Curriculum Vita
Bryan R. Franks

***Specialization*:** Marine Biology, Ecology, Conservation Biology

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EDUCATION

Ph.D., Environmental Science/Ecology, 2007: Drexel University, Philadelphia, Pennsylvania
Dissertation Research: *The spatial ecology and habitat selection of juvenile lemon sharks (Negaprion brevirostris) in their primary nursery areas.*

M.S., Environmental Science/Ecology, 2003: Drexel University, Philadelphia, Pennsylvania, GPA – 4.0
Thesis Research: *The home range and movements of desert tortoises (Gopherus agassizii) in the California Mojave Desert.*

B.S., Biology, 1997: Villanova University, Villanova, Pennsylvania

TEACHING EXPERIENCE

2013-present **Assistant Professor**
Florida Southern College, Department of Marine Biology

2011-2013 **Visiting Assistant Professor**
Rollins College, Department of Biology
Fall 2011: Ecology with lab, The Biosphere with lab
Spring 2012: Introduction to Marine Science, Biology of Fishes with lab, General Biology lab
Fall 2012: The Biosphere with lab, Human Impacts of Marine Ecosystems, The Biology of Sharks
Spring 2013: Introduction to Marine Science, Marine Biology with lab, Journal Club

2006-2007 **Teaching Assistant**
Drexel University, Physiological and Population Ecology

2003-2004; 2008-2010 **Assistant**
University of Miami & University of Minnesota, Marine Biology Field Course
-Delivered two class lectures on telemetry techniques and shark movement patterns
-Assisted in field collection of specimens
-Helped maintain aquaria in lab for over 100 specimens
-Led field trips around the Bimini Islands to show students the variety of habitats found in a tropical ecosystem

2002-2004; 2008-2010 **Assistant**
Coastal Carolina University, Eckerd College, & University of New Brunswick
Shark Biology Course
-Delivered class lectures on telemetry techniques and shark movement patterns
-Led field trips for students to observe numerous species of sharks in their natural habitat

2002 **Teaching Assistant**
Drexel University, School of Environmental Science, Engineering and Policy, Environment and Society
-Attended lectures once weekly and held review sessions

-Delivered one class lecture on endocrine disruptors and their implications on humans and wildlife
-Developed questions and assisted in the grading of final exams

INFORMAL TEACHING ACTIVITIES

2003-2005 **Field Supervisor, Bimini Biological Field Station**
-Supervised seven master's and thirteen undergraduate students during their time at the Bimini Biological Field Station

RESEARCH EXPERIENCE

2008-2011 **Postdoctoral Researcher/Managing Director**
Bimini Biological Field Station
-Responsible for planning and conducting research projects in Bimini, Bahamas; Tiger Beach, Bahamas; Marquesas Key, Florida; Cape Canaveral, Florida; and Jupiter, Florida.

2005-present **Research Biologist**
Jupiter Lemon Shark Aggregation Study
Seasonal study investigating the ecology and behavior of a large aggregation of adult lemon sharks in Jupiter, FL.

2004, 2009-10 **Field Team Leader**
Marquesas PIT Tagging Census
-Responsible for field crews catching and tagging juvenile and adult lemon sharks

2003-2006 **Principal Investigator/ Doctoral Student**
Bimini Biological Field Station - Samuel H. Gruber, Ph.D., Director
-Responsible for directing the scientific research being conducted at the station
-Organize and conduct my own doctoral research on the spatial ecology and habitat utilization of resident lemon sharks
-Mentor undergraduate and master's students during their research projects
-Experience: acoustic telemetry of sharks including both manual and automated telemetry; shark capture techniques including gillnetting, longlining, and hook and line fishing; surgical techniques for the implantation of transmitters; stomach evaluation techniques including stomach eversions and lavage; assessment of mangrove and seagrass communities using seine netting, block netting, and beam trawls

2002 **Research Assistant**
Drexel University - Walter Bien, Ph.D., Project director
-Conducted herp and fish surveys in the Pine Barrens of New Jersey
-Radiotracked state threatened timber rattlesnakes and state endangered eastern pine snakes

2001-2002 **Research Biologist**
Drexel University – James R. Spotila, Ph.D., Project director
-Conducted research on endangered leatherback sea turtles at Playa Grande, Costa Rica
-Performed nightly beach surveys for nesting females and conducted metabolism studies on leatherback nests and eggs
-Used Qubit oxygen sensors to examine how biotic factors affect the nest environment of leatherback turtles

2001 **Research Assistant**
Drexel University – James R. Spotila, Ph.D. and Harold W. Avery, Ph.D.

-Continued research on desert tortoises (*Gopherus agassizii*) at 4 sites in the California Mojave Desert
-Performed radiotelemetry and demography studies
-Used x-radiography and radiotelemetry to examine how resource quality affects movements and reproduction
-Acquired many field techniques including x-radiography of tortoises as well as transmitter application in the presence of permitted biologists

2000 **Biological Science Technician**
USGS/Biological Resources Division – Harold W. Avery, Ph.D.
-Conducted research on threatened desert tortoises (*Gopherus agassizii)* in the California Mojave Desert
-Performed both reproductive and radiotelemetry studies
-Acquired many field techniques in the presence of permitted biologists including the use of thread trailers for determining nest locations

PUBLICATIONS: Peer Reviewed Literature

Jennings, David E., Joseph D. DiBattista, Kristine L. Stump, Nigel E. Hussey, Bryan R. Franks, R. Dean Grubbs, and Samuel H. Gruber. Assessment of the aquatic biodiversity of a threatened coastal lagoon at Bimini, Bahamas. Journal of Coastal Conservation Planning and Management (2012) In Press.

Guttridge TL, Gruber SH, Franks BR, Kessel ST, Gledhill KS, Uphill J, Krause J, Sims DW. 2012. Deep danger: intra-specific predation risk influences habitat use and aggregation formation of juvenile lemon sharks, *Negaprion brevirostris*. Marine Ecology Progress Series. In Press.

Franks, B.R., H.W. Avery, and J.R. Spotila. 2010. Home range and movement of desert tortoises *Gopherus agassizii* in the Mojave Desert of California. Endangered Species Research, **13(3):** 191-201.

Chapman, D.D., E.A. Babcock, S.H. Gruber, J.D. DiBattista, B.R. Franks, S.T. Kessel, T. Guttridge, E.K. Pikitch, and K.A. Feldheim. 2009. Long-term natal site-fidelity by immature lemon sharks (*Negaprion brevirostris*) at a subtropical island. Molecular Ecology. **18:** 3500-3507.

Jennings, D.E., S.H. Gruber, B.R. Franks, S.T. Kessel, and A.L. Robertson. 2008. Effects of large-scale anthropogenic development on juvenile lemon shark (*Negaprion brevirostris*) populations of Bimini, Bahamas. Environmental Biology of Fishes. **83(4):** 369-377.

Wallace, B.P., J.R. Spotila, P.R. Sotherland, R.D. Reina, B.R. Franks, and F. Paladino. 2004. Biotic and abiotic factors affect the nest environment of embryonic leatherback turtles, *Dermochelys coriacea*. Physiological and Biochemical Zoology **77(3)**: 423-432.

Manuscripts in Preparation

Franks, B.R., S.H. Gruber, G. Johnson, J.R. Spotila.. The occurrence of the endangered smalltooth sawfish (*Pristis pectinata*) in Bimini Bahamas with notes on preliminary tracking of a single individual. In preparation. Target Publication: *Endangered Species Research*

Kessel, S.T., D.D. Chapman, B.R. Franks, T. Gedamke, S.H. Gruber, and R.G. Perkins. Aggregation and migration of adult lemon sharks (*Negaprion brevirostris*).

PRESENTATIONS AT SYMPOSIA

- Franks, B.R. Home Range and Movements of Desert Tortoises in Response to Rainfall and Vegetation Parameters. Desert Tortoise Council Symposium, 2002, Palm Springs, CA.

- Franks, B.R. Nesting Success of Desert Tortoises at Ivanpah Valley, CA and Fort Irwin Reference Site, CA During the Year 2000. Desert Tortoise Council Symposium, 2002, Palm Springs, CA.

- Franks, B.R., S.H. Gruber, B.M. Wetherbee, and J.R. Spotila. The Spatial Ecology and Habitat Utilization of Juvenile Lemon Sharks (*Negaprion brevirostris*) in Florida, Brazil, and the Bahamas. Joint Meeting of Ichthyologists and Herpetologists, 2004, Norman, OK.

- Franks, B.R., S.H. Gruber, and J.R. Spotila. The movements and habitat selection of juvenile lemon sharks, *Negaprion brevirostris*, over a spatiotemporal scale. Joint Meeting of Ichthyologists and Herpetologists, 2005, Tampa, FL.

- Kessel, S.T., S.H. Gruber, B.R. Franks, G.T. Johnson, and S. Konigson. Community structure of the resident and nomadic shark populations, Bimini, Bahamas. Joint Meeting of Ichthyologists and Herpetologists, 2005, Tampa, FL.

- Franks, B.R., S.H. Gruber. Utilization of mangroves by juvenile lemon sharks (*Negaprion brevirostris*) in their primary nursery areas. 1st Symposium on Mangroves as Fish Habitat. 2006. Miami, FL.

- Franks, B.R., S.H. Gruber. Behavioral strategies of space use by young lemon sharks (*Negaprion brevirostris*) in their primary nursery areas. Joint Meeting of Ichthyologists and Herpetologists, 2006. New Orleans, LA.

- Franks, B.R., S.H. Gruber, and J.R. Spotila. A Mother's Right to Choose: Ecological partitioning of nursery areas at Bimini, Bahamas and the implications for conservation strategies. Joint Meeting of Ichthyologists and Herpetologists, 2007. St. Louis, MO.

- Franks, B.R., E.A. Reyier, S.H. Gruber, S.T. Kessel, and D.D. Chapman. Lemon Sharks (*Negaprion brevirostris*) on the Beach: An Update from a Winter, Surf-zone Nursery at Cape Canaveral, Florida. Joint Meeting of Ichthyologists and Herpetologists, 2009. Portland, OR.

- Kerstetter, D., T. Gedamke, B.R. Franks, S.T. Kessel, and S.H. Gruber. Pop-up Satellite Archival Tag (PSAT) Tagging of Two Lemon Sharks (*Negaprion brevirostris*) in the Florida Straits within an Acoustic Tagging Network. Joint Meeting of Ichthyologists and Herpetologists, 2010. Providence, RI.

- Kessel, S.T., S.H. Gruber, T. Gedamke, B.R. Franks, D.D. Chapman, D. Kerstetter, D. Fugate, and R. Perkins. Influence of Water Temperature on Behaviour and Migration of Adult Lemon Shark (Negaprion brevirostris) Throughout the U.S. Eastern Seaboard. Joint Meeting of Ichthyologists and Herpetologists, 2010. Providence, RI.

- Reyier, E.A., B.R. Franks, D.D. Chapman, S.T. Kessel, and S.H. Gruber. Site Fidelity and Seasonal Movement Patterns of Juvenile Lemon Sharks in an Open Ocean Nursery at Cape Canaveral, Florida. Joint Meeting of Ichthyologists and Herpetologists, 2010. Providence, RI.

GRANTS AND AWARDS

- Rollins College Student-Faculty Collaborative Research Award, 2012
- Nominated for the Professing Excellence award, 2012. Rollins College
- Teaching Excellence Award Nominee, 2007. Drexel University, Department of Bioscience and Biotechnology
- Environmental Systems Research Institute, ESRI Conservation Program Grant
    - Awardees: DiGirolamo, T., Franks, B.R., Gruber, S.H. 2004
- Student Travel Award, American Elasmobranch Society, 2004
- Student Travel Award, American Society of Ichthyologists and Herpetologists, 2004
- P.I.; SeaWorld & Busch Gardens Conservation Fund, "Shark Schools: Conservation Research to Protect Florida's Vulnerable Shark Populations with an Emphasis on Lemon Shark Aggregations." **$10,000**
- P.I.; National Geographic Society, Committee for Research and Exploration, "Investigation Of The Structure And Function Of Large, Seasonal Aggregations Of Mature Lemon Sharks (Negaprion Brevirostris) Off Jupiter Florida" **$32,000**
- P.I.; The Henry Foundation, "Scientific research to protect a key shark aggregation and nursery area at Cape Canaveral, Florida." **$10,000**
- P.I.; The Pew Foundation, Institute for Ocean Conservation Science, "Conservation genetics a large coastal shark, *Negaprion brevirostris* at Bimini Bahamas: Philopatry and Natal Homing ." **$195,000**
- P.I.; Guy Harvey Ocean Foundation, **$45,000**

COMPUTER EXPERIENCE

- **Databases:** dBase, Microsoft Access, Excel
- **Statistics:** Stata, SAS, SPSS, Sigma Stat and Sigma Plot, Statview, Statgraphics Plus
- **GIS:** ArcView 3.2, ArcGIS 8.3, ArcGIS 9.1, ArcInfo

INVITED LECTURES

- Eckerd College, St. Petersburg, FL, Invited speaker, December 5, 2012
- Coastal Carolina University, Conway, SC, Celebration of Inquiry, Invited speaker, March 31, 2012
- Okeeheelee Nature Center, West Palm Beach FL, April 2011
- Cape Eleuthera Institute, Eleuthera Bahamas, December 2010
- Daggerwing Nature Center, Boca Raton, FL, April 2010
- The Biology of Lower Vertebrates course, Drexel University, February 2007
- Departmental Seminar, Drexel University, December 2004
- Environmental Science and Society course, Drexel University, April 2002

PROFESSIONAL MEMBERSHIPS

- American Society of Ichthyologists and Herpetologists (ASIH)
- American Elasmobranch Society (AES)

PUBLIC RELATIONS

- Today Show, segment on shark migrations in Florida, February 2011
- Today Show, segment on importance of sharks, February 2009
- Participated in documentaries with BBC, Discovery, Animal Planet, Nat Geo Wild, and others