

Contact & Personal Information

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DOB: 02-18-1974 Citizenship: USA, Bermuda

Education

- Post-Doc** Department of Biological Sciences, Clemson University (2008-Present)
Advisor: Amy L. Moran, Ph.D.
- Ph.D.** Department of Biology, University of North Carolina at Chapel Hill (2001-2007)
Advisor: Joel G. Kingsolver, Ph.D.
- M.S.** Department of Biological Sciences, University of South Carolina - Columbia (1996-1998)
Advisor: Stephen E. Stancyk, Ph.D.
- B.S.** Biology, University of Richmond, Virginia (1992-1996)
Minor curricula in Chemistry and History
- Sea Education Association, Sea Semester Class #C-139, Woods Hole, Massachusetts (1995)

Professional Experience

- 2008-Present Post Doctoral Research Fellow: Clemson University, Clemson, South Carolina
- 2001-2007 Graduate Research Assistant: University of North Carolina at Chapel Hill
- 2006 Visiting Researcher: Smithsonian Tropical Research Institute, Panama
- 2005 Short Term Fellow: Smithsonian Tropical Research Institute, Panama
- 2004, 2005 Research Assistant / Visiting Researcher: National Marine Fisheries Service, Galveston, TX
- 2001-02, 2003 Visiting Researcher: Lizard Island Research Station, Queensland, Australia
- 2001 Visiting Researcher: Friday Harbor Laboratories, Friday Harbor, Washington
- 2001, 2003 Departmental Student Assistant: Dept. of Biology, UNC – Chapel Hill
- 1999-2001 Marine Biologist II: Marine Resources Research Institute
South Carolina Department of Natural Resources, Charleston, SC
- 1998-1999 Environmental Biologist: Syracuse Research Corporation, Arlington, VA
(U.S. EPA contractor: Office of Prevention, Pesticides, and Toxic Substances)
- 1996-1998 Graduate Research Assistant: University of South Carolina – Columbia
- 1998 Editorial Assistant: Journal of Experimental Marine Biology & Ecology (JEMBE)
- 1995-1996 Undergraduate Research Assistant: University of Richmond, Virginia
Advisor: Roni J. Kingsley, Ph.D.

Extramural Scholarships, Fellowships, Awards and Honors

2006	Supplemental Research Award, Smithsonian Tropical Research Institute (\$400)
----	Student Travel Award, 12 th International Echinoderm Conference (\$200)
----	Alpha Epsilon Lambda, Graduate & Professional Student Honor Society Membership
----	Honorable Mention, Best Student Paper Oral Presentation Award, SICB Annual Meeting
2005	STRI Short Term Fellowship, Smithsonian Tropical Research Institute (\$4600)
----	Fellowship for Graduate Student Travel, Society for Integrative and Comparative Biology (\$2000)
----	Expedition Grant, The Exploration Fund of The Explorers Club (\$1200)
----	Lerner-Gray Fund for Marine Research, American Museum of Natural History (\$1000)
2004	Graduate Student Travel Award, National Science Foundation (\$500)
2003	Grant-In-Aid of Research, Sigma Xi, The Scientific Research Society (\$500)
----	Summer Institute in Statistical Genetics Scholarship, North Carolina State University (\$1000)
2002	Robert L. Fernald Fellowship, Friday Harbor Laboratories, University of Washington (\$1600)
1998	Sigma Xi, The Scientific Research Society: Associate Membership
1996	Beta Beta Beta, Biological Honor Society Membership
----	Phi Alpha Theta, Honorary Society of History Membership
1995	Sea Education Association Scholarship (\$1600)

Intramural Scholarships, Fellowships, Awards and Honors

2006	H.V. Wilson Award for Summer Research, Dept. of Biology, UNC-CH (\$500)
2005	Graduate Student Opportunity Fund Grant, The Graduate School, UNC-CH (\$730)
----	Nominated for Tanner Award for Excellence in Undergrad. Teaching by Teaching Asst., UNC-CH
2005, 04, 03, 02	H.V. Wilson Award for Summer Research, Dept. of Biology, UNC-CH (\$300 each year)
2003, 02	Graduate Student Mentor Award, UNC-CH Office of Undergraduate Research (\$1000 each year)
2001	University Merit Assistantship, Dept. of Biology, UNC-CH (\$10,000)
----	Grinter Fellowship, Dept. of Zoology, Univ. of Florida (\$6000, declined to attend UNC-CH)
1995, 94	Dean's List Award for Academic Excellence, University of Richmond
1994, 93	Agnes L. Tucker Scholarship, University of Richmond
1994, 93	W.G. Turbyfill Scholarship, University of Richmond

Publications*Peer Reviewed Literature*

- McAlister, J.S. Accepted. Evolutionary responses to environmental heterogeneity in Central American echinoid larvae: plastic versus constant phenotypes. **Evolution**.
- McAlister, J.S., R.D. Podolsky, and J.G. Kingsolver. To be submitted. A test for costs of phenotypic plasticity during larval development of the sea urchin, *Lytechinus variegatus* (Lamarck). **PLOS ONE**.
- McAlister, J.S. 2007. Egg size and the evolution of plasticity in larvae of the echinoid genus *Strongylocentrotus*. **Journal of Experimental Marine Biology and Ecology**. 352: 306-316.
- McAlister, J.S. 2007. The long arm of the larva: Evolutionary responses to resource availability. Ph.D. Dissertation. University of North Carolina at Chapel Hill. 125pp.
- Allen, J.D. and J.S. McAlister. 2007. Testing rates of planktonic versus benthic predation of larvae in the field. **Journal of Experimental Marine Biology and Ecology**. 347: 77-87.
- Podolsky, R.D. and J.S. McAlister. 2005. Developmental plasticity in *Macrophiothrix* brittlestars: are morphologically convergent larvae also convergently plastic? **Biological Bulletin**. 209(2): 127-138.
- Marko, P.B., S.C. Lee, A.M. Rice, J.M. Gramling, T.M. Fitzhenry, J.S. McAlister, G.R. Harper, and A.L. Moran. 2004. Mislabeling of a depleted reef fish. **Nature**. 430: 309-310.

Publications continued

McAlister, J.S. and S.E. Stancyk. 2003. Effects of variable water motion on regeneration of *Hemipholis elongata* (Echinodermata: Ophiuroidea). **Invertebrate Biology**. 122(2): 166-176.

McAlister, J.S. 1998. Effects of variable water motion on regeneration of the infaunal brittlestar, *Hemipholis elongata* (Say: 1825) (Echinodermata: Ophiuroidea). M.S. Thesis. Univ. of South Carolina. 146 pp.

Manuscripts in Preparation

McAlister, J.S. and J.G. Kingsolver. Patterning reaction norm distributions: which genotypes produce extreme phenotypes? To be submitted to **American Naturalist**.

McAlister, J.S., M.J. Fuxjager, J.H. Wang, and K.J. Lohmann. Potential mitigation strategies for the attraction of juvenile sea turtles to lightsticks used in longline fisheries. To be submitted to **Animal Conservation**.

Postdoctoral Research Projects in Development

McAlister, J.S. and A.L. Moran. Evolution of 'geminant pair' echinoid eggs: Is egg size indicative of egg quality?

McAlister, J.S. and A.L. Moran. Latitudinal variation in the expression of plasticity in echinoid larvae.

Invited Seminars

- 2007 Marine Science Program, University of South Carolina, Columbia, SC
 --- Department of Biology, University of Richmond, Richmond, Virginia
 2005 Departments of Biology and Marine Science, Jacksonville University, Jacksonville, Florida
 --- Smithsonian Tropical Research Institute, Panama
 2003 Lizard Island Research Station, Queensland, Australia

Professional Presentations*Oral Contributions & Published Abstracts*

- 2006 12th International Echinoderm Conference, University of New Hampshire, Durham, NH.
 McAlister, J.S. Abstract In: Proceedings of the 12th Intl. Echinoderm Conference.
- Society for Integrative and Comparative Biology Annual Meeting, Orlando, Florida.
 McAlister, J.S. Abstract In: **Integrative & Comparative Biology** 45(6): 1040.
- Allen, J.D. and J.S. McAlister. Abstract In: **Int. & Comp. Biol.** 45(6): 956.
- 2005 Society for Integrative and Comparative Biology Annual Meeting, San Diego, California.
 McAlister, J.S. and R.D. Podolsky. Abstract In: **Int. & Comp. Biol.** 44(6): 599.
- International Sea Turtle Society's 25th Sea Turtle Symposium. Savannah, GA.
 Wang, J.H., L.C. Boles, B. Higgins, J.S. McAlister, and K.J. Lohmann. Abstract In: Symposium Abstracts.
- 2004 Society for Integrative and Comparative Biology Annual Meeting, New Orleans, Louisiana.
 McAlister, J.S. and R.D. Podolsky. Abstract In: **Int. & Comp. Biol.** 43(6): 1079.
- 2001 4th North American Echinoderm Conference, Darling Marine Center, University of Maine, Walpole, ME.
 McAlister, J.S. and S.E. Stancyk. Abstract In: **Gulf of Mexico Science**. 14(2): 185-186.
- 2000 29th Annual Benthic Ecology Meeting, University of North Carolina at Wilmington, NC.
 Coen, L.D., J.S. McAlister, & K. Hammerstrom. Abstract In: 29th Annual BEM Abstracts, p. 45.

Professional Presentations continued*Poster Contributions & Published Abstracts*

- 2006 26th Annual Sea Turtle Symposium. Crete, Greece.
Wang, J.H., J.S. McAlister, M. Fuxjager, B. Higgins, and K.J. Lohmann. Abstract In: Symposium Abs.
- 2005 UNC-CH Department of Biology Annual Retreat and Graduate Student Symposium.
- 2004 24th Annual Sea Turtle Symposium. San Juan, Costa Rica.
Wang, J.H., L.C. Boles, J.S. McAlister, B. Higgins, K.J. Lohmann. Abstract In: Symposium Abstracts.
- 2003 UNC-CH Department of Biology Annual Retreat and Graduate Student Symposium.
- 2000 10th International Echinoderm Conf., Univ. of Otago, Dunedin, NZ.
McAlister, J.S. & S.E. Stancyk. Abstract In: *Echinoderms 2000*. Barker (ed.) Swets & Zeit., Lisse. p. 299.

Professional Service

- 2005-06 Divisional Representative – SICB Student/Postdoc Affairs Committee
- 2003-05 President: UNC-CH Biology Graduate Student Association (BGSA)
- 2004 Panel Member: UNC-CH New Graduate Student Orientation Sessions
- 2004-06 Alumni Admission Representative: Sea Education Association (SEA)
- 2003-05 Student Advisory Board Member: UNC-CH Office of Undergraduate Research (OUR)
- 2000 Adjudicator, The Lowcountry Middle School Science Fair (Charleston, SC)
- 1998 Volunteer, National Ocean Sciences Bowl Regional Competition (Columbia, SC)

Reviewer for Scientific Journals

The Biological Bulletin, Invertebrate Biology, Journal of Experimental Marine Biology and Ecology

Membership in Professional Organizations

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| American Microscopical Society (AMS) | American Academy of Underwater Sciences (AAUS) |
| Diver's Alert Network (DAN) | Professional Association of Diving Instructors (PADI) |
| Sigma Xi, The Scientific Research Society (ΣΞ) | Society for Integrative and Comparative Biology (SICB) |

Teaching Experience

Clemson University – Principal Instructor
2008 Marine Biology

University of North Carolina at Chapel Hill – Graduate Teaching Assistant (TA)
2003, 05, 07 Invertebrate Biology
2005 - 2007 Special Topics: Modes of Inquiry
2001 - 2006 Principles of Anatomy & Physiology (Human)

University of South Carolina – Columbia – Graduate Instructional Assistant (TA)
1998 Invertebrate Zoology
1997, 1997 Biological Principles II
1996 Biological Principles I

Invited Course Lectures

- 2007 Marine Invertebrate Biology, UNC-Chapel Hill, 1 lecture, Spring 2007
2005 Marine Invertebrate Biology, UNC-Chapel Hill, 2 lectures, Spring 2005

Supervisory/Mentoring Experience*University of North Carolina at Chapel Hill*

Nine (9) Undergraduate Research Assistants
 One (1) Post-baccalaureate Research Volunteer

Lizard Island Research Station, Queensland, Australia

Two (2) Post-baccalaureate Research Volunteers
 Two (2) Postgraduate Research Volunteers
 One (1) Post-doctoral Research Volunteer

Marine Resources Research Institute, SC Department of Natural Resources

One (1) Marine Biologist I (M.S. level position)
 Three (3) Research Technician II (B.S. level position)
 Twelve (12) Temporary Research Employees (B.S. level position)
 One (1) High School Science Fair Student

University of South Carolina – Columbia

Two (2) Undergraduate Research Assistants

Relevant Coursework*University of North Carolina at Chapel Hill*

Evolutionary Genetics
 Molecular Population Biology
 Comparative Biomechanics
 Comparative Physiology
 Evolutionary Mechanisms
 Invertebrate Paleontology
 Seminar: Speciation
 Seminar: Phenotypic Plasticity
 Seminar: Microevolution
 Seminar: Invertebrate Zoology
 Seminar: Evolution of Phenotypic Plasticity
 Seminar: Ecological & Evolutionary Responses
 to Environmental Change (Audit)

University of South Carolina – Columbia

Evolutionary Biology
 Theoretical Ecology
 Biological Oceanography
 Ultramicroscopy
 Applied Statistics I & II
 Environmental Economics

University of Washington - Friday Harbor Labs

Larval Biology

NC State Univ. – Bioinformatics Research Center

Regression and Analysis of Variance
 Principles of Quantitative Genetics

University of Richmond, Virginia

Invertebrate Zoology
 Tropical Marine Biology
 Microbial Ecology
 Cell & Molecular Biology
 Genetics
 Introductory Plant Biology
 Introductory Animal Biology

 Environmental Chemistry
 Analytical Chemistry I (Quantitative)
 Organic Chemistry I & II
 Inorganic Chemistry I & II
 Measurements and Statistics
 Calculus I & II

Sea Education Association, Woods Hole, Mass.

Oceanography w/Lab
 Practical Oceanography I & II
 Nautical Science
 Maritime Studies

George Mason University, Virginia

Geographic Information Systems

References*Ph.D. Dissertation Advisor***Dr. Joel G. Kingsolver**

William Rand Kenan, Jr. Professor
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*Postdoctoral Fellowship Advisor***Dr. Amy L. Moran**

Assistant Professor
Department of Biological Sciences
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*Ph.D. Committee Member***Dr. William M. Kier**

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*Ph.D. Committee Member***Dr. David W. Pfennig**

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*M.S. Thesis Advisor***Dr. Stephen E. Stancyk**

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Department of Biological Sciences & Marine Science Program
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*STRI Fellowship Advisor***Dr. Harilaos A. Lessios**

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Other references available upon request.