. Gravitational Physiol.* 2:P1-P4.

1996. **LILLYWHITE, H.B.**, R.E. BALLARD, and A.R. HARGENS. Tolerance of snakes to hypergravity. *Physiol. Zool.* 69:293-303.
1996. **LILLYWHITE, H.B.** Husbandry of the little filesnake, *Acrochordus granulatus*. *Zoo Biology* 15:315-327.
1996. CONKLIN, D.J., **H.B. LILLYWHITE**, K.R. OLSON, R.E. BALLARD, and A.R. HARGENS. Blood vessel adaptation to gravity in a semi-arboreal snake. *J. Comp. Physiol. B* 165:518-526.
1996. **LILLYWHITE, H.B.** Gravity, blood circulation, and the adaptation of form and function in lower vertebrates. *J. Exp. Zool.* 275:217-225.
1996. **LILLYWHITE, H.B.**, R.E. BALLARD, and A.R. HARGENS. Cardiovascular responses of semi-arboreal snakes to chronic, intermittent hypergravity. *J. Comp. Physiol. B* 166:241-253.
1997. **LILLYWHITE, H.B.**, A.K. MITTAL, T.K. GARG, and N. AGRAWAL. Wiping behavior and its ecophysiological significance in the Indian tree frog, *Polypedates maculatus*. *Copeia* 1997: 88-100.
1997. BURGGREN, W., A. FARRELL, and **H. LILLYWHITE**. Vertebrate cardiovascular systems. In W. Dantzler (ed.), *Handbook of Comparative Physiology*, American Physiological Society, Bethesda, Maryland, pp. 215-308.
1997. **LILLYWHITE, H.B.**, R.E. BALLARD, A.R. HARGENS and H.I. ROSENBERG. Cardiovascular responses of snakes to hypergravity. *Grav. and Space Biol. Bull.* 10:145-152.
1997. SCHUMACHER, J., **H.B. LILLYWHITE**, W.M. NORMAN, and E.R. JACOBSON. Effects of ketamine HCl on cardiopulmonary function in snakes. *Copeia* 1977:395-400.
1997. **LILLYWHITE, H.B.**, A.K. MITTAL, T.K. GARG and N. AGRAWAL. Integumentary structure and its relationship to wiping behavior in the common Indian tree frog, *Polypedates maculatus*. *J. Zool. (Lond.)* 243:675-687.
1998. **LILLYWHITE, H.B.**, A.K. MITTAL, T.K. GARG and I. DAS. Basking behavior and thermal ecology of the Indian tree frog, *Polypedates maculatus*. *J. Herpetology* 32:169-175
1998. ZIPPEL, K.C., **H.B. LILLYWHITE** and C.R.J. MLADINICH. Contribution of the vertebral artery to cerebral circulation in the rat snake, *Elaphe obsoleta*. *J. Morph.* 238:39-51.
1998. MATSUYAMA, M., T. UENO, C. YANG, S.T. HSIEH, **H.B. LILLYWHITE** and A.R. HARGENS. Evolutionary adaptations of intracranial pressure to gravity. *Research and Technology*, pp. 137-138. NASA Technical Memorandum 112240.
1998. **LILLYWHITE, H.B.** Use it and lose it: unraveling the mysteries of skin shedding. *Reptiles*, Aug. 1998, pp. 68-79.
1998. **LILLYWHITE, H.B.** and T.M. ELLIS. Structure and function of the tracheal air sacs in the Asian snake, *Gonyosoma oxycephalum*. *Hamadryad* 23:121-126.
1999. **LILLYWHITE, H.B.** Defensive neck displays in snakes. *Reptiles*, September 1999, pp. 27-30.
1999. **LILLYWHITE, H.B.**, K.C. ZIPPEL and A.P. FARRELL. Resting and maximal heart rates in ectothermic vertebrates. *Comp. Biochem. Physiol.* A124:371-384.
1999. **LILLYWHITE, H.B.** and A.K. MITTAL. Amphibian skin and the aquatic-terrestrial transition: constraints and compromises related to water exchange. In A.K. Mittal, F.B. Eddy, and J.S. Datta Munshi (eds.), *Water/Air Transitions in Biology*, Oxford & IHB Pub. Co. , New Delhi & Calcutta, pp. 131-144.
2000. SEYMOUR, R.S. and **H.B. LILLYWHITE**. Hearts, neck posture and metabolic intensity of sauropod dinosaurs. *Proc. R. Soc. Lond. B* 267:1883-1887.

2000. **LILLYWHITE, H.B.**, J.R. LAFRENTZ, Y.C. LIN and M.C. TU. The cantilever abilities of snakes. *J. Herpetol.* 34: 523-528.
2001. **LILLYWHITE, H.B.** Vertebrate respiration and circulation in extreme environments. *Encyclopedia of Life Sciences*, Nature Publishing Group, Macmillan, London, pp. 1-6.
2001. ZIPPEL, K.C., **H.B. LILLYWHITE**, and C.R.J. MLADINICH. New vascular system in reptiles: Anatomy and postural hemodynamics of the vertebral venous plexus in snakes. *J. Morph.* 250:173-184.
- 2001 **LILLYWHITE, H.B.** To wipe and wax. *Natural History* 110:58-63.
2002. **LILLYWHITE, H.B.**, P. deDELVA and B.P. NOONAN. Patterns of gut passage time and the chronic retention of fecal mass in viperid snakes. Pp. 497-506, In G.W. Schuett, M. Höggren, and H.W. Greene (eds.), *Biology of the Vipers*. Biological Sciences Press, Traverse City, MI.
2002. **LILLYWHITE, H.B.**, C.M. SHEEHY III, and M.D. McCUE. Scavenging behaviors of cottonmouth snakes at island bird rookeries. *Herpetol. Rev.* 33:259-261.
2002. McCUE, M.D. and **H.B. LILLYWHITE**. Oxygen consumption and the energetics of island dwelling Florida cottonmouth snakes. *Physiol. Biochem. Physiol.* 75:165-178.
2002. TU, M.C., **H.B. LILLYWHITE**, J.G. MENON and G.K. MENON. Postnatal ecdysis establishes permeability barrier in snake skin: new insights into barrier lipid structures. *J. Exp. Biol.* 205:3019-3030.
2002. **LILLYWHITE, H.B.** Thermal relations of reptiles. *Encyclopedia of Reptiles and Amphibians*, Andromeda Oxford Ltd., Oxfordshire, England, pp. 108-109.
2003. ZIPPEL, K.C., **H.B. LILLYWHITE** and C.R.J. MLADINICH. Anatomy of the crocodilian spinal vein. *J. Morphol.* 258:327-335.
2003. **LILLYWHITE, H.B.** Structure and function. Pp. 23-33 In M. Hutchins, J.B. Murphy, N. Schlager, eds., *Grzimek's Animal Life Encyclopedia*, 2nd Edition, Volume 7, *Reptiles*. Farmington Hills, MI: Gale Group.
2003. **LILLYWHITE, H.B.** File snakes (Acrochordidae). Pp. 439-444 In M. Hutchins, J.B. Murphy, N. Schlager, eds., *Grzimek's Animal Life Encyclopedia*, 2nd Edition, Volume 7, *Reptiles*. Farmington Hills, MI: Gale Group.
2004. **LILLYWHITE, H.B.** Adaptation Constipation? *Wildlife Conservation* 107 (No. 3, June):20.
2004. **LILLYWHITE, H.B.** and C.M. SHEEHY III. *Eleutherodactylus planirostris* (Greenhouse Frog), USA: Florida: Levy Co: Seahorse Key, upland hammock and beaches. [range extension] *Herpetol. Rev.* 35:78.
2004. **LILLYWHITE, H.B.** Plasticity of the water barrier in vertebrate integument. In S. Morris, A. Vosloo (eds.), *Animals and Environments*. Proceedings of the Third International Conference of Comparative Physiology and Biochemistry. *International Congress Series*, Volume #1275C, pp. 283-290. Elsevier.
2004. BEAUPRE, S.J., E.R. JACOBSON, **H.B. LILLYWHITE**, and K. ZAMUDIO. Guidelines for the use of live amphibians and reptiles in field and laboratory research. A publication of the American Society of Ichthyologists and Herpetologists, approved by Board of Governors June 30, 2004, Norman, Oklahoma.
2005. **LILLYWHITE, H.B.** Cardiovascular adaptation to gravity: Lessons from comparative studies of snakes. Chap. 6, pp. 68-81 In P.K. Singal, N. Takeda (eds.), *Adaptation Biology and Medicine*, Vol. 4, Current Concepts. Narosa Publishing House, New Delhi.
2005. T.R. BARBEAU and **LILLYWHITE, H.B.** Body wiping behaviors associated with cutaneous lipids in hyliid tree frogs of Florida. *J. Exp. Biol.* 208:2147-2156.

2006. **LILLYWHITE, H.B.** Water relations of tetrapod skin. (invited review) *J. Exp. Biol.* 209:202-226.
2006. **LILLYWHITE, H.B.** and C.A. NAVAS. Animals, energy and water in extreme environments: Perspectives from Ithala 2004. *Physiol. Biochem. Zool.* 79(2):265-273.
2006. GOMEZ, N.A., M. ACOSTA, F. ZAIDAN III, **H.B. LILLYWHITE**. Wiping behavior, skin resistance, and the metabolic response to dehydration in the arboreal frog *Phyllomedusa hypochondrialis*. *Physiol. Biochem. Zool.* 79:1058-1068.
2007. **LILLYWHITE, H.B.** Water and permeability relations of skin: A comparative perspective. *Cosmetic Medicine/Kosmetische Medizin* 5:220-227. (invited review).
2008. WOOTEN, D., D. HALL, C. WORMAN, **H.B. LILLYWHITE**. *Lampropeltis getula getula* (Eastern King Snake). *Herpetol. Rev.* 38:487.
2008. YOUNG B.A., A. AGUIAR, and **H. LILLYWHITE**. Foraging cues used by insular Florida cottonmouths, *Agkistrodon piscivorus conanti*. *South Amer. J. Herpetol.* 3:135-144.
2008. **LILLYWHITE, H.B.** and R.J.R. McCLEARY. Trophic ecology of insular cottonmouth snakes: Review and perspective. *South Amer. J. Herpetol.* 3:175-185.
2008. **LILLYWHITE, H.B.**, L.S. BABONIS, C.M. SHEEHY III, and M.-C. TU. Sea snakes (*Laticauda* spp.) require fresh drinking water: Implication for the distribution and persistence of populations. *Physiol. Biochem. Zool.* 81:785-796.
2008. **LILLYWHITE, H.B.**, C.M. SHEEHY III, and F.ZAIDAN III. Pitviper scavenging at the intertidal zone: An evolutionary scenario for invasion of the sea. *BioScience* 58:947-955.
2008. **LILLYWHITE, H.B.** Essential history of herpetological societies: Origins of the ASIH, HL, and SSAR. *Herpetol. Rev.* 39:412-413.
2008. CONKLIN, D.J., **H.B. LILLYWHITE**, B. BISHOP, A. HARGENS and K. OLSON. Rythmic contractility in the hepatic portal “corkscrew” vein of the rat snake. *Comparative Biochemistry and Physiology, part A* 152:389-397.
2008. **LILLYWHITE, H.** and J. ALBERT. Evolutionary physiology, comparative data, and phylogenetic methods. Pp. 613-620 in S. Morris, A. Vosloo (eds.) 4th CBP Meeting in Africa: MARA 2008, “Molecules to Migration: The Pressures of Life.” International Proceedings, Medimond S.r.l. Monduzzi Editore International, Bologna, Italy.
2009. **LILLYWHITE, H.** Physiological ecology: Field methods and perspective. Chapter 20 In K. Dodd (ed.), *Amphibian Ecology and Conservation. A Handbook of Techniques*. Pp. 363–386. Oxford University Press series in Techniques in Ecology and Conservation.
2009. **LILLYWHITE, H.B.**, J.G. MENON, G.K. MENON, C.M. SHEEHY III, and M.-C. TU. Water exchange and permeability properties of the skin in three species of amphibious sea snakes (*Laticauda* spp.). *J. Exp. Biol.* 212:1921-1929.
2009. BABONIS, L.S., K.A. HYNDMAN, **H.B. LILLYWHITE** and D.H. EVANS. Immunolocalization of Na⁺/K⁺-ATPase and Na⁺/K⁺/2Cl⁻ cotransporter in the tubular epithelia of sea snake salt glands. *Comp. Biochem. Physiol. Part A* 154:535–540.
2009. **LILLYWHITE, H.B.** A long drink of water. For thirsty sea snakes, the ocean can be a desert. *Natural History* 118:22–27.
2010. **LILLYWHITE, H.B.** Focus on snake conservation. *BioScience* 60:315–317. (book review)

2010. **LILLYWHITE, H.B.**, A. SOLÓRZANO, C.M. SHEEHY III, S. INGLEY and M. SASA. New perspectives on the ecology and natural history of the sea snake, *Pelamis platurus*, in Costa Rica: Does precipitation influence distribution? *Reptiles and Amphibians* 17:69–72. (memorial volume dedicated to Henry Fitch).
2010. LIU, Y.L., **H.B. LILLYWHITE** and M.C. TU. Sea snakes anticipate tropical cyclone. *Marine Biology* 157:2369–2373.
2011. **LILLYWHITE, H.B.** and R.S. SEYMOUR. Heart position in snakes: Response to “Phylogeny, ecology and heart position in snakes”. *Physiol. Biochem. Zool.* 84:99–101.
2011. BRISCHOUX, F. and **H.B. LILLYWHITE**. Light- and flotsam-dependent ‘float-and-wait’ foraging by pelagic sea snakes (*Pelamis platurus*). *Marine Biology* 158:2343–2347.
2011. **LILLYWHITE, H.B.** and M.-C. TU. Abundance of sea kraits correlates with precipitation. *PLoS ONE* Vol. 6, e28556 (<http://dx.plos.org/10.1371/journal.pone.0028556>)
2011. SHEEHY III, C.M., J.B. PFALLER, **H.B. LILLYWHITE** and H.F. HEATWOLE. *Pelamis platurus*. Predation. *Herpetol. Rev.* 42:3.
2012. **LILLYWHITE, H.B.**, J.S. ALBERT, C.M. SHEEHY III and R.S. SEYMOUR. Gravity and the evolution of cardiopulmonary morphology in snakes. *Comp. Biochem. Physiol. Part A* 161:230–242.
2012. **LILLYWHITE, H.B.** and F. BRISCHOUX. Is it better in moonlight? Nocturnal activity of insular cottonmouth snakes increases with lunar light levels. *J. Zool.* 286: 194–199. Published online 2011 (doi: 10.1111/j.1469-7998.2011.00866.x)
2012. M.D. McCUE, **LILLYWHITE, H.B.** and S.J. BEAUPRE. Physiological responses to starvation in snakes: Low energy specialists. Chapter 8, pp.103–131, In: M.D. McCue (Ed.) *The Comparative Physiology of Fasting, Starvation, and Food Limitation*, Springer Verlag.
2012. **LILLYWHITE, H.B.** and F. BRISCHOUX. Introduction to the symposium “New frontiers from marine snakes to marine ecosystems.” *Integrative and Comparative Biology* 52:213–216.
2012. **LILLYWHITE, H.B.**, F. BRISCHOUX, C.M. SHEEHY III, and J.B. PFALLER. Dehydration and drinking responses in a pelagic sea snake. *Integrative and Comparative Biology* 52:227–234.
2012. LIU, Y.-L., Y.-H. CHEN, **H.B. LILLYWHITE** and M.-C. TU. Habitat selection by sea kraits (*Laticauda* spp.) at coastal sites of Orchid Island, Taiwan. *Integrative and Comparative Biology* 52:274–280.
2012. PFALLER, J.B., M.G. FRICK, F. BRISCHOUX, C.M. SHEEHY III and **H.B. LILLYWHITE**. Marine snake epibiosis: A review and first report of decapods associated with *Pelamis platurus*. *Integrative and Comparative Biology* 52:296–310.
2012. SHEEHY, C.M., A. SOLÓRZANO, J.B. PFALLER and **H.B. LILLYWHITE**. Preliminary insights into the phylogeography of the Yellow-bellied Sea Snake, *Pelamis platurus*. *Integrative and Comparative Biology* 52:321–330.
2012. BRISCHOUX, F, R. TINGLEY, R. SHINE, and **H.B. LILLYWHITE**. Salinity influences the distribution of marine snakes: Implications for evolutionary transitions to marine life. *Ecography*, 35:994–1003.
2012. SAVITZKY, A.H., A. MORI, D.A. HUTCHINSON, R.A. SAPORITO, G.M. BURGHARDT, **H.B. LILLYWHITE** and J. MEINWALD. Sequestered defensive toxins in tetrapod vertebrates: Principles, patterns, and prospects for future studies. *Chemoecology* 22:141–158.
2013. BRISCHOUX, F., R. TINGLEY, R. SHINE and **H.B. LILLYWHITE**. Behavioral and physiological correlates of the geographic distributions of amphibious sea kraits (*Laticauda* spp.). *Journal of Sea Research* 76:1–4.

2013. **LILLYWHITE, H.B.** Climate change and reptiles. Pp. 279–294 In: K. Rohde (ed.), *The Balance of Nature and Human Impact*, Cambridge University Press.
2013. WANG, S., **H.B. LILLYWHITE**, Y.C. CHENG and M.-C. TU. Variation of traits and habitat use in three species of sea kraits (*Laticauda* spp.) in Taiwan. *Journal of Zoology* 290:19–26.
2013. BRISCHOUX, F. and **H.B. LILLYWHITE**. Trophic consequences of pelagic life-style in Yellow-bellied sea snakes. *Marine Ecology Progress Series* 478:231–238.
2013. QUESADA, R.J., R.J.R. McCLEARY, D.J. HEARD and **H.B. LILLYWHITE**. Non-lethal sampling of liver tissue for toxicologic evaluation of Florida cottonmouths snakes, *Agkistrodon piscivorus conanti*. *Ecotoxicology* (5 pp. published online 7 Nov. 2013) doi 10.1007/s10646-013-1148-8
2013. WANG, S., **H.B. LILLYWHITE** and M.-C. TU. Locomotor performance of three sympatric species of sea kraits (*Laticauda* spp.) from Orchid Island, Taiwan. *Zoological Studies* 52:43–50.
2014. **H.B. LILLYWHITE**. A Desert in the Sea: Water Relations of Marine Snakes. Pp. 485–500, Chapter 24 In W. Lutterschmidt (Ed.), *Reptiles in Research: Investigations of Ecology, Physiology, and Behavior from Desert to Sea*. Nova Science Publishers, Inc., Hauppauge, NY.
2014. **LILLYWHITE, H.B.**, H. HEATWOLE and C.M. SHEEHY III. Dehydration and drinking behavior of the marine file snake, *Acrochordus granulatus*. *Physiological and Biochemical Zoology* 87:46–55.
2014. **LILLYWHITE, H.B.**, C.M. SHEEHY III, F. BRISCHOUX, and A. GRECH. Pelagic sea snakes dehydrate at sea. *Proceedings of the Royal Society B*. 281: 20140119.
2015. **LILLYWHITE, H.B.**, C.M. SHEEHY III, F. BRISCHOUX and J.B. PFALLER. On the abundance of a pelagic sea snake. *Journal of Herpetology* 49:184–189.
2015. **LILLYWHITE, H.B.**, H.A. HEATWOLE and C.M. SHEEHY III. Dehydration and drinking behavior in true sea snakes (Elapidae: Hydrophiinae: Hydrophiini). *Journal of Zoology* 296:261–269.
2015. SHEEHY III, C.M., J.S. ALBERT, and **H.B. LILLYWHITE**. The evolution of tail length in snakes associated with different gravitational environments. *Functional Ecology* doi:10.1111/1365-2435.12472.
2015. **LILLYWHITE, H.B.**, J.P. PFALLER, and C.M. SHEEHY III. Feeding preferences and responses to prey in insular neonatal Florida cottonmouth snakes. *Journal of Zoology* 297:156–163.
2016. **LILLYWHITE, H.B.** Behavior and physiology: An ecological and evolutionary viewpoint on the energy and water relations of ectothermic amphibians and reptiles. Chapter 1, pp. 1–39 in *Amphibian and Reptile Adaptation and Environment: Interplay between Physiology and Behavior*, D.V. Andrade, C.R. Bevier, J.E. de Carvalho (Eds.), CRC Press.
2016. **LILLYWHITE, H.B.** and C.M. SHEEHY III. Leg length and the evolution of human stature: Insights from evolutionary studies of tail length in snakes. Chapter in *Adaptation Biology and Medicine: Current Trends*. Vol. 8. Y. Kawai and P. Singal (Eds.). Narosa Publishing House, New Delhi (in press)
2016. SEYMOUR, R.S. and **H.B. LILLYWHITE**. Why vascular siphons with sub-atmospheric pressures are physiologically impossible in sauropod dinosaurs. *Journal of Experimental Biology* 219:2078–2080.
2016. BRISCHOUX F, C. COTTÉ, **H.B. LILLYWHITE**, F. BAILLEUL, M. LALIRE, and P. GASPARD. Oceanic circulation models predict global biogeography of pelagic Yellow-bellied sea snake. *Biology Letters* (in press)
2016. **LILLYWHITE, H.B.** and C.M. SHEEHY III. Synchrony of ecdysis in snakes. *Herpetological Conservation and Biology*. (in press)

N = 168

Published Abstracts: (ordered chronologically)

1970. **LILLYWHITE, H.B.** Behavioral temperature regulation in the bullfrog, *Rana catesbeiana*. *Herpetological Abstracts*, Mar 1970, pp. 21-22.
1971. **LILLYWHITE, H.B.** Glandular regulation of cutaneous evaporative water loss in the frog, *Rana catesbeiana*. *Herpetological abstracts*, June 1971.
1972. **LILLYWHITE, H.B.**, P. LICHT and P. CHELGREN. The role of behavioral thermoregulation in the growth energetics of the toad, *Bufo boreas*. *Bull. Ecol. Soc. Amer.* 53:10.
1974. **LILLYWHITE, H.B.** Amphibian mucous glands: comparative evidence for an adaptive role in preventing cutaneous desiccation. *Bull. Ecol. Soc. Amer.* 55:16.
1974. **LILLYWHITE, H.B.** Activity of snakes in recently burned chaparral. *Bull. Ecol. Soc. Amer.* 55:43.
1974. **LILLYWHITE, H.B.**, E. SEIBERT, and R. WASSERSUG. Amphibian co-ossification: relationship to evaporative water loss. *Herpetological abstracts*, June 1974.
1974. **LILLYWHITE, H.B.** Abundance and diversity of lizards on chaparral-grass conversions. *Amer. Zool.* 14:1293.
1977. **LILLYWHITE, H.B.** and R.S. SEYMOUR. Blood pressure regulation in tiger snakes. AAAS annual meeting, Denver, Feb 1977.
1977. **LILLYWHITE, H.B.** Tracking as an aid in the study of snake communities. Symposium of the Society for the Study of Amphibians and Reptiles and the Herpetologists' League, Lawrence, Aug 1977.
1977. **LILLYWHITE, H.B.** Animal responses to fire and fuel management in chaparral. International symposium on Environmental Consequences of Fire and Fuel Management in Mediterranean Ecosystems, Palo Alto, California, Aug 1977.
1978. **ROBERTS, J.B.** and **H.B. LILLYWHITE**. Evidence for a lipid barrier to water loss in snake epidermis. Joint annual meeting of American Society of Ichthyologists and Herpetologists, Society for the Study of Amphibians and Reptiles, and the Herpetologists' League, Tempe, May-June 1978.
1978. **ROBERTS, J.B.** and **H.B. LILLYWHITE**. Evidence for a lipid barrier to water loss in snake epidermis. 21st West Central States Biochemical Conference, Kansas City, Nov 1978.
1978. **LILLYWHITE, H.B.** Anuran thermoregulation: new insights from a field study of *Bufo woodhousei*. *Amer. Zool.* 18:573.
1980. **LILLYWHITE, H.B.** Blood volume and arterial pressure regulation in the Black ratsnake. *Federation Proceedings* 39:1060.

1980. **LILLYWHITE, H.B.** Assessment of concepts of amphibian thermoregulation. Symposium on Amphibian Physiology, Pacific Division of AAAS, Davis, California, June 1980.
1980. **LILLYWHITE, H.B.** Behavioral control of arterial pressure in snakes. *Amer. Zool.* 20:768.
1981. **LILLYWHITE, H.B., R. ACKERMAN, and L. PALACIOS.** Cardiorespiratory responses to hemorrhage in the snake, *Elaphe obsoleta quadrivittata*. *Federation Proceedings* 40:431.
1981. **STEIN, B., H.B. LILLYWHITE, and A. ONIGBANJO.** Water retention and surface sculpturing of elephant skin. Annual mtg. Amer. Soc. Mammalogists.
1981. **LILLYWHITE, H.B. and F.H. POUGH.** Arterial pressure and hemodynamics in sea snakes. *Amer. Zool.* 21:963.
1982. **LILLYWHITE, H.B.** Gravitational blood pooling and control of arterial pressure in snakes: a comparative study. *Physiologist* 25:189.
1982. **ROBERTS, J.B. and H.B. LILLYWHITE.** Epidermal lipids and integumentary water loss in reptiles. *Physiologist* 25:227.
1982. **POUGH, F.H. and H.B. LILLYWHITE.** Oxygen transport properties of blood of sea snakes. *Amer. Zool.* 22:934.
1983. **LILLYWHITE, H.B. and A.W. SMITS.** Blood volume regulation and body fluid compartments in snakes. *Proc. International Union of Physiological Sciences*, 15:318.
1983. **LILLYWHITE, H.B. and R.A. ACKERMAN.** Hydration, compliance and conductance to water vapor in flexible-shelled snake eggs. IUPS Satellite Symposium, Murray River, South Australia.
1984. **LILLYWHITE, H.B. and K.P. GALLAGHER.** Hemodynamic adjustments to head-up posture in the partly arboreal snake, *Elaphe obsoleta*. *Amer. Zool.* 24:18A.
1984. **SMITS, A.W., G. MENEELY, and H.B. LILLYWHITE.** Effects of plasma hyperkalemia on heart function in the lizard, *Sauromalus hispidus*. *Amer. Zool.* 24:18A.
1984. **KOZUBOWSKI, M.M., H.B. LILLYWHITE, and H.W. SHIRER.** Cardiovascular mechanoreceptors in the rattlesnake, *Crotalus viridis helleri*. *Amer. Zool.* 24:18A.
1985. **LILLYWHITE, H.B. and A.W. SMITS.** Diving adaptations in the aquatic file snake, *Acrochordus granulatus*. *Physiologist* 28:283.
1986. **LILLYWHITE, H.B.** Gravitation and the evolution of lung structure in snakes. *Amer. Zool.* 26:123A.
1987. **LILLYWHITE, H.B. and J.A. DONALD.** Neurovascular structure and function in the elongate lung of an aquatic snake. *Physiologist* 30:190.
1987. **DONALD, J.A. and H.B. LILLYWHITE.** Fluorescence histochemical studies of the pulmonary vasculature of the aquatic snake, *Acrochordus granulatus*. *Physiologist* 30:190.
1987. **LILLYWHITE, H.B.** Tissue free fluid pressures in relation to behavioral and morphological variation in snakes. *Amer. Zool.* 27:117A.
1987. **DONALD, J.A. and H.B. LILLYWHITE.** Neuroanatomical studies of the pulmonary artery of reptiles. *Amer. Zool.* 27:8A.
1988. **LILLYWHITE, H.B. and J.A. DONALD.** Anterograde bias of blood flow in arboreal snakes. *Amer. Zool.* 28:86A.

1988. DONALD, J.A., J.E. O'SHEA, and **H.B. LILLYWHITE**. Pulmonary vascular innervation of the ratsnake, *Elaphe obsoleta*. *Amer. Zool.* 28:86A.
1989. **LILLYWHITE, H.B.** and R.W. HENDERSON. Arboreal specializations of snakes. 1st World Congress of Herpetology, Canterbury, UK.
1989. **LILLYWHITE, H.B.** and A.W. SMITS. Cardiovascular adaptations of pitvipers. Symposium on Biology of Pitvipers, University of Texas, Arlington.
1990. **LILLYWHITE, H.B.** Reptilian models for the study of cardiovascular homeostasis. *Physiologist* 33:A11.
1990. **LILLYWHITE, H.B.**, Y.-C. KAM, and E. JACOBSON. Physiological constraints of vertical posture in viperid snakes. *Amer. Zool.* 30:95A.
1991. **LILLYWHITE, H.B.** Blood pressure regulation in snakes. Third International Congress of Comparative Physiology and Biochemistry, Abstracts p. 39.
1991. **LILLYWHITE, H.B.** Cardiovascular responses to head-up posture in Pacific rattlesnakes. Third International Congress of Comparative Physiology and Biochemistry, Abstracts p. 138.
1991. **LILLYWHITE, H.B.** and T.M. ELLIS. Extrapulmonary air sacs in an arboreal snake. *Amer. Zool.* 31:38A.
1992. **LILLYWHITE, H.B.** Orthostatic intolerance in snakes. *Amer. Zool.* 32:39A.
1992. SCHUMACHER, J., **H.B. LILLYWHITE**, W. NORMAN, and E.R. JACOBSON. The effects of ketamine on cardiopulmonary function in snakes. Proc. joint mtg. AAZV and AAWV, Oakland, Nov 1992, p. 73.
1992. **LILLYWHITE, H.B.** Regulation of blood volume in reptiles. Proc. international joint meeting of SEB, APS, ASZ and CSZ, Abstracts p. 19.
1993. **LILLYWHITE, H.B.** Posterior-to-anterior shunt of systemic arterial blood flow during head-up posture in arboreal snakes. *Faseb J.* 7:A677.
1994. **LILLYWHITE, H.B.** Significance of wiping behavior in the Indian tree frog. *Physiologist* 37:A-60.
1994. **LILLYWHITE, H.B.** Blood volume regulation in reptiles. *Physiologist* 37:A-20.
1994. **LILLYWHITE, H.B.**, R.E. BALLARD, and A.R. HARGENS. Tolerance of snakes to hypergravity. *Amer. Soc. Grav. Space Biol. Bulletin* 8:67.
1995. CONKLIN, D., **H. LILLYWHITE**, K. OLSON, R. BALLARD, and A. HARGENS. Blood vessel reactivity in a semi-arboreal snake. *Faseb Journal* 9:A354.
1995. DONALD, J.A., and **H.B. LILLYWHITE**. Adrenergic innervation of the larger arteries and veins of snakes. *Faseb Journal* 9:A354.
1995. **LILLYWHITE, H.B.**, R.E. BALLARD, and A.R. HARGENS. Cardiovascular responses of snakes to hypergravity. *Amer. Soc. Grav. Space Biol. Bulletin* 9:67.
1996. **LILLYWHITE, H.B.** and A.K. MITTAL. Amphibian skin and the aquatic-terrestrial transition: constraints, opportunities and compromises. Abstracts of the International Symposium on Water/Air Transitions in Biology, Varanasi, India, p SL-21.
1996. **LILLYWHITE, H.B.** Gravity and the evolution of form and function in vertebrates. Abstracts of the International Symposium on Animal Adaptation, Changhua, Taiwan, p. 11.

1996. **LILLYWHITE, H.B.** Constraints on the evolution of skin permeability in amphibians. Abstracts of the International Symposium on Animal Adaptation, Changhua, Taiwan, p. 24.
1997. **LILLYWHITE, H.B.** Exploring the unusual: physiological specializations of diving snakes. Abstracts (Animal and Cell Biology) of 1997 annual meeting of Society for Experimental Biology, Canterbury UK, p. 51.
1997. **LILLYWHITE, H.B.** Gravity and the evolutionary design of snakes. Abstracts of the 3rd World Congress of Herpetology, Prague, 1997, p. 128.
1997. **LILLYWHITE, H.B.** Adaptation to upright posture: insights from animal studies. Abstracts of the 5th World Congress of International Society for Adaptive Medicine, Framingham, MA, 1997, p. 61.
1997. **LILLYWHITE, H.B.** Skin secretions, basking behavior, and thermal ecology of the Indian tree frog. *Amer. Zool.* 37:187A.
1997. BARBEAU, T.R. and **H.B. LILLYWHITE.** Wiping behavior of hylid tree frogs. *Amer. Zool.* 37:34A.
1997. ZIPPEL, K.C. and **H.B. LILLYWHITE.** Contribution of vertebral artery to cerebral blood flow in an arboreal snake. *Amer. Zool.* 37:201A.
1998. **LILLYWHITE, H.B.** Cardiac rhythms in lower vertebrates. An International Symposium on "Cardiac rhythms in Animals: Regulation, Development and Environmental Influences," Muroran, Japan. Abstracts, p. 39.
1998. HSIEH, S.T., **H.B. LILLYWHITE,** R.E. BALLARD and A.R. HARGENS. Cardiovascular responses of snakes to gravitational gradients. *Faseb J.* 12:A333.
1998. **LILLYWHITE, H.B.,** P.E. DE DELVA, and B. NOONAN. Retention of fecal mass in snakes: Is constipation adaptive? *Amer. Zool.* 38:157A.
1998. BARBEAU, T. and **H. LILLYWHITE.** Iridophore-associated lipids in the skin of hylid frogs. *Amer. Zool.* 38:204A.
1999. MATSUYAMA, M., T. UENO, C. YANG, **LILLYWHITE, H.B.,** and A.R. HARGENS. Evolutionary adaptation of intracranial pressure to gravity. *Faseb J.* 13:A127.
1999. **LILLYWHITE, H.B.** Evolution of the cutaneous water barrier in amphibians. *Comp. Biochem. Physiol.* 124A Suppl.: S29.
1999. LILLYWHITE, H.B., P.E. DE DELVA and B. NOONAN. Habitat, foraging strategy and the processing of fecal mass in snakes. Abstracts of the Joint Meeting of ASIH, AES, HL, and SSAR, p. 149.
1999. BARBEAU, T.R. and **H.B. LILLYWHITE.** Dermal lipids in the skin of Florida hylid frogs. *Comp. Biochem. Physiol.* 124A Suppl.:S29.
1999. BARBEAU, T.R. and **H.B. LILLYWHITE.** Comparative morphology and histochemistry of lipid-containing glands in the skin of treefrogs. *Amer. Zool.* 39:115A.
1999. **LILLYWHITE, H.B.,** J.R. LAFRENTZ, Y.C. LIN and M.C. TU. The cantilever abilities of snakes. *Amer. Zool.* 39:65A.
2000. **LILLYWHITE, H.B.,** P. de Delva, and B.P. Noonan. Patterns of gut passage time and the chronic retention of fecal mass in viperid snakes. Abstracts of the *Biology of Vipers Conference*, Marielund, Sweden.
2000. **LILLYWHITE, H.B.** Gravity, water and feces: Some unusual insights into the care and use of viperid snakes in biomedical research. Abstracts of the 51st American Association for Laboratory Animal Science National Meeting, San Diego.

2001. **LILLYWHITE, H.B.** and M.C. TU. First ecdysis increases skin resistance to evaporative water loss in newborn snakes. Abstracts of 2001 SICB, p. 275.
2001. **LILLYWHITE, H.B.** Social behavior of cottonmouth snakes at Seahorse Key, Florida. Abstracts of 81st annual mtg. of Amer. Soc. Ichthyologists & Herpetologists, State College, PA, p. 88.
2001. McCUE, M. D. and **LILLYWHITE, H.B.** Metabolic rates in cottonmouth snakes from Seahorse Key, Florida. Abstracts of 81st annual mtg. of Amer. Soc. Ichthyologists & Herpetologists, State College, PA, p. 95.
2001. **LILLYWHITE, H.B.** Water and skin: Evolution of cutaneous water barriers and its implications for biodiversity. Abstracts of the 2nd Intl. Conf. Comp. Physiol. & Biochem., Kasane, Botswana, p. 13.
2002. **LILLYWHITE, H.B.**, J.G. MENON, G.K. MENON and M.C. TU. Ontogeny of the permeability barrier in hatchling king snakes. *Physiologist* 45:369.
2003. **LILLYWHITE, H.B.** and F. ZAIDAN III. Snakes and islands: Novel systems integrating physiology and behavior. *Comp. Biochem. Physiol.* A134:S126-S127.
2003. **LILLYWHITE, H.B.** Cardiovascular adaptation to gravity: Lessons from comparative investigations of snakes. Abstracts of the 7th International Congress of the International Society for Adaptive Medicine, p. 28.
2004. **LILLYWHITE, H.B.** and F. ZAIDAN III. Mutualism between birds and snakes at Seahorse Key, Florida. Abstracts of the annual meeting of the Society for Integrative and Comparative Biology, p. 302.
2004. ROARK, A.W. and **LILLYWHITE, H.B.** Genetic variation in an insular population of cottonmouth snakes. Abstracts of the annual meeting of the Society for Integrative and Comparative Biology, p. 299.
2004. **LILLYWHITE, H.B.** and F. ZAIDAN III. Physiological ecology of pit vipers on Gulf Coast islands. 2004 Snake Ecology Group Conference, p. 19.
2004. **LILLYWHITE, H.B.** and F. ZAIDAN III. Trophic interactions, climate, and the interdependence of birds and pit vipers on Gulf Coast islands. Joint Mtg. of Ichthyologists and Herpetologists, Norman, Oklahoma (abstracts).
2004. **LILLYWHITE, H.B.** Plasticity of the water barrier in vertebrate integument. Abstracts of the 3rd International Conference of Comparative Physiology and Biochemistry in Africa, Animals and Environments, p. 66.
2005. **LILLYWHITE, H.B.**, N.A. GOMEZ, M. ACOSTA, F. ZAIDAN III. 2005. Metabolic response to water-conserving posture in a "waterproof" frog. *Faseb Journal* 7:A1651-52.
2005. **LILLYWHITE, H.B.**, G. SAWYER and H. HEATWOLE. A functional interpretation of pulmonary structure in marine snakes. *Integr. Comp. Biol.* 45:1033.
2005. BABONIS, L.S. and **H.B. LILLYWHITE**. Drinking of freshwater by sea snakes. *Integr. Comp. Biol.* 45:960.
2005. McCLEARY, R.J.R., **H.B. LILLYWHITE** and M. McCUE. Foraging and water requirement in terrestrial cottonmouth snakes. *Integr. Comp. Biol.* 45:1040.
2005. SHEEHY III, C.M. and **H.B. LILLYWHITE**. Foraging behaviors of insular cottonmouth snakes. *Integr. Comp. Biol.* 45:1072.

2006. BABONIS, L.S., K.A. HYNDMAN and **H.B. LILLYWHITE**. Immunolocalization of Na⁺/K⁺ -ATPase and Na⁺/K⁺/2Cl⁻ cotransporter in the tubular epithelium of sea snake salt glands. Abstracts of the APS Intersociety Meeting: Comparative Physiology 2006, Integrating Diversity, p. 32.
2007. BABONIS, L.S., K.A. HYNDMAN and **H.B. LILLYWHITE**. Comparative immunolocalization of Na⁺/K⁺ -ATPase and Na⁺/K⁺/2Cl⁻ cotransporter in osmoregulatory tissues from marine and semi-marine snakes. Abstracts of SICB (Society for Integrative and Comparative Biology) Annual Meeting, 6.1.
2007. **LILLYWHITE, H.B.**, L.S. BABONIS, C.M. SHEEHY III, and M.C. TU. Sea snakes dehydrate in sea water. Abstracts of SICB (Society for Integrative and Comparative Biology) Annual Meeting, 6.4.
2008. **LILLYWHITE, H.B.**, L.S. BABONIS, C.M. SHEEHY III, and M.C. TU. Skin permeability and water relations of sea snakes. *FASEB J.* 2008; 22:1239.18.
2008. CONKLIN, D.J., B. BISHOP, A. HARGENS, K. OLSON, and **H. LILLYWHITE**. Rhythmic contractions in the portal “corkscrew” vein of a colubrid snake. *FASEB J.* 2008; 22:1239.23.
2008. BABONIS, L.S., **H.B. LILLYWHITE**, and D.H. EVANS. Comparative immunolocalization of Na⁺/K⁺ -ATPase and Na⁺/K⁺/2Cl⁻ cotransporter in the kidneys of freshwater and marine snakes. *FASEB J.* 2008; 22:757.9
2008. BABONIS, L.S., C.C. CAMPBELL, and **H.B. LILLYWHITE**. A comparative study of osmoregulatory physiology in freshwater and estuarine watersnakes. Abstracts of Society for Integrative and Comparative Biology Annual Meeting.
2009. **LILLYWHITE, H.B.** and J.B. PFALLER. Prey utilization of neonatal insular cottonmouth snakes: Is there an evolved prey preference? 2009 Joint Meeting of Ichthyologists and Herpetologists, Portland.
2009. NICODEMO, P. and **LILLYWHITE, H.B.** Ontogenetic shifts of heart position in snakes. 2009 Joint Meeting of Ichthyologists and Herpetologists, Portland.
2009. **LILLYWHITE, H.B.** A functional interpretation of pulmonary structure in marine snakes. *Adaptive Medicine* 1:85 (abstract).
2010. **LILLYWHITE, H.**, Y-L LIU, M-C TU. Do sea snakes anticipate tropical storms? SICB (Society for Integrative and Comparative Biology) annual meeting, Seattle (abstract).
2010. **LILLYWHITE, H.**, C.M. SHEEHY III, J. PFALLER and F. BRISCHOUX. Drought tolerance of pelagic sea snakes in Costa Rica. 2010 APS Intersociety Meeting, Colorado. *The Physiologist* 53:42.
2011. **LILLYWHITE, H.B.** and C.M. SHEEHY III. Freshwater drinking requirement in a pelagic sea snake, *Pelamis platurus*. SICB annual meeting, Salt Lake City. <http://www.sicb.org/meetings/2011/schedule/abstractdetails.php3?id=86>.
2012. **LILLYWHITE, H.B.** Introduction to the symposium “New frontiers from marine snakes to marine ecosystems”. 2012 annual meeting of the Society for Integrative and Comparative Biology, Charleston, SC, 2012. <http://www.sicb.org/meetings/2012/schedule/abstractdetails.php?id=1481>.
2012. **LILLYWHITE, H.B.**, F. BRISCHOUX, C.M. SHEEHY III and J.B. PFALLER. Dehydration and freshwater drinking requirements of marine snakes. 2012 annual meeting of the Society for Integrative and Comparative Biology, Charleston, SC, 2012. <http://www.sicb.org/meetings/2012/schedule/abstractdetails.php?id=26>.
2012. BRISCHOUX, F., R. TINGLEY, R. SHINE and **H.B. LILLYWHITE**. Distributional data help to identify evolutionary challenges: Oceanic salinity as a major constraint during the transition to marine life in snakes. 2012 annual meeting of the Society for Integrative and Comparative Biology, Charleston, SC, 2012. <http://www.sicb.org/meetings/2012/schedule/abstractdetails.php?id=16>.

2012. SHEEHY III, C.M., H.B. **LILLYWHITE** and J.B. PFALLER. Low genetic diversity across the Pacific Ocean in the pelagic sea snake, *Pelamis platurus*. 2012 annual meeting of the Society for Integrative and Comparative Biology, Charleston, SC, 2012.
<http://www.sicb.org/meetings/2012/schedule/abstractdetails.php?id=553>.
2012. PFALLER, J.B., M.G. FRICK, F.E.O. BRISCHOUX, C.M. SHEEHY III, and **H.B. LILLYWHITE**. Ecology of epibiosis: What can we learn from marine reptiles? 2012 annual meeting of the Society for Integrative and Comparative Biology, Charleston, SC, 2012.
<http://www.sicb.org/meetings/2012/schedule/abstractdetails.php?id=1481>.
2012. LIU, Y.-L., Y.-H. CHEN, **H.B. LILLYWHITE** and M.-C. TU. New perspectives on the extent of terrestriality in three species of sea kraits and their habitat selection. 2012 annual meeting of the Society for Integrative and Comparative Biology, Charleston, SC, 2012.
<http://www.sicb.org/meetings/2012/schedule/abstractdetails.php?id=35>.
2012. WIXSON, J., R.J.R. McCLEARY, D. HEARD and **H.B. LILLYWHITE**. Heavy metal contaminants in an insular population of cottonmouth snakes (*Agkistrodon piscivorus*). World Congress of Herpetology, Vancouver BC, Canada.
2012. **LILLYWHITE, H.B.** and M.-C. TU. Abundance of sea kraits correlates with precipitation. *The FASEB Journal* 26:1069.3.
2013. **LILLYWHITE, H.B.** The freshwater requirements of sea snakes. 52nd Annual Meeting of the Herpetological Society of Japan, Tokai University, Sapporo, Hokkaido, Japan.
2014. **LILLYWHITE, H.B.**, C.M. SHEEHY III., F. Brischoux and A. Grech. Pelagic sea snakes dehydrate at sea. *The FASEB Journal* 28, No. 1, Supplement 860.19.
2014. SHEEHY, C.M. and **H.B. LILLYWHITE**. Gravitational stress and the evolution of relative tail length in arboreal snakes. *The FASEB Journal* 28, No. 1, Supplement 1100.10.
2015. **LILLYWHITE, H.B.** Is cooling and freezing an appropriate euthanasia method for ectothermic vertebrates? Abstracts of the 9th International Congress of Comparative Physiology and Biochemistry: *From Molecules to Macrophysiology*, p. 355.