

*Curriculum Vitae*  
**William P. Irwin**

**PERSONAL  
INFORMATION**

**Address:** The Georgia Sea Turtle Center  
100 James Road  
Jekyll Island, GA 31527  
USA

**E-mail:** birwin@jekyllisland.com  
**Phone:** (912) 635-4400

**Websites:** www.unc.edu/~wpirwin  
homepage.mac.com/Limulus (mirror)  
members.seaturtle.org/Bill/ (mirror)

**Citizenship:** U.S.  
**Languages:** English, functional Spanish

**EDUCATION**

**Ph.D. Biology** (2004)  
University of North Carolina, Chapel Hill, NC, USA

Dissertation under the Direction of Kenneth J. Lohmann:  
Magnetic orientation and magnetoreception in hatchling loggerhead sea turtles.

**B.S. Biology *Cum Laude*** (1996)  
University of Massachusetts, Amherst, MA, USA

**A.S. Electronic Systems Engineering *Cum Laude*** (1986)  
Springfield Technical Community College, Springfield, MA, USA

**MANAGEMENT  
EXPERIENCE**

**Jekyll Island Authority - Jekyll Island, GA** (2007 - present)  
**Director, Georgia Sea Turtle Center**

**Kaplan Test Prep and Admissions - Durham, NC** (2005-2006)  
**Center Director**

**Kaplan Test Prep and Admissions - Chapel Hill, NC** (2005)  
**Associate Center Manager**

**Metropolitan Parking Systems, Inc. - Boston, MA** (1990-1992)  
**City Manager / Manager**

**Franciscan Brothers of the Good News, Inc. - Cummington, MA** (1986-1989)  
**Vice President / General Manager**

**TEACHING  
EXPERIENCE**

**Vance Granville Community College (Fall 2006)**  
**Instructor - Anatomy and Physiology Lecture with Lab**  
**Instructor - Basic Anatomy and Physiology with Lab (2 classes on 2 campuses)**

**University of North Carolina at Chapel Hill (1996-2004)**  
**Laboratory Instructor in Animal Behavior (5 semesters)**  
**Laboratory Instructor in Invertebrate Zoology (3 semesters)**  
**Laboratory Instructor in Human Anatomy and Physiology (6 semesters)**  
**Undergraduate Research Supervisor**

**Kaplan Test Prep and Admissions - Chapel Hill, NC (2004 - 2006)**  
**Teacher / Student Advisor / Writer for published teaching materials**

**OceanQuest - Woods Hole, MA (1993-1994)**  
**Educator / Crew**

**Schooner Appledore - Camden, ME and Key West, FL (1992-1993)**  
**Crew / Marine Life Expert**

**New England Aquarium - Boston, MA (1990-1992)**  
**Education Guide, Whale Watch Guide, Marine Mammal Stranding Volunteer,**  
**Volunteer Training Teacher, President Volunteer Association**

**RESEARCH  
EXPERIENCE**

**University of North Carolina, Chapel Hill, NC**  
**Research Consultant - Melbourne Beach, FL (2004)**  
Magnetic orientation and navigation in juvenile and hatchling sea turtles

**University of North Carolina, Chapel Hill, NC**  
**Graduate Researcher (1996 - 2004)**  
Magnetic Orientation and Magnetoreception in Hatchling Loggerhead Sea Turtles  
Orientation behavior in horseshoe crabs (*Limulus polyphemus*)

**University of Massachusetts, Amherst, MA, USA (1995-1996)**  
**Undergraduate Researcher**  
Genetics of axon path-finding in *Drosophila melanogaster*

**PUBLICATIONS**

**Published papers:**

**Irwin, W.P. and Lohmann, K. J. (2003).**  
Magnet-induced disorientation in hatchling loggerhead sea turtles.  
*Journal of Experimental Biology* 206(3): 497-501. (Issue cover article)

**Irwin, W.P., Horner, A.J. and Lohmann, K. J. (2004).** Magnetic field distortions produced by protective cages around sea turtle nests: unintended consequences for orientation and navigation?  
*Biological Conservation* 118(1): 117-120.

**Irwin, W. P. (2004).** Magnetic orientation and magnetoreception in hatchling loggerhead sea turtles. Ph.D. Dissertation, University of North Carolina, Chapel Hill, NC, 150pp.

**Irwin, W.P. and Lohmann, K. J. (2005).** Disruption of magnetic orientation behavior in hatchling loggerhead sea turtles by magnetic pulse. *Journal of Comparative Physiology A* 191: 475-480.

**Submitted manuscripts:**

**Irwin, W.P. and Lohmann, K. J. (In review)**

Evidence for cephalic magnetoreceptors in loggerhead sea turtles.

**Working manuscripts:**

Innate and environmentally-derived compass orientation in loggerhead sea turtles.

Sensitivity of the magnetoreception system of loggerhead sea turtles.

Sun orientation in hatchling loggerhead sea turtles.

Perception of ocean wave motion by juvenile green sea turtles.

**PRESENTATIONS  
at  
PROFESSIONAL  
MEETINGS**

**25th Annual Symposium on Sea Turtle Biology and Conservation (2005)**  
**(International Sea Turtle Symposium - ISTS);** Savannah, GA, USA

**24th Annual ISTS (2004);** San Jose, Costa Rica

**Annual North Carolina Sea Turtle Permit Holder's Meeting;** invited speaker (2004)

**23rd Annual ISTS (2003);** Kuala Lumpur, Malaysia

**22nd Annual ISTS (2002);** Miami, FL, USA

**21st Annual ISTS (2001) ;** Philadelphia, PA, USA

**20th Annual ISTS(2000);** Orlando, FL, USA

**Society for Integrative and Comparative Biology (2000);** Atlanta, GA, USA

**19th Annual ISTS (1999);** South Padre Island, TX, USA

**FELLOWSHIPS  
GRANTS  
and  
AWARDS**

**PADI Foundation Research Grant**

**American Museum of Natural History Lerner-Gray Research Grant**

**UNC Instructional Technology Enhancement Award**

**UNC Chancellor's Award for Instructional Technology**

**H. V. Wilson Award for Summer Research**

**University of North Carolina Graduate School Merit Scholarship**

**Howard Hughes Medical Institute REU Program Research Grant**

**University of Massachusetts Junior Fellows Research Grant**

**Winner - Archie Carr award for best student poster (ISTS 2000)**

**Runner-up - Archie Carr award for best student talk (ISTS 2004)**

**Finalist - Convention on the Conservation of Migratory Species of Wild Animals**

**(UNEP/CMS) Thesis Award on Migratory Species Conservation (2005)**

**RECENT  
PROFESSIONAL  
  
and  
SERVICE  
AFFILIATIONS**

**International Sea Turtle Society (1997-2007)**

Poster session chair *2008, 2007, 2006, 2005*; Student presentation judge *2006, 2005, 2002, 2001*

**Animal Behavior Society (1997-2006)**

**Society for Integrative and Comparative Biology (1999-2006)**

**American Association of Underwater Scientists (2002-2006)**

**PADI Certified Rescue Diver**

15 years diving experience

**USA Track and Field Certified Official (2008 Olympiad, 2004 Olympiad)**

**American Mensa and Mensa of Eastern North Carolina (2002-2006)**

**COMPUTER  
SKILLS**

**Operating systems:** Mac OS X (10.4), OS 9.x, etc., Windows XP, 2000, 98, etc.

**Software:** MS Office, Adobe CS, iLife, Endnote, Virtual PC, ARCView, ARCInfo

**Programming:** Visual Studio 6 (Visual Basic), MPLAB IDE (PIC)

Created and continue to develop ArenaTracker® software that is used for orientation studies by animal behavior researchers worldwide.

**Web site administering:** Various