

CURRICULUM VITAE

NAME: Michael Angelo Castellini

B.A. Biology 1975 University of California, San Diego, *summa cum laude*
Ph.D. Marine Biology 1981 Scripps Institution of Oceanography
Thesis: Biochemical adaptations for diving in marine mammals
Drs. G.L. Kooyman and G.N. Somero, chairmen

EMPLOYMENT RECORD:

1976-80 Research assistant, University of California, San Diego
1981 Postdoctoral research fellow, Scripps Institution of Oceanography
1982 NATO postdoctoral fellow, University of British Columbia, Vancouver
1983-86 NIH postdoctoral fellow, University of British Columbia, Vancouver
1986-87 Visiting assistant research physiologist, University of California, San Diego
1987 Adjunct lecturer, Department of Biology, University of California, San Diego
1987-89 Assistant research biologist, University of California, Santa Cruz
1990-92 Research associate in Marine Sciences, University of California, Santa Cruz
1989-93 Assistant Professor, marine biology, School of Fisheries and Ocean Sciences,
University of Alaska Fairbanks
1993-98 Associate Professor, marine biology, SFOS, University of Alaska Fairbanks
1995-99 Science director, Alaska Sea Life Center, Seward
6/99-9/99 Interim Executive Director, Alaska SeaLife Center, Seward
1998-present Professor marine biology, SFOS, University of Alaska Fairbanks
2002-2005 Director, Institute of Marine Science, SFOS, University of Alaska Fairbanks
2007-present Director, Coastal Marine Institute, University of Alaska, Minerals Management
Service
1/10-3/10 Interim Director, Fisheries Division, SFOS
2005-2010 Associate Dean, SFOS, University of Alaska Fairbanks
2010-2011 Interim Dean, SFOS, University of Alaska Fairbanks
2011-present Dean, SFOS

ACADEMIC AWARDS DURING GRADUATE TRAINING:

- 1975 B.A. Biology, Highest Honors, *summa cum laude*
- 1976 University of California Regents Fellow
- 1976 ARCS Foundation Fellow
- 1980 Southern California Academy of Science Award in Vertebrate Zoology

AWARDS AND HONORS:

- 1997 Nomination University of Alaska Usibelli Award in Research
- 1998 UAF Faculty Achievement Recruiting Brochure Biography
- 2000 Viennese and International Clinical Experimental Research Biology Award for Scientific Contributions to Marine Biology, Austria.
- 2008 Fellow, American Association for the Advancement of Science
- 2009 William S. Hoar Memorial Award in Comparative Physiology, University of British Columbia, Canada.

SOCIETY MEMBERSHIPS:

- 1981-1987 American Association for the Advancement of Science
- 1983 -2009 American Physiological Society
- 1984 -present Society for Marine Mammalogy (Charter member)
- 1987-1993 American Society of Zoologists.
- 1988-1992 Comparative Respiratory Society
- 2008-Present Fellow, American Association for the Advancement of Science

SERVICE OUTSIDE OF THE UNIVERSITY:

- 1988 Scholander Award Panel Judge, FASEB meetings, Las Vegas
- 1989 Scholander Award Keynote Address, FASEB meetings, New Orleans
- 1989 Student Award Panel Judge, Eighth Biennial Conference on the Biology of Marine Mammals, California.
- 1989 Chair and Organizer, Symposium on Diving Physiology, Eighth Biennial Conference on the Biology of Marine Mammals, California.
- 1990 Scholander Award Panel Judge, FASEB meetings, Wash, DC
- 1990 Chair and Organizer, Symposium on Field Physiology, American Physiological Society Meetings, Florida
- 1991 Student Award Chairman, Ninth Biennial Conference on the Biology of Marine Mammals, Chicago.
- 1992 Chair, Comparative Physiology Session. Federation of American Societies of Experimental Biologists. Anaheim, CA.
- 1992 Chair and Organizer, Symposium on Natural Diving Physiology. Society of Experimental Biology meetings. Cambridge, England
- 1993 Co-Organizer and chair, Symposium on Hypometabolism and Diving, International Union of Physiological Sciences, Glasgow, Scotland.
- 1994 Organizer and chair, Symposium on medical applications of marine mammal physiology. American Physiological Society, San Diego, CA.
- 1994-96 National committee member, Career Opportunities in Physiology, American Physiological Society.
- 1994-97 National program officer, Comparative Section, American Physiological Society.
- 1995 Organizer and chair, Symposium on development of diving in seals. Marine Mammal Society meetings, Orlando, FL.

1997-1999 Anchorage Museum of History and Art. Program design consultant

1998-1999 EVOS Trustee Council. 10th Anniversary Program Development

1998-2000 Scientific Advisor. Alaskan Ocean, Seas and Fisheries Research Foundation, Kodiak, AK.

1999 Co-organizer and co-chair, Symposium on the biochemistry of lipids in marine mammals. Marine Mammal Society meetings, Maui, Hawaii.

1999 Nomination. Scientific Advisor to U.S. Marine Mammal Commission.

1999 Nomination. Scientific Committee Minerals Management Service.

2000 Co-organizer and co-chair, International Institute of Fisheries Economics and Trade, Annual Meeting, Oregon State University.

2000-present Member, National Research Council Postdoctoral Fellowship Program.

2001 Organizer and chair, Symposium on Diving Physiology. Second International Conference on Comparative Physiology and Biochemistry. Botswana. Africa.

2001 Co-organizer and chair. Symposium on fatty acid signature analysis. Marine Mammal Society meetings, Vancouver, Canada

2001 Nomination. North Pacific Marine Research Board Academic Member

2002 Chair, Symposium on Diving behavior and physiology. American Physiological Society, San Diego.

2001- present Editorial Board, Physiological and Biochemical Zoology

2001-2002 National Research Council Steller sea lion Advisory Panel

2002-2008 Member, Scientific Committee U.S. Minerals Management Service

2003-2004 Member, Alaska Sea Grant Wakefield Symposium Organizing Committee

2004-2010 Co-chair, Life Sciences, National Research Council Postdoctoral Program

2004-2008 Chair, US Mineral Management Service Alaska Research Sub-Committee

2004-2008 Editorial Board, Polar Biology

2005 Member, NSF Polar Program Postdoctoral Review Panel

2005 Referee, Jefferson Science Fellows, National Academy Fellowship Program

2007-2009 Member, NSF/NASA "Polar Palooza" Stories from A Changing Planet
This is a multi-city International Polar Year public outreach program featuring scientific talks, multi-media presentations, teacher education, and University lectures.
2007: Albuquerque, Oakland, Berkeley, Atlanta, Baton Rouge.
2008: Washington DC, Anchorage, Fairbanks, Chicago, Denver
2009: Anchorage, New York, Baltimore, Australia (Perth, Canberra, Sydney)

2008-2010 Member, National Science and Engineering Council Grants Selection Committee, Canada

2008-2011 Contributing Editor, Marine Ecology Progress Series

2010-present Associate Editor, Frontiers in Aquatic Physiology

2010-present Chair, Life Sciences, National Research Council Postdoctoral Program

REVIEWER AND REFEREE:

JOURNALS

American Journal of Physiology
American Midland Naturalist
Aquatic Biology
Aquatic Mammals
Antarctic Science
Australian Journal of Zoology
Biology Letters of the Royal Society
Canadian Journal of Zoology
Comparative Biochemistry and Physiology
Deep Sea Research
Ecological Society of America
Ecosystems
Fishery Bulletin
Frontiers in Aquatic Physiology
Journal of Applied Physiology
Journal of Comparative Physiology
Journal of Comp Physiology and Biochemistry
Journal of Experimental Biology
Journal of Experimental Zoology
Journal of Mammalogy
Journal of Zoology
Lipids
Mammalogy
Marine Biodiversity
Marine Biology
Marine Mammal Science
Marine Ecology Progress Series (MEPS)
Physiological Reviews
Physiological and Biochemical Zoology
Physiological Zoology
Proceedings Royal Society
Polar Biology
Translations Royal Society
Science
Contributing Editor, Mar Eco Prog Series
Assoc. Ed., Frontiers in Aquatic Physiol.

AGENCIES, PROGRAMS, BOOKS, SCHOLARSHIPS, PROMOTION

American Society of Engineering Education, Office of Naval Technology; Panel member
Anchorage Museum
Arctic Institute of North America
Australian Research Council
Biotechnology and Biological Sciences Research Council, UK
California Sea Grant
Canada Council for the Arts
Cornell University Press
Dalhousie University, Canada. Promotion and tenure external referee.
Idaho State Board of Education
International Centre for Antarctic Information and Research
National Fish and Wildlife Foundation
National Geographic Society, Research and Exploration
National Institutes of Health, Special Emphasis Panel
National Oceanic and Atmospheric Association.
National Science Foundation, Biological Oceanography
National Science Foundation, Office of Polar Programs; Referee and Panel member
National Science Foundation, Polar Postdoctoral Program Review Panel Member
National Science Foundation, Division of Cellular Biosciences
National Science Foundation, Integrative Animal Biology
National Science Foundation, Integrative Biology and Neuroscience
National Science Foundation, Integrative Organismal Systems
National Science Foundation, Instrumentation Development
National Science Foundation, Ocean Sciences
National Science Foundation, Major Research Instrumentation
Natural Environment Research Council
National Research Council, Postdoctoral Fellowship Program
National Research Council, Member, Steller sea lion program review
National Research Council, Referee, Oil Spill Recovery Institute review
Natural Sciences and Engineering Research Council of Canada.
North Pacific Marine Science Foundation
Memorial University of Newfoundland, St. John's, Newfoundland, Canada
Oiled Wildlife Care Network, University of California, Davis
Oxford University Press
Princeton University Press
Texas A&M University, Galveston. Promotion and tenure external referee
UAF Alaska Cooperative Fish & Wildlife Research Unit
University of Alaska Press
University of British Columbia, Vancouver, Canada. Committee on Animal Care.
University of California, Davis, Biology, Promotion and Tenure outside review
University of California, Davis, School of Medicine, Promotion and Tenure outside review
University of California, San Diego. Promotion and tenure external referee.
University of Manitoba, Canada. Promotion and tenure external referee
West Coast National Undersea Research Center

SERVICE TO THE UNIVERSITY:

Department or SFOS:

1. 1989 Member, IMS Merit Award Committee
2. 1989 Member, IMS Concurrent Research Faculty Rank Committee
3. 1990 Chair, Invertebrate Zoologist search committee
4. 1990 Member, SFOS Long Range Planning Committee
5. 1994 Member, Capital Plan and Facilities Development Committee
5. 1990-1995 Scientific Advisor, Alaska SeaLife Center.
6. 1992 Member, MAP marine mammal specialist search committee
7. 1994-1995 Chair, IMS weekly faculty meetings
8. 1993-1999 Member, GPMS&L graduate applications committee
9. 1995 Member, SFOS Capital planning committee
10. 1995-1999 Science Director, Alaska SeaLife Center
11. 1999-2001 Peer Review sub-Committee for Promotion/Tenure
12. 2000-2001 Member, Marine Biology search committee
13. 2000 Chair, IMS weekly faculty meetings
14. 2000-2001 Member, ASLC Research Faculty search committee
15. 2000-2001 Faculty Mentor program member
16. 2000-2004 Chair, Marine Biology Masters Comprehensive Exam Committee
17. 2001-2002 Chair, Stable isotope faculty search committee
18. 2001-2002 Chair, peer review sub-committee for promotion/tenure
19. 2002-2005 Director, Institute of Marine Science
20. 2004-2008 Member, Marine Biology Masters Comprehensive Exam Committee
21. 2005 Member, NURP Director search committee
22. 2005-2010 Associate Dean, SFOS
23. 2006-2007 Chair, Seward Marine Center Director Search Committee
24. 2006 Chair, Undergraduate Fisheries Program Coordinator Search Committee
25. 2008-2009 Member, COSEE education faculty search committee
26. 2008-2009 Member, Physiological Ecology Fisheries faculty search committee
27. 2010-2011 Interim Dean, SFOS
28. 2011- present Dean, SFOS

University Wide:

1. 1990-2008 Member, Biological Papers of the University of Alaska Editorial Board.
2. 1991 Member, Wilson Scholarship Committee, U of A Foundation
3. 1994-1996 Member, University-wide Promotion and Tenure Committee
4. 1995-1996 Member, Usibelli Research Award Selection Committee
5. 1995-1996 Interim chair, Irving-Scholander Award Lecture committee
6. 1995-1997 Member, American Heart Association Graduate Fellowship Committee
7. 2000-2001 Member, IAB Director search committee
8. 2002 Member, IAB Integrative Physiology search committee
9. 2001-2005 Member, NSF UAF EPSCOR graduate fellowship committee
10. 2002-2003 Interim Chair, Chancellor's Institutional Animal Use and Care Committee
11. 2002-2005 UAF Provost's Council
12. 2003-2008 Member, NIH BRIN INBRE state wide committee.
13. 2005 Member, Vice Chancellor for Research Search Committee
14. 2007 Member, Provost Search Committee
15. 2005--2008 Member, Provost's Budget Committee

- 16. 2008-2009 Chair, Museum Director Search Committee
- 17. 2008 Interim Chair, Institutional Animal Use and Care Committee
- 18. 2009-2010 Member, Chancellors Committee on Integration of Research and Teaching in Sciences.
- 19. 1989-Present Member, Chancellor's Institutional Animal Use and Care Committee
- 20. 1990-Present Member, Irving-Scholander Award Lecture committee
- 21. 2010-2011 Chair, Chancellors Task Force on eLearning and distance education
- 22. 2011 Chair, UA Office of Information Technology Executive Director Search
- 23. 2011 – present Multiple task forces, committees, as Dean, SFOS for UAF/UA programs.

Alaska SeaLife Center:

- 1. 1990-1995 Member, scientific design team
- 2. 1995-1999 Science Director
- 3. 1998-1999 Member, Institutional Animal Care and Use Committee
- 4. 1997-2003 Member, ASLC Scientific Advisory Committee
- 5. 1997-1999 Director, Research Department
- 6. 1997-1999 Chief Scientist, Marine Mammal Protection Act Permit
- 7. 1999 Member, Husbandry Director search committee
- 8. 1999 Member, Science Director search committee
- 9. 1999 Member, Executive Director search committee
- 10. June-Sept 1999 Interim Executive Director / ASLC Program Coordinator
- 11. 2010- Member, Board of Directors, appointed by Pres. Gamble

FUNDING HISTORY

External Travel Grants:

- 1983 American Physiological Society travel grant IUPS meetings, Sydney, Australia
- 1984 American Society of Zoology travel grant IUCPB meetings, Liege, Belgium
- 1985 International Union of Biochemistry travel grant, IUB meetings, Amsterdam
- 1989 American Physiological Society travel grant IUPS meetings, Helsinki, Finland
- 1993 American Physiological Society travel grant, IUPS meetings, Glasgow, Scotland

Research Funding Grants

- 1982-1983 NSF-NATO. The biochemistry of extended breath-hold diving. \$14,980
- 1983-1986 NIH Individual Research Award. Diving metabolism in marine mammals. \$52,512
- 1986 NSF Symposium Support: Current methods in pinniped energetics. Co-PI. \$8,000
- 1987-1989 American Heart Association. Apo-lipoprotein E Deficiency in harbor seals. Co-PI. \$39,880
- 1987-1992 NIH FIRST Award. Sleep apnea in seals: Metabolic Implications. \$349,581
- 1990-1991 UAF Faculty Grant. Metabolic consequences of long term fasting in seals. \$4,934
- 1990 American Physiological Society Symposium Support Award. American Physiological Society meetings, Orlando, Fl. \$2,900
- 1991 UAF Biomedical Research Equipment Grant. Portable field centrifuge. \$1,641.
- 1991-1992 University of Alaska Natural Resources Council. Marine mammal and fisheries interactions in Alaska waters. \$4,030
- 1991-1992 American Heart Association, Alaska Chapter. Cardiac responses to prolonged sleep apnea: Marine Mammal Models. \$16,307
- 1991-1992 National Marine Fisheries Service Contract. Physiological studies on Steller sea lions and northern fur seals. \$43,669
- 1992-1993 Alaska Sea Grant. Physiological health status of Steller sea lions. \$45,817
- 1992-1993 Presidents Special Projects. \$2,500. Fisheries and Marine mammals in Alaska
- 1992-1995. National Science Foundation. Polar Programs. Testa and Castellini, Co-PI. Physiological development and survival of juvenile Weddell seals. OPP-9119885. \$600,534.
- 1993-1995 Office of Naval Research. Biochemical indices of high pressure tolerance in marine mammals. # N00014-93-1-0457. \$180,723.
- 1993-1996 NIH. Academic Research Enhancement Award. \$109,224
- 1993 University of Alaska Faculty Grant. Computer work station. \$5,000
- 1993-1995 Research Service Agreement. Alaska Department of Fish and Game. Fitness indices for Alaskan marine mammals. \$15,000
- 1995-1996 North Pacific Marine Mammals Consortium. Health of Steller sea lions. \$10,000
- 1996 Office of Polar Programs, NSF. Student stipend award. \$8,350
- 1996 Alaska Dept. Fish and Game. Health of Alaska Harbor seals. \$5,000
- 1993-1996 Office of Naval Research. Augmentation Award for Science and Engineering Research Training. N00014-93-1-1404. \$73,496.
- 1995-1996 Exxon Valdez Oil Spill Trustee Council grant. Recovery of harbor seals from EVOS: Condition and health status. \$153,800
- 1995-1996 Exxon Valdez Oil Spill Trustee Council grant. Harbor seals and EVOS: Blubber and lipids as indices of food limitation. \$82,948
- 1996-1997 Shedd Aquarium Aquatic Sciences Grant. Physiological and medical status of wild Steller sea lions: Implications for endangered species legislation and captive care. \$1,475
- 1996-1998 Exxon Valdez Oil Spill Trustee Council grant. Recovery of harbor seals from

EVOS: Condition and health status. \$248,000

1997-2000 Exxon Valdez Oil Spill Trustee Council grant. Harbor seal recovery: Phase II: Controlled studies of health and diet. \$248,800

1997-1999 University of Alaska Sea Grant: Condition and health of Alaskan seals and sea lions. \$117,106.

1997-2001 Environmental Protection Agency. Biochemical responses of marine mammals to external contaminants: Metals and inflammatory agents. \$301,171

1998-2000 Cooperative Institute for Arctic Research. Spatial aspects of organochlorine contamination in northern fur seal tissues. \$10,296

1998-2001 Cooperative Institute for Arctic Research. Bowhead whale blubber analyses. \$72,900

1998-1999 National Science Foundation. Office of Polar Programs. Co-PI with L.D. Rea. Blood lipid alterations with development and fasting in Weddell seal pups. OPP-9725859. \$33,042

1999-2002 National Science Foundation. Office of Polar Programs. Nutritional physiology and body condition of seals. \$231,225

1999-2000 Reproductive endocrinology of Steller sea lions. National Fish and Wildlife Federation. \$39,000.

2001-2002. Pollock Conservation Cooperative Research Center. Co-PI with Dr. Shannon Atkinson. Capture and Holding of Transient Juvenile Steller sea lions. \$34,000

2002-2004 Alaska SeaLife Center Steller sea lion program. Metabolic aspects of survival. \$250,000.

2002-2005 Alaska Sea Grant. Pollock as food items for Alaskan pinnipeds. \$160,000.

2002-2006 National Science Foundation: Lipid chemistry in naturally foraging Weddell seals. \$650,000.

2002 North Pacific Research Board: Alaskan fish as food for predators. Equipment to measure the nutritional quality of fish \$25,000

2002-2003 Morphometric indices of fitness and hydrodynamic profile in juvenile Steller sea lions. NOAA contract. \$23,614

2003 The Biochemistry of extreme aging in the bowhead whale. EPSCOR. \$20,000

2003 Continuous wavelength, temperature controlled microplate spectrophotometer. EPSCOR. \$12,000

2004 BRIN. Extreme aging in bowhead whales. \$20,000

2004-2005 Alaska SeaLife Center. Metabolic Demands of Steller sea lions. Wild fish as food. \$15,000

2007-2009 North Pacific Research Board. Development of Condition Indices for pollock \$52,000

2008-2011 National Science Foundation: Centers for Ocean Science Education Excellence. Co-PI: Total grant award: \$743,646.

2008-2011 Minerals Management Service Coastal Marine Institute Administration Total budget: \$890,000

2011- As Dean, PI for a suite of administrative and SFOS research program budgets

TEACHING

- 1987 Comparative Physiology. University of California, San Diego
Enrollment: 200 upper division undergraduates
- 1990 Fall semester. Physiology of Marine Organisms. MSL 615
Enrollment: 10 graduate
- 1990 Fall semester. Marine mammals: life in the sea. Graduate seminar. SFOS/IMS
Enrollment: 10 graduate
- 1991 Fall semester. Advanced topics in physiology. Graduate Seminar. SFOS/IMS
Enrollment: 6 graduate
- 1992 Oregon State University Marine Biology Intensive Course in Marine Mammals.
April 27 - May 1. Enrollment: 23 undergraduates.
- 1993 Spring semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 15 graduate
- 1993 Spring semester. Biology of Marine Mammals (co-taught with W. Testa) MSL 693.
Enrollment: 17 graduate
- 1994 Fall semester. Seals, sea lions and walruses (co-taught with S. Hills) MSL 693.
Enrollment: 5 graduate.
- 1995 Spring semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 7 graduate.
- 1995 Fall semester. Marine Biology Seminar. MSL 692
Enrollment: 8 graduate.
- 1996 Fall semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 6 graduate
- 1996 Fall semester. Teaching methods seminar. Co-taught with S. Henrichs. MSL 692
Enrollment: 5 graduate
- 1996 Fall semester. Marine Biology Seminar. MSL 692.
Enrollment: 7 graduate
- 1997 Spring semester. Marine Biology Seminar. MSL 692.
Enrollment: 8 graduate
- 1997 Fall semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 11 graduate
- 1999 Fall semester. Physiology of Marine Organisms. MSL 615
Enrollment: 11 graduate; 1 undergraduate
- 2001 Spring semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 9 graduate
- 2001 Spring semester. Biology of Marine Mammals, MSL 619. Co-taught with B. Kelley.
Enrollment: 14 graduate
- 2002 Spring semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 8 graduate
- 2003 Spring semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 9 graduate
- 2004 Spring semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 10 graduate
- 2005 Spring semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 12 graduate
- 2006 Spring semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 9 graduate
- 2007 Spring semester. Physiology of Marine Organisms. MSL 615.
Enrollment: 9 graduate
- 2008 Spring semester. Physiology of Marine Organisms. MSL 615.

Enrollment: 3 graduate
 2010 Spring semester. Biology of Marine Mammals. MSL 619.
 Substitute instructor mid-semester due to emergency leave of assigned instructor.
 Enrollment: 6 graduate.

GUEST UAF TEACHING LECTURES:

1991	Polar Marine Science. MSL 621	1998	Marine Biology MSL 611
1992	Current Topics Oceanography. MSL 411	1999	Marine Biology MSL 692A
1992	Polar Marine Science. MSL 621	1999	Marine Biology MSL 692B
1993	Animal care and welfare. BIO 693	2000	Marine Biology MSL 692
1994	Animal care and Welfare. BIO 693	2000	Marine Mammals Seminar
1994	Marine Biology. MSL 610	2000	Biology and Wildlife Telemetry class
1994	Medical health student program. IAB.	2001	Marine policy
1994	Polar Marine Science. MSL 621	2001	Marine Biology
1994	Biotelemetry. WLF 603	2003	Biotelemetry. WLF 603
1995	Animal care and Welfare BIO 693	2004	Biotelemetry. WLF 603
1996	Animal care and Welfare BIO 693	2006	Biotelemetry. WLF 603
1996	Marine Biology. MSL 610	2008	Polar Marine Science MSL 621
1996	Biotelemetry. WLF 603	2009	Marine Physiology, MSL 615
1996	Polar Marine Science. MSL 621	2011	Marine Physiology, MSL 615
1997	Animal care and Welfare BIO 693		

GRADUATE STUDENT COMMITTEES:

Current UAF committees:

2001-	Chair, PhD	Susan Inglis
2008-	Co-chair, PhD	Keri Lystek
2005-	Member, PhD	Allison Banks
2009-	Member, MS	Elena Fernandez

Completed committees:

1990-1995	Chair, Ph.D.	Lorrie Rea
1992-1996	Chair, MS.	Amal Ajmi
1992-1997	Chair, MS.	Pat Rivera
1992-1997	Chair, Ph.D.	Tania Zenteno-Savin
1993-1997	Chair, Ph.D.	Jennifer Moss
1992-1997	Chair, Ph.D.	Brian Fadely
1996-2003	Chair, PhD.	Steve Trumble
1997-2001	Chair, MS	Heather Harmon
1997-2004	Chair, PhD.	Tami Mau
1995-2000	Co-chair, Ph.D.	Michael Simpkins
1992-1997	Co-chair, MS.	Gay Sheffield
1997-2000	Co-chair, MS	Grace Abromaitis
1992-1993	Member, Ph.D.	Vicky Kirby (Univ of Calif)
1992-1996	Member, Ph.D.	Susanna Blackwell (Univ of Calif)
1994-1999	Member, Ph.D.	Kimberly Beckmen (IAB)
1992-2000	Member, Ph.D.	Amy Hirons
1992-2001	Member, Ph.D.	Dave Person (IAB)
1998-2002	Member, PhD.	LiYang Zhao

1999-2005	Member, PhD	Cara Fields (University of California)
2000-2006	Member, PhD	Cheryl Rosa (IAB)
2000-2007	Member, PhD	Matt Myers
2006-2011	Co-chair, PhD	Jason Waite
2007-2011	Member, PhD	Mandy Keogh

1990-1992	Member, MS.	Jon Bishop (IAB)
1989-1993	Member, MS.	Eva Saulitis
1992-1994	Member, MS.	Jason Schreer
1989-1995	Member, MS	Jill Anthony
1993-1996	Member, MS.	Kelly Hastings (IAB)
1993-1996	Member, MS.	Michael Williams (IAB)
1994-1997	Member, MS.	Laurie Jemison
1997-1999	Member, MS	Carrie Talus
1997-1999	Member, MS	Christopher Taylor, Interdisciplinary
1998-2002	Member, MS	Monica Bando
2001-2004	Member, MS	Danielle O'Neill
2003-2006	Member, MS	Janet Doherty
2003-2006	Member, MS	Mette Nielsen
2005-2006	Member, MS	Shannon Hanna
2005-2007	Member, MS	John Brewer
2006-2008	Member, MS	Beate Litz
2007-2009	Member, MS	Jeanette Nienaber

Outside examiner:

1989	Ph.D. Michael Davis. Universite Laval, Quebec
1990	Ms. Sean Adams. University of California, Santa Cruz.
1992	Ph.D. Jane Reed. Birmingham University, England.
1999	Ph.D. Russell Andrews. University of British Columbia
2000	Ph.D. Sylvia Brunner. University of Sydney, Australia
2003	PhD. Geoffrey Dutton, University of Sydney, Australia
2005	PhD. Natalie Miller, University of Adelaide, Australia
2009	PhD. Jeremy Goldbogen, University of British Columbia, Canada

Committees not completed.

1989-1991	Chair, MS committee. Lynn Lessard. Student left graduate school.
1989-1994	Member, MS committee. Leanne Lipton. Failed comprehensives. Left UAF
1990-1996	Member, MS. Tammy Adams. Left UAF to start Ph.D. elsewhere.
1995-1997	Chair, MS. Richard Lindemann. Failed comprehensives. Switched committee.
1997-1998	Chair, MS. Kerrie Becket. Switched programs.
1998-	Member, MS Stephanie Haverlack. Left graduate school, medical
1997-2001	Chair, PhD. Wendy Dunlap. Left graduate school for outside employment
2004-2007	Chair, PhD. Vicki Stegall. Left graduate school for outside employment
2001-2008	Chair, MS. Shawn Harper. Left graduate school for outside employment

Postdoctoral advisor:

2002-2004	Dr. Leslie Cornick. NSF Postdoctoral Fellow
2002-2004	Dr. Liying Zhao
2003-2004	Dr. Lori Polasek
2005-2006	Dr. Tami Haase

BIBLIOGRAPHY (* Student author)

1. Kooyman, G.L., E.A. Wahrenbrock, M.A. Castellini, R.W. Davis and E.E. Sinnett. Aerobic and anaerobic metabolism during voluntary diving in Weddell seals: evidence of preferred pathways from blood chemistry and behavior. *Journal Comparative Physiology*. 138: 335-346. 1980.
2. Kooyman, G.L., M.A. Castellini and R.W. Davis. Physiology of diving in marine mammals. *Annual Review Physiology*. 43:343-356. 1981.
3. Castellini, M.A. and G.N. Somero. Buffering capacity of vertebrate muscle: Correlations with potentials for anaerobic function. *Journal of Comparative Physiology*. 143:191-198. 1981.
4. Castellini, M.A., G.N. Somero and G.L. Kooyman. Glycolytic enzymes activities in tissues of marine and terrestrial mammals. *Physiological Zoology*. 54(2):242-252. 1981.
5. Kooyman, G.L., M.A. Castellini, R.W. Davis and R.A. Maue. Aerobic diving limits of immature Weddell seals. *Journal of Comparative Physiology*. 151:171-174. 1983.
6. Davis, R.W., M.A. Castellini, G.L. Kooyman and R.A. Maue. Renal glomerular filtration rate and hepatic blood flow during voluntary diving in Weddell seals. *American Journal of Physiology*. 245 R743-R748. 1983.
7. Castellini, M.A., R.W. Davis, M. Davis and M. Horning. Antarctic marine life under the McMurdo ice shelf at White Island: A link between nutrient influx and seal population. *Polar Biology*. 2:229-231. 1984.
8. Castellini, M.A., B.J. Murphy, M. Fedak, K. Ronald, N. Gofton and P.W. Hochachka. Potentially conflicting demands of diving and exercise in seals. *Journal of Applied Physiology*. 58(2):392-399. 1985.
9. Castellini, M.A. Metabolic depression in tissues and organs of marine mammals during diving: Living longer with less oxygen. *Molecular Physiology*. 8(3):427-437. 1985.
10. Castellini, M.A., D.P. Costa and A.C. Huntley. Hematocrit variation during sleep apnea in elephant seal pups. *American Journal of Physiology*. 251:R429-R431. 1986.
11. Castellini, M.A., D.P. Costa and A.C. Huntley. Fatty acid metabolism in fasting elephant seal pups. *Journal of Comparative Physiology B*. 157(4):445-449. 1987.
12. Castellini, M.A., R.W. Davis and G.L. Kooyman. Blood chemistry regulation during repetitive diving in Weddell seals. *Physiological Zoology*. 61(5):379-386. 1988.
13. Castellini, M.A. Visualizing metabolic transitions in aquatic mammals: Does apnea plus exercise equal "diving"? *Canadian Journal of Zoology*. 66(1):40-44. 1988.
14. Castellini, M.A. and J.M. Castellini. Influence of hematocrit on whole blood glucose levels: new evidence from marine mammals. *American Journal of Physiology*. 256:R1220-R1224. 1989.
15. Castellini, M.A. and G.L. Kooyman. Behavior of freely diving animals. *Undersea Biomedical Research*. 16(5):355-362. 1989.
16. Castellini, M.A. and G.L. Kooyman. Length, girth, and mass relationships in Weddell seals (*Leptonychotes weddellii*). *Marine Mammal Science*. 6(1):75-77. 1990.
17. Ponganis, P.J., Kooyman, G.L., Zornow, M.H., Castellini, M.A. and D.A. Croll. Cardiac output and stroke volume in swimming harbor seals. *Journal of Comparative Physiology B*. 160(5):473-482. 1990.
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 16. Castellini, M.A., Zhao, L., and S. Inglis. Metabolic demands of Steller sea lion survival. In: Synopsis of Research on Steller sea lion: 2001-2005. Loughlin, T.R., Calkins, D.G. and S. Atkinson, eds. Pages 68-76. ASLC NOAA Steller Sea Lion Research Program Report. Sea Script Press, Seattle. 2005.
 17. Calkins, D., Castellini, M., Burkanov, V., Atkinson S., Inglis, S. and D. Hennen. Impact of changing diet regimes on Steller sea lion body condition. In: Synopsis of Research on Steller sea lion: 2001-2005. Loughlin, T.R., Calkins, D.G. and S. Atkinson, eds. Pages 6-18. ASLC NOAA Steller Sea Lion Research Program Report. Sea Script Press, Seattle. 2005.

INVITED SCIENTIFIC LECTURES

Lectures 1-55 encompass the years 1983 to 2003. The following list begins in 2004.

56. The Natural Foraging Biochemistry of Weddell seals. International Conference on Comparative Physiology. Ithala, KwaZulu-Natal, Africa, August, 2004
57. Field Studies on Adult Steller sea lions: After a decade, where are we? Wakefield Symposium on Sea Lions of the World. Anchorage, AK. September, 2004.
58. Take two seals and call me in the morning: Marine Mammals, Medicine and You. Sitka WhaleFest, November, 2005.
59. Take two seals and call me in the morning: Marine Mammals, Medicine and You. University of Southern California School of Medicine, June, 2006.
60. The Regulation Of Hematocrit In Diving Mammals: Adaptation Or Problem? M.A and J.M. Castellini. American Physiological Society Comparative Physiology. Virginia Beach, October 2006.
61. Doing Aerobics While Holding your Breath: How Seals Dive. Sitka WhaleFest, November, 2006.
62. Biochemical Aspects of Marine Mammal Diving Physiology. The Center of Comparative Physiology, University of San Diego, CA. April 2007.
63. Bio-politics of marine mammals in Alaska. University of New England, Marine Science Center, Biddeford, Maine. April 2007.
64. Impacting marine mammals...what would you measure? Sitka WhaleFest. November, 2007.
65. Polar Biology...Marine Mammals. Louisiana State University. October 2007
66. University of New Mexico. Polar science and marine mammals. October 2007
67. Science for Alaska Series, Fairbanks. On thin ice...marine mammals and climate change. January 2008
68. West Valley High School, Fairbanks. Climate change and marine mammals. April 2008
69. National Ocean Sciences Bowl, Seward AK. International Polar Year. April 2008
70. Alaska SeaLife Center 10 year Anniversary. Spring 2008.
71. Migration...easy for some...why not for you? Sitka WhaleFest. November, 2008
72. Alaska Dept of Fish and Game, Anchorage. Wildlife Wednesday public lecture. Marine mammals and climate change. December, 2008
73. Biochemical aspects of marine mammal diving physiology. William H. Hoar award in Comparative Physiology. University of British Columbia. October, 2009
74. To a squid, would you be a land monster? Sitka WhaleFest. November, 2009
75. Do marine biologists need to be Lawyers? Sitka WhaleFest, November, 2010
76. High Latitude marine research in the next 10 years: Issues, opportunities and risks. Science for Alaska Series. Anchorage, May, 2011.
76. Science from Pole to Pole: Science in the Arctic and Antarctic. UAF Undergraduate Seminar Series. Fall, 2011.
77. One world, One ocean, Many users. Sitka Whalefest, November, 2011.