

# **Susan C Gardner, Ph.D.**

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## **EDUCATION**

Doctorate (1995) University of Washington, Seattle, WA  
Major: Ocean and Fisheries Sciences, Minor: Toxicology

Master's of Science (1991) North Carolina State University, Raleigh, NC  
Major: Toxicology, Minor: Biochemistry

Bachelor's of Science (1989) Long Island University at Southampton Campus, Southampton, NY  
Major: Marine Science

## **PROFESSIONAL HISTORY**

2012 – Present: Chief of Staff; U.S. National Oceanic and Atmospheric Administration, Northeast Fisheries Science Center, Woods Hole, MA.

2011-2012: Deputy Director; U.S. Department of State, Bureau of Oceans and International Environmental and Scientific Affairs, Office of Science and Technology Cooperation. Washington, D.C.

2006 – 2010: Senior Foreign Affairs Officer; U.S. Department of State, Bureau of Oceans and International Environmental and Scientific Affairs, Office of Environmental Policy. Washington, D.C. (Awarded a Gold Medal for Exceptional Services from the U.S. Environmental Protection Agency, the highest National Honor Award that EPA bestows)

2000 – 2006: Program Manager / Professor; Northwest Center for Biological Research, La Paz, Baja California Sur, Mexico

2004 – 2006: Environmental Consultant; Inhalation Toxicology and Associates Inc., Savannah, GA

1996 – 1999: Research Faculty/ Program Director/ Interim Center Director; School for Field Studies, Center for Coastal Studies, Puerto San Carlos, Baja California Sur Mexico

1995 – 1996: Postdoctoral Researcher; National Oceanic and Atmospheric Administration, Northwest Fisheries Science Center, Seattle

1992 – 1995: Research Technician; Washington Cooperative Fish and Wildlife Research Unit, University of Washington, Seattle, WA

## **AWARDS AND HONORS**

Quality Step Increase Award; Department of State (2012)

Quality Step Increase Award; Department of State (2010)

Gold Medal Award; Environmental Protection Agency (2010)

Superior Honor Award; Department of State (2009)

Meritorious Honor Award; Department of State (2008)

Extra Mile Award; Department of State (2008)

Board Certified Fellow; Academy of Toxicological Sciences (2007)

AAAS Science and Technology Policy Fellowship Award, AAAS (2006)

International Travel Award; Symposium on Sea Turtle Biology and Conservation (2000)

National Research Council Associateship Program Fellowship (1995)

## **PUBLICATIONS**

### **Book**

Gardner, S.C. and E. Oberdörster (2005) Toxicology of Reptiles. CRC Press. 310 pp.

### **Book Chapters**

Riosmena-Rodriguez, R. A.L. Talavera-Saenz, G. Hinojosa-Arango, M. Lara-Uc, S. Gardner . (2011). The Foraging Ecology of the Green Turtle in the Baja California Peninsula: Health Issues, Health Management - Different Approaches and Solutions, Dr. Krzysztof Smigorski (Ed.), ISBN: 978-953-307-296-8, InTech, DOI: 10.5772/19736. Available from: <http://www.intechopen.com/books/health-management-different-approaches-and-solutions/the-foraging-ecology-of-the-green-turtle-in-the-baja-california-peninsula-health-issues>

Méndez Rodríguez, L., S.C. Gardner, B. Acosta Vargas, N. López Esquerr, S.T. Alvarez-Castañeda. (2007) Concentración de metales pesados en organismos bénticos: caso almeja venus *Chione californiensis* en el sistema lagunar de Bahía Magdalena. Chapter 5 In: Estudios sobre el Ecosistema de Bahía Magdalena (Funes-Rodriguez, J. Gomez-Gutierrez, and R. Palomares-Garcia, eds.) Centro Interdisciplinarios de Ciencias Marinas – Instituto Politecnico Nacional; pp. 83-90.

Gardner D.E. and S.C. Gardner (2005) Respiratory Infections. In: Encyclopedic Reference of Immunotoxicology. Vohr H.W. (ed.). Springer, Heidelberg Berlin. pp. 559-563.

Gardner, S.C. (2005) Introduction of Reptilian Toxicology. In: Toxicology of Reptiles. (Gardner, S.C. and E. Oberdörster, eds.) CRC Press. pp. 1-6.

Grue C.E., S.C. Gardner, and P. Gilbert. (2002) On the significance of pollution-induced alterations in the behavior of fish and wildlife. In: Behavioral Ecotoxicology, (ed. Giacomo Dell'omo) John Wiley Publ. pp. 1-90.

Gardner, D. E., and S. C. Gardner. (1993) Toxicology of air pollutants. In: Basic Environmental Toxicology. (L. Cockerham and M. Shane, eds.) CRC Press. pp. 287-312.

### **Peer-reviewed Scientific Journals**

Riosmena-Rodríguez, R., A. Talavera-Sáenz, B. Acosta-Vargas, S.C. Gardner. (2010) Heavy metals dynamics in seaweeds and seagrasses in Bahía Magdalena, B.C.S., Mexico; *J Appl Phycol* 22:283–291.

Labrada-Martagon, V., L.C. Mendez-Rodriguez, S.C. Gardner, V.H. Cruz-Escalona, T. Zenteno-Savin. (2010) Health Indices of the Green Turtle (*Chelonia mydas*) Along the Pacific Coast of Baja California Sur, Mexico. II. Body Condition Index. *Chelonian Conservation and Biology*, 9(2): 173–183.

Zaccaroni, A., M. Zucchini, L. Segatta, M. Gamberoni, D. Freggi, P.A. Accorsi, D. Scaravelli, S.C. Gardner. (2010) Vitellogenin (VTG) Conservation in Sea Turtles: Anti-VTG Antibody in *Chelonia mydas* versus *Caretta caretta*. *Physiological and Biochemical Zoology* 83(1):191–195.

Niño-Torres, C.A., S.C. Gardner, T. Zenteno-Savín, G.M. Ylitalo. (2008) Organochlorine pesticides and polychlorinated biphenyls in California sea lions (*Zalophus californianus californianus*) from the Gulf of California, México. *Archives of Environmental Contamination and Toxicology*.

Gardner, S.C., G. Ylitalo, U. Varanasi. (2007) Organochlorine accumulation in *Phocoena melon* as compared to blubber. *Marine Mammal Science*. 23(2):434-444.

Talavera Saenz, A., S.C. Gardner, R. Riosmena Rodriguez, B. Acosta Vargas. (2007) Metal Profiles Used as Environmental Markers of Green Turtle (*Chelonia mydas*) Foraging Resources. *Science of the Total Environment* 373(1): 94-102.

Kampalath, R., S.C. Gardner, L. Mendez, J. Jay (2006) Total and methyl mercury in three species of sea turtles of Baja California Sur. *Marine Pollution Bulletin* 52(12):1816-1823.

Aguirre A.A., S.C. Gardner, J.C. Marsh, S.G. Delgado, C.J. Limpus, W.J. Nichols. (2006) Hazards associated with the consumption of sea turtle meat and eggs: a review for health care workers and the general public. *EcoHealth*. 3(3):141-153.

Valdivia, PA, T Zenteno-Savin, SC Gardner, A Alonso Aguirre. (2006) Basic Oxidative Stress Metabolites in Eastern Pacific Green Turtles (*Chelonia mydas agassizii*) *Comparative Biochemistry & Physiology*.

- Sifuentes-Romero, I., C. Vázquez-Boucard, A.P. Sierra-Beltrán, S.C. Gardner. (2006) Vitellogenin in black turtle (*Chelonia mydas agassizii*): purification, partial characterization and validation of an ELISA for detection. *Environmental Toxicology and Chemistry*. 25(2):477-485.
- Gardner, S.C., S.L. Fitzgerald, B. Acosta Vargas, L. Méndez Rodríguez. (2006) Heavy metal accumulation in four species of sea turtles from the Baja California Peninsula, Mexico. *Biometals*. 19(1):91-99.
- Arencibia-Carballo G., L. Orta-Arrascaeta, N. Capetillo-Piñar, I. Perez, R. Hernández, S.C. Gardner, A. Ortega-Rubio. (2005) Organochlorine Insecticide Residues in Nipe Bay, Cuba. *Bulletin of Environmental Contamination and Toxicology*. 75(2): 304-307.
- López-Mendilaharsu, M., S.C. Gardner, R. Riosmena-Rodríguez, J.A. Seminoff. (2005) Identifying critical foraging habitats of the green turtle (*Chelonia mydas*) along the Pacific Coast of the Baja California Peninsula, México. *Aquatic Conservation: Marine and Freshwater Ecosystems*. 15(3):259-269.
- Cordero-Tapia A., S.C. Gardner, J. Arellano-Blanco, and R.B. Inohuye-Rivera. (2004) *Learedius learedi* Price, 1934 infection in black turtles (*Chelonia mydas agassizii*) Baja California Sur, Mexico. *Journal of Parasitology*. 90(3):645-647.
- Gardner, S.C. and U. Varanasi. (2003) Isovaleric acid accumulation in odontocete melon during development. *Naturwissenschaften*. 90(11):528-531.
- Gardner, S.C., M. Dawn Pier, Raymond Wesselman, J. Arturo Juárez. (2003) Organochlorine contaminants in sea turtles from the Eastern Pacific. *Marine Pollution Bulletin*. 46(9):1082-1089.
- Inohuye-Rivera, R.B., A. Cordero-Tapia, J. Arellano-Blanco and S.C. Gardner. (2004) *Learedius learedi* Price, 1934 (trematoda: spirorchiidae) in black turtle (*Chelonia mydas agassizii*) hearts from Magdalena Bay, Baja California Sur Mexico. *Journal of Comparative Parasitology*. 71(1):37-41.
- Major, W.W. III, C.E. Grue, S.C. Gardner and J.M. Grassley. (2003) Concentrations of glyphosate and AMPA in sediment following operational applications of Rodeo to control smooth cordgrass in Willapa Bay, Washington, USA. *Bulletin of Environmental Contamination and Toxicology*. 71(5):912-918.
- Lopez Mendilaharsu, M., S.C. Gardner, and J.A. Seminoff. (2003) *Chelonia mydas agassizii* (East Pacific Green Turtle) Diet. *Herpetological Review*. Vol. 34(2):139-140.
- Gardner S.C. and W.J. Nichols. (2001) Assessment of sea turtle mortality rates in the Bahía Magdalena region, Baja California Sur, México. *Chelonian Conservation and Biology*. Vol. 4(1) 197-199.
- Gardner, S.C., C.E. Grue, W.W. Major III, and L.L. Conquest. (2001) Aquatic invertebrate communities associated with purple loosestrife (*Lythrum salicaria*), cattail (*Typha latifolia*), and bulrush (*Scirpus acutus*) in central Washington, USA. *Wetlands*. 21(4) 593-601.
- Gardner, S.C. and S. Chávez-Rosales. (2000) Changes in the distribution and abundance of gray whales (*Eschrichtius robustus*) in Magdalena Bay during an El Niño event. *Marine Mammal Science*. 16(4) 48-71.

Chávez-Rosales, S. and S.C. Gardner. (1999) Recent sightings of harbor seal pups (*Phoca vitulina richardsi*) in Magdalena Bay, Baja California Sur, México. *Aquatic Mammals*. 25(3): 169-171.

Major, W.W., J. Grassley, C.E. Grue and S.C. Gardner. (1998) A vacuum water pump/filtration sampler for the collection of aquatic invertebrates. *Journal of Freshwater Ecology*. 13:361-363.

Gardner, S. C., C.E. Grue, J. M. Grassley, L. A. Lenz, J. M. Lindenauer and M. E. Seeley. (1997) Single species algal (*Ankistrodesmus*) toxicity tests with Rodeo and Garlon 3A. *Bulletin of Environmental Contamination and Toxicology*. 59:492-499.

Gardner, S. C., and C.E. Grue. (1996) Effects of Rodeo and Garlon 3A on nontarget wetland species in central Washington. *Environmental Toxicology and Chemistry*. 15(4): 441-451.

Gardner, S.C., C.E. Grue, C.J. Perry and G.L. Piper (1994) Potential impacts of purple loosestrife and its control on wetlands in Washington State: An evaluation of research needs. *Lake and Reservoir Management*. 9(1): 133-136.

Gardner, S. C., and W. C. Dauterman. (1992) Studies on cysteine conjugate B-lyase and thiol S-methyltransferase in insects. *Insect Biochemistry and Molecular Biology*. 22: 181-184.

#### Conference Proceedings

Cordero, A., J. Arellano, A. Aguilar, and S.C. Gardner. Serological Results of Black Turtle (*Chelonias mydas agassizii*) from Three Different Locations at Baja California, Mexico for Herpesvirus, Rabdovirus and Orthomyxovirus. *Proceedings from the Symposium on Sea Turtle Biology and Conservation. 23rd Annual Meeting*, Kuala Lumpur, Malaysia.

Cordero, A., J. Arellano, R. Inohuye, and S.C. Gardner. Infection of the Black Tortoise (*Chelonias mydas agassizii*) by *Learedius learedi*. An Histological and Parasitological Evaluation. *Proceedings from the Symposium on Sea Turtle Biology and Conservation. 23rd Annual Meeting*, Kuala Lumpur, Malaysia.

Juarez, J.A. and S.C. Gardner. Contaminants in sea turtles: Comparing Mexico to the global situation. *Proceedings from the Symposium on Sea Turtle Biology and Conservation. 23rd Annual Meeting*, Kuala Lumpur, Malaysia.

López Mendilaharsu, M., S.C. Gardner, R. Riosmena Rodriguez, and J.A. Seminoff. Diet Preferences by East Pacific Green Turtles (*Chelonia mydas*) in Bahía Magdalena, S.C., Mexico. *Proceedings from the Symposium on Sea Turtle Biology and Conservation. 23rd Annual Meeting*, Kuala Lumpur, Malaysia.

Hilbert, S.C., S.C. Gardner, R. Riosmena Rodriguez, and W.J. Nichols. (2004). Diet composition of east Pacific green turtles (*Chelonia mydas*) in Bahía Magdalena, Baja California Sur, Mexico. *Proceedings from the Symposium on Sea Turtle Biology and Conservation. 21<sup>th</sup> Annual Meeting*, NOAA Tech. Memo. NMFS-SEFSC-528. pp. 189-191.

Gardner, S.C. (2003). Assessment of the health of sea turtles in the Baja California peninsula, Mexico using toxicological studies. *Proceedings from the Symposium on Sea Turtle Biology and Conservation. 22nd Annual Meeting*, NOAA Tech. Memo. NMFS-SEFSC-503. pp. 94-95.

Cordero, A., J. Arellano, S.C. Gardner. (2003). Trematode infection and resulting immunological mimetic in green sea turtles (*Chelonia mydas agassizii*) from Magdalena Bay, Baja California Sur, Mexico. *Proceedings from the Symposium on Sea Turtle Biology and Conservation. 22nd Annual Meeting*, NOAA Tech. Memo. NMFS-SEFSC-503. pp.300-302.

Lopez Mendilaharsu, M., S.C. Gardner and J.A. Seminoff. (2003). Feeding ecology of the east pacific green turtle (*Chelonia mydas agassizii*), in Bahía Magdalena, B.C.S., Mexico. *Proceedings from the Symposium on Sea Turtle Biology and Conservation. 22nd Annual Meeting*. NOAA Tech. Memo. NMFS-SEFSC-503. pp. 218-219.

Koch, V., WJ Nichols, L. Brooks, and S. Gardner. (2003). Black turtle (*Chelonia mydas*) mortality in Bahía Magdalena, Baja California Sur, Mexico. *Proceedings from the Symposium on Sea Turtle Biology and Conservation. 22nd Annual Meeting* NOAA Tech. Memo. NMFS-SEFSC-503. pp. 83-84.

Gardner, S.C. and W.J. Nichols. (2002) Mortality rates of sea turtle species in the Bahía Magdalena region. *Proceedings of the 20<sup>th</sup> Annual Symposium on Sea Turtle Biology and Conservation*. NOAA Tech. Memo. NMFS-SEFSC-477, pp. 83-85.

Hilbert S.C., S.C. Gardner, W. J. Nichols, L. Campbell, H. Schoonover, J. Ward and K. Zilinskas. (2002) Feeding habits of black turtles (*Chelonia mydas agassizii*) in the Magdalena Bay region, Baja California Peninsula, Mexico. *Proceedings of the Twentieth Annual Symposium on Sea Turtle Biology and Conservation*. NOAA Tech. Memo. NMFS-SEFSC-477, pp. 143-145.

#### Technical Reports

Malatesta, R.J., Gardner, S., Boudrias, M., Bolender, J., Koch, V. (2002) Water Quality Impacts on Bahía Magdalena, Mexico - an Analysis. A report to the David and Lucile Packard Foundation.

Pérez-Cortés, H., S. C. Gardner, S. Chávez-Rosales and Pablo Loreto C. (1998) La ballena gris, *Eschrichtius robustus*, en Bahía Magdalena. Invierno 1998. (The gray whale, *Eschrichtius robustus* in Magdalena Bay. Fall, 1998) Instituto Nacional de la Pesca, Centro Regional de Investigación Pesquera de La Paz, No. mamif-98-65, December, 1998.

Gardner, S.C. (1998) Mortalidad de tortugas marinas en la Laguna Ojo de Liebre, Guerrero Negro, B.C.S., México. (Mortality of sea turtles in Ojo de Liebre Lagoon, Guerrero Negro, B.C.S., Mexico) Informe Técnico al Comité científico consultivo: Experto en Ecotoxicología.

#### Newspaper Articles

Gardner S.C. (2004) Cual es el parto mas seguro, Cesárea o normal? (What is the safer birth, cesarean or normal?) El Sudcaliforniano. (State Newspaper)

Gardner S.C., J.J. Alvarado Diaz, C. Delgado Trejo, S. Chavez Rosales, W.J. Nichols. (2001) En Respuesta a Miguel Mendez sobre si podría ser permitida la pesca de la tortuga marina. (In response to M. Mendez regarding whether sea turtle fisheries can be permitted) El Sudcaliforniano. (State Newspaper)

#### Other publications

GenBank Entry. Castelan, H.E., Gardner, S.C., Ascencio, F., Flores, S.F., Vazquez, R.C. (2006) Herpesvirus detection through PCR in sea turtles from the Baja California Peninsula, Mexico. GenBank Accession number DQ649024.

#### **INVITED CHAIRPERSON:**

Program Review; United Nations Environment Program, Strategic Approach to International Chemicals Management (SAICM), Geneva, Switzerland (2010)

Reptilian Toxicology; Society of Environmental Toxicology and Chemistry Meeting, Baltimore. (2005)

Agrochemicals, Pesticides, Pharmaceuticals; Society of Environmental Toxicology and Chemistry Meeting, World Congress, Portland, OR. (2004)

Toxicological Research in Baja California, Mexico; Southern California Society of Environmental Toxicology and Chemistry Meeting, Santa Barbara, CA. USA. (2003)

Wetland Restoration Session; Washington Cooperative Fish and Wildlife Research Unit Annual Meeting, Seattle, WA. (1998)

#### **INVITED SEMINARS:**

University of California Riverside, Departmental Seminar Series (2005)

University of Simón Bolívar of México City. Promotion and Diffusion Department (2002)

San Diego State University, Departmental Seminar Series. San Diego, California, (2002)

U.S. Department of the Navy, Biological Sciences Division, San Diego, California, (1999)

University of Hawaii, Zoology Departmental Seminar Series, Honolulu, Hawaii, (1999)

National Marine Fisheries Service, Northwest Fisheries Science Center, Lecture Series, Seattle (1996)

U.S. Fish and Wildlife Seminar Series; Olympia, Washington, (1995)

#### **INVITED PRESENTATIONS:**

Science and Technology Policy in a Global Context, Gordon Research Conference, Waterville, NH (2012)

Panel Discussion on Chemicals Management in Emerging Economies, Society of Environmental Toxicology and Chemistry, Milwaukee, WI. (2010)

International Activities on Mercury Management, Alaska Quicksilver Summit, Girdwood, Alaska, (2010)

Southern CA Chapter Meeting: Society of Environmental Toxicology and Chemistry. Fullerton, CA (2005)

Association of Obstetricians and Gynecologists of the State of B.C.S. (2005)

VI Meeting of the Turtle Group of the Californias. San Jose del Cabo, Mexico. Key Note Speaker (2004)

Meeting of the State Ecology Commission of Baja California Sur. First Meeting over Natural Protected Areas of the State of B.C.S.: Biological and Urban Aspects of the Bay of La Paz. (2004)

Forum of Environment, Culture and Quality of Life. Invited by “Concerned Citizens” Group (2004)

Southern California Society of Environmental Toxicology and Chemistry. Santa Barbara, CA (2003)

IV Annual Meeting of the Turtle Group of the Californias. Loreto, B.C.S., Mexico. (2002)

57th Annual Northeast Fish and Wildlife Conference, Saratoga Springs, New York, (2001)

Wetland Science and Policy Forum: Non-indigenous plant series in the coastal zone; Seattle, WA (1996)

## **CONFERENCE AND SYMPOSIUM PRESENTATIONS**

I have authored or co-authored over 50 presentations at scientific conference since 1990 including presentations in: USA, Mexico, Italy, Malaysia, and Chile:

North American Society of Environmental Toxicology and Chemistry

International Symposium: Pollution Responses in Marine Organisms

Latin American Conference for Marine Sciences

Symposium on Sea Turtle Biology and Conservation

Middle American Society of Ecotoxicology and Environmental Chemistry

Association of Researchers of the Sea of Cortez

Mexican Society for the Study of Marine Mammals

Society for Marine Mammalogists

Society of Wetland Scientists

Western Aquatic Plant Management Society

Washington Wildlife Society

Washington Cooperative Fish and Wildlife Research Unit

North American Lake Management Society

North Carolina Society of Toxicology

Society of Toxicology

Burroughs Wellcome Symposium

## **STUDENTS DIRECTED:**

### Doctoral Degrees

Amaury Cordero Tapia; Histopathological studies to evaluate the health sea turtles in Bahía Magdalena, Baja California Sur, México. CIBNOR, La Paz, B.C.S. Codirector: Jorge Arellano Blanco. (2005)

Carlos Alberto Niño-Torres; Concentrations of persistent contaminants in marine mammals of the Gulf of California, Mexico. Universidad Nacional Autónoma de México, Ciencias del Mar y Limnología. (2007)

### Master's of Science Degrees

Lucía Santos Baca; Bioaccumulation of heavy metals in food chains. CIBNOR, La Paz, B.C.S. (2008)

Verónica Aureoles Lopez; Heavy metals profiles in blood samples of green turtles, *Chelonia mydas* from Baja California Sur, Mexico. CIBNOR, La Paz, B.C.S. (2006)

Héctor Edgar Castelán Martínez; Genetic studies of sea turtle populations in Baja California, Mexico. CIBNOR, La Paz, B.C.S. (2007)

Erika Lyons; Health assessment of sea turtles in Baja California Sur, México. International Studies in Aquatic Tropical Ecology (ISATEC), Center for Tropical Marine Ecology (ZMT), Bremen, Germany (2006)

Jorge Arturo Juarez; Thesis Title: Organochlorine contaminants in sea turtles from the Baja California peninsula, México. CIBNOR, La Paz, México. (2004)

Shannon Fitzgerald; Thesis Title: Heavy metal contamination in sea turtle tissues from Baja California, Mexico. CIBNOR, La Paz, México. (2004)

Itzel Sifuentes; Evaluation of vitellogenin levels in sea turtles from the Baja California Peninsula. CIBNOR, La Paz, México (2004) (Winner of the Best Master's Thesis in the State of Baja California Sur)

Milagros Lopez; Thesis Title: Habitat use and diet composition of sea turtles in Magdalena Bay, Mexico. CIBNOR, La Paz, México. (2002)

#### Undergraduate Degrees

Ana Luisa Talavera Saenz; Determination of heavy metals in algae associated with sea turtle feeding grounds (co-advisor) Universidad Autónoma de Baja California Sur, La Paz, B.C.S. (2006)

Fabiola Villegas Nava; Nutritional analysis of macroalgae and seagrasses associated with green turtle (*Chelonia mydas agassizii*) foraging habitats. (co-advisor) Universidad Autónoma de Baja California Sur, La Paz, B.C.S. (2006)

Antonio Trujillo Susunaga; Thesis Title: Intestinal parasites in green sea turtles (*Chelonia mydas agassizi*) in Bahía Magdalena, B. C. S., México. (co-advisor) Universidad Autónoma de Baja California Sur, La Paz, B.C.S. (2007)

Alejandra Perea; Benthic invertebrate density along a contaminant gradient in Magdalena Bay. (co-advisor) Universidad Autónoma de Baja California Sur, La Paz, B.C.S. (2004)

Sarah Hilbert; Diet composition of black turtles (*Chelonia mydas*) during the summer months in Magdalena Bay. (co-advisor) Whitman College, WA. USA (2001)

#### **ACADEMIC COMMITTEES:**

Doctoral thesis committee: Laura Beatriz Rivera Rodríguez; Determination of pesticides and their effects in terrestrial birds associated with agricultural areas in Baja California Sur. CIBNOR, La Paz, México (2006)

Doctoral thesis committee: Felix Moncada Gavilan; Migration and reproduction of green turtle (*Chelonia mydas*), loggerhead (*Caretta caretta*) and hawksbill (*Eretmochelys Imbricata*) in Cuba., Ministerio de la Industria Pesquera, Centro de Investigaciones Pesqueras, Habana, Cuba (2005)

Doctoral thesis committee: Gustavo Arencibia Carballo; Management of coastal ecosystems with a balance between populations and natural resources. Ministerio de la Industria Pesquera, Centro de Investigaciones Pesqueras, Habana, Cuba (2005)

Doctoral thesis committee: Javier Caraveo Patiño; Biochemical composition of the populations of benthic invertebrates and their relationship to the migration of gray whales (*Eschrichtius robustus*) in Baja California Sur, Mexico. CIBNOR, La Paz, Mexico. (2004)

Master's of Science thesis committee: Claudia Fernanda Díaz Guzmán: Abundance and movements of fin whales *Balaenoptera physalus* in the Gulf of California. National University of Mexico (UNAM), Mexico City, Mexico (2006)

Master's of Science thesis committee: Hiram Sarabia; Thesis Title: Benthic Invertebrate Community Biomonitoring in Magdalena Bay, México. University of San Diego. San Diego, CA. (2006)

Master's of Science thesis committee: Paloma Alejandra Valdivia Jiménez: Oxidative stress in tissues of sea turtles. CIBNOR, La Paz, México (2003)

Master's of Science thesis committee: Estrellita Clayton Hernández; Thesis Title: Potential oxidative stress in tissues of seals. CIBNOR, La Paz, Mexico. (2002)

Master's of Science thesis committee: Claudia Fernanda Bravo Garzón; Thesis Title: Bioindicators of contamination of pesticides along the coasts of the Gulf of California. CIBNOR, La Paz, Mexico (2002)

## **ADVISORY COMMITTEES**

Board of Directors: Elected Academic Representative. Southern California Chapter of the Society of Environmental Toxicology and Chemistry. (2005-2006)

Program Advisory Council: Environmental Planning and Conservation Program, Northwest Center for Biological Research (CIBNOR). Appointed by the Director of CIBNOR. (2003- 2005, two-year appointment)

Board of Directors: Elected Treasurer of the State of Baja California Sur Committee for the Protection and Conservation of Sea Turtles. (2004- 2006)

International Advisory Council: Sea Turtles and Human Health. Propeninsula Foundation. (2004- 2006)

Invited Panel Expert: Working Group on Marine Vertebrates as Sentinels of Ecological Health in the Californias. Hosted by: Wildlife Trust, New York, USA (2004).

Ecotoxicology Expert: Mortality of Marine Turtles in Ojo de Liebre Lagoon, Guerrero Negro, B.C.S., Mexico. ECODES, S.P., Environmental Consultant, Ensenada, Mexico. (1998)

## **EXPERT REVIEW**

### *International journals and conferences:*

Marine Pollution Bulletin (2014, 2015)  
Ecotoxicology (2014)  
Progress in Oceanography (2014)  
Journal of Marine Biology (2013, 2014)  
Progress in Oceanography (2013)  
Environmental Toxicology and Chemistry (2005 - 2006)  
Science of the Total Environment (2005 - 2006)  
Journal of Immunotoxicology (2005)  
Chelonia Conservation and Biology (2004)  
Chemosphere (2003)  
Oceánides (2002 - 2003)  
Society of Marine Mammalogy (2005)

### *Research proposals:*

National Fish and Wildlife Foundation, Competitive Grants. Washington D.C. (2005)  
Pronatura Noroeste, Competitive Grants, Ensenada, Mexico (2005)  
Mexican Federal Competitive Grants of the National Advisory Council of Science and Technology (CONACyT). Mexico City, Mexico (2004-2006)  
Institute of Marine and Limnology Sciences, National University of Mexico. Mexico City (2004, 2005)  
Ministry of Education, Science, and Technology. Buenos Aires, Argentina. (2004)

## **GRANTS OBTAINED AS PRINCIPAL INVESTIGATOR:**

- 2005 Project: Bioaccumulation of heavy metals in sea turtles in relation to feeding ecology. Financed by: SEP – CONACYT (Mexican Federal Government) (\$71,000)
- 2004 Project: Monitoring the health of sea turtles of northwestern Mexico. Financed by: SEMARNAT- CONACYT, (Mexican Federal Government) (\$97,200)
- 2004 Project: Sentinel Species as indicators of ecosystem health. Financed by: Wildlife Trust, New York, (\$8,500)
- 2003 Project: Effects of contaminants on ecosystems. Financed by: Packard Foundation, (\$10,000)
- 2001 Project: Use of habitat by sea turtles in Baja California Sur. Financed by: The Bay Foundation, New York, (\$9000)

- 2000 Project: Evaluation of the health of sea turtle populations in the Peninsula of Baja California using toxicological, physiological, and pathological studies. Financed by: CONACYT, (Mexican Federal Government) (\$190,000)
- 2000 Project: Sea turtle health assessments in Baja California Sur. Financed by: The PADI AWARE Foundation, (\$1800)

### **PROJECT COLLABORATIONS:**

Department of Public Health, Veterinary and Animal Pathology, Università degli Studi di Bologna, Italy; Biomarkers for assessing endocrine disruption.

Duke University, Marine Laboratory, NC; Comparison of contaminant concentrations in sea turtle eggs from the Atlantic and Pacific oceans.

University of California Riverside, CA; Effects of contaminants on shellfish fisheries of Baja California.

University of California, Los Angeles; Bioaccumulation of mercury in ecosystems of Baja California Sur.

CIBNOR, La Paz; Evaluation of contaminants in recreational beaches of Cabo San Lucas, B.C.S., Mexico.

CIBNOR, La Paz; Bioindicators of physiological and chemical stress in marine mammals.

Southwest Fisheries Science Center, NOAA, San Diego, CA; Use of habitat by sea turtles in Mexico.

University of San Diego, CA; Ecotoxicological studies in Magdalena Bay, B.C.S. (2000-2004)

U.S. Environmental Protection Agency, National Exposure Research Laboratory, Cincinnati, OH; Project: Organochlorine concentrations in sea turtle tissues.

ProPeninsula, San Diego, CA; Sea turtle mortality rates in Baja California, Mexico.

### **COURSES TAUGHT**

Sustainability of Coastal Ecosystems: Land Sea Interaction; Graduate level. Joint Course between CIBNOR and San Diego State University (2003, 2004)

Environmental Toxicology: Contributing Lecturer. Graduate level. CIBNOR (2003, 2004, 2006)

Coastal Ecology; Undergraduate level. School for Field Studies, Center for Coastal Studies (1997, 1998, 1999).

Marine Mammalogy (Teaching Assistant); University of Washington, School of Fisheries (1994, 1995).

### **PROFESSIONAL SERVICE:**

Vice President: Academy of Marine Ecology; Elected by members of the Academy. CIBNOR (2006).

Radio Program Guest: Conservation of Marine Turtles in Baja California. XEBCS Cultural Radio of the State Institute of Radio and Television. La Paz, BCS. (2003)

Radio Program Guest: Sea Turtles in the Baja California Peninsula. Environmental Education Series of SEMARNAT. XEBCS; La Paz, BCS. (2005)

Workshop Organizer: Analyses of Sea Turtle Tissues for Evaluating Health Status. Cuyutlán, Colima, Mexico. Attended by federal government officials and university faculty. (2005)

Scientific Consultant: Community, Vision and Development; Nonprofit, independent organization for improved urban development. La Paz, (2005)

Doula: Professional and volunteer birth assistant providing education and support to women during labor and birth. (2004-2007)

## **PROFESSIONAL TRAINING**

National Security Executive Leadership, Foreign Service Institute, 2011

Intermediate Leadership Skills; Foreign Service Institute, 2009

Multilateral Negotiation; Foreign Service Institute, 2008.

Negotiation and Leadership Skills; AAAS Training Workshop. 2007.

P.A.D.I. Dive Master Certificate (1990) with specialties in Underwater Navigation, Rescue Diver and Underwater Research.

## **AFFILIATIONS**

Academy of Toxicological Sciences (Board-certified Fellow)

Mexican National Association of Researchers (Member)

Society of Environmental Toxicology and Chemistry (Member)

Committee for Sea Turtle Protection and Conservation (Elected Treasurer: Board of Directors)

Institute of Marine and Limnology Sciences (Adjunct Faculty Member)

American Association for the Advancement of Science (AAAS) (Member)

California Chapter: Society of Environmental Toxicology and Chemistry (Academic Representative: Board of Directors)

## **LANGUAGES**

English and Spanish