

CURRICULUM VITAE

Daniela Maldini (previously Feinholz)
7981-A1 Moss Landing Road, Moss Landing, CA 95039
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EDUCATION

Post-Doc	Conservation Biology Council on International Educational Exchange (CIEE) Research Station Bonaire, Kralendijk, Bonaire, Netherland Antilles Supervisor: Dr. Rita Peachey.	2008
Ph.D.	Zoology University of Hawai'i at Mānoa, Honolulu, HI Dissertation: Abundance and Distribution of Odontocetes in Hawaiian Waters Committee Members: Dr. Shannon Atkinson, Dr. Joseph Mobley, Dr. Whitlow Au, Dr. Paul Nachtigall, Dr. Ernie Reese.	2003
M.Sc.	Marine Sciences Moss Landing Marine Laboratories, San Jose State University, San Jose, CA Thesis: The social ecology of bottlenose dolphins in Monterey Bay, California Committee Members: Dr. James Harvey, Dr. Nicholas Welshmayer, Dr. Richard Defran.	1996
B.Sc.	Biological Sciences Università degli Studi, Department of Biology, Pavia, Italy Thesis: The ecology of Pleuronectiform fishes in the Ligurian Sea, Italy Senior Thesis: The effect of the antibiotic tobramycin on malaria infected mice Committee Members: Dr. Cesare Brambilla, Dr. Menico Torchio.	1998

PUBLICATIONS

- Maniscalco, J., C.O. Matkin, **D. Maldini**, S. Atkinson, and D. Calkins. 2007. Assessing killer whale predation on Steller Sea Lions from field observations in Kenai Fjords, Alaska. *Marine Mammal Science* 23(2): 306-321.
- Matkin, C.O., E. Saulitis, **D. Maldini**, J. Maniscalco, and L. Mazzuca. 2005. Steller Sea Lion Predation by Killer Whales in Kenai Fjords/Prince William Sound *in* *Synopsis of Research on Steller Sea Lions: 2001-2005* edited by T. Laughlin, S. Atkinson, and D.G. Calkins, Sea Script Company, Seattle WA ISBN 0-9672186-4-0.
- Burdin, A. M., D.G. Calkins, S. Atkinson, and **D. Maldini**. 2005. Killer Whale Surveys in the Russian Far East: 2002-2004 in Kenai Fjords/Prince William Sound *in* *Synopsis of Research on Steller Sea Lions: 2001-2005*, edited by T. Laughlin, S. Atkinson, and D.G. Calkins, Sea Script Company, Seattle WA ISBN 0-9672186-4-0.
- Danil, K., **D. Maldini** and K. Marten. 2005. Patterns of use of Makua Beach, Oahu, Hawaii, by spinner dolphins (*Stenella longirostris*) and potential effects of swimmers on their behavior. *Aquatic Mammals* 31(4): 403-412.
- Maldini, D.**, L. Mazzuca, and S. Atkinson. 2005. Odontocete strandings patterns in the main Hawaiian Islands (1937-2002): how do they compare with live animal surveys? *Pacific Science* 59(1): 55-67.

- Maldini, D.**, S. Atkinson, D. Calkins, and R. Mehan editors. 2004. Alaska sea otter research workshop: addressing the decline of the Southwestern Alaska sea otter population. Fairbanks: Alaska. Alaska Sea Grant College Program, University of Alaska Fairbanks 2004, AK-SG-04-03.
- Maldini, D.** 2003. Abundance and distribution patterns of Hawaiian odontocetes: focus on O'ahu. Ph.D. Dissertation. University of Hawai'i at Manoa. August 2003.
- Maldini, D.** 2003. Evidence of predation by tiger shark (*Galeocerdo cuvier*) on spotted dolphin (*Stenella attenuata*) off O'ahu, Hawai'i. *Aquatic Mammals* 29(1): 84-87.
- Maldini, D.**, J. Maniscalco, and A. Burdin. 2002. Predatory activity of a single killer whale, *Orcinus orca*, at a Steller sea lion, *Eumetopias jubatus*, rookery in Alaska. Proceedings of the Fourth International Orca Symposium and Workshop, Sept. 23-28, Chize', France.
- Feinholz, D. M.** and S. Atkinson. 2000. Possible etiologies of yellow coloration in dolphin calves. *Aquatic Mammals*, 26(3): 191-195.
- Feinholz, D. M.** 1998. Abundance, distribution, and behavior of the southern sea otter (*Enhydra lutris nereis*) in a California estuary. *Aquatic Mammals* 24(2): 105-116.
- Feinholz, D. M.** 1996. Pacific coast bottlenose dolphins (*Tursiops truncatus gilli*) in Monterey Bay, California. M.S. Thesis, San Jose State University, CA.
- Feinholz, D. M.** 1994. Home range: is this concept applicable to cetacean studies? Proceedings of the Eight Annual Conference of the European Cetacean Society, Bottlenose Dolphin Workshop, Montpellier, France, 2-5 March, 1994.
- Maldini, D.** 1988. Current populations of fishes of the Family *Scophthalmidae* in the area of Savona. Laurea Thesis, Università degli Studi, Pavia, Italy. In Italian.
- Maldini, D.** 1988. Effects of the antibiotic Tobramycin on malaria in the house mouse (*Mus musculus*). Laurea Thesis, Università degli Studi, Pavia, Italy. In Italian.
- Torchio, M., G. Barletta, G. Bellagamba, **D. Maldini**, and A. Torelli. 1984. Movements of the ichthyonecton - and its strandings - in the Province of Savona during the last thirty years: new eco-ethological and conservational observations. *Quaderni della Stazione Idrobiologica di Milano* (12): 26 pp. In Italian.

CONFERENCE ABSTRACTS

- Kieckhefer, T. R., **D. Maldini**, S. Reif, J. Cassidy and J. Hoffman. 2007. Rise and Fall (and Rise again) of Southern Sea Otters (*Enhydra lutris nereis*) in Elkhorn Slough, California, 1994-2006. Poster at 17th Biennial Conference on the Biology of Marine Mammal, 29 Nov - 3 Dec, Cape Town, South Africa.
- Maldini, D.**, P. B. Nilsson, C. Brammer, and J. Sousa. 2006. Temporal and spatial distribution of humpback whales around the Main Hawaiian Islands. Poster at American Society of Mammalogy Conference, 17-23 June, Amherst, MA.
- Maniscalco, J., C. O. Matkin, **D. Maldini**, S. Atkinson, D.G. Calkins, and R.D. Andrews. 2006. Are killer whales affecting the recovery of steller sea lions? Assessing evidence in Kenai Fjords, Alaska. Oral Presentation at the Marine Science in Alaska Symposium, Jan 2006, Anchorage, AK.
- Matkin, C.O., J. Maniscalco, **D. Maldini**, E. Saulitis, and L. Mazzuca. 2005. Specialists or generalists? Population-specific variation in the foraging ecology of transient killer whales in Alaska. Poster Presentation at the 16th Biennial Conference on the Biology of Marine Mammals, 12-17 Dec 2005, San Diego, CA.
- Kieckhefer, T.R., J. Cassidy, J. Hoffman, S.L. Reif, and **D. Maldini**. 2004. Rise and fall of southern sea otters (*Enhydra lutris nereis*) in Elkhorn slough, California, 1994-2003. Poster at Sanctuary Currents Symposium: Clean Waters, Healthy Oceans, March 6th 2004, Marina, CA. Received Best Overall Poster Award.

Maldini, D., S. Atkinson, and J. Mobley. 2003. Odontocete abundance and distribution patterns around Oahu and Penguin Banks, Hawaii. Poster at the 15th Biennial Conference on the Biology of Marine Mammals, 14-19 Dec 2003, Greensboro, NC.

Feinholz, D.M., S. Atkinson and J. Mobley. 1999. Distribution of odontocetes around the Island of Oahu, Hawaii. Poster at American Society of Mammalogist Conference, 19-24 June, Seattle, WA.

Feinholz, D.M. 1995. Northern range extension, abundance, and distribution of Pacific coastal bottlenose dolphin (*Tursiops truncatus gilli*) in Monterey Bay, California. Poster at 11th Biennial Conference on the Biology of Marine Mammals, 14-18 December, Orlando, FL.

Konopka-Reif, S.L. and **D.M. Feinholz**. 1995. Abundance and distribution of sea otters (*Enhydra lutris nereis*) in Elkhorn Slough, California. Poster at the 11th Biennial Conference on the Biology of Marine Mammals, 14-18 December, Orlando, FL.

Feinholz, D.M. 1993. The effects of El Niño on abundance and distribution of coastal bottlenose dolphins in Monterey Bay, California. Poster at the 10th Biennial Conference on the Biology of Marine Mammals, 11-15 November, Galveston, TX.

Maldini, D. 1993. Bottlenose dolphins in Monterey Bay, a coastal perspective. Poster at the annual meeting of the Western Section of The Wildlife Society, 23-27 February, Monterey, CA.

Maldini, D., and G. Kent. 1992. A preliminary note on bottlenose dolphins in Monterey Bay, California. Poster at the 5th Biennial Conference of the American Cetacean Society, 6-8 November, Monterey, CA.

FUNDING

Last three years:

2006-2008	Earthwatch Institute	\$145,000
2006-2007	Barrett Foundation	\$ 30,000
2007	Travelocity	\$ 15,000
2007	National Fish and Wildlife Foundation	\$ 25,000

RESEARCH PROJECTS

Principal Investigator

- Ecology, population dynamics, social structure and health status of Pacific Coastal Bottlenose Dolphins (*Tursiops truncatus*) in Monterey Bay, California.
Collaborators: Dr. Thomas Jefferson (NMFS-SWFSC), Dr. Maddalena Bearzi (OCS), Dr. Richard Defran (SDSU), Dr. David Weller (NMFS-SWFSC), Dennis Kelly (OCC)
- Ecology of Southern Sea Otter (*Enhydra lutris nereis*) in Elkhorn Slough, California.
Collaborators: Dr. Thomas Jefferson (NMFS-SWFSC), Thomas Kieckhefer (PCG)
- Abundance and distribution patterns of odontocetes around the Island of Oahu, Hawaii.
Collaborators: Dr. Shannon Atkinson (UHM), Dr. Joseph Mobley (UHM)
- Breeding ecology of Wedge Tailed Shearwater (*Puffinus pacificus*) on Kapapa Island, Hawaii.
Collaborators: Peter Nilsson (UNCW), Dr. Daniel Poland (UHM)

Co-Investigator

- Reef Check: monitoring of Hawaiian coral reefs using standardized monitoring tools
Collaborators: Dr. Marc Lammers (UHM)

- Effects of human related activities on resting patterns of Spinner Dolphins (*Stenella longirostris*) along the Waianae Coast of Oahu, Hawaii.
Collaborators: Keri Danil (NMFS-SWFSC), Dr. Ken Marten (Earthtrust)
- Potential effects of high speed ferry on Humpback Whales (*Megaptera novaeangliae*) around Oahu, Hawaii.
Collaborators: Dr. Marc Lammers (UHM-PI), Dr. Whitlow Au (co-PI)

Research Associate

- Effects of transient Killer Whale (*Orcinus orca*) predation on Steller Sea Lions (*Eumetopias jubatus*) in Kenai Fjords, Alaska.
Collaborators: Craig Matkin (NGOS-PI), Don Calkins (ASLC), Dr. Shannon Atkinson (ASLC), Eva Saulitis (NGOS), Dr. Lance Barrett-Lennard (Vancouver Aquarium), Dr. John Ford (UBC), John Maniscalco (ASLC), Graham Ellis (UBC)
- Ecology of resident killer whales (*Orcinus orca*) in Kenai Fjords, Alaska.
Collaborators: Craig Matkin (NGOS-PI), Eva Saulitis (NGOS), Graham Ellis (UBC)
- Splash 2004 - Photo-identification survey of humpback whales (*Megaptera novaeangliae*) along the Kamchatka and Chukotka Peninsula and in the Commander Islands, Bering Sea, Russia.
Collaborators: Dr. Alexander Burdin (ASLC), Don Calkins (ASLC), Jeff Jacobsen (SPLASH)
- Killer Whale (*Orcinus orca*) photo-identification survey along the Kamchatka and Chukotka Peninsula and in the Commander Islands, Bering Sea, Russia - Russia.
Collaborators: Dr. Alexander Burdin (ASLC), Don Calkins (ASLC), Jeff Jacobsen (SPLASH)

Collaborator

- Monitoring of Humpback Whales (*Megaptera novaeangliae*) around the Hawaiian Islands for the Hawaiian Islands Humpback Whale National Marine Sanctuary, Hawaii.
Collaborators: Christine Brammer (HIHWNMS), Jean Sousa (HIHWNMS)
- Enlarging the sea turtle monitoring network in the Caribbean through training of community members, Matura, Trinidad.
Collaborators: Dr. Scott Eckert (Duke University - WIDECAST)
- Setting up ecological monitoring of coffee plantations and implementation of CAFÉ PRACTICES at Coope Terrazu, Costa Rica.
Collaborators: Dr. Mark Chandler (Earthwatch - PI)

Research Assistant

- Acoustic Thermometry Ocean Climate Project (ATOC): Effects of anthropogenic sounds on marine mammals, Kauai, Hawaii and Monterey Bay, California.
Collaborators: Dr. Chris Clark (), Dr. Adam
- Human-wildlife conflicts in the Samburu region of Kenya: monitoring predator behavior to determine best intervention methods, Samburu, Kenya.
Collaborators: Dr. Nicholas Ogue (Earthwatch Institute, Kenya), Dr. Samuel Andanje (KWS), Dr. Ogada (Moi University)
- Anthropogenic effects on the ecology of Lake Naivasha, Kenya.
Collaborators: Dr. David Harper (University of Leicester, UK)

- Ecology of Bottlenose Dolphins (*Tursiops truncatus*) around the Island of Lojini, Croatia.
Collaborators: Dr. Giovanni Bearzi (Tethys Research Institute), Dr. Elena Politi (Tethys Research Institute)
- Abundance and distribution of cetaceans in the Ionian Sea, Mediterranean Region
Collaborators: Dr. Giuseppe Notarbartolo di Sciara (Tethys Research Institute), Dr. Elena Politi (Tethys Research Institute)
- Feeding ecology of *Balaenopteridae* whales in the Sea of Cortez, La Paz, Baja California, Mexico.
Collaborators: Dr. Donald Croll (UCSC), Dr. Bernie Tershy (UCSC)

PROFESSIONAL EXPERIENCE

Chief Scientist Jun 2007 to present
Okeanis, Moss Landing, CA

Leading a research program in California. Using affiliation as Adjunct Professor at the University of Massachusetts at Amherst to sponsor students.

Director of Research Jan 2005-Jun 2007
Earthwatch Institute, Maynard, MA

Led the Research Department in the management of 140+ field-based research projects in 50+ countries. Project topics ranged widely from terrestrial to marine biology, and from earth to social sciences with a strong conservation biology focus. Was responsible for coordinating the International Science Program Group, a collective of staff from field offices in the US, United Kingdom, Australia and Japan.

Reference: Dr. Marie Studer – (508) 932-5243

Contract Biologist Jan to Aug 1998-2006
Hawai'iian Islands Humpback Whale National Marine Sanctuary, Honolulu, HI

Was responsible for the organization of the research component of the annual Sanctuary Ocean Count which engaged over 1000 volunteers on three islands in the census of humpback whales from shore-based sites. Delivered data analysis through an annual report.

Reference: Christine Brammer – (808) 397-2651 ext. 252

Research Associate Jun 2001-Jan 2005
Alaska SeaLife Center, Seward, AK

Led the field component of the Orca and Sea Otter Research Program in the Kenai Fjords area of Alaska and collaborated in the organization and delivery of a similar research program in Russia. Worked with colleagues from a variety of organizations under a joint grant.

Reference: Dr. Shannon Atkinson – (907) 224-6346

Research Assistant Aug 1998-May 2001
University of Hawai'i at Mānoa, Zoology Department, Honolulu, HI

Under the direction of Dr. Shannon Atkinson completed a dissertation on abundance and distribution patterns of marine mammals in Hawaiian waters using aerial surveys.

Reference: Dr. Shannon Atkinson – (907) 224-6346
Dr. Ernie Reese – ereese@hawaii.edu

Biologist (part-time) Jan 2000-May 2001
Oceanwide Science Institute, Honolulu, HI

Was responsible for the organization and delivery of research and conservation programs that fit the organizational mission. Led a research projects on the ecology of wedge-tailed shearwaters near O'ahu, and a study of spinner dolphins in Oahu's waters.

Reference: Dr. Marc Lammers - (808) 236-7485

Biologist (seasonal) Summer 1995- Winter 1996
ATOC Project, Cornell University, Ithaca, NY

Worked as marine mammal observer in California and Hawai'i studying the effect of underwater sounds on the ecology of humpback whales.

Reference: Dr. Chris Clark - (607) 254-2473

Research Assistant (seasonal) Spring 1996
University of California, Santa Cruz, CA

Assisted as marine mammal observer in a project studying the ecology of *Balenopteridae* whales in the Sea of Cortez. The work consisted of tagging and monitoring fin and blue whales and conducting plankton tows and sonar surveys of their prey field.

Reference: Dr. Donald Croll - (831) 459-3610

Research Associate Jan 1994- May 1997
Pacific Cetacean Group, Moss Landing, CA

Led investigations of bottlenose dolphins and sea otters in Monterey Bay under a grant from Earthwatch Institute and the Center for Field Studies.

Reference: Thomas Kieckhefer - (831) 763-3608

Central California Stranding Coordinator 1993-1994
The Marine Mammal Center, Monterey Bay Operations, Moss Landing, CA

Managed the rescue and first-aid care of marine mammals in the Monterey Bay area. Managed a roster of 60+ volunteers, organized training and knowledge enhancement lectures, and was the liaison between the facility and the main center in Sausalito, California.

Reference: Susan Andrews - (831) 633-6298

Biologist Summer 1992-1993
Tethys Research Institute, Milano, Italy

Led boat-based marine mammal surveys in the Ionian Sea, Greece.

Reference: Dr. Giovanni Bearzi - tasmaceto@tiscalinet.it

Intern Summer 1989
University of Texas at Austin, Marine Science Institute, Port Aransas, TX

Assisted with oceanographic data collection and entry and worked part-time in the sea turtle rescue and recovery center.

Reference: Dr. Antony Amos - (361) 749-6720

Research Assistant 1984-1987
Universita' degli Studi di Pavia, Italy

Conducted independent research on Pleuronectiform fishes in the northern Mediterranean Sea and managed the Marine Biology lab.

TEACHING

Faculty

International Honors Program – Rethinking Globalization Program (India, New Zealand, Mexico)

Courses Taught: Ecology and Comparative Conservation Practices I&II Fall and Spring 2008

The course traveled to a collection of the planet's diverse ecosystems (i.e., tropical forests, coastal habitats, savannahs) and explored ways in which globalization and development forces are transforming landscapes and threatening biodiversity.

Reference: Dr. Rachel Brock – ihp.rachel@gmail.com - (202) 372 5980

Post-Doc Lecturer

2008

Council on International Educational Exchange, Research Station Bonaire, Bonaire, Netherland Antilles

Courses Taught: Tropical Marine Conservation Biology
Independent Study

Reference: Dr. Rita Peachey - RPeachey@ciee.org

Adjunct Faculty

since 2006

University of Massachusetts at Amherst, Amherst, MA

Courses Taught: Ecology and Evolutionary Implications of Social Behavior
in Marine Mammals

Reference: Dr. Bruce Byer - bbyers@bio.umass.edu

Adjunct Faculty

2002

University of Alaska Anchorage, Kenai Peninsula College, Seward, AK

Courses Taught: Beginning Italian

Reference: Dr. Shannon Atkinson – shannon_atkinson@alaskasealife.org

Adjunct Faculty

2000-2002

Hawaii Pacific University, Honolulu, HI

Courses Taught: General Biology Lab

Reference: Dr. John Culliney – (808) 236-5839

Lecturer

2000–2001

Kapiolani Community College, Honolulu, HI

Courses Taught: Oceanography

Reference: Charles Matsuda – (808) 734-9356

Adjunct Faculty

1998-2000 and 2001

Transpacific Hawaii College, Honolulu, HI

Courses Taught: General Biology (Lecture and Lab)
Marine Biology (Lecture and Lab)

Reference: Dr. Shungo Kawanishi – (808) 377-5402

Lecturer

1999-2001

Windward Community College, Kaneohe, HI

Courses Taught: General Biology (Lecture and Lab)
Biology (non-majors, Lecture and Lab)
Anatomy

Reference: Dr. Dave Krupp – (808) 236-9121

Teaching Assistant	1998
<i>University of Hawaii at Manoa, Honolulu, HI</i>	
Courses Taught:	Biology Lab
Reference:	Dr. Agnes Fok - (808) 956-8303
Lecturer Elderhostel Program	1994-1995
<i>Pacific Cetacean Group/Elderhostel, Monterey, CA</i>	
Courses Taught:	Marine Mammal Biology Kelp Forest Ecology Wetland Ecology
Reference:	Thomas Kieckhefer - (831) 763-3608
Graduate Teaching Assistant	1992
<i>Moss Landing Marine Laboratories, Moss Landing, CA</i>	
Courses Taught:	Advanced Marine Mammal Biology
Reference:	Dr. James Harvey - harvey@mlml.calstate.edu
Docent	1990-1991
<i>Monterey Bay Aquarium, Monterey, CA</i>	
Reference:	Jane King, Monterey Bay Aquarium, Monterey, CA
Instructor Extension Program	1990
<i>University of Texas at Austin, Austin, TX</i>	
Courses Taught:	Beginning Italian
Substitute Teacher, Middle School	1982-1984
<i>Scuola Media Arturo Toscanini, Milano, Italy</i>	
Courses Taught:	English (ESL) Math Science

STUDENT ACADEMIC ADVISING

Jenna Mawhinney	University of Vermont	Independent Project	2008
Sarah Marr	University of California, Irvine	Independent Project	2008
Jillian Coddington	University of California, Berkeley	Independent Project	2008
Josalyn Barrett	Denver School of Science and Technology	Independent Project	2008
Kyle McCarthy	University of Massachusetts, Amherst	Ph.D. Committee	2008
Stephanie Wallace	University of Massachusetts, Amherst	Senior Thesis Advisor	2008
Mark Cotter	University of Massachusetts, Amherst	Independent Project	2007
Andrew Walsh	University of Massachusetts, Amherst	Independent Project	2007
Shinae Yoon	University of Massachusetts, Amherst	Intern	2006
LeAnn Eitrem	Hawaii Pacific University	Independent Project	1999
Daniel Poland	Hawaii Pacific University	Independent Project	1999
Tamara de Wit	University of Hawaii, Manoa	Intern	1999

ADVISORY COMMITTEES AND BOARD MEMBERSHIPS

Scientific Advisory Committee	currently
<i>Pacific Cetacean Group, Moss Landing, CA</i>	

Board Member Society for Conservation Biology, Marine Section	currently
Founding Director and Vice-President Oceanwide Science Institute, Honolulu, HI	1996-2006
Founding Director and President Pacific Cetacean Group, Moss Landing, CA	1994-1995

SKILLS AND CERTIFICATIONS

Branch Chief Marine Environmental Protection U.S. Coast Guard Auxiliary	2006-2007
Active Member U.S. Coast Guard Auxiliary	since 2002
Alaska Water Wise Instructor State of Alaska	since 2003
Dive Master PADI	since 2007
CPR and First Aid Instructor American Red Cross	2003-2007

LANGUAGES

Fluent in Italian and good in Spanish. Can read French. Some understanding of written Portuguese and Papiamentu.

AWARDS

Arts and Science Advisory Council Award University of Hawai'i at Manoa, Honolulu, HI	1999
Outstanding Citizen Award City of Austin, TX	1989

MEMBERSHIPS AND PROFESSIONAL ORGANIZATIONS

Association for the Advancement of Arts and Sciences	from 2005
Society for Conservation Biology	from 2006
Society for Marine Mammalogy	from 1992
American Society of Mammalogists	from 1999
European Society of Marine Mammalogy	from 2002

REFERENCES

Dr. Marie Studer
Encyclopedia of Life
Education and Outreach Director
Harvard University
Museum of Comparative Zoology
26 Oxford Street
Cambridge, MA 02138

Phone: (617) 496-1560
Email: mstuder@eol.org

Dr. Alan Fortescue

Director of Education
Earthwatch Institute
3 Clock Tower Place, Box 75
Maynard, MA
Phone: (413) 426-4190 (cell)
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Dr. Shannon Atkinson

Associate Professor
University of Alaska Fairbanks
P.O. Box 1329, 101 Railway Ave
Seward, AK 99664
Phone: (907) 224-6346
E-Mail: shannon_atkinson@alaskasealife.org

Dr. Maddalena Bearzi

President
Ocean Conservation Society
P.O. Box 12860
Marina del Rey, CA 90295
Phone: 310-822-5205
E-Mail: mbearzi@earthlink.net

Dr. Rita Peachey

Resident Director
CIEE Research Station Bonaire
Kaya Gob. DeBrot 21 N
Kralendijk, Bonaire
Netherland Antilles
Phone: +599-786-7394
E-Mail: rpeachey@ciecee.org

Christine Brammer

Hawaiian Islands Humpback Whale National Marine Sanctuary
O`ahu Program Coordinator
6600 Kalaniana`ole Highway, Suite 301
Honolulu, Hawai`i 96825
Phone: (808) 397-2651 ext. 252
E-Mail: Christine.Brammer@noaa.gov

TEACHING PHILOSOPHY

As a species, humans depend on their learning ability to survive and become adept at modifying their environment to fulfill their basic needs. In a social context, our ability to learn from one another and use this knowledge to navigate complex social constructs and establish relationships is essential to our well being. As our technological knowledge evolves, our society is increasingly dependent on a specialized workforce and education has become the key to being able to move up the ranks of society.

However, education is much more than this to me. It is the key to freedom. It allows an individual to base decisions on factual information and to formulate opinions based on knowledge and experience combined. It enables an individual to make choices based on a more holistic view of the world. It also fosters greater acceptance of other opinions and points of view and encourages a more productive dialogue and a greater willingness to embrace cultural and societal differences.

Science is at the core of technological progress in the 21st century and it is also the key to understanding our world and the interrelationships and synergies that are fundamental to a sustainable future for humankind. In a world threatened by global climate change, environmental degradation, increasing human population, and rising political tensions contending with a rapid globalization process, understanding the key elements of ecology and the consequences of unmanageable growth and unsustainable behaviors is paramount.

Teaching to me is not the process of dumping a myriad of facts and numbers into a student's brain, but a dialogue where the teacher is a mentor and facilitator, using knowledge sharing as a tool to instigate the natural curiosity and inherent enthusiasm I believe all humans have for learning. The bond with nature, I believe, is still deeply rooted into our consciousness as a species. Although today's society has built a virtual reality that gives the impression that humans are no longer dependent on the natural cycle for their survival, only a few steps into a natural landscape can completely shift this perspective, if properly guided.

I embrace teaching as an important responsibility to fellow human beings and as a way to communicate my fascination and respect for the natural world. I see my students as fellow travelers on a road to discovery and always strive to encourage their natural curiosity and talent to go beyond the written material and beyond the fact. I always remind them that facts can be always looked up again to refresh our memories. It is the understanding of the mechanisms, the proper use of the scientific tools and methods, and the way questions are asked and answers pursued that are at the core of the learning process. The scientific method is a powerful tool. Critical thinking is the filter through which information acquired is processed, conclusions are a baseline for further refinement and for meaningful discussion and the humility and openness to accept alternative explanations is a must to engage in meaningful collaborations.

I believe the role of the scientific community in the world of today is being and has to be redefined. Scientists today, especially those engaged in conservation-based research, have a responsibility towards humanity to act as interpreters, to reach out to broader audiences, to go beyond the collection of meaningful data, to embrace and spearhead positive solutions. Teaching and reaching out to broader audiences has become a part of a scientist's job, and many find themselves with an inadequate tool box to fulfill this obligation. For this reason, I believe it is important to incorporate into my teaching *curriculum* elements that will enable future scientists to translate their findings into recommendations and actions that will influence public awareness, intervention and policy. I strive to pair a broad-based biology education with hands-on experience, public speaking skills, awareness of public issues and controversies, an ability to engage in constructive debate, and an ability to navigate and leverage funding sources.

I like to present my students with practical problems derived from my field experiences, or present them with information derived from controversial conservation debates and encourage them to study and research the issue on their own, formulate ideas and solutions based on their experience and

then bring these ideas and thought process into the classroom for a healthy and constructive debate.

Through my experience teaching to audiences of various ages, from elders to middle-school kids and from American to foreign students, I came to appreciate the fact that not all students learn the same way and that cultural as well as personality differences may call for different teaching styles and tools. While I recognize that it is difficult to incorporate everything into one course, especially when a large number of students is involved, paying attention to the students' body language may provide excellent clues to whether they are engaged or not. I am sensitive to the spark in the eye of a young adult during a lecture, or the unresponsiveness of a student in the back barely paying attention and I try to shift the pace of a classroom session to engage as many people in the audience as possible.

It is easier to be proactive at adapting to the students when time is taken to get to know them, to interact with them and to understand their motivation and commitment level. I have found that students welcome this approach and are generally more responsive when they are entrusted with the responsibility for their own education. I incorporate the building of a trusting relationship between myself and the students I mentor whenever possible.

When I work with a student more consistently, such as during Independent Study or Thesis work, I like to meet and together lay out a simple contract stating our mutual expectations for the work to be completed, the timelines, and the metrics for grading, so that the student knows exactly what the responsibilities are and what the result will be if fulfilled. I provide the student with some background material, raw data or the opportunity to collect them, and then discuss strategies for approaching the work. I also lay out a plan for meeting regularly to discuss progress, challenges and to give feedback when needed. I find this approach creates a more mature collaboration with the student and generally a sense of trust and a feeling of support.

I have learned a lot through the years, and I realize learning is a lifetime endeavor. I am committed to continue to pursue professional development in teaching by staying current with progress in my field and in that of education by participating to conferences and workshops and by learning or refreshing my knowledge of innovations in scientific tools and technology so that I can properly guide students that will be exposed to continually evolving demands for technical skills. I also find that my abilities to teach about a subject are directly correlated with the amount of teaching I do, because the real learning, for me, is in the classroom, where I am a student as much as everybody else.