♦ CURRICULUM VITAE ♦

WARREN W. BURGGREN

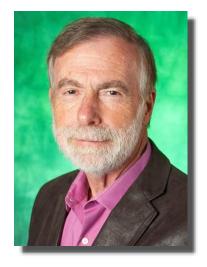
TABLE OF CONTENTS +

1.	PERSONAL INFORMATION	2
2.	PROFESSIONAL APPOINTMENTS	3
3.	HONORS	4
4.	ADMINISTRATION	5
5.	TEACHING AND MENTORING	.11
6.	TEACHING AND MENTORING	.10
7.	GRANTS AND EXTRAMURAL RESEARCH ACTIVITIES	.15
8.	PLENARY LECTURES, SYMPOSIA AND SEMINARS	.18
9.	REVIEWING	.27
10.	PUBLICATIONS	.29

1. PERSONAL INFORMATION

PROFESSIONAL CONTACT INFORMATION

- Mailing Address: 1155 Union Circle #311190 University of North Texas Denton, TX 76205-5189 940-565-3952 940-565-4438 (FAX)
- Email: <u>burggren@unt.edu</u>
- Web Site: biology.unt.edu/burggren



DATEAND PLACE OF BIRTH

• August 14, 1951, Edmonton, Alberta, Canada

MARITAL STATUS

• Married, 3 daughters, 1 son

CITIZENSHIP

• Canadian and American

UNDERGRADUATE TRAINING

• Department of Biology, University of Calgary, Alberta, Canada 1969-1973

GRADUATE TRAINING

 School of Biological Sciences, University of East Anglia, Norwich, England 1973-1976

DEGREES HELD

- B.Sc. (1st Class Honors) in Biology University of Calgary, 1973
- Ph.D. in Physiology University of East Anglia, U.K. 1976

2. PROFESSIONAL APPOINTMENTS

Administrative Appointments

• 2015-2016	President's Special Advisor for STEM and International Activities
• 2010-2015	Provost and Vice President for Academic Affairs, Univ. of North Texas
• 1998-2010	Dean, Arts and Sciences, Univ. of North Texas
• 1997-1998	Chair, Biological Sciences, Univ. of Nevada, Las Vegas
• 1995-1997	Interim Dean, College of Science and Mathematics, Univ. of Nevada, Las Vegas
• 1995-1996	Director, "Bridges to the Future" Program for University of Nevada, Las Vegas for Minority College Students; jointly funded by National Institutes of Health and Department of Energy
• 1992-1995	Chair, Biological Sciences, Univ. of Nevada, Las Vegas
• 1991	Acting Chair, Zoology Dept., Univ. of Massachusetts

• Faculty Appointments

 1998-present 1992-1998 	Professor of Biology, Univ. of North Texas Professor of Biological Science, Univ. of Nevada, Las
	Vegas
• 1990	Visiting Professor, Univ. of Sao Paulo, Brazil
• 1987-1991	Professor of Zoology, Univ. of Massachusetts
• 1985	Visiting Scholar, Univ. of Melbourne, Australia
• 1982-1987	Associate Professor of Zoology, Univ. of Massachusetts
• 1978-1982	Assistant Professor of Zoology, Univ. of Mass
• 1976-1978	Killam Postdoctoral Fellow, Univ. of British Columbia
• 1976-1978	N.R.C. Postdoctoral Fellow, Univ. of British Columbia
• 1976	Visiting Lecturer, Univ. of Aarhus, Denmark
• 1973-1976	Ph.D., Cardiovascular and Respiratory Physiology, Univ. of East Anglia, supervised by Dr. G. Shelton
• 1973-1976	Demonstrator in vertebrate and invertebrate physiology, invertebrate taxonomy, vertebrate and invertebrate morphology, Univ. of East Anglia
• 1970-1973	Research Assistant, Univ. of Calgary

3. HONORS

Awards and Other Distinctions (See also Plenary and Honorary Lectures)

• 2023	University of North Texas Foundation Research Leadership Award
• 2023	University of North Texas Undergraduate Research Mentor
	of the Year Award
• 2023	Elsevier Top 2% of Cited World Scientists
• 2020	Mercator Fellow, German Research Foundation
• 2019	Fellow, American Physiological Society
 2018-present 	Evolutionary Biology Advisory Board, Baylor College of Medicine, Houston.
• 2017	University Distinguished Research Professor
• 2012	Rector Honoris Causa (Honorary University President), The Autonomous University of the State of Mexico, Toluca, Mexico
• 2012	Invited Participant, Commandant's National Security Program, US Army War College
• 2008	Academia Mexicana de Ciencias Distinguished Visiting Professor
• 2006-2011	National Science Foundation Advisory Board – Biology Directorate
• 2002-2005	Science Advisory Board, Bigelow Aerospace, Inc
• 2002	Outstanding Supporter Award, Student Center for Ethnic Enrichment, University of North Texas
• 2002	Annual Equity and Diversity Recognition Award, University of North Texas
• 2000	Chair, Science Advisory Board - National Institute for Discovery Science
• 1997	Barrick Distinguished Scholar, Univ. of Nevada, Las Vegas
• 1997	Regent's Research Medal - University and Community College System of Nevada Board of Regents
• 1997	Regents' Researcher Citation, University and Community College System of Nevada Board of Regents
• 1996	Medal of the University of Helsinki, Finland
• 1992	Fellow, Japan Society for the Promotion of Science
• 1984	Elected Program Officer, Division of Comparative Physiology and Biochemistry, American Society of Zoologists
• 1976-1978	Killam Postdoctoral Scholarship - Univ. of British Columbia
• 1976-1978	NRC Postdoctoral Fellowship - Univ. of British Columbia
• 1974-1976	Commonwealth Scholarship, Univ. of East Anglia, England

- 1972-1974 Univ. of East Anglia Studentship, England
- 1972 Province of Alberta Scholarship, Univ. of Calgary, Canada

4. ADMINISTRATION

1. CONSULTING AND TRAINING

- Program Evaluation, Site Visits
 - University of Alberta, Edmonton, Canada UofA Water Initiative
 - Auburn University,
 - Biology Graduate Program
 - Department of Biological Sciences
 - Five-Year Evaluation of Cellular and Molecular Biology Program
 - University of Calgary Faculty of Science
 - University of the Central Caribbean NIH Behavioral Testing Facility
 - Middle Tennessee State University, Biology Masters Degree
 - University of North Carolina Greensboro, Evaluation of Department of Biological Sciences
 - Indiana University Terre Haute, Department of Biological Sciences
 - State of North Dakota, NSF EPSCOR Evaluation for University of North Dakota and North Dakota State University
 - Idaho State University, Department of Biological Sciences
 - University of Idaho, Department of Biological Sciences
 - Western Washington University, College of Sciences
 - United Arab Emirates University
 - College of Sciences Evaluation
 - Training Workshop on "Effective Resource Management" for University Deans and Chairs
 - Prince Mohammed University, Saudi Arabia. Undergraduate Core Curriculum Development

• Personnel Search Consultant

- University of Helsinki, Finland
- Academia Sinica, Taipei, Taiwan
- Training Workshops Conducted

- New Deans Workshop Council of Colleges of Arts and Sciences -Facilitator for Williamsburg, VA.
- Effective Resource Management Workshop
 - United Arab Emirates University
 - University of Nevada, Las Vegas
 - University of North Texas
- Creating Winning Grant Proposals
 - Autonomous University of the State of Mexico
 - University of North Texas
 - City University of Hong Kong
 - Education University of Hong Kong
 - University of Texas San Antonio
 - Midwester State University Wichita Falls

• Other Consulting - Advising

- University of the Central Caribbean Department of Physiology
- Texas International Education Consortium
- International Isotopes Incorporated
- Bigelow Aerospace Corporation
- Jwala Technologies, Inc. (Director)
- Lucid Med Tech II, Inc. (Chief Scientific Officer)

• Higher Education Service

System, Regional and State Higher Education Committees and Councils

• 2014-2015	UNT System Executive Council
• 2010-2015	Texas Council of Chief Academic Officers
• 2001-2003	Advisory Board Member, the Institute for Diversity in Engineering and Society (IDEAS), North Texas
• 2001-2002	Advisory Board Member, Futures in Research, Science and Technology (FIRST), Mountain View Community College, Dallas, TX
• 2000-2003	Executive Council Member, Texas Association of Deans of Liberal Arts and Sciences
• 2001	Deans Circle, Institute for Diversity in Engineering and Society (IDEAS)
• 1998	University and Community College System of Nevada Regents' Researcher Award Selection Committee
• 1996-1997	Director, Southern Nevada School Science Fair
• 1992	University and Community College System of Nevada Regents' Researcher Award Selection Committee

University Committees (UNT 1998-present; UNLV 1992-1998; UMASS, 1978-1991)

- University Distinguished Research Professor Selection • 2018-2023 Committee
- International Risk Oversight Committee • 2018-present
- China Advisory Council (Co-Chair) • 2013-2015
- 2011-2015 **Distinguished Alumni Awards Selection Committee**
- President's Diversity Council • 2011-2015
- Provost's Council (Chair) • 2010-2015
- University Gift Acceptance Committee • 2010-2015
- President's Capital Projects Council • 2010-2014
- President's Finance Council • 2010-2014
- President's Enrollment and Retention Council • 2010-2015
- President's Cabinet • 2010-2015
- 2009-2010 Institute for the Advancement of the Arts Steering Committee
- Information Technology Council (Chair) • 2008-2010
- Search Committee for Provost and Vice President for • 2007 Academic Affairs
- UNT System Life Sciences Council (Co-Chair) • 2006-2008
- 2005-2008 Academic Planning Council
- RCM Sub-Committee on Indirect Costs (Chair) • 2005
- Task Force on Centers and Institutes (Chair) • 2004-2005
- **UNT Critical Incident Management Team** • 2004-2006
- **UNT Master Planning Committee** • 2004-2007
- Search Committee for CEO and President of University of • 2003 North Texas Foundation
- 2002
- 2002-2003
- **Campus Beautification Committee Chemistry Building Construction Steering Committee** • 2001-2004

Technology Transfer

Search Committee for Vice President for Research and

- Executive Committee University Planning Council • 2001-2002
- 2001-2002 Academic Affairs Committee
- 2001 Institutional Information System Steering Committee
- **Enrollment Management Steering Committee** • 2001
- Task Force on Honors Program • 2000
- **Teacher Education Council** • 2000-2008
- **Donor Relations Committee** • 2000
- Search Committee for Dean, School of Music, (Chair) • 1999-2000
- Assessment Advisory Council • 1999-2000
- **Facilities Planning Committee** • 1998-2001
- University Planning Council • 1998-2004

 1998 1998 1997-1998 1997-1998 1997-1998 1997 1996-1997 1996-1997 1996-1997 1996-1997 1996 1995-1996 1995-1996 1995-1996 1995 1995-1997 1994-1995 1993-1995 1993-1994 1988-1989 1986-1991 1982-1985 1982-1985 1982-1985 	Minority Recruitment and Retention Task Force Undergraduate Student Retention Steering Committee Barrick Distinguished Scholar Award Committee Gerentology Certificate Program Advisory Committee Bigelow Endowed Chair Search Committee - (Chair) UNLV 40th Anniversary Planning Committee President's Task Force on Planning - Subcommittee on Strategic Initiative Funding President's Task Force on Planning - General Member Women's Studies Steering Committee Faculty Discipline Hearing Officer Research Strategic Planning Committee (Co-Chair) <i>Ad hoc</i> Committee for Distance Education Evaluation Development Council UNLV Academic Council Research Issues Resolution Committee Executive Committee of the NIH "Bridges to the Baccalaureate Minority Recruitment Program" University Priority and New Program Review Committee Organization Committee for Biology Undergraduate Degree Graduate Operations Committee for Neuroscience and Behavior Ph.D. Program University Research Council
	-
• 1984	University Health Council
• 1985	University Computer Use Committee
• 1981-1983	Biomedical Research Support Grant Committee
College Committees	(UNT, College of Arts and Sciences, 1998-present; UNLV, College of Science and Mathematics, 1992- 1998,: UMASS, College of Natural Sciences and Mathematics, 1978-1991)
 2016-2017 2005 1998-2010 1995-1997 1995-1997 1004 1005 	College of Science and Mathematics Planning Committee Strategic Planning Committee (Chair) Personal Affairs Committee (Chair) Financial Aid Committee (Chair) Executive Committee (Chair)

- 1994-1995 Computing Services Committee1993-1994 Commencement Committee
- 1992-1998 Executive Committee
- 1990-1991 Organismal and Evolutionary Biology Ph.D. Organization Committee (Co-chair)

• 1980 Dean's Search Committee for Zoology Department Chair

Departmental Committees (UNT, 1998-present; UNLV 1992-1998: UMASS, 1978-1991)

Extensive service on a wide variety of search, personel, promotion and tenure, planning and other committees.

• Professional Service - National / International Committees

Society and Professional Associations

• 2004	Nominations Committee, Division of Comparative Physiology and Biochemistry, Society for Integrative and Comparative Biology
• 2000	Case Study Facilitator, Council of College of Arts and Science Annual Meeting, Toronto, Canada
• 1999-2002	Publication Committee (Chair) - Society for Integrative and Comparative Biology
• 1996-1998	American Heart Association Research Committee - Nevada Affiliate
• 1995-2002	Publication Committee - Society for Integrative and Comparative Biology
• 1993	George A. Bartholomew Award Committee - American Society of Zoologists (Division of Comparative Physiology and Biochemistry)
• 1991-1992	Standing Committee on Comparative Physiology and Biochemistry, Systematics Agenda 2000, NSF
• 1990	Nomination Committee for Executive Committee, Division of Comparative Physiology and Biochemistry, American Society of Zoologists
• 1984-1986	Member of Executive Committee, Division of Comparative Physiology and Biochemistry, Am. Soc. of Zoologists
• 1985	American Society of Zoologists (Division of Comparative Physiology and Biochemistry): International Union of Biological Sciences (1988)- Program Committee
• 1984	American Society of Zoologists (Division of Comparative Physiology and Biochemistry): International Union of Physiological Sciences (1986)- Program Committee
• 1984	American Society of Zoologists (Division of Comparative Physiology and Biochemistry) - Committee for Selection of Best Student Paper

National Research Funding Panels

• 2020	Animal Biology Experimentation Flight Panel, NASA, Panel Chair
• 2015	Integrative Animal Biology – National Science Foundation – Panel Member
• 2012	Animal Biology Experimentation Flight Panel, NASA, Panel Chair
• 2009	Animal Biology Experimentation Flight Panel, NASA, Panel Chair
• 2004	American Heart Association – Western Region - Panel Member
• 2004	STEP Undergraduate Education Panel - National Science Foundation Panel Member
• 2001	Animal Biology Experimentation Flight Panel, NASA, Panel Chair
• 1998-2001	Integrative Animal Biology - National Science Foundation - Panel Member
• 1997	Professional Opportunities for Women in Research and Education - National Science Foundation -Panel Member
• 1992	Outstanding Young Investigator Awards -National Science Foundation - Panel Member
• 1986	International Programs: Postdoctoral Fellowships - National Science Foundation - Panel Member

• Membership In Administrative Professional Organizations

• 2010-2015	APLU Council on Academic Affairs
• 1999-2010	Texas Association of Deans of Liberal Arts and Sciences
• 1995-1997	American Conference of Academic Deans
• 1995-2010	Council of Colleges of Arts and Sciences

• 1995-1997 Rocky Mountain Deans Association

5. TEACHING AND MENTORING

Classroom Instruction

University of North Texas, Dept. of Biological Sciences (1998-present)

- Metabolic Physiology (Graduate)
- The Biology of Extreme Environments (Graduate)
- Animal Adaptation: Mechanisms for Survival (Graduate)

- Professional Development for Graduate Students (Graduate)
- The Biology of Extreme Environments (Undergraduate)

University of Nevada, Las Vegas, Dept. of Biological Sciences (1992-1996)

- Human Anatomy and Physiology
- Bioenergetics
- Ethics in Science

University of Massachusetts, Department of Zoology (1978-1991)

- Introductory Zoology
- Human Anatomy and Physiology
- Introductory Physiology
- Comparative Physiology
- Physiology Laboratory
- Topics in Respiratory Physiology
- Member of Undergraduate Program in Marine and Coastal Sciences
- Member of Graduate Program in Neuroscience and Behavior
- Member of Graduate Program in Organismal and Evolutionary Biology

University of British Columbia, Department of Zoology (1977)

Animal Physiology

University of East Anglia (1973-1976)

- Demonstrator in Vertebrate and Invertebrate Physiology
- Invertebrate Taxonomy
- Vertebrate and Invertebrate Morphology

Graduate Students Mentored (As Major Advisor)

Doctors of Philosophy (graduation date)

- 1. Steven Williams (current student)
- 2. Christopher Melendez, (current student)
- 3. Wanasa Frifer. (current student)
- 4. Lindsey Daniel. (current student)
- 5. Karem Vazquez Roman 2024. Myocardial Infarction and its Implications for Cardiac Function and Behavior in the Zebrafish Larvae Model.

- 6. Alicia Dunton 2023. Neurotoxic Effects of Polycyclic Aromatic Hydrocarbons in Vertebrates: From Behavioral to Cellular Levels .
- 7. Naim Martinez Bautista 2019. Transgenerational Responses to Environmental Stressors in Vertebrates: From Organisms to Molecules.
- 8. Melissa Lewallen 2019. Metabolic Physiology of Planarians
- Sheela Sadruddin 2017. Optimization of *In Vitro* Mammalian Blastocyst Development: Assessment of Culture Conditions, Ovarian Stimulation and Experimental Micromanipulation.
- 10. Josele Flores Santin– 2016. Cardiovascular Fetal Programming in Quail (*Colinus virginianus*), an Avian Comparative Model.
- 11. Fernando Mendez-Sanchez 2015. Environmental Modulation of the Onset of Airbreathing of the Siamese Fighting Fish and the Blue Gourami
- 12. Kelly Reyna 2010. Thermal Stress During Pre-incubation Induces Subsequent Developmental Plasticity in Northern Bobwhites.
- 13. Francis Pan 2009. Metabolic, Cardiac and Ventilatory Regulation in Early Larvae of the South African Clawed Frog, Xenopus laevis.
- 14. Greta Bolin 2009. Incubation Humidity as an Environmental Stressor on the Osmoregulatory Developmental PROGRAM OF THE CHIcken, *Gallus gallus domesticus*.
- 15. Tara Blank 2009. Cardio-respiratory Ontogeny and the Transition to Bimodal Respiration in an Air-breathing Fish, the Blue Gourami (*Trichogaster trichopterus*): Morphological and Physiological Development in Normoxia and Hypoxia.
- 16. Dao Ho 2008. Morphological and Physiological Developmental Consequences of Parental Effects in the CHICKEN Embryo (*Gallus gallus domesticus*) and the Zebrafish Larva (*Danio rerio*).
- 17. Bonnie Myer, 2007. A contravention of Established Principles of Interspecific Allometric Metabolic Scaling in Developing Silkworms, *Bombyx mori.* University of North Texas.
- 18. Brian Bagatto, 2001. The Developmental Physiology of the Zebrafish: Influence of Environment on Metabolic and Cardiovascular Attributes. University of North Texas.
- 19. Dane Crossley, 1999. Development of Cardiovascular Regulation in Embryos of the Domestic Fowl (*Gallus gallus*), with Partial Comparison to Embryos of the Desert Tortoise (*Gopherus agassizi*). University of North Texas.
- 20. Paul Territo, 1996. The Ontogeny of Cardio-Respiratory Support for Metabolism, University of Nevada, Las Vegas.
- 21. Tobias Wang, 1993 (co-advisor) Control of Breathing and Arterial Blood Gases in Reptiles and Amphibians, University of Aarhus, Denmark, and University of Nevada, Las Vegas.
- 22. Lucy Ping-Chun Hou, 1991. Development of Hemodynamic Regulation in the African Clawed Toad *Xenopus laevis*, University of Massachusetts, Amherst.
- 23. XiXi Jia, 1991. Chemoreceptor Modulation of Gill Ventilation in the Larval Bullfrog *Rana catesbeiana*, University of Massachusetts, Amherst.
- 24. Robert Infantino, 1991. Ontogeny of Ventilatory Regulation in the bullfrog *Rana catesbeiana*, University of Massachusetts, Amherst.
- 25. Carl Reiber, 1991. The Hemodynamics of the Crustacean Open Circulatory Systems:

Hemolymph Flow in the Crayfish (*Procambarus clarkii*) and the lobster (*Homarus americanus*), University of Massachusetts, Amherst.

- 26. Peter Kimmel, 1990. Ontogeny of the Regulation of Cardiovascular Physiology in the Bullfrog *Rana catesbeiana*, University of Massachusetts, Amherst.
- 27. Alan Pinder, 1985. Respiratory Physiology of the Frogs *Rana pipiens* and *Rana catesbeiana*: Influence of Temperature and Hypoxia, University of Massachusetts, Amherst.
- 28. Dana Quinn, 1982. The Exercise Physiology of *Rana catesbeiana* during Recovery from Exercise to Exhaustion, University of Massachusetts, Amherst.

Masters of Science / Masters of Arts in Science (graduation date)

- 1. Jack Eudy (Current student)
- 2. Haley Huse (Current student)
- 3. Alexis Auzenne 2023. Hypoxia-Induced Cardiac Arrest Alters central Nervous System Concentrations of the Glyt2 Glycine Transporter In Zebrafish (*Danio rerio*)
- 4. Karem Vazquez Roman 2020. M.Sc. Metabolic Responses to Crude Oil During Very Early Development in the Zebrafish (*Danio rerio*).
- 5. Wenasa Frifer 2016 . M.Sc. Respiratory Responses in the Freshwater Snail (*Pomacea bridgesii*) are Differentially Affected by Temperature, Body Mass and Oxygen Availability.
- 6. Shaun Jones 2015. M.Sc. Phenotypic Morphological Plasticity Induced By Environmental Salt Stress in the Brine Shrimp, *Artemia*
- 7. Melissa Lewallen, 2012. M.Sc. Chronic Hypoxia and Hyperoxia Modifies Morphology and VEGF Expression of the Lungs of the Developing Chicken (*Gallus gallus domesticus*).
- 8. Josie Rossitto, 2012. M.Sc. Beta-Adrenergic Blockade Via Atenolol Exposure in the Developing Chicken (*Gallus Gallus Domesticus*) and its Effects on Embryonic Blood Pressure, Heart Rate, and Renal Morphology.
- 9. Travis Alvine, 2011. M.Sc. Retinoic acid treatment affects development of the kidney and osmoregulatory system in the developing chicken, *Gallus gallus*.
- 10. Sylvia Ruck, 2010. M.Sc. Induced bradycardia effects on angiogenesis, growth, and development in early development in chicken embryos, *Gallus domesticus*.
- 11. Matt Gore, 2007. M.Sc. Influence of parental swimming stamina on the cardiac and metabolic perforamance of larval zebrafish (*Danio rerio*).
- 12. Marc Wuerdeman, 2007. M.Sc.
- 13. Jessie Brown, 2004. M.Sc. Heart Rate and Oxygen Consumption During the Critical Prenatal Period in Chicken Embryos (*Gallus gallus*): Influence of Light Cues and the Onset of Pulmonary Ventilation.
- 14. Sheva Khorrami, 2004. M.Sc. Hematocrit, Hematocrit Regulation and its Effect On Oxygen Consumption in the Late Stage Chicken Embryos (Gallus gallus).
- 15. Nora Elmonoufy, 2003. M.Sc. Differential Effects of Hypoxia on Morphology and Hematology of the Quail *Coturnix coturnix*. University of North Texas.
- 16. Juli Black, 2003. M.Sc. Developmental patterns of metabolism and hematology in the late stage chicken embryo (*Gallus domesticus*) at two incubation temperatures. University of

North Texas.

- 17. Natasha Capell, 2002. M. A.
- 18. Brett Clarke, 1997. M.Sc. The Influence of Blood Flow on Angiogenesis in the 3 Day Chick Embryo. University of Nevada, Las Vegas.
- 19. Shilpa Thanker, 1998. M.A.Sc. Changes in Dorsal Aortic Diameter in Day 3 chicken embryos in Response to Invasive Sham Aortic Ligation: Assessment of the Ligation Technique.
- 20. Dulynn Hastings, 1994. M.Sc. The Metabolic Rate of *Xenopus laevis*: Interactional Influences of Development and Short Term Hypoxia. University of Nevada, Las Vegas.
- 21. Henry Bermudez, 1994. M.Sc. The Mechanism and Function of Transient Pressure fluctuations occurring in the lungs During Diving in the Turtle, *Trachemys* [=*Pseudemys*] *scripta elegasn*. University of Nevada, Las Vegas.
- 22. Lucy Ping-Chun Hou. 1987. M.Sc. Allometry of Cardiac and Hematological Variables in Developing Mice (*Mus musculus*): Intraspecific vs. Interspecific Allometry. University of Massachusetts, Amherst.
- 23. Rosalba Sacca, 1982. M.Sc. Oxygen Partitioning Between the Skin, Gills and Lungs of the Air-Breathing Reedfish, *Calamoicthys calabaricus*. University of Massachusetts, Amherst.

Post-Doctoral Fellows and Research Scientists Supervised (Current Position)

- 1. Gil Martinez-Bautista, 2021-2024 Research Scientist II
- 2. Amelie Crespel, 2016-2017 (Marie Curie Fellow)
- 3. Prescilla Perrichon, 2015-2018 (Research Scientist)
- 4. Benjamin Dubansky, 2013-2018 (Research Scientist, CTO)
- 5. Casey Mueller, 2011-2013 (Assistant Professor)
- 6. Sarah Andrewartha, 2010-2011 (Research Scientist)
- 7. Francis Pan, 2010 (Research Scientist)
- 8. Dao Ho, 2008-2010 (Science Division Chief, US Navy)
- 9. Bonnie Myer, 2007-2009 (Lecturer)
- 10. Edward Dzialowski, 1999-2002 (Professor & Associate Dean)
- 11. Jordi Altimiras, American Heart Association Fellow, 1995-1997 (Professor)
- 12. Regina Fritsche, 1994-1995 (AstraZeneca Corporate Executive)
- 13. Tobias Wang, 1993-1994 (Professor and Chair)
- 14. Stephen Warburton, NIH Fellow), 1992-1994 (Associate Professor retired)
- 15. Francis Ragsdale, 1992-1993 (Professor)
- 16. Andrew Gannon, 1990-1992 (Professor)
- 17. Alan Pinder, 1985-1987 (Associate Professor)
- 18. Timothy Vitalis, Parker B. Francis Fellow), 1987-1990 (Research Scientist)
- 19. Bernd Pelster, German Research Council Fellow), 1989-1990 (Professor, Dean)
- 20. Allan Smits, Parker B. Francis Fellow, 1984-1986 (Professor, Associate Dean)

7. GRANTS AND EXTRAMURAL RESEARCH ACTIVITIES

Federal and State Research Grants

• 2024-2027	Department of Defense – US Navy	\$500,000
• 2021-2025	Natnl. Sci. Found. (Int. Org. Biol.)	\$1,150,000
• 2018-2019	Department of Defense – US Army	\$90,000
• 2018-2020	Gulf of Mexico Research Initiative	\$600,000
• 2015-2019	Natnl. Sci. Found. (Int. Org. Biol)	\$300,000
• 2015-2017	Gulf of Mexico Research Initiative	\$856,318
• 2010-2014	Natnl. Sci. Found. (Int. Org. Biol)	\$806,255
• 2009-2011	Natnl. Sci. Found. (Int. Org. Biol)	\$198,344
• 2008-2011	Natnl. Sci. Found .(SciSIP)	\$393,688
• 2006-2010	Natnl. Sci. Found. (Int Biol and Neurosci)	\$677,227
• 2002-2006	Natnl. Sci. Found. (Int Biol and Neurosci)	\$601,000
• 2001-2002	Natnl. Sci. Found. (Math. Sci. Infra.) (Co-PI)	\$100,000
• 2001-2002	Natnl. Sci. Found. (Intern. Programs)	\$25,000
• 1999-2001	Texas Advanced Research Program	\$99,600
• 1999-2000	Natnl. Sci. Found. (Int Biol and Neurosci)	\$51,544
• 1997-2001	Natnl. Sci. Found. (Int Biol and Neurosci)	\$287,000
• 1995-1996	American Heart Association (Co-PI)	\$24,722
• 1993-1997	Natnl. Sci. Found. (Int Biol. and Neurosci)	\$382,000
• 1990-1993	Natnl. Sci. Found. (Intern. Programs)	\$34,562
• 1989-1992	Natnl. Sci. Found. (Phys. Proc.)	\$234,500
• 1986-1989	Natnl. Sci. Found. (Reg. Biol.)	\$242,000
• 1985	Natnl. Sci. Found. (Reg. Biol.) (Co-PI)	\$13,300
• 1984	Natnl. Sci. Found. (Reg. Biol.) (Co-PI)	\$3,000
• 1983-1986	Natnl. Sci. Found. (Reg. Biol.)	\$275,190
• 1980-1983	Natnl. Sci. Found. (Reg. Biol.)	\$100,850
• 1980	Natnl. Sci. Found. (Inst. Sci. Equip. Program)	\$34,008

Private Foundation Grants and International Agencies

• 2020	AstraZeneca	\$100,000
• 2018	AstraZeneca	\$65,220
• 1997	Max Baer Heart Fund	\$5,000
• 1992	Japan Society for the Promotion of Science	\$5,000
• 1990	Japanese Ministry of Education., Science & Culture	\$5,000
• 1990	State Government of Sao Paulo, Brazil	\$3,500
• 1988	Parker B. Francis Foundation (Co-PI)	\$136,000
• 1985	Puritan-Bennett Foundation (Co-PI)	\$56,000

• 1984	Puritan-Bennett Foundation (Co-PI)	\$24,180		
University Grants (Competitive Review)				
• 1999	Unswachoke International Collaboration Grant (UNT)	\$3,600		
• 1992	University Research Grant (UNLV)	\$3,000		
• 1979-1988	Biomedical Research Support Grants (UMASS)	\$25,000		
• 1978-1987	Faculty Research Grant (UMASS)	\$17,820		
• 1983	Healey Endowment Grant (UMASS)	\$4,800		

Training Grants

• 2021-2026	National Institutes of Health (Co-PI)	\$2,195,228
• 1995-1996	Dept. of Energy Training Grant for Minority	\$29,663
	Students(Co-PI)	
• 1995-96	NIH Bridges to the Future Program for	\$173,251
	Minority Students (Co-PI)	

Editorships And Membership In Editorial Boards

 2024-present 	Associate Editor, Physiological Reports
• 2020-2024	Specialty Chief Editor, Frontiers in Developmental Physiology
• 2009-2017	 2020-2024, Frontiers in Aquatic Physiology
• 2003-2018	Founding Series Editor, <i>Ecological and Environmental</i> <i>Physiology</i> , a monograph series published by Oxford University Press
• 1999	Guest editor for Comparative Biochemistry and Physiology A: Molecular and Integrative Physiology. Vol 124A
• 1998-2015	Editorial Board, <i>University of North Texas Press,</i> University of North Texas, Denton, Texas
• 1988-1995	Editor-in-Chief, <i>Physiological Zoology</i> (now <i>Physiological Biochemistry and Zoology</i>), published by University of Chicago Press, Journals Division
• 1986-2000	Editorial Board, <i>Zoophysiology</i> , (monograph series published by Springer-Verlag, Berlin)
• 1986	Guest editor for Journal of Morphology: Centennial Supplement #1

Memberships In Learned Societies

• 19	95-present	American	Physiological	Society

• 1987-1995 Council of Biology Editors

- 1986-1995 American Assoc. for the Advancement of Science (USA)
- 1985-1989 Society For the Preservation of Old Fishes
- 1978-1996 American Society of Zoologists
- 1996-present Society for Comparative and Integrative Biology
- 1973-1991 The Society for Experimental Biology (Britain)
- 1972-1990 Canadian Society of Zoologists (Canada)

Membership In Science Advisory Boards

- 2006-2012 National Science Foundation Advisory Board Biology Directorate
- 2002-2009 Science Advisory Board, Jwala Technolgies Inc.
- 2002-present External Advisory Board, North Dakota State NSF-EPSCoR
 Program
- 2002-2004 Research Advisory Council, Biotechnology Research Partnership (BRP) consortium with Univ. Texas, Arlington, Univ. of North Texas Health Science Center and Univ. of North Texas, Member
- Science Advisory Board, National Institute for Discovery Science, Chair
- 1998-2004 Science Advisory Board, National Institute for Discovery Science, Member
- 1996-1998 Corporate Board of Directors, National Institute for Discovery Science, Member

Formal Extramural Research/Training Activities

• 1996	Invited Lecturer for Amphibian Physiology Section of "Graduate Topics in Biology". University of Puerto Rico, San Juan, Puerto Rico
• 1990	Invited Lecturer for Gas Transport and Circulation Section of
	"Graduate Topics in Comparative Physiology" University of California, Irvine
• 1990	Visiting Professor, Univ. of Sao Paulo, Brazil
• 1985	Visiting Scholar, University of Melbourne, Australia
• 1983	Visiting Investigator, Naos Marine Laboratory, Smithsonian Tropical Research Institute, Panama
• 1982	Invited Lecturer for Gas Transport and Circulation Section of "Graduate Topics in Comparative Physiology" University of California, Irvine
• 1980	Visiting Investigator, Univ. of Aarhus, Denmark
• 1979	Alpha Helix expedition to Palau, Western Caroline Islands
• 1976	Visiting Lecturer, University of Aarhus, Denmark

8. PLENARY LECTURES, SYMPOSIA AND SEMINARS

• Plenary and Honorary Lectures

• 2024	Jornados de la Ciencia 2024, Autonomous University of the State of Mexico, Toluca, Mexico
• 2020	David Randall Lecture, University of British Columbia,
- 2020	Vancouver, British Columbia, Canada
	Plenary Lecture, Annual Meeting of the German Zoological
• 2018	Society, Greifswald, Germany
	Plenary Lecture, Annual Meeting of Incubation and Fertiltiy
	Research Group. Edinburgh, Scotland
• 2017	Plenary Lecture, Annual Meeting of the Society for Chaos
	Theory in Psychology and Life Sciences, Cininnati,
	Ohio
	August Krogh Distinguished Lecturer, American
00/F	Physiological Society, Chicago, Illinois
• 2015	Plenary Lecture, Fisheries and Aquaculture Conference
	2015, Guilin, China Plenary Lecture, BEACON Congress on Evolution in
	Action, Michigan State University, East Lansing, Michigan
• 2014	Davidson Annual Lecture, Department of Biology, Baylor
• 2014	University, Waco, Texas.
• 2013	Keynote Speaker, Spring Convocation, Mountain View
2010	Community College, Dallas, Texas, USA
• 2012	Inaugural Kjell Johansen Lecture, University of Aarhus,
	Aarhus, Denmark
• 2008	Plenary Lecture, 32nd Annual Larval Fish Conference, Kiel,
	Germany
• 2002	Diebold Lecture, Kalamazoo College, Michigan, USA
• 2002	Plenary Lecture, Symposium on Ontogeny of
	Cardiorespiratory Mechanisms: An Evolutionary
	Perspective, Experimental Biology Meeting, New
0004	Orleans, USA
• 2001	Plenary Lecture, American Association for the
	advancement of Science - South West and Rocky
- 2000	Mountain Regional Meeting. Denton, Texas Plenary Lecture, Sixth International Workshop on Perinatal
• 2000	Physiology in Birds. Berlin, Germany
• 1998	Annual W. S. Hoar Lecture, University of British Columbia,
	Vancouver, British Columbia, Canada
• 1998	Plenary Lecture, International Conference on Animal
	Adaptation, Academia Sinica, Taipei, Taiwan

• 1997	Plenary Lecture, International Workshop on Developmental
	Physiology, Gothenberg, Sweden

- 1995 Annual Phi Sigma Lecturer, Univ. of Texas, Arlington
- 1993 Annual Williams Lecturer, Univ. of Akron
- 1990 Plenary Lecture, Annual meeting of Japanese Society of Comparative Physiologists and Biochemists
- 1988 Annual Dunaway-Burnham Visiting Lecturer, Dartmouth College Medical School

• Invited Symposium/Workshop Presentations

- 2023 Symposium in Honor of James Hicks. University of California, Irvine. Irvine, California, USA.
- 2022 Krogh Nobel Prize Centenary Symposium. University of Copenhagen, Denmark.
- 2020 Symposium on Evolutionary Biology and Ecology. University of Greifswald, Germany
- 2018 Symposium on Phenotypic Plasticity and Epigenetics: Annual Meeting of Society for Advancement of Chicano and Native American Students, San Antonio, USA.
- 2017 Symposium on Morphology Meets Physiology: A Tribute to Pierre Laurent. Society for Experimental Biology, Gothenburg, Sweden
- 2016 Symposium on The Physiology and Genetics of Fishes, Autonomous Juarez University of Tabasco, Villahermosa, Mexico
 - Symposium on Physiological Systems in Birds and Mammals, Jaboticabal, Sao Paulo, Brazil
 - Open Access Publishing Symposium, University of North Texas, Denton, Texas.
- 2015 Fisheries and Aquaculture Conference 2015. Guilin, China
 - Symposium on How Environmental Influences on Parents and Early Developmental Stages Determine "Winners and Losers". Society for Experimental Biology, Prague, Czech Republic.
- 2014 Symposium on Challenges from the Very Beginning: Developmental Physiology, Epigenetics, and Critical Windows. American Physiological Society, San Diego, CA.
 - Symposium on Epigenetics: Molecular Through Organismal Influences. SICB Annual Meeting, Austin, Texas
 - JEB Workshop on Epigenetics, Banff, Alberta, Canada
- 2012 BioEnergetics Workshop, Thermodynamics Conference. Autonomous University of the State of Mexico, Toluca, Mexico
 - Comparative Physiology Symposium. Society for Experimental Biology. Sarteano, Italy

- Workshop on Cardiovascular Physiology. Aarhus University, Aarhus, Denmark
- Symposium on Women in Science. 99th Indian Science Congress. Bhubeneswar, India
- 2010 Symposium on Environmental Adaptations of Cardio-Respiratory Systems. APS Intersociety Meeting, Westminster, CO.
 - Symposium on Integrative Developmental Systems: Where Developmental Biology, Physiology and Ecology Meet. 34th Larval Fish Conference, Santa Fe, NM.
- 2009 Symposium on Developmental Physiology and Genetics. Society for the Advancement of Chicano and Native American Students Annual Meeting, New Orleans, LA.
 - Symposium on Oxygen Stressors, Development And Adaptations Experimental Biology Annual Meeting, New Orleans, LA.
- 2006 Symposium on Physiological Complexity: Recognition, Definitions, Modeling and Predictions, American Physiological Society Comparative Physiology Conference, Virginia Beach, VA.
- 2004 Symposium on Ontogeny of Physiological Regulatory Mechanisms: Fitting into the Environment. Society for Integrative and Comparative Biology, Annual Meeting, New Orleans, LA.
- 2002 Symposium on Cardiovascular Developmental Physiology. Experimental Biology Annual Meeting, New Orleans, LA.
 - Bilateral Seminar of Cooperative Research on Development of Physiological Functions in Avian Embryos. Muroran Institute of Technology, Muroran, Japan
- 2001 Symposium on "From First Beat to Last". Society for Experimental Biology Annual Meeting, Canterbury, U.K.
- 2000 Sixth International Workshop on "Perinatal Physiology in Birds". Berlin, Germany
- 1999 Symposium on "Functional Ontogeny of Organ Systems". Annual Meeting of the Deutsche Zoologische Gesellschaft. Innsbruck, Austria
- 1997 International Symposium on "Animal Adaptation". Academic Sinica, Taipei, Taiwan. "Developmental Physiology: Past, Present and Future"
 - Workshop on "Animal Physiology Techniques", National Taiwain Normal University, Department of Biology, Taipei, Taiwan
 - Third Workshop on Comparative Physiology. "Physiological Changes During Ontogeny", Sao Paulo, Brazil
 - International Workshop on "Homeostasis and Environment During Development. Gothenberg, Sweden
- 1995 American Society of Zoologists Symposium on "The Regulation of Arterial Blood Gases ", Annual Meeting, Washington, D. C.

- International Symposium on Hypoxia, Session on "Comparative Physiology of Respiratory Pigments". Lake Louise, Alberta, Canada
- 1994 American Physiological Society Symposium on "Ontogeny of Cardiovascular Systems", San Diego, California
 - International Symposium on "Metabolism and Respiration in Vertebrates". Sao Carlos, Brazil
 - International Conference on "Environmental Physiology and Metabolism". Friedrichroda, Germany; Japanese Society for Comparative Physiology and Biochemistry, Tokyo, Japan
- 1993 Italian Association of Cardiovascular Sciences: "International Workshop on Determinants of Cardiac Shape and Function". Trento, Italy
- 1992 American Society of Zoologists Symposium on "The Form and Function of Open and Closed Circulations", Annual Meeting, Vancouver, B.C., Canada
- 1991 American Society of Zoologists Symposium Current Perspectives on the "Evolution, ecology and Comparative Physiology of Bimodal Breathing", Annual Meeting, Atlanta, GA.
- 1990 "Plenary Lecture", Japanese Society of Comparative Biochemistry and Physiology, Japan
 - Symposium on "Gas Exchange, Gas Transport, and Acid-base Regulation in Lower Vertebrates" - Max Planck Institute for Experimental Medicine Gottingen, West Germany
 - American Society of Zoologists Symposium on "The Publication Process", Annual Meeting, San Antonio, Texas
 - American Society of Zoologists Symposium on "The Complete Crab: Physiological Ecology of Everyday Life and Special Events", Annual Meeting, San Antonio, Texas
 - American Society of Zoologists Symposium on "Amphibian Metamorphosis", Annual Meeting, San Antonio, Texas
- 1989 International Union of Physiological Sciences Satellite Symposium on "Strategies on Physiological Adaptation", Copenhagen, Denmark
- 1988 Spring Systematics Symposium on "Evolutionary Innovations: Pattern and Processes", Field Museum, Chicago, Illinois
- 1986 American Society of Zoologists Symposium on "Cutaneous Exchange of Gases and Ions", Annual Meeting, Nashville, Tennessee
 - International Union of Physiological Sciences Satellite Symposium on "Diving and Hypometabolism", Cowichan Bay, British Columbia, Canada
 - National Science Foundation Workshop on "New Directions in Physiological Ecology", Washington, D.C.
 - Society for Experimental Biology Symposium on "Bimodal Respiration", Nottingham, England

- Canadian Society of Zoologists Symposium on "Respiratory Strategies in Non-mammalian Vertebrates", Annual Meeting, Saskatoon, Canada
- 1985 NATO Conference on "Evolutionary Biology of Primitive Fishes", Bamfield Marine Station, Vancouver Island, Canada
- 1984 American Society of Zoologists Symposium on "The Biology and Evolution of Lungfishes", Annual Meeting, Denver, Colorado
 - American Society of Zoologists Symposium on "Cardiovascular Adaptations in Reptiles", Annual Meeting, Denver, Colorado
 - Alfred Benzon Foundation Symposium on "Cardiovascular Shunts: Phylogenetic, Ontogenetic and Clinical Aspects", Royal Danish Academy of Sciences and Letters, Copenhagen, Denmark
- 1983 International Union of Physiological Sciences Satellite Symposium on "Respiration and Metabolism in Embryonic Vertebrates", University of Adelaide, Australia
- 1982 Symposium on "Gas Exchange, Gas Transport, and Acid base Regulation in Lower Vertebrates" - Max Planck Institute for Experimental Medicine Gottingen, West Germany

Conference/Symposium Organizing

• 2024	Co-organizer, Symposium on Variabiology: What it Means and How We Deal With It. Society for experimental
	Biology Annual Meeting. Prague, Czech Republic.
• 2023	Co-organizer, 7 th International Workshop on Integrative Biology. Toluca, Mexico.
0047	
• 2017	Co-organizer, Larval Fish Converence, Austin, Texas.
• 2015	Co-organizer. Fisheries and Aquaculture Conference. Guilin, China
• 2014	Organizer. Epigenetics: Molecular Through Organismal Influences. Society of Comparative and Integrative
	Biology, Annual Meeting. Austin, Texas
• 2009	Co-Organizer of Symposium on Oxygen Stressors,
	Development And Adaptations Experimental Biology
	Annual Meeting, New Orleans, LA.
• 2006	Organizer. Symposium on Physiological Complexity: Recognition, Definitions, Modeling and
	Predictions, American Physiological Society
	Comparative Physiology Conference, Virginia Beach,
	VA.
• 2002	Co-organizer of International Roundtable on Comparative Developmental Physiology, Glen Rose, Texas
	Developmentari nysiology, Glen Nose, Texas

• 1999	Co-organizer of International Symposium on Crustacean Physiology, International Union of Biological Sciences, Calgary, Alberta Canada
• 1998	Co-organizer of International Symposium on Cardiac Rhythms in Animals: Regulation, Development and Environmental Influences, Muroran, Japan
• 1995	Co-organizer of International Union of Biological Sciences Symposium on "Amphibian Models in the Study of Transcapillary and Lymphatic Fluid Movement", Manchester, England
• 1994	Organizer of American Physiological Society Symposium on "Ontogeny of Cardiovascular Systems", San Diego, California
• 1994	Co-organizer of "International Workshop on Developmental Physiology", University of Nevada, Las Vegas
• 1988	Co-organizer of International Union of Biological Sciences Symposium on "Comparative Physiology of Tissue Fluid Balance", Baton Rouge, Louisiana
• 1986	Co-organizer of National Science Foundation Workshop on "New Directions in Physiological Ecology", Washington, D.C.
• 1986	Co-organizer of American Society of Zoologists Symposium on "Cutaneous Exchange of Gases and Ions", Nashville, Tennessee
• 1985	Co-organizer of Alfred Benzon Foundation Symposium on "Cardiovascular Shunts: Phylogenetic, Ontogenetic and Clinical Aspects". Copenhagen, Denmark
• 1985	Co-organizer of American Society of Zoologists Symposium on "Cardiovascular Adaptations in Reptiles", Denver, Colorado

• INSTITUTIONAL SEMINARS (INVITED)

United States

- Alaska-Anchorage, University of Biology
- Alaska-Fairbanks, University of Biology
- Arizona, University of Biology
- Arizona State University Zoology
- Baylor School of Dentistry
- Baylor University Biology (2 occasions)
- Baylor University Environmental Sciences
- Boston University Biology
- Brookhaven College Biology

- Brown University Physiology (2 occasions)
- California, Irvine, University of Cellular/Developmental Biology
- California, Los Angeles, University of School of Medicine
- Chicago, University of Anatomy (2 occasions)
- Colorado, University of Population/Organismic Biology
- Connecticut, University of Biology
- Dartmouth University Physiology (2 occasions)
- Eastern Connecticut State University Biology
- Illinois, University of Physiology and Biophysics
- Harvard Medical School Cardiology
- Kalamazoo College Biology
- Loma Linda University Physiology
- Lovelace Medical Center Bioengineering (2 occasions)
- Lovelace Medical Center Oxygen Transport Group
- Louisiana State University Biology
- Massachusetts, University of, Amherst Zoology
- Massachusetts, University of, Amherst Biology
- Miami, University of Rosenstiel School of Marine and Atmospheric Science
- Midwestern State University (Wichita Falls, TX) Biology
- Mount Holyoke College, Mass. Biology (2 occasions)
- Nevada, Reno, University of Ecology, Evolution and Conservation Biology
- Nevada, Las Vegas, University of Biology (2 occasions)
- New Mexico, University of Physiology (2 occasions)
- New Mexico, State University Biology
- North Dakota, University of Biology
- North Texas, University of, Health Sciences Center Integrative Physiology
- North Texas, University of, Health Sciences Center Cell. & Mol. Biology
- North Texas, University of Biology (2 occasions)
- Northeastern University Zoology
- Northern Arizona University Biology
- Oklahoma, University of Biology
- Rensselaer Polytechnic Institute Biology
- Rutgers University, Biology
- San Diego, University of Biology
- Scripps Institution of Oceanography Physiol. Research. Lab.
- Texas, Arlington, University of Biology
- Texas, University of South Western Medical Center, Pulmonary Division
- Texas, Austin, University of Marine Science Laboratory
- Texas A & M University Biology
- Texas Woman's University Biology
- Toledo, University of Biology
- Tripler Army Medical Center Clinical Physiology

- Tulsa University Biology
- Wake Forest University
- Wellesley College, Mass. Biology
- Woods Hole Marine Biological Laboratory

International

Australia

- Baker Cardiovascular Research Institute, Melbourne
- Queen Victoria Hospital, Melbourne Pediatrics
- Melbourne, University of Zoology

Brazil

- Sao Paulo, University of Physiology
- Ribeiro Preto Campus, University of Sao Paulo Physiology
- Rio Claro Campus, University of Sao Paulo Zoology
- Federal University of Sao Carlos Biology

Canada

- Acadia University Biology
- University of Alberta Biology
- University of British Columbia Zoology (4 occasions)
- University of Calgary Biology (3 occasions)
- Dalhousie University Anatomy, Biology
- McMaster University Zoology
- Mount Allison University Biology
- University of Saskatchewan Physiology
- St. Francis Xavier University Biology

Denmark

- University of Aarhus Zoophysiology (4 occasions)
- University of Copenhagen

England

• University of East Anglia - Biological Sciences

Germany

• University of Gottingen, - Biomedical Sciences

Hong Kong

- City University of Hong Kong Biology (2 occassions)
- City University of Hong Kong Chemistry
- Hong Kong University Biology
- Education University of Hong Kong Biology

Mexico

- Universidad Autónoma del Estado de Mexico Biological Sciences
- Universidad Autónoma del Estado de Mexico Biotechnology
- Universidad Juárez Autónoma de Tabasco Aquaculture

Panama

• Smithsonian Tropical Research Institute

Puerto Rico

- University of the Central Caribbean Department of Physiology
- University of Puerto Rico Department of Biology
- University of Puerto Rico Department of Physiology and Biophysics

Japan

- Muroran Institute of Technology Electrical Engineering
- Muroran Institute of Technology International Programs
- Yamagata University School of Medicine Physiology
- Yamagata University Hospital
- Tokyo Metropolitan University Biology

Scotland

- University of Glasgow, Biodiversity, Animal Health and Comparative Medicine
- University of the West of Scotland, Biology

Taiwan

- National Taiwan University Zoology
- National Taiwan Normal University Biology
- Academia Sinica Institute of Zoology (2 occasions)

Vietnam

- Nong Lam University (Institute of Biotechnology)
- Vietnam International University (Biology)
- Vietnam National University

9. REVIEWING

• Reviewing for Journals

- Advances in Physiological Education
- American Journal of Anatomy
- American Journal of Physiology
- Animal Behaviour
- Biological Bulletin (Woods Hole)
- Canadian Journal of Zoology
- Ecology
- Fieldiana Zoology
- Functional Ecology
- Herpetologica
- Journal of Comparative Physiology
- Journal of Applied Physiology
- Journal of Experimental Biology

• Reviewing for Funding Agencies

- NASA
- National Science Foundation
 - Biology Directorate (multiple programs)
 - Undergraduate Instrumentation Program
 - International Programs
 - Science, Tech., Engin. Program (STEP)
- National Institutes of Health
- American Heart Association
- NATO Scientific Affairs Division
- Fonds de Recerche du Quebec
- National Science and Engineering Research Council (Canada)

• Consulting for Publishers

Benjamin/Cummings

- Physiological Zoology
- PLOS One
- Science articles, book review s
- Journal of Experimental Zoology
- Marine Behaviour and Physiology
- Nature
- Natural History
- Physiological Reviews
- Journal of Morphology
- Proceedings of the Royal Society B

- The Canada Council
- Research Corporation
- Hudson River Foundation
- Jefrees Trust
- Louisiana Board of Regents
- Guggenheim Foundation
- Mass. Water Resources Board
- New Zealand Federal Research Agencies (various)
- Australian Research Council
- British Federal Research
- Netherlands Council for the Earth and Life Sciences
- National Science Center (Poland)
- Houghton Mifflin

- Blackwell
- Cambridge University Press
- Chapman and Hall
- D. Van Nostrand
- Encyclopedia Britannica
- Harper and Row
- William C. Brown
- National Geographic Publications
- University of North Texas Press
- Pearson Publishing

- Oxford University Press
- Academic Press
- Saunders College Publishing
- Sinauer Associates
- Times Mirror/Mosby
- Willard Grant
- W. H. Freeman
- Iowa State University Press
- Graduate Record Exam
- Prentice-Hall

10. PUBLICATIONS

1. BOOKS (Authored or Co-authored)

• 2016	(11)	Burggren, W.W., Bagatto, B., Brewster, J. and Hester, L. Study Guide
		for Biological Science. Prentice Hall, Upper Saddle River, New
		Jersey. 6 th . Ed.
• 2013	(10)	Burggren, W.W., Bagatto, B., Brewster, J. and Hester, L. Study Guide
		for Biological Science. Prentice Hall, Upper Saddle River, New
	<i>(</i> -)	Jersey. 5 th . Ed.
• 2010	(9)	Burggren, W.W., Bagatto, B., Brewster, J. and Hester, L. Study Guide
		for Biological Science. Prentice Hall, Upper Saddle River, New
	$\langle 0 \rangle$	Jersey. 4 th . Ed.
• 2008	(8)	Burggren, W.W., Bagatto, B., Brewster, J. and Hester, L. Study Guide
		for Biological Science. Prentice Hall, Upper Saddle River, New Jersey. 3 rd . Ed
• 2005	(7)	Burggren, W.W. , Bagatto, B., Brewster, J. and Hester, L. Study Guide
• 2005	(')	for Biological Science. Prentice Hall, Upper Saddle River, New
		Jersey. 2 nd . Ed.
• 2002	(6)	Burggren, W. and Hester, L. Study Techniques for the Sciences.
	()	Prentice Hall. Upper Saddle River, New Jersey.
	(5)	Burggren, W.W., Bagatto, B., Brewster, J. and Hester, L. Study Guide
		for Biological Science. Prentice Hall, Upper Saddle River, New
		Jersey.
•2001	(4)	Randall, D. J., Burggren, W.W., and French, K. <u>Animal Physiology</u> . 5th
	$\langle \mathbf{O} \rangle$	Edition. W. H. Freeman, New York.
	(3)	Minor, V.C., Działowski, E.D., Burggren, W.W. , Goodloe, L. and Guild,
		N. <u>Study Guide to Accompany Life, the Science of Biology, 6th</u> ed. Sinauer, Sunderland, MA.
•1997	(2)	Randall, D. J., Burggren, W.W., French, K., and Fernald, R. <u>Eckert</u>
•1331	(2)	<u>Animal Physiology</u> . 4th Edition. W. H. Freeman, New York.
•1981	(1)	Randall, D.J., Burggren, W.W. , Haswell, M.S. and Farrell, A.P. The
	()	<u>Evolution of Air Breathing in Vertebrates</u> . Cambridge University
		Press, Cambridge, England.

2. BOOKS (Edited or Co-edited)

• 2018	(8)	Burggren, W. and Dubansky, B. Editors. Development and
		Environment. Springer, Cham, Switzerland.
• 2006	(7)	Warburton, S., Burggren, W.W., Pelster, B., Reiber, C, and Spicer, J.
		Comparative Developmental Physiology. Oxford University
		Press, New York.
• 1997	(6)	Burggren, W.W. and B. Keller. Editors. Development of
		Cardiovascular Systems: Molecules to Organisms. Cambridge

University Press, New York.

- **1992** (5) Feder, M.E. and **Burggren, W.W.**, Editors. <u>Environmental Physiology</u> <u>of the Amphibia</u>. University of Chicago Press, Chicago.
- **1988** (4) **Burggren, W.W.** and McMahon. B., Editors. <u>Biology of the Land Crabs</u>. Cambridge University Press, New York.
- 1987 (3) Feder, M.E., Bennett, A. F., Burggren, W.W., and Huey, R. Editors. <u>New Directions in Physiological Ecology</u>. Cambridge University Press, New York
 - (2) Bemis, W., **Burggren, W.W.** and Kemp, N., Editors. <u>The Biology and</u> <u>Evolution of Lungfishes</u>. Alan R. Liss, New York.
- 1985 (1) Johansen, K. and Burggren, W.W., Editors. <u>Cardiovascular Shunts:</u> <u>Phylogenetic, Ontogenetic and Clinical Aspects</u>. Munksgaard, Copenhagen.

3. BOOK CHAPTERS

- 2023 (41) Khursigara, A.J., Roberts, A., Burggren, W. and Hamilton, T.J. Behavior and Toxicology. In: Encyclopedia of Fish Physiology, 2nd edition. Elsevier. Doi.org/10.1016/B978-0-323-90801-6.00037-9
- 2021 (40) Mueller, C., Burggren, W.W., and Tazawa, H. The Physiology of the Avian Embryo. In: Sturkie's Avian Physiology. Seventh Edition. Ed. Scanes, C.J., Dridi, Sami. Elsevier, New York. Pp. 995-1026.
 - (39) Burggren, W. W. Gobierno y Autonomia Universitaria en Canada, Estados Unidos y Mexico: Un Estudio Comparativo. En: Autonomia: Legado y Futuro. Prensa de la Universidad del Estado de Mexico.
- 2018 (38) Burggren, W. W. and Dubansky, B. The Nexus of Development and Environment. In: Development and Environment. Editors: Burggren, W. and Dubansky, B. Springer, Cham, Switzerland.
 - (37) Pelster, B. and Burggren, W. W. Responses to Environmental Stressors in Developing Animals: Costs and Benefits of Phenotypic Plasticity. In: Development and Environment. Editors: Burggren, W. and Dubansky, B. Springer, Cham, Switzerland.
- 2017 (36) Burggren, W.W., Dubansky, B. and Bautista, N. Cardiovascular Development Of Embryonic And Larval Fishes. In: Fish Physiology. Vol. 35. The Cardiovascular System: Design, Control and Function. Editors: Gamperl, K. and Gillis, T. Academic Press.
 - (35) Burggren, W.W. Epigenetics in insects: Mechanisms, phenotypes, and ecological and evolutionary implications. In Advances in Insect Physiology. Vol 53.1-30 Editors R. Jurenka and H. Verlinden. Elsevier, New York.

	(34)	Burggren, W.W., Chapman, K., Keller, B., Monticino, M. and Torday,
		J. Interdisciplinarity In The Biological Sciences. In Handbook of
		Interdisciplinarity. Eds. Frodeman, R, Mitchum, C and Hollbrook,
		J.B. Vol II. Oxford University Press.
• 2015	(33)	Mueller, C., Burggren, W.W., and Tazawa, H. The Physiology of the

- (33) Mueller, C., Burggren, W.W., and Tazawa, H. The Physiology of the Avian Embryo. In: Sturkie's Avian Physiology. Sixth Edition. Ed. Scanes, C.J. Elsevier, New York. Pp.739766.
- 2010 (32) Burggren, W.W., Chapman, K., Keller, B., Monticino, M. and Torday, J. Interdisciplinarity In The Biological Sciences. In Handbook of Interdisciplinarity. Eds. Frodeman, R, Mitchum, C and Hollbrook, J.B. Oxford University Press.
- 2009 (31) Burggren, W.W. and Pan, T-C. Chemoreceptive Control of Ventilation in Amphibians and AirBreathing Fishes. In: Structure, Evolution and Function of the Airway Chemoreceptors in the Vertebrates. Eds. Zaccone, G., Cutz, E., Adriaensen, D., Nurse, C., and Mauceri, A. Science Publishers, Enfield,N.H.
- 2008 (30) Burggren, W.W. and Bagatto, B. Cardiovascular Anatomy and Physiology of Larval Fishes. In: Fish Larval Physiology. Eds. N. Finn, B.G. Kapoor. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi. Pp 119-162
- 2007 (29) Burggren, W.W. and Reiber, CL. Evolution of Cardiovascular Systems. In: The Endothelium: A Comprehensive Reference. Ed. W. Aird. Cambridge University Press.
- 2006 (28) Yoneta, H., Fukazawa, K., Dzialowski, E.M., Burggren, W.W., and Tazawa, H. 2006. Does sequence of exposure to altered ambient temperatures affect the endothermic heart rate response of newly hatched chicks? In: New Insights into Fundamental Physiology and Perinatal Adaptation of Domestic Fowl. Eds. S.Yahav and B. Tzschentke, Nottingham Univ. Press, UK. P. 15-28.
 - (27) Fukuoka, S., Khandoker, A.H., Dzialowski, E.M., Burggren, W.W., and Tazawa, H. Development of endothermic heart rate response in emu (*Dromaius novaehollandiae*) embryos. In. New Insights into Fundamental Physiology and Perinatal Adaptation of Domestic Fowl. Eds. S. Yahav and B. Tzchentke. Nottingham University Press, Nottingham, UK. pp. 29-42.
 - (26) Burggren, W.W. Complexity change during physiological development. In: <u>Comparative Developmental Physiology</u>. Eds: Warburton, S., Burggren, W.W., Pelster, B., Reiber, C, and Spicer, J. Oxford University Press, New York. 29-49.
- 2002 (25) Burggren, W.W. Form, Function and the Nature of Adaptation. In: Biological Science, by S. Freeman. Prentice Hall: Englewood Cliffs, New Jersey.
- **1998** (24) Wang, T. B., Smits, A. W., and **Burggren, W.W.** Pulmonary function in reptiles. In: Biology of the Reptilia, Vol. 19, Morphology C. C.

Gans and A. Gaunt. Editors. pp. 297-374. Society for the Study of Amphibians and Reptiles, St. Louis, MO.

- 1997 (23) Burggren, W.W. and Keller, B. Why Study Cardiovascular Development? In: <u>Development of Cardiovascular Systems:</u> <u>Molecules to Organisms</u>. Burggren, W.W. and B. Keller. Editors. pp. 1-4. University of Cambridge Press, New York.
 - (22) Burggren, W.W. and Fritsche, R. Amphibian Cardiovascular Development. In: <u>Development of Cardiovascular Systems:</u> <u>Molecules to Organisms</u>. Burggren, W.W. and B. Keller. Editors. pp. 166-182. University of Cambridge Press, New York.
 - (21) Keller, B. and Burggren, W.W. Future Directions in Developmental Cardiovascular Sciences. In: <u>Development of Cardiovascular</u> <u>Systems: Molecules to Organisms</u>. Burggren, W.W. and B. Keller. Editors. pp. 281-286. University of Cambridge Press, New York.
 - (20) Burggren, W.W., Farrell, A. P. and Lillywhite, H. B. Vertebrate cardiovascular systems. In: <u>Handbook of Comparative</u> <u>Physiology</u>. W. Dantzler, Editor. pp. 215-308. Oxford University Press, Oxford, U.K.
 - (19) Burggren, W.W. and Territo, P. Early Development of Blood Oxygen Transport. In: <u>Hypoxia and Brain</u>. J. Houston and J. Coates. (eds.) pp: 45-56. Queen City Printer, Burlington, Vermont.

• 1995

- (18) Burggren, W.W. Central cardiovascular function in amphibians: qualitative influences of phylogeny, ontogeny and seasonality. In: <u>Mechanisms of Systemic Regulation</u>: Vol. 1 Respiration and Circulation. N. Heisler (ed.). pp. 175-197. Springer-Verlag, Berlin.
- 1992 (17) Reiber, C.L., McMahon, B.R. and Burggren, W.W. Redistribution of cardiac output in response to hypoxia: a comparison of the freshwater crayfish, *Procambarus clarkii*, and the lobster, *Homarus americanus*. In: <u>Phylogenetic Models in Functional</u> Coupling of the CNS and the Cardiovascular System. Comparative Physiology vol. 11:22-28. R.B. Hill, K. Kuwasawa, B.R. McMahon and T. Kuramoto (eds.). Basel, Karger.
 - (16) Burggren, W.W. Respiratory Metamorphosis during the Water-to-Land Transitions in Developing Vertebrates and Invertebrates. In: <u>The Vertebrate Gas Transport Cascade: Adaptations to</u> <u>Environment and Mode of Life</u>. Editors, E. Bicudo, M. Glass and A. Abe. CRC Press, Boca Raton, Fl.
 - (15) Burggren, W.W. and Just, J.J. Developmental changes in Amphibian physiological systems. In: <u>Environmental Physiology of the</u> <u>Amphibia</u>. Editors, M.E. Feder and W.W. Burggren. University of Chicago Press, Chicago.
 - Burggren, W.W. The Importance of an Ontogenetic Perspective in Physiological Studies: Amphibian Cardiology as a Case Study.
 In: <u>Physiological Adaptations in Vertebrates: Respiration</u>,

<u>Circulation and Metabolism</u>. Editor S.C. Wood, R. Weber, A. Hargens and R., Millard. Dekker, New York. pp. 235-253.

- 1991 (13) Burggren, W., McMahon, B., and Powers, D. Blood. In: <u>Comparative</u> <u>Animal Physiology</u>, 4th Edition. Editor C. Ladd Prosser. Wiley, New York. pp. 437-508.
 - (12) Burggren, W. and Roberts, J. Respiration and Metabolism. In: <u>Comparative Animal Physiology</u>, 4th Edition. Editor C. Ladd Prosser. Wiley, New York. pp. 353-435.
 - (11) Burggren, W.W. Does comparative respiratory physiology have a role in evolutionary biology (and vice versa)? In: <u>Comparative Insights</u> <u>into Strategies for Gas Exchange and Metabolism</u>. Editors, A.J. Woakes, M.K. Grieshaber, and C.R Bridges. Cambridge University Press. pp. 1-13.
- 1990 (10) Burggren, W.W. and Bemis, W.E. Studying physiological evolution: Paradigms and pitfalls. In: <u>Evolutionary Innovations: Patterns</u> <u>and Processes</u>. Editor M.H. Nitecki. Oxford University Press, Oxford. pp. 191-228.
- 1989 (9) Burggren, W.W. The structure and function of amphibian lungs. In: <u>Comparative Pulmonary Physiology: Current Concepts</u>. Editor S. Wood. Dekker, New York. pp. 153-192.
- 1988 (8) Burggren, W.W. and McMahon, B.R. Circulation In: <u>Biology of the</u> <u>Land Crabs</u>. Editors W. W. Burggren and B.R. McMahon. Cambridge University Press, New York. pp. 298-332.
 - (7) McMahon, B.R. and Burggren, W.W. Respiration In: <u>Biology of the Land Crabs</u>. Editors W. W. Burggren and B.R. McMahon. Cambridge University Press, New York. pp. 249-297.
- 1987 (6) Burggren, W.W. Invasive and Non-invasive Methodologies in Physiological Ecology: A Plea for Integration. In: <u>New Directions</u> <u>in Physiological Ecology</u>. Editors, Feder, M.E., Bennett, A. F., Burggren, W.W., and Huey, R. Cambridge University Press, New York. pp. 251-272.
- 1986 (5) Burggren, W.W., Johansen, K. and McMahon, B.R. Respiration in primitive fishes. In: <u>The Biology of Primitive Fishes</u>. Editors R.E. Foreman, A. Gorbman, J. M. Dodd and R. Olsson. Plenum, New York. pp. 217-252.
- 1985 (4) Feder, M.E. and Burggren, W.W. The regulation of cutaneous gas exchange in vertebrates. In: <u>Current Topics and Trends:</u> <u>Comparative Physiology and Biochemistry</u>. Vol. A: Respiration, Circulation, Metabolism. Editor R. Gilles. Springer-Verlag, Berlin. pp. 101-113.
 - (3) Burggren, W.W. Hemodynamics and Regulation of Cardiovascular Shunts in Reptiles. In: <u>Cardiovascular Shunts: Phylogenetic,</u> <u>Ontogenetic and Clinical Aspects</u>. Editors K. Johansen and W. Burggren. Munksgaard, Copenhagen. pp 121-142.
- 1984 (2) Burggren, W.W. Transition of Respiratory Processes during

Amphibian Metamorphosis: From Egg to Adult. In: <u>Respiration</u> <u>and Metabolism in Embryonic Vertebrates</u>. Editor R. Seymour. Junk, The Hague. pp. 31-53.

• 1980 (1) Johanson, K. and Burggren, W.W. Cardiovascular Function in Lower Vertebrates. In: <u>Hearts and Heart-like Organs</u>. Editor G. Bourne. Academic Press, New York. pp. 61-117.

4. BOOK REVIEWS

- **1997** (2) **Burggren, W.W.** Review of "Air Breathing Fishes. Evolution, Diversity and Adaptation by Jeffrey B. Graham. Science. 277:1056-1057.
- **1994** (1) **Burggren, W.W.** Review of "Air Breathing Fishes of India" by J.S. Datta Munshi and G.M. Hughes. Copeia 1994.(3)

5. REFEREED JOURNAL ARTICLES

• 2024	(253)	Fahlman, A., Burggren, W. and Milsom, W. The role of cognition as a factor regulating the diving responses of animals, including humans. Journal of Experimental Biology. 227(20) :jeb246472.
	(252)	Burggren, W., Dzialowski, E. and Tzschentke, B. The avian embryo as a time-honored animal model in developmental, biomedical and agricultural research. Philosophical Proceedings of the Royal Society – B. In Press.
	(251)	Martinez-Bautista, G., Padilla, P., Burggren, W. Genetic basis for morphological variation in the Zebrafish <i>Danio rerio</i> : Insights from a low heterozygosity line. Fishes. 9(5), 164. doi.org/10.3390/fishes9050164.
	(250)	Burggren, W., Fahlman, A. and Milsom, W. Breathing patterns and associated cardiovascular changes in intermittently breathing animals: (Partially) correcting a semantic quagmire. Experimental Physiology. doi.org/ 10.1113/ep091784.
	(249)	 Crossley, D.A. 2nd, Bagatto, B.P., Dzialowski, .EM., Burggren, W.W., Hicks, J.W. Short communication: Baroreflex function in embryonic emus (<i>Dromiceius novaehollandiae</i>). Comp Biochem Physiol A Mol Integr Physiol. 290:111576.
	(248)	Göpel, T. and Burggren, W . Temperature and hypoxia trigger developmental phenotypic plasticity of cardiorespiratory physiology and growth in the parthenogenetic marbled crayfish, Procambarus virginalis Lyko, 2017. Comparative Biochemistry and Physiology A Molecular and Integrative Physiology. 288:111562.

• 2023	(247)	Burggren, W. and Mendez-Sanchez, F. "Bet hedging' against
		climate change in developing and adult animals: roles for
		stochastic gene expression, phenotypic plasticity,
		epigenetic inheritance and adaptation. Frontiers in
		Physiology DOI 10.3389/pphys.2023.1245875.
	$\langle 0, 4, 0 \rangle$	

- Bautista, N., Crespel, A., Martinez-Bautista, G. and Burggren,
 W. Dietary crude oil exposure during sex differentiation skewes adult sex ratio towards males in the zebrafish. Science of the Total Environment. DOI 10.1016/j.scitotenv.2023.164449.
- (245) Chaput, S.-L., Burggren, W., Hurd, P. and Hamilton, T. Zebrafish (*Danio rerio*) shoaling in light and dark conditions involves a complex interplay between vision and lateral line. Behavioral Brain Research. 439:114228
- (244) Burggren, W., Andrewartha, S.J., Mueller, C.A., Dubansky, B. and Tazawa, H. Acid-base and hematological regulation in chicken embryos during internal progressive hypercapnic hypoxia. Respiratory Physiology and Neurobiology. 308:103996.
- 2022 (243) Martinez-Bautista, G., Martínez-Burguete, T., Peña-Marín, E., Jiménez Martínez, E., Camirillo-Coop, S., Burggren, W. W., Álvarez-González, A. Hypoxia- and hyperoxia-related gene expression dynamics during developmental critical windows of the tropical gar *Atractosteus tropicus*. Comparative Biochemistry and Physiology - Part A: Molecular & Integrative Physiology. 263:111093.
 - (242) Vazquez Roman, K., Burggren, W. W.. Metabolic responses to crude oil during early life stages reveal critical developmental windows in the zebrafish (*Danio rerio*). Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology. 254:109274.
 - (241) Branum, S., Tazawa, H., Burggren, W. W. Physiological regulation of growth, hematology and blood gases in chicken embryos in response to low and high incubation humidity. Frontiers in Physiology. doi.org/10.3389/fphys.2022.880737
 - (240) Göpel, T. and Burggren, W. Cores of reproducibility in physiology: Insufficient reporting of experimental variables as a cause for non-reproducibility in animal physiology? A Case Study. American Journal of Physiology. 323(3):R363-R374.
 - (239) Lewallen, M. and Burggren, W. Metabolic cost of development, regeneration, and reproduction in the planarian Schmidtea mediterranea. Comparative Biochemistry and Physiology A. Molecular and Integrative Physiology. 265:111127.

	(238)	Córdova-de la Cruz, S.E., Martinéz Bautista, G., Peña-Marín, E.M, Martinéz-Garcia, R., Núñez-Nogueira, G., Adams, R.H., Burggren, W., Álvarez-González, C.A. Morphological and cardiac alterations after crude oil exposure in the early- life stages of the tropical gar (<i>Atractosteus tropicus</i>). Environmental Science and Pollution Research. 29(15):22281-22292.
2021	(237)	Dunton, A, Göpel, T., Ho, D and Burggren, W. Form and function of the vertebrate and invertebrate blood-brain barriers. International Journal of Molecular Sciences. 22(22):12111.
	(236)	Flores Santin, J. and Burggren, W.W. Beyond the chicken: Alternative avian models for developmental physiological research. Frontiers in Physiology. https://doi.org/10.3389/fphys.2021.712633
	(235)	Amaral-Silva, L., Rojas Antich, M., Dubansky, B., Tazawa, H. and Burggren, W.W. Embryotoxicity and physiological compensation in chicken embryos exposed to crude oil. Environmental Toxicology and Chemistry. 40 (8), 2347-2358
	(234)	Burggren, W.W. Developmental Physiology: Grand challenges. Frontiers in Physiology – Developmental Physiology. 12:706061.
	(233)	Hamilton, T.J., Krook, J., Szaszkiewicz, J. and Burggren, W . Analysis of the potential behavioral impact of methanol when used as a solvent: Dataset from zebrafish (<i>Danio rerio</i>) behavioral research. Data in Brief. 36(1):107018.
	(232)	Bautista, N., Amaral, L., Dzialowski, E. and Burggren, W . Dietary exposure to low levels of crude oil affects physiological and morphological phenotype in adults and their eggs and hatchlings of the king quail (<i>Coturnix</i> <i>chinensis</i>). Frontiers in Physiology – Developmental Physiology. 12:661943.
	(231)	 Karki, M., Jangid, R.K, Anish, R, Seerva, R.N.H., Bertocchio, J-P, Hotta, T, Msaouel, P., Jung, S.Y., Grimm, S.L., Coarfa, C., Weissman, B.E., Ohi, R., Verhey, K.J., Hodges, H.C., Burggren, W., Dere, R., Park, I.Y., Prasad, B. V. V., Rathmell, W.K., Walker, C.L. and Tripathi, D.N. A cytoskeletal function for PBRM1 reading methylated microtubules. Science Advances. 7(14):eabf2866.
	(230)	 Martínez, G., Peña, E., Martínez, R., Camarillo, S., Burggren, W. and Alvarez, A. Survival, growth, and development in the early stages of the tropical gar <i>Atractosteus tropicus</i>: Developmental critical windows and the influence of temperature, salinity and oxygen availability. Fishes. 6, 5. doi.org/10.3390/fishes6010005

•

	(229)	Hamilton, T.J., Krook, J., Szaszkiewicz, J. and Burggren, W . Shoaling, boldness, anxiety-like behavior and locomotion in zebrafish (<i>Danio rerio</i>) are altered by acute benzo[a]pyrene exposure. Science of the Total Environment. 774: 145702
	(228)	Burggren, W. Putting the August Krogh Principle to work in developmental physiology. Comparative Biochemistry and Physiology A Molecular and Integrative Physiology. 252:110825.
2020	(227)	Burggren, W. and Rojas Antich, M. Angiogenesis in the avian embryo chorioallantoic membrane: A perspective on research trends and a case study on toxicant vascular effects. Journal of Cardiovascular Development and Disease. 7(4):56.
	(226)	Sadruddin, S., Barnett, B., Ku, L., Havemann, D, Jucowski, S., Herrington, R. and Burggren, W. Maternal serum concentration of anti-Müllerian hormone is a better predictor than follicle stimulating hormone of successful blastocysts development during IVF treatment. Plos One. 15(10):e0239779
	(225)	Lewallen, M. and Burggren, W.W. Metabolic physiology of the freshwater planaria <i>Girardia dorotocephela</i> and <i>Schmidtea mediterranea</i> : Reproductive mode, specific dynamic action and temperature. American Journal of Physiology: Regulatory, Integrative and Comparative. 319(4) R428-R438.
	(224)	Amaral, L., Tazawa, H., Bicego, K and Burggren, W.W. Metabolic and hematological responses to endotoxin- induced inflammation in chicks experiencing embryonic 2,3,7,8-Tetrachlorodibenzodioxin exposure. Environmental Toxicology and Chemistry. 39(11): 2208-2220.
	(223)	Walker, C. and Burggren , W . Remodeling the epigenome and (epi)cytoskeleton: A new paradigm for co-regulation by methylation. Journal of Experimental Biology. 223: 10.1242/jeb.220632
	(222)	Bautista, N., Crespel, A., Crossley, J., Padilla, P., Crossley, J. and Burggren, W . Parental Transgenerational epigenetic inheritance related to dietary crude oil exposure in <i>Danio</i> <i>rerio</i> . Journal of Experimental Biology. 220: jeb222224.
	(221)	Burggren, W.W. Phenotypic switching resulting from developmental plasticity: Fixed or reversible? Frontiers in Physiology. https://doi.org/10.3389/fphys.2019.01634.
	(220)	Magnuson, J., Bautista, N, Lucero, J., Lund, A., Xu, E., Schlenk, D., Burggren, W., Roberts, A. Exposure to crude oil induces retinal apoptosis and impairs visual function in fish. Environmental Science and Technology. 54(5):2843-2850.

•

	(219)	Garduno, M., Mendez Sanchez, F. Burggren, W., García Martínez, J.L.A., Metabolic rate and hypoxia tolerance in <i>Girardinichthys multiradiatus</i> (Pisces: Goodeidae), an endemic fish at high altitude in tropical Mexico. Comparative Biochemistry and Physiology A Molecular and Integrative Physiology. 239:110576
	(218)	Damsgaard, C., Baliga, V., Bates, E, Burggren, W ., McKenzie, D., Taylor, E, and Wright, P. Evolutionary and cardio- respiratory physiology of air-breathing and amphibious fishes. Acta Physiologica Scandinavica. 228(3) e13406
• 2019	(217)	Burggren, W.W., Filigonio, R. and Wang, T. Cardiovascular shunting in vertebrates: a practical integration of competing hypotheses. Biological Reviews. 95(2): 449-471
	(216)	Burggren, W.W,, Arriaga-Bernal, J.C,, Méndez-Arzate, P.M., Méndez-Sánchez, J.F Metabolic physiology of the Mayan cichlid fish (<i>Mayaheros uropthalmus</i>): Re-examination of classification as an oxyconformer. Comparative Biochemistry and Physiology. A Molecular and Integrative Physiology. 237:110538.
	(215)	Burggren, W., Bautista, N. Invited review: Development of acid- base regulation in vertebrates. Comparative Biochemistry and Physiology A Molecular and Integrative Physiology. 236:110518.
	(214)	Bautista, N. and Burggren, W. Parental stressor exposure simultaneously conveys both adaptive and maladaptive larval phenotypes through epigenetic inheritance in the zebrafish (<i>Danio rerio</i>). Journal of Experimental Biology. 222(17). pii: jeb208918.
	(213)	Ho, D. and Burggren, W.W . Blood-brain barrier function, cell viability, and gene expression of tight junction-associated proteins in the mouse are disrupted by crude oil, benzo[a]pyrene, and the dispersant Corexit. Comparative Biochemistry and Physiology C. Toxicology and Pharmacology. 223:96-105.
	(212)	 Pasparakis, C., Grosell, M., Esbaugh, A., Burggren, W.W. Physiological impacts of DeepWater Horizon oil on fish. Comparative Physiology and Biochemistry. Part C. Toxicology and Pharmacology. 224: 108558.

(211)	Burggren, W.W., Mendez-Sanchez, J.F., Martínez Bautista, G., Peña, E., Martínez García, R., and Alvarez González, C.A. Developmental changes in oxygen consumption and hypoxia, tolerance in the heat and hypoxia-adapted tabasco line of the Nile tilapia, <i>Oreochromis niloticus</i> , with a survey of the metabolic literature for the genus <i>Oreochromis</i> . Journal of Fish Biology. doi: 10.1111/jfb.13945.
(210)	 Perrichon, P., Stieglitz ,J.D., Xu, E.G., Magnuson, J.T., Pasparakis, C., Mager, E.M., Wang, Y.,Schlenk, D., Benetti, D.D., Roberts, A.P., Grosell, M., Burggren, W.W. Mahi-mahi (<i>Coryphaena hippurus</i>) life development: morphological, physiological, behavioral and molecular phenotypes. Developmental Dynamics. doi: 10.1002/dvdy.27.
(209)	Velazquez-Rodriguez, A.S., García-Cruz, A, Burggren, W. and RodrÍguez-Romero, F. Physical and chemical variables promote successful nesting in high mountain <i>Sceloporus</i> Lizards in Central México. Herpetologica. 75(2) 134-142.
(208)	Burggren, W . Inadequacy of typical physiological experimental protocols for investigating consequences of stochastic weather events emerging from global warming. American Journal of Physiology. Regulatory, Comparative and Integrative. 316(4):R318-R322
(207)	Bautista, N., Pothini, T., Meng, K. and Burggren, W.W. Behavioral consequences of dietary exposure to crude oil extracts in the Siamese fighting fish (<i>Betta splendens</i>). Aquatic Toxicology. 207:32-42.
(206)	Mendez-Sanchez, J.F. and Burggren , W.W. Very high blood oxygen affinity and large bohr shift differentiates the air- breathing siamese fighting fish (<i>Betta splendens</i>) from the closely related anabantoid the blue gourami (<i>Trichopodus</i> <i>trichopterus</i>). Comparative Biochemistry and Physiology A Molecular and Integrative Physiology. 229:45-51
(205)	Mendez-Sanchez, J.F. and Burggren, W.W. Hypoxia-induced developmental plasticity of larval growth, gill and labyrinth organ morphometrics in two anabantoid fish: the facultative air-breather Siamese fighting fish (<i>Betta</i> <i>splendens</i>) and the obligate air-breather the blue gourami (<i>Trichopodus trichopterus</i>). Journal of Morphology. 280(2):193-204.

• 2018	(204)	Burggren, W., Madasu, D., Hawkins, K. and Halbert, M. Marketing via email solicitation by predatory (and legitimate) journals: An evaluation of quality, frequency and relevance. Journal of Librarianship and Scholarly Communication. eP2246 https://doi.org/10.7710/2162-3309.2246
	(203)	Perrichon, P., Mager, E. Pasparakis, C. Stieglitz, J., Benetti, D, Grosell, M. and Burggren, W. Combined effects of elevated temperature and Deepwater Horizon oil exposure on the cardiac performance of larval mahi-mahi, <i>Coryphaena hippurus</i> . PLOS One. 13(10):e0203949. doi: 10.1371/journal.pone.0203949.
	(202)	Burggren, W. Developmental phenotypic plasticity helps bridge stochastic weather events associated with climate change. Journal of Experimental Biology. doi:10.1242/jeb.16.
	(201)	Dubansky, B., Verbeck, G., Mach, P., Burggren, W.W. Methodology for exposing avian embryos to quantified levels of airborne aromatic compounds associated with crude oil spills. Environmental Toxicology and Pharmacology. 10.1016/j.etap.2018.01.005.
	(200)	Flores-Santin, J. Antich, M. R., Tazawa, H, Burggren, W.W. Hematology from embryo to adult in the bobwhite quail (<i>Colinus virginianus</i>): Differential effects in the adult of clutch, sex and hypoxic incubation. Comparative Biochemistry and Physiology Part A. 218:24-34
• 2017	(199)	Tattersal, G and Burggren, W. <i>Xenopus</i> and the art of oxygen maintenance. Journal of Experimental Biology. 220(22):4084-4087.
	(198)	Burggren, W. and Elmonoufy, N. Critical developmental windows for morphology and hematology revealed by intermittent and continuous hypoxic incubation in embryos of quail (<i>Coturnix coturnix</i>). PLoS ONE 12(9): e0183649. https://doi.org/10.1371/journal.pone.0183649.
	(197)	Reyna, K. and Burggren, W. Altered embryonic development in northern bobwhite quail(<i>Colinus virginianus</i>) induced by pre-incubation oscillatory thermal stresses mimicking global warming predictions. PLOS One. 12(9): e0184670. doi.org/10.1371/journal.pone.0184670
	(196)	Bolin, G., Dubansky, B., Burggren, W. Incubation relative humidity influences renal morphological and physiological remodeling in the embryo of the chicken (<i>Gallus gallus</i> <i>domesticus</i>). Comparative Biochemistry & Physiology Part A. 204:185-196.

	(195)	Perrichon, P., Grosell, M. and Burggren, W.W. Heart performance determination by visualization in larval fishes: influence of alternative models for heart shape and volume. Frontiers in Physiology – Aquatic Physiology. 82017464.
	(194)	Mendez-Sanchez, J.F. and Burggren, W.W . Cardio-respiratory physiological phenotypic plasticity in developing air breathing anabantid fishes (<i>Betta splendens</i> and <i>Trichopodus trichopterus</i>). Physiological Reports. e13359.
	(193)	Perrichon, P., Pasparakis, C., Mager, E., Stieglitz, J., Benetti, D., Grosell, M. and Burggren, W. Morphology and cardiac physiology are differentially affected by temperature in developing larvae of the marine fish mahi-mahi (<i>Coryphaena hippurus</i>). Biology Open. 6(6): 800–809
	(192)	Burggren, W.W., Souder, B. and Ho, D. Metabolic rate and hypoxia tolerance are affected by group interactions and sex in the fruit fly (<i>Drosophila melanogaster</i>): New data and a literature survey. Biology Open. 2017:6(471-480).
	(191)	Mueller, C.M., Tazawa, H., and Burggren, W.W. Dynamics of acid-base and hematological regulation in day 15 chicken embryos (<i>Gallus gallus domesticus</i>) exposed to graded hypercapnia and hypoxia. Journal: Respiratory Physiology & Neurobiology. 239:55-63.
• 2016	(190)	Crossley II, D.A., Burggren, W.W. , Reiber, C.L., Altimiras, J., Rodnick, K.J. Mass transport: Circulatory system with emphasis on non-endothermic species. Comprehensive Physiology. DOI: 10.1002/cphy.c150010.
	(189)	Khursigara, A.J., Perrichon, P., Bautista, N.M., Burggren, W.W. , and Esbaugh, A.A. Cardiac function and survival are affected by crude oil in larval red drum, <i>Sciaenops</i> <i>ocellatus</i> . Science of the Total Environment. 579:797- 804.
	(188)	Watson, C.M. and Burggren, W.W. Interspecific differences in metabolic rate and metabolic temperature sensitivity create distinct thermal ecological niches in lizards (Plestiodon). PLOS One. Doi.org/10.1371/journal.pone
	(187)	Burggren, W.W., Flores Santin, J. and Rojas, M. Cardio- respiratory development in bird embryos: new insights from a venerable animal model. Revista Brasileira de Zootecnia. 45(11):709-728.

	(186)	Burggren, W. W., Bautista Martinez, G., Camarillo Coop, S., Márquez, Couturier, G., Páramo Delgadillo, S. and Alvarez González, C.A. Developmental cardiorespiratory physiology of the air breathing tropical gar, <i>Atractosteus</i> <i>tropicus</i> . American Journal of Physiology: Regulatory, Integrative and Comparative. 311(4):R689-R701.
	(185)	Oziolor, E.M., Dubansky, B., Burggren, W. and Matson, C.W. Cross-resistance in Gulf killifish (<i>Fundulus grandis</i>) populations resistant to dioxin-like compounds. Aquatic Toxicology. 175:222-231.
	(184)	Burggren, W.W. Epigenetic inheritance and its role in evolutionary biology: Re-evaluation and new perspectives. Biology. <i>5</i> (2), 24; doi:10.3390/biology5020024.
	(183)	Branum, S., Tazawa, H. and Burggren, W.W. Phenotypic developmental plasticity induced by pre-incubation egg storage in chicken embryos (<i>Gallus gallus domesticus</i>). Physiological Reports. 4(4). pii: e12712. doi: 10.14814/phy2.12712.
	(182)	Mueller, C.A, Willis, E. and Burggren, W.W. Salt sensitivity of the morphometry of <i>Artemia franciscana</i> during development: A demonstration of 3-D critical windows. Journal of Experimental Biology. 219:571-581.
	(181)	Shell, L., Burggren, W ., Muirhead, D., Nelson, T. and Dzialowski, E. Circulatory changes associated with the closure of the ductus arteriosus in hatching emu (<i>Dromaius novaehollandiae</i>). Journal of Comparative Physiology. A. 191: 202-208.
• 2015	(180)	Burggren, W., Dubansky, B., Roberts, A., and Alloy, M. Deepwater Horizon oil spill as a case study for interdisciplinary cooperation within developmental biology, environmental sciences and physiology. World Journal of Engineering and Technology. 3:7-23.
	(179)	Lewallen, M. and Burggren, W. W. Chronic hypoxia and hyperoxia modifies morphology and VEGF concentration of the lungs of the developing chicken (<i>Gallus gallus</i> variant <i>domesticus</i>). Respiratory Physiology and Neurobiology. 219:85-94. doi: 10.1016/j.resp.2015.08.004.
	(178)	Kohl, Z. F., Crossley II, D.A., Tazawa, H. and Burggren, W. W. Dynamics of blood viscosity regulation during hypoxic challenges in the chicken embryo (<i>Gallus gallus</i> <i>domesticus</i>). Comparative Biochemistry and Physiology A.190:1-8.

	(177)	Burggren, W. W. , Mueller,C.A., and Tazawa, H. Hypercapnic thresholds for embryonic acid-base metabolic compensation and hematological regulation during CO ₂ challenges in layer and broiler chicken strains. Respiratory Physiology and Neurobiology. 215:1-12.
	(176)	Mueller, C.A., Eme, J., Burggren, W.W ., Roghair, R.D., Rundle, S.D. Challenges and opportunities in developmental integrative physiology. Comparative Biochemistry and Physiology A.Part A 184 (2015): 113-124
	(175)	Burggren, W.W. and Mueller, C.A. Developmental critical windows and sensitive periods as 3-D constructs in time and space. (Invited Perspective). Physiological and Biochemical Zoology. 88(2):91-102.
	(174)	Burggren, W.W. Dynamics of epigenetic phenomena: intergenerational and intragenerational phenotype 'washout'. Journal of Experimental Biology. 218:80-87.
• 2014	(173)	Alvine, T. and Burggren, W.W . Renal, metabolic and hematological effects of trans-retinoic acid during critical developmental windows in the embryonic chicken. Journal of Comparative Physiology B. 184(1):107-23.
	(172)	Mueller, C.A., Crossley II, D.A. and Burggren, W.W. The actions of the renin-angiotensin system on cardiovascular and osmoregulatory function in embryonic chickens (<i>Gallus gallus domesticus</i>). Comparative Biochemistry and Physiology <i>A</i> 178, 37-45.
	(171)	Burggren, W.W. and Crews, D. Epigenetics in comparative biology: Why we should pay attention. Integrative and Comparative Biology. 54(1):7-20.
	(170)	Mueller, C., Tazawa, H. and Burggren, W.W. Dynamics of acid- base metabolic compensation and hematological regulation interactions in response to CO ₂ challenges in embryos of the chicken (<i>Gallus gallus</i>), Journal of Comparative Physiology - B. 185:641-649.
	(169)	Andrewartha, S.J., Tazawa, H. and Burggren, W.W. Acute regulation of hematocrit and acid-base balance in chicken embryos in response to severe intrinsic hypercapnic hypoxia. Respiratory Physiology and Neurobiology. 195:1- 10.
	(168)	Blank, T. and Burggren, W.W. Hypoxia-induced developmental plasticity of the gills and air-breathing organ of the air-breathing fish blue gourami (<i>Trichopodus trichopterus</i>). Journal of Fish Biology. 84(3):808-826.

	(167)	Mendez-Sanchez, J. F. and Burggren , W.W. Environmental modulation of the onset of air-breathing and survival of the Siamese fighting fish <i>Betta splendens</i> and the three spot gourami <i>Trichopodus trichopterus</i> . Journal of Fish Biology. 84(3):794-807.
	(166)	Burggren, W.W. Epigenetics in Comparative Animal Physiology or - Lamarck is lookin' pretty good these days!. Journal of Experimental Biology. 217:682-689.
	(165)	Hala, D., Huggett, D.B. and Burggren, W.W. Environmental stressors and the epigenome. Drug Discovery Today: Technologies. 12:e3-e8.
	(164)	Burggren, W.W., Christoffels V.M., D.A. Crossley II, S. Enok, A.P. Farrell, M.S. Hedrick, J.W. Hicks, B. Jensen, A.F.M. Moorman, C.A.Mueller, N. Skovgaard, E.W. Taylor and T. Wang. Comparative cardiovascular physiology: future trends, opportunities and challenges. Acta Physiologica Scandinavica. 210(2):257-276.
• 2013	· · ·	Branum, S.R., Yamada-Fisher, M. and Burggren, W . Reduced heart rate and cardiac output differentially affect angiogenesis, growth, and development in early chicken embryos (<i>Gallus domesticus</i>). Physiological Biochemistry and Zeology, 26(2):270,82
	(162)	and Zoology. 86(3):370-82. Mueller, C. A., Burggren, W.W. and Crossley II, D. A Angiotensin II and baroreflex control of heart rate in embryonic chickens (<i>Gallus gallus domesticus</i>). American Journal of Physiology: Regulatory, Integrative and Comparative Physiology. 305(8):R855-63.
	(161)	Bolin, G. and Burggren, W.W. Metanephric kidney development in the chicken embryo: glomerular numbers, characteristics and perfusion. Comparative Biochemistry and Physiology. A. 166(2):343-350.
	(160)	Pan, T-C. F. and Burggren, W.W. Ontogeny of hypoxic modulation of cardiac performance and its allometry in the African clawed frog <i>Xenopus laevis</i> . Comparative Biochemistry and Physiology. 183:123-133.
	(159)	Burggren, W.W. Cardiovascular development and angiogenesis in the early vertebrate embryo. Cardiovascular Engineering and Technology. 4(3):234-245.
	(158)	Mueller, C.A., Tazawa, H. and Burggren, W.W. Dynamics of metabolic compensation and hematological changes in chicken (<i>Gallus gallus</i>) embryos exposed to hypercapnia with varying oxygen. Respiratory Physiology and Neurobiology. 185:272-280.

• 2012	(157)	Zhang, H. and Burggren, W.W. Hypoxic level and duration differentially affect embryonic organ system development of the chicken (<i>Gallus gallus</i>). Poultry Science. 85(6):625-634.
	(156)	Ho, D. and Burggren, W.W. Parental hypoxic exposure confers offspring hypoxia resistance in zebrafish (<i>Danio rerio</i>). Journal of Experimental Biology. 215(23):4208-4216.
	(155)	Tazawa, H., Andrewartha, S.J. and Burggren, W.W. Acute regulation of hematocrit and blood acid-base balance during severe hypoxic challenges in late chicken embryos (<i>Gallus gallus</i>). Respiratory Physiology and Neurobiology. 184:86-96.
	(154)	Burggren, W.W., Andrewartha, S.J. and Tazawa, H. Interactions of acid-base balance and hematocrit regulation during environmental respiratory gas challenges in developing chicken embryos (<i>Gallus gallus</i>). Respiratory Physiology and Neurobiology. 183 (2012) 135-148.
	(153)	Andrewartha, S. and Burggren, W.W. Transgenerational variation in metabolism and life history traits in response to maternal hypoxia exposure in <i>Daphnia magna</i> . Physiological Biochemistry and Zoology. 85(6):625-634.
	(152)	Gore, M. and Burggren, W.W. Cardiac and metabolic physiology of early larval zebrafish (<i>Danio rerio</i>) reflects parental swimming stamina. Frontiers in Aquatic Physiology. 3:35 (Online).
	(151)	Reyna, K. and Burggren, W.W. Upper lethal temperatures of northern bobwhite embryos and the thermal properties of their eggs. Poultry Science 91(1): 41-6.
• 2011	(150)	Andrewartha, S.J., Tazawa, H., and Burggren, W.W. Hematocrit and blood osmolality in developing chicken embryos (<i>Gallus gallus</i>): in vivo and in vitro regulation. Respiratory Physiology and Neurobiology. 179(2-3):142-150.
	(149)	Andrewartha, S.J., Tazawa, H., Burggren, W.W. Embryonic control of heart rate: Examining developmental patterns and temperature and oxygenation influences using embryonic avian models. Respiratory Physiology and Neurobiology. 178(1):84-96.
	(148)	Burggren, W.W. and Reyna, K. Developmental trajectories, critical windows and phenotypic alteration during cardio-respiratory development. Respiratory Physiology and Neurobiology. 178:13-21.

	(147)	Tazawa, H., Andrewartha, S.J., and Burggren, W.W. Development of hematological respiratory variables in late chicken embryos: The relative importance of incubation time and embryo mass. Comparative Biochemistry and Physiology, Part A. 159(3):225-33.
	(146)	 Ho, D., Reed, W.L., and Burggren, W.W. Egg yolk environment differentially influences physiological and morphological development of broiler and layer chicken embryos. Journal of Experimental Biology. 214:619-628.
• 2010	(145)	 Robinson, G.E., Banks, J.A., Padilla, D.K., Burggren, W.W., Cohen, C.S., Delwiche, C.F., Funk, V., Hoekstra, H.E., Jarvis, E.D., Johnson, L.J., Martindale, M.Q., Martinez del Rio, C., Medina, M., Salt, D.E., Sinha, S., Specht, C.S, Strange, K., Strassmann, J.E., Swalla, B.J., and Tomanek, L. Empowering 21st century biology. Biosciences. 60(11):923-930.
	(144)	Pan, T-C. F. and Burggren, W.W. Onset and early development of hypoxic ventilatory responses and branchial neuroepithelial cells in <i>Xenopus laevis</i> . Comparative Biochemistry and Physiology. 157:382-391
	(143)	Evans, D.H., Axelsson, M. Beltz, B. Burggren, W. , Castellini, M., Clements, K.D., Crockett, L., Gilmour, K.M., Henry, R.P., Hirose, S.,Ip. A., Londraville, R., Lucu, C., Poertner, H.O., Summers, A. and Wright, P. <u>Frontiers in aquatic</u> <u>physiology - grand challenge.</u> Frontiers in Physiology. 18 May 2010.
	(142)	Blossman-Myer, B. and Burggren, W.W. The silk cocoon of the silkworm, <u>Bombyx</u> <u>mori</u> : micro structure and transmural diffusion of oxygen and water vapor. Comparative Biochemistry and Physiology. 155(2):259-63.
	(141)	Blossman-Myer, B. and Burggren, W.W. Metabolic allometry during development and metamorphosis of the silkworm, <i>Bombyx mori</i> : Analyses, patterns and mechanisms. Physiological Biochemistry and Zoology. 83(2):215-231.
	(140)	Ho, D and Burggren, W.W. Epigenetics and transgenerational transfer: a physiological perspective. Journal of Experimental Biology. 213:3-16.
• 2009	(139)	Burggren, W.W. Implementation of the National Science Foundation's 'broader impacts': Efficiency considerations and alternative approaches. Social Epistemology. 23(3- 4):221-237.

	(138)	Burggren, W.W. and Blank, T. Physiological study of larval fishes: challenges and opportunities. Scientia Marina. 2009:99-110.
	(137)	Crossley, D III and Burggren, W.W. Development of cardiac form and function in ectothermic sauropsids. Journal of Morphology. 270(11):1400-1412.
	(136)	Fernández-Mongil, M., Venza, C., Rivera, A., Lasalde-Dominicci, J.A., Burggren, W. and Rojas, L.V. Triiodothyronine (T ₃) action on locomotor behavior during metamorphosis of the bullfrog <i>Rana catesbeiana</i> . International Journal of Developmental Biology. 53: 101-108.
• 2008	(135)	Khorrami, S., Tazawa, H., and Burggren, W. 'Blood-doping' effects on hematocrit regulation and oxygen consumption in late-state chicken embryos (<i>Gallus gallus</i>). Journal of Experimental Biology. 211 (6):883-9.
• 2007	(134)	Fisher, S.A. and Burggren, W.W. Role of hypoxia in the evolution and development of the cardiovascular system. Antioxidants and Redox Signaling. 9(9):1339-52.
	(133)	Perry, S and Burggren, W. Why respiratory biology? The meaning and significance of respiration and its integrative study. Integrative and Comparative Biology. 47(4):506-509.
	(132)	Burggren, W.W. and Warburton, S. Amphibians as animal models in physiological studies. Institute for Laboratory Animal Research Journal. 48(3):260-269.
	(131)	Yoneta, H., Dzialowski, E.M., Burggren, W.W. , and Tazawa, H. Endothermic heart rate response in broiler and White Leghorn chicks (<i>Gallus gallus domesticus</i>) during the first two days of post-hatch life. Comparative Biochemistry and Physiology. A. 147(2):529-535.
• 2006	(130)	Dzialowski, E. M., Burggren, W.W. , Komoro, T. and Tazawa, H. Development of endothermic metabolic response in embryos and hatchlings of the emu (<i>Dromaius</i> <i>novaehollandiae</i>). Respiratory Physiology and Neurobiology. 155:286-292.
	(129)	Bagatto, B and Burggren, W. A three-dimensional functional assessment of heart and vessel development in the larva of the zebrafish (<i>Danio rerio</i>). Physiological Biochemistry and Zoology. 79(1):194-201.

• 2005	(128)	Burggren, W.W. Developing animals flout prominent assumptions of ecological physiology. Comparative Biochemistry and Physiology. A. 141(4):430-439.
	(127)	Burggren, W.W. and Monticino, M.G. Assessing Physiological Complexity. Journal of Experimental Biology. 208:3221- 3232.
	(126)	Chan, T. and Burggren, W.W. Hypoxic incubation creates differential morphological effects during specific developmental critical windows in the embryo of the chicken (<i>Gallus gallus</i>). Respiratory Physiology and Neurobiology. 145:251-263.
	(125)	Burggren, W.W. and Warburton, S.J. Comparative developmental physiology: An interdisciplinary convergence. Annual Reviews of Physiology. 67:203-223.
• 2004	(124)	Moriya, K., Akiyama, R., Dzialowski, E. M., Burggren, W.W. and Tazawa, H. Development of heart rate circadian rhythms in chicks. Avian and Poultry Biology Reviews. 15: 211-218.
	(123)	Tazawa, H., Chiba, Y., Khandoker, A. H., Dzialowski, E. M. and Burggren, W.W. Early development of thermoregulatory competence in chickens: responses of heart rate and oxygen uptake to altered ambient temperatures. Avian and Poultry Biology Reviews. 15:166-176.
	(122)	Burggren, W.W. and Vitalis, T.Z. The interplay of cutaneous water loss, gas exchange and blood flow in the toad, <i>Bufo woodhousei</i> : Adaptations in a terrestrially-adapted amphibian. Journal of Experimental Biology. 208:105-112.
	(121)	Burggren, W.W. , Khorrami, S., Pinder, A. and Sun, T. Body, eye and chorioallantoic vessel growth are not dependent upon cardiac output levels in day 3-4 chicken embryos. American Journal of Physiology: Regulatory and Integrative Physiology: 287(6):R1399-1406.
	(120)	Burggren, W.W. What is the purpose of the embryonic heart beat? or How facts can ultimately prevail over physiological dogma. Physiological And Biochemical Zoology. 77:333-345.
	(119)	Black, J. and Burggren, W.W. Acclimation to hypothermic incubation in developing chicken embryos (<i>Gallus domesticus</i>): I. Developmental effects and chronic and acute metabolic adjustments. Journal of Experimental Biology. 207:1543-1552.
	(118)	 Black, J. and Burggren, W.W. Acclimation to hypothermic incubation in developing chicken embryos (Gallus domesticus): II. Hematological and blood O₂ transport. Journal of Experimental Biology. 207:1553-1561.

(117)	 Khandoker, A.H., Fukazawa, K., Dzialowski, E.M., Burggren, W.W. and Tazawa, H. Maturation of the homeothermic response of heart rate to altered ambient temperature in developing chick hatchlings (<i>Gallus gallus domesticus</i>). American Journal of Physiology: Regulatory and Integrative Physiology. 286: R129-R137.
(116)	Khandoker, A. H., Dizalowski, E. M., Burggren, W.W. and Tazawa, H. Cardiac rhythms of late pre-pipped and pipped chick embryos exposed to altered oxygen environments, Comparative Biochemistry and Physiology. A 136:289- 299.
(115)	Burggren, W.W. , Crossley, D III, Rogowitz, G. and Thompson, D. Clutch effects explain heart rate variation in embryonic frogs (cave coqui, Eleutherodactylus cooki). Physiological and Biochemical Zoology 76(5):672-678.
(114)	Crossley II, D., Bagatto, B., Dzialowski, E and Burggren, W. Maturation of cardiovascular control mechanisms in the embryonic emu (<i>Dromiceius novaehollandiae</i>). Journal of Experimental Biology. 206(15):2703-2710.
(113)	Spicer, J. I. and Burggren, W.W. Development of Physiological Regulatory Systems: Altering the Timing of Crucial Events. Zoology (formerly Zoology - Analysis of Complex Systems): 106:91-99.
(112)	Tamura, A., Akiyama, R., Chiba, Y. Moriya, K., Dzialowski, W.M., Burggren, W. and Tazawa, H. Heart rate responses to cooling in emu hatchlings. Comparative Biochemistry and Physiology. Part A 134:829-838.
(111)	Crossley, DA, II, Burggren, W.W. and Altimiras, J. Cardiovascular regulation during hypoxia in embryos of the domestic chicken <i>Gallus gallus</i> . American Journal of Physiology: Regulatory, Integrative and Comparative Physiology. 284, 219-226.
(110)	Burggren, W. and Crossley, D. A. II. Comparative cardiovascular development: improving the conceptual framework. Comparative Biochemistry and Physiology. A 132:661-674.
(109)	 Moriya, K., Kato, K. Matsumura, M. Dzialowski, E. Burggren, W.W. and Tazawa, H. Cardiac rhythms in developing emu hatchlings. Comparative Biochemistry and Physiology A. 131(4):787-795.
	 (116) (115) (114) (113) (112) (111) (110)

	(108)	 Xu, X., Meiler, S. E., Zhong, T. P., Mohideen, M., Crossley, D. A., Burggren, W. and Fishman, M. Cardiomyopathy in zebrafish due to mutation in an alternatively spliced exon of titin. Nature Genetics, 30(1).
	(107)	Kato, K., Moriya, K., Dzialowski, E., Burggren, W.W. and Tazawa, H. Cardiac rhythms in prenatal and perinatal emu embryos. Comparative Biochemistry and Physiology A 131(4):775-785.
	(106)	Dzialowski, E.M., von Plettenberg, D., Elmonoufy, N. and Burggren, W.W. Chronic hypoxia effects on the physiology and morphology of developing chicken embryos. Comparative Biochemistry and Physiology. 131(4):713-24.
• 2001	(105)	Bagatto, B., Pelster, B. and Burggren, W.W. Growth and metabolism in larval zebrafish: Effects of swim training. The Journal of Experimental Biology. 204:4335-4343.
• 2000	(104)	Burggren, W.W., Warburton, S. J. and Slivkoff, M.D. Interruption of cardiac output does not affect short term growth and metabolism in day 3 and 4 chick embryos. The Journal of Experimental Biology. 203, 3831-3838.
	(103)	Bagatto, B., Crossley, D. and Burggren, W. Physiological variability in neonatal armadillo quadruplets: within and between litter differences. The Journal of Experimental Biology. 203(11):1733-1740.
	(102)	Burggren, W.W. Developmental physiology, animal models, and the August Krogh principle. Zoology-Analysis of Complex Systems 102(2-3): 148-156.
	(101)	Moriya, K., Pearson, J. T., Burggren, W.W. , Ar, A. and Tazawa, H. Continuous measurements of instantaneous heart rate and its fluctuations before and after hatching in chickens. Journal of Experimental Biology. 203:895-903.
	(100)	Smits, A.W., Burggren, W.W. and Oliveras, D. Developmental changes in <i>in vivo</i> cardiac performance in the moth <i>Manduca sexta</i> . Journal of Experimental Biology. 203(2):369-378.
• 1999	(99)	Tazawa, H., Burggren, W. , and Ar, A. Introduction: On the significance of cardiac rhythms. Comparative Biochemistry and Physiology. 124A:367-368.
	(98)	Burggren, W.W. Genetic, environmental and maternal influences on embryonic cardiac rhythms. Comparative Biochemistry and Physiology. 124A:423-427.

	(97)	Akiyama, R., Mitsubayashi, H., Tazawa, H. and Burggren, W. Heart rate responses to altered ambient oxygen in early (day 3-9) chick embryos in the intact egg. Journal of Comparative Physiology. 169:85-92.
	(96)	Barrionuevo, W. R. and Burggren, W.W. O ₂ consumption and heart rate in developing zebrafish (<i>Danio rerio</i>): influence of temperature and ambient O ₂ . Am. J. Physiol. 276:R505- R513.
• 1998	(95)	Burggren, W.W. Studying Physiological Development: Past, Present and Future. Biological Bulletin of the National Taiwan Normal University. 33(2):71-84.
	(94)	Territo, P. And Burggren, W.W. Cardio-respiratory ontogeny during chronic carbon monoxide induced hypoxemia in the clawed frog <i>Xenopus laevis</i> . Journal of Experimental Biology. 201 (9):1461-1472.
• 1997	(93)	Jia, X.X. and Burggren, W.W. Developmental changes in chemoreceptive control of gill ventilation in larval bullfrogs (<i>Rana catesbeiana</i>). I. Reflex ventilatory responses to ambient hyperoxia, hypoxia and NaCN. Journal of Experimental Biology. 200:2229-2236.
	(92)	Jia, X.X. and Burggren, W.W. Developmental changes in chemoreceptive control of gill ventilation in larval bullfrogs (<i>Rana catesbeiana</i>). II. Site of O ₂ -sensitive chemoreceptors. Journal of Experimental Biology. 200:2237-2248.
	(91)	Reiber, C.L., McMahon, B.R. and Burggren, W.W. Cardiovascular functions in two macruran decapod crustaceans (<i>Procambarus clarkiil</i> and <i>Homarus</i> <i>americanus</i>) during periods of inactivity, tail flexon and cardiorespiratory pauses. Journal of Experimental Biology. 200:1103-1113.
	(90)	Burggren, W.W. Identifying and evaluating patterns in cardio- respiratory physiology. American Zoologist. 37:109-115.
• 1996	(89)	Fritsche, R. and Burggren, W.W. Developmental responses to hypoxia in larvae of the frog <u>Xenopus laevis</u> . American Journal of Physiology. 271:R912-R917.
	(88)	Pelster, B. and Burggren, W.W. Disruption of hemoglobin oxygen transport does not impact oxygen-dependent physiological processes in developing embryos of zebrafish (<i>Danio rerio</i>). Circulation Research 79:358-362.

• 1995	(87)	Hou, P-C. L. And Burggren, W.W. Blood pressures and heart rate during larval development in the anuran amphibian <u>Xenopus laevis</u> . Amer. J. Physiol. 269:R1120-R1125.
	(86)	Hou, P-C. L. And Burggren, W.W. Cardiac output and peripheral resistance during larval development in the anuran amphibian <u>Xenopus laevis</u> . Amer. J. Physiol. 269:R1126-R1132.
	(85)	Hastings, D and Burggren, W. W. Developmental changes in oxygen consumption regulation in larvae of the South African clawed frog <u>Xenopus laevis</u> . Journal of Experimental Biology. 198:2465-2475.
	(84)	Burggren, W.W. and Fritsche, R. Cardiovascular measurements in animals in the milligram body mass range. Brazilian Journal of Medical and Biological Research. 28:1291- 1305.
	(83)	Wang, T., Burggren, W. and Nobrega, E. Metabolic, ventilatory and acid-base responses associated with specific dynamic action in the toad, <i>Bufo marinus</i> . Physiological Zoology. 68(2):192-205.
• 1994	(82)	Howe, R. S., Burggren, W.W. and Warburton, S. J. Fixed patterns of bradycardia during late embryonic development in domestic fowl with <i>C</i> locus pleiotropic mutations. American Journal of Physiology. 268:H56-H60.
	(81)	Burggren, W.W. and Infantino, R.L. Jr. The respiratory transition from water to air breathing during amphibian metamorphosis. American Zoologist. 34:238-246.
	(80)	Burggren, W.W. and Warburton, S. Patterns of form and function in developing hearts: Contributions from non-mammalian vertebrates. Cardioscience 5(3):183-191.
	(79)	Tazawa, H, Watanabe, W. and Burggren, W. Embryonic heart rate in altricial birds, the pigeon (<i>Columba domestica</i>) and the bank swallow (<i>Riparia riparia</i>). Physiological Zoology. 67:1448-1460.
	(78)	Burggren, W.W., Tazawa, H. and Thompson, D. Intraspecific variability in avian embryonic heart rates: Potential genetic and maternal environment influences. Israel Journal of Zoology. 40:351-362.
• 1993	(77)	Pelster, B., Burggren , W.W. , Petrou, S. and Wahlqvist, I. Developmental changes in the acetylcholine influence on heart muscle of <i>Rana catesbiana</i> : <i>In situ</i> and <i>in vitro</i> effects. Journal of Experimental Zoology. 267:1-8.

	(76)	Burggren, W.W. Moreira, G.S. and Santos, M. C. F. Specific dynamic action and the metabolism of the brachyuran land cabs <i>Ocypode quadrate</i> (Fabricus, 1787), <i>Goniopsis</i> <i>cruentata</i> (Latreille, 1803) and <i>Cardisoma guanhumi</i> Latreille, 1825. Journal of Experimental Marine Biology and Ecology. 169(1993) 117-130.
• 1992	(75)	Burggren, W.W. Respiration and circulation in land crabs: Novel variations on the marine design. American Zoologist. 32:417-427.
	(74)	Burggren, W.W., Bicudo, J.E., Glass, M.L. and Abe, A.S. Development of blood pressure and cardiac reflexes in the frog <i>Pseudis paradoxsus</i> . American Journal of Physiology. 263:R602-R608.
	(73)	Burggren, W.W. and Bemis, W.E. Metabolism and ram gill ventilation in juvenile paddlefish, <i>Polyodon spathula</i> (Chondrostei: Polyodontidae). Physiological Zoology. 65:515-539.
• 1991	(72)	McMahon, B.R., Burggren, W.W. , Pinder, A.W., and Wheatly, M.G. Air exposure and physiological compensation in a tropical intertidal chiton, <i>Chiton stokesii</i> (Mollusca: Polyplacophora). Physiological Zoology. 64(3):728-748.
	(71)	Burggren, W.W. and Pinder, A.W. Ontogeny of Cardiovascular and Respiratory Physiology in Lower Vertebrates. Annual Reviews of Physiology 53:107-135.
	(70)	Pelster, B. and Burggren , W.W. Central arterial hemodynamics in larval bullfrogs (<i>Rana catesbeiana</i>): developmental and seasonal influences. American Journal of Physiology 260:R240-R246.
• 1990	(69)	Burggren, W.W. , Infantino, R.L. and Townsend, D.L. Developmental changes in cardiac and metabolic physiology of the direct-developing tropical frog <i>Eleutherodactylus coqui</i> . Journal of Experimental Biology. 152:129-147.
	(68)	Burggren, W.W., Pinder, A.W., MCMahon, B.R., Doyle, M. and Wheatly, M.G. Heart rate and hemolymph pressure responses to hemolymph volume changes in the land crab <i>Cardisoma guanhumi</i> : Evidence for 'baroreflex' function. Physiological Zoology. 63:167-181.
• 1989	(67)	Hou, PC. L. and Burggren, W.W. Interaction of allometry and development in the mouse <i>Mus musculus</i> ; heart rate and hematology. Respiration Physiology 78:265-280.

	(66)	West, N.H., Smits, A.W. and Burggren, W.W. Factors terminating nonventilatory periods in the turtle, <i>Chelydra serpentina</i> . Respiration Physiology 77:337-350.
	(65)	Burggren, W.W., Smits, A.W. and Evans, B. Arterial oxygen homeostasis during diving in the turtle <i>Cheldoina</i> <i>longicollis.</i> Physiological Zoology. 62:668-686.
• 1988	(64)	Burggren, W.W. Role of the central circulation in regulation of cutaneous gas exchange. American Zoologist 28:985-998.
	(63)	Burggren, W.W. Cardiac design in lower vertebrates: what can phylogeny reveal about ontogeny? Experentia. 44:919-929.
	(62)	Burggren, W.W. Cardiovascular responses to diving and their relation to lung and blood oxygen stores in vertebrates. Canadian Journal of Zololgy. 66:20-28.
• 1987	(61)	McMahon, B.R. and Burggren, W.W. Respiratory physiology of intestinal air breathing in the teleost fish <i>Misgurnus anguillicaudatus</i> . Journal of Experimental Biology. 133:371-394.
	(60)	Burggren, W.W., Dupre, R. K. and Wood, S. C. Allometry of red cell oxygen binding and hematology in larvae of the tiger salamander, <i>Ambystoma tigrinum</i> . Respiration Physiology. 70:73-84.
	(59)	Burggren, W.W. and Doyle, M. E. Ontogeny of regulation of gill and lung ventilation in the bullfrog, <i>Rana catesbeiana</i> . Respiration Physiology. 66:279-291.
	(57)	Burggren, W.W. Form and function in reptilian circulations. American Zoologist. 27:5-19.
• 1986	(57)	Burggren, W.W. and Doyle, M. E. The action of acetylcholine upon heart rate changes markedly with development in bullfrogs. Journal of Experimental Zoology. 240:137-140.
	(56)	Burggren, W. and Johansen, K. Circulation and respiration in lungfishes. Journal of Morphology 190. Supplement 1:217- 236.
	(55)	Pinder, A.W. and Burggren, W.W. Ventilation and partitioning of oxygen uptake in the frog <i>Rana pipiens</i> : Effects of hypoxia and activity. Journal of Experimental Biology. 126:453-468.
	(54)	Smits, A.W., West, N.H. and Burggren, W.W. Pulmonary fluid balance following pulmocutaneous baroreceptor denervation in the toad. Journal of Applied Physiology. 61:331-337.

	(53)	Burggren, W.W. and Doyle, M.E. Ontogeny of heart rate regulation in the bullfrog, <i>Rana catesbeiana</i> . American Journal of Physiology. 251:R231-239.
	(52)	Burggren, W.W. and Feder, M.E. Effect of experimental ventilation of the skin on cutaneous gas exchange in the bullfrog. Journal of Experimental Biology. 121:445-450.
	(51)	Wheatly, M.G., McMahon, B.R., Burggren, W.W. and Pinder, A.W. A rotating respirometer to monitor voluntary activity and associated exchange of respiratory gases in the land hermit crab (<i>Coenobita compressus</i> - H. Milne Edwards). Journal of Experimental Biology. 119:85-101.
	(50)	Wheatly, M.G., McMahon, B.R., Burggren, W.W. and Pinder, A.W. Haemolymph acid-base, electrolyte and blood gas status during sustained voluntary activity in the land hermit crab (<i>Coenobita compressus</i> - H. Milne Edwards). Journal of Experimental Biology. 125:225-244.
• 1985	(49)	Feder, M.E. and Burggren, W.W. Cutaneous gas exchange in vertebrates: Design, patterns, control and implications. Biological Reviews. 60:1-45.
	(48)	Feder, M.E. and Burggren, W.W. Skin Breathing in Vertebrates. Scientific American. 253(5):126-143.
	(47)	Burggren, W.W. Gas exchange, metabolism and 'ventilation' in gelatinous frog egg masses. Physiological Zoology 58:503-514.
	(46)	Burggren, W.W., Pinder, A.W., McMahon, B.R. Wheatly, M. G. and Doyle, M. Ventilation, circulation and their interactions in the land crab, <i>Cardisoma guanhumi</i> . Journal of Experimental Biology 117:133-154.
• 1984	(45)	Johansen,K. and Burggren, W.W. Venous return and cardiac filling in varanid lizards. Journal of Experimental Biology 113:389-400.
	(44)	West, N.H. and Burggren, W.W. Factors influencing pulmonary and cutaneous arterial blood flow in the toad, <i>Bufo marinus</i> . American Journal of Physiology 247:R884-R894.
	(43)	Burggren, W.W. and Moalli, R. 'Active' regulation of cutaneous gas exchange by capillary recruitment in amphibians: experimental evidence and a revised model for skin respiration. Respiration Physiology 55:379-392.
	(42)	Wheatly, M.G., Burggren, W.W. and McMahon, B.R. The effects of temperature and water availability on ion and acid-base balance in hemolymph of the land hermit crab <i>Coenobita clypeatus</i> . Biological Bulletin 166:427-445.

• 1983	(41) (40)	 Burggren, W.W., Feder, M.E. and Pinder, A.W. Temperature and the balance between aerial and aquatic respiration in larva of <i>Rana berlandieri</i> and <i>Rana catesbeiana</i>. Physiological Zoology 56: 263-273. West, N.H. and Burggren, W.W. Reflex interactions between (aerial and aquatic gas exchange organs in the larval bullfrog. American Journal of Physiology 244(6): R770-R777.
	(39)	Burggren, W.W. and McMahon, B.R. An analysis of scaphognathite pumping performance in the crayfish <i>Orconectes virilis</i> : Compensatory changes to acute and chronic hypoxic exposure. Physiological Zoology 56(3): 309-318.
	(38)	Quinn, D. and Burggren, W.W . Lactate production, tissue distribution and elimination following exhaustive exercise in larval and adult bullfrogs <i>Rana catesbeiana</i> . Physiological Zoology 56(4): 597-613.
	(37)	Burggren, W.W. and Mwalukoma, A. Respiration during chronic hypoxia and hyperoxia in larval and adult bullfrogs (<i>Rana catesbeiana</i>). I. Morphological responses of lungs, skin and gills. Journal of Experimental Biology 105: 191-203.
	(36)	 Pinder, A. and Burggren, W.W. Respiration during chronic hypoxia and hyperoxia in larval and adult bullfrogs (<i>Rana catesbeiana</i>). II. Changes in respiratory properties of whole blood. Journal of Experimental Biology 105: 205-213.
• 1982	(35)	Sacca, R. and Burggren, W.W. Oxygen partitioning between the skin, gills and lungs of the air-breathing reedfish, <i>Calamoicthys calabaricus</i> . Journal of Experimental Biology 97: 179-186.
	(34)	Wood, S.C., Hoyt, R.W. and Burggren, W.W. Control of hemoglobin function in salamanders (<i>Ambystoma tigrinum</i>). Molecular Physiology. 2(1982): 263-272.
	(33)	Burggren, W.W. and Johansen, K. Ventricular hemodynamics in the monitor lizard, <i>Varanus exanthematicus</i> : Pulmonary and systemic pressure separation. Journal of Experimental Biology 96: 343-354.
	(32)	West, N.H. and Burggren, W.W. Respiratory response to steady- state aquatic hypoxia and hyperoxia in the bullfrog tadpole. Respiration Physiology 47: 165-176.
	(31)	Burggren, W.W. and West, N.H. Changing respiratory importance of the gills, skin and lungs during metamorphosis in the bullfrog, <i>Rana catesbiana</i> . Respiration Physiology 47: 151-164.

	(30)	Burggren, W.W. Pulmonary plasma filtration in the turtle: A wet vertebrate lung? Science 215: 77-78.
	(29)	Burggren, W.W. 'Air Gulping' improves blood oxygen transport during aquatic hypoxia in the goldfish, <i>Carassius auratus</i> . Physiological Zoology 55(4): 327-334.
• 1981	(28)	Glass, M., Burggren, W.W. and Johansen, K. Pulmonary diffusing capacity of the bullfrog <i>Rana catesbeiana</i> . Acta Scandinavica Physiologica 113: 485-490.
	(27)	Burggren, W.W. and Wood, S.C. Respiration and acid-base balance in the tiger salamander, <i>Ambystoma tigrinum</i> : Influence of temperature acclimation and metamorphosis. Journal of Comparative Physiology 144: 241-246.
	(26)	Burggren, W.W. and McMahon, B.R. Oxygen uptake during environmental temperature change in hermit crabs: adaptation to subtidal, intertidal and supratidal habitats. Physiological Zoology 54: 325-333.
	(25)	Burggren, W.W. and McMahon, B.R. Hemolymph oxygen transport, acid-base status and hydromineral regulation during dehydration in three terrestrial crabs, <i>Cardisoma</i> , <i>Birgus</i> and <i>Coenobita</i> . Journal of Experimental Biology 218: 53-64.
	(24)	McMahon, B.R. and Burggren, W.W. Acid-base balance following acclimation to temperature change in land crabs. Journal of Experimental Zoology 218: 45-52.
	(23)	Cole, R. and Burggren, W.W. The contribution of the respiratory papulae and tube feet to oxygen uptake in the sea star, <i>Asterias forbesi</i> (Desor). Marine Biology Letters 2(1981): 279-287.
• 1980	(22)	Burggren, W.W. and Cameron, J.N. Anaerobic metabolism, gas exchange and acid-base balance during hypoxic exposure in the channel catfish, <i>Ictalurus punctatus</i> . Journal of Experimental Zoology 213:405-416.
• 1979	(21)	McMahon, B.R. and Burggren, W.W. Respiration and adaptation to the terrestrial habitat in the terrestrial hermit crab, <i>Coenobita clypeatus</i> . Journal of Experimental Biology 79: 265-281.
	(20)	Burggren, W.W. and Shelton, G. Gas exchange and transport during intermittent breathing in chelonian reptiles. Journal of Experimental Biology 82: 75-92.

	(19)	Burggren, W.W. Bimodal gas exchange during variation in environmental oxygen and carbon dioxide in the air breathing fish <i>Trichogaster trichopterus</i> . Journal of Experimental Biology 82:197-214.
	(18)	Burggren, W.W. and Haswell, M.S. Aerial CO ₂ excretion in the obligate air breathing fish, <i>Trichogaster trichopterus</i> : A role for carbonic anhydrase. Journal of Experimental Biology 82: 215-226.
	(17)	Burggren, W.W., Dunn, J. and Barnard, K. Branchial circulation and gill morphometrics in the sturgeon <i>Acipenser</i> <i>transmontanus</i> , an ancient chondrosteian fish. Canadian Journal of Zoology 57: 2160-2170.
• 1978	(16)	Burggren, W.W. Gill ventilation in the sturgeon, <i>Acipenser transmontanus</i> : Unusual adaptations for bottom dwelling. Respiration Physiology 34: 153-170.
	(15)	Burggren, W.W. and Randall, D. Oxygen uptake and transport during hypoxic exposure in the sturgeon <i>Acipenser</i> <i>transmontanus</i> . Respiration Physiology 34: 171-184.
	(14)	Glass, M., Burggren, W.W. and Johansen, K. Ventilation in an aquatic and a terrestrial chelonian reptile. Journal of Experimental Biology 72: 165-179.
	(13)	Burggren, W.W. Influence of intermittent breathing on ventricular depolarization patterns in chelonian reptiles. Journal of Physiology (London) 278: 349-364.
	(12)	Burggren, W.W. , Glass, M. and Johansen, K. Intrapulmonary variation of gas partial pressures and ventilation inequalities in chelonian reptiles. Journal of Comparative Physiology 126: 203-209.
• 1977	(11)	Burggren, W.W. The pulmonary circulation of the chelonian reptile; morphology, pharmacology and haemodynamics. Journal of Comparative Physiology B. 116: 303-324.
	(10)	Burggren, W.W. , Hahn, C.E.W. and Foex, P. Properties of blood oxygen transport in the turtle <i>Pseudemys scripta</i> and the tortoise <i>Testudo graeca</i> : Effects of temperature, CO ₂ and pH. Respiration Physiology 31: 39-50.
	(9)	Johansen, K., Burggren, W.W. and Glass, M. Pulmonary stretch receptors regulate heart rate and pulmonary blood flow in the turtle <i>Pseudemys scripta</i> . Comparative Biochemistry and Physiology 58A: 185-191.
	(8)	Burggren, W.W. Circulation during intermittent lung ventilation in the garter snake <i>Thamnophis</i> . Canadian Journal of Zoology 55 (10): 1, 720-725.

	(7)	Burggren, W.W. , Glass, M., and Johansen, K. Pulmonary ventilation: perfusion relationships in terrestrial and aquatic chelonian reptiles. Canadian Journal of Zoology 55(12): 2,024-2,034.
• 1976	(6)	Shelton, G. and Burggren, W.W . Cardiovascular dynamics of the Chelonia during apnoea and lung ventilation. Journal of Experimental Biology 64: 323-343.
	(5)	Burggren, W.W. The persistence of a patent ductus arteriosus in an adult specimen of the tortoise <i>Testudo graeca</i> . Copeia 2:405-407.
• 1975	(4)	Burggren, W.W. A quantitative analysis of ventilation tachycardia and its control in two chelonians <i>Pseudemys scripta</i> and <i>Testudo graeca</i> . Journal of Experimental Biology 63: 367-380.
	(3)	Burggren, W.W. Oxygen consumption as a function of body size in a terrestrial hermit crab <i>Coenobita</i> (Decapoda, Paguridea). Crustaceana 28(3): 314-316.
• 1974	(2)	Burggren, W.W , McMahon, B.R. and Costerton, J. W. Branchial water and blood flow patterns and the structure of the gill of the crayfish <i>Procambarus clarkii</i> . Canadian Journal of Zoology 52(12): 1511-1518.
	(1)	McMahon, B.R., Burggren, W.W. and Wilkens, J.L. Respiratory responses to long-term hypoxic stress in the crayfish <i>Orconectes virilis</i> . Journal of Experimental Biology 60: 195- 206.