

**Curriculum Vitae: André Eric Punt**  
**FEBRUARY 2015**

**EDUCATION AND EMPLOYMENT**

- 1982 Matriculated Bergvliet High School ('A' aggregate).
- 1983 - 1985 B.Sc. UCT (Distinctions in Applied Mathematics, Computer Science, and Mathematics, and Degree with Distinction).
- 1986 B.Sc. (Hons) UCT (Computer Science - 1st class).
- 1987 - 1988 M.Sc. UCT (Applied Mathematics - Degree with Distinction) Thesis title: Model selection for the dynamics of Southern African hake resources.
- 1989 - 1991 Ph.D. UCT (Applied Mathematics) Thesis title: Management procedures for Cape hake and baleen whale resources.
- 1987 - 1992 Research Officer in the Benguela Resources Population Modeling project of the Benguela Ecology Programme, FRD based in the Department of Applied Mathematics, UCT.
- 1992 - 1994 Research Associate at the School of Fisheries, University of Washington.
- 1994 - Resource Modeller, Division of Marine Research, CSIRO.
- 2001 - 2005 Research Associate Professor, School of Aquatic and Fishery Sciences, University of Washington.
- 2005 - 2007 Associate Professor, School of Aquatic and Fishery Sciences, University of Washington.
- 2007 - Professor, School of Aquatic and Fishery Sciences, University of Washington.
- 2012 - Director, School of Aquatic and Fishery Sciences, University of Washington.

**TEACHING EXPERIENCE**

- 1987 - 1991 Lectured parts of AMA 218S (Introduction to Biological Modeling).
- 1988 & 1991 Lectured parts of SMS 201F (Calculus of Several Variables and Vector Analysis).
- 2001 Planned and lectured FISH 512 (Age Structured Models) with Ray Hilborn.
- 2002, 2004-5 Planned and lectured FISH 458 (Fisheries Stock Assessment).
- 2003 Planned and lectured workshops on Visual Basic and AD Model Builder.
- 2003, 5, 7, 8 Planned and lectured FISH 507 (Numerical Computing for Fisheries Assessment and Management).
- 2004 Planned and lectured FISH 507 (Age Structured Models) with Ray Hilborn.
- 2004 Acted as faculty mentor for Lucy Flynn who taught FISH 497 (Visual Basic Programming with Excel).
- 2005-12 Planned and lectured QSCI 381B (Introduction to Probability and Statistics).
- 2006, 7, 9, 11 Planned and lectured FISH 558 (Advanced Fisheries Stock Assessment).
- 2008 Planned and lectured FISH 497E (Advanced R programming).

- 2009-10 Acted as faculty mentor for FISH 507F/552 (Introduction to R programming).
- 2009-12 Planned and lectured FISH 507G/553 (Advanced R programming).
- 2010, 12, 14 Planned and lectured FISH 559 (Numerical Computing for Fisheries Assessment and Management).

During 2001-2012, I have also given guest lectures / participated in the following courses: FISH 210, 323, 444, 458, 475, 512, 522, 558, 578, BIOL 562 and QERM 597.

## **STUDENTS SUPERVISED**

I currently chair the Committees of the following students:

1. Kelli Stingle: (Ph.D.) [Started Fall 2011]
2. Chantel Wetzell: "Management strategy evaluation for the determination of annual catch limits using probability based methods for West Coast groundfish" (Ph.D.) [Started Spring 2011]
3. Ingrid Spies: "Building a bridge between genetics and fisheries management; addressing loss of genetic diversity, the utility of small datasets, and mismatches between management and biological units" (Ph.D.) [Started Summer 2009]
4. Felipe Hurtado: "Management of small pelagic fishes" (Ph.D.) [Started Autumn 2010]
5. Stan Kotwicki: "Combining bottom trawl and acoustic data to improve survey derived population and spatial indices of semi-pelagic species" (Ph.D.) [Started 2009 –] (co-chair with John Horne)

I also co-supervise Mr Bruce Taylor, Ph.D. student at the University of Melbourne (2001-), and am a member of the committee of John Feenstra (Ph.D. student, University of Adelaide). I am a member of the Committees of the following UW students:

1. Joe Bizzaro (Ph.D.) [2010 –
2. Kotaro Ono (Ph.D.) [2011 –
3. Lauren Seckel (Ph.D.) [GSR] [2012 –
4. Kiva Oken (MS) [2012 –
5. Melissa Muradian (Ph.D) [2013 –
6. Jeff Rutter (Ph.D) [2013 –

### Students with completed degrees

#### *Chaired*

1. Gavin Fay: "A Bayesian stochastic metapopulation model for Steller's sea lions in Alaska" (MS; SAFS, 2004).
2. Teresa A'Mar: "Quantifying Error and Uncertainty in Fishery Stock Assessment Models" (MS; QERM, 2004).
3. Stephani Zador: "Management implications of factors influencing seabird populations" (Ph.D.; SAFS, 2007) [co-chair with Julia Parrish]
4. Rod Towell: "Population dynamics of Northern fur seal population (*Callorhinus Ursinus*) on the Pribilof Islands, Alaska" (MS; QERM, 2008).
5. Jason Cope: "Issues and advances in data-limited stock assessment: Experimentation through simulation" (Ph.D.; SAFS, 2008)

6. Melissa A Haltuch: "Modeling human and climate impacts on the management of the Pacific north west groundfish fishery" (Ph.D.; SAFS, 2008)
7. John Brandon: "Quantifying Uncertainty and Incorporating Environmental Stochasticity in Stock Assessments of Marine Mammals". (Ph.D.; SAFS, 2009)
8. Teresa A'Mar: "A Management Strategy Evaluation exploring the National Standards of the Magnusson-Stevens Fisheries Conservation and Management Acts with respect to the robustness of decision rules used for North Pacific groundfish, with applications for the U.S. Gulf of Alaska walleye pollock (*Theragra chalcogramma*) fishery" (Ph.D.; QERM 2009)
6. Doug Kinzey: "Multispecies stock assessment with predator-prey interactions" (Ph.D.; SAFS 2010)
7. Tommy Garrison: "The Value of Marine Protected Areas for Improving Stock Assessments" (MS; QERM 2010)
8. Chantel Wetzell: "Challenges of data-Limited Stock Assessments: Simple vs. Complex Stock Assessment Techniques and the Influence of Data" (MS; SAFS 2011)
9. James Thorson: "Improved estimation of behaviors, ecological processes, and abundance trends in marine species using multi-species mixture distribution models, autonomous underwater vehicles, and multi-state tag-resighting models" (Ph.D.; SAFS 2011)
10. Charlotte Boyd: "The predator's dilemma: Investigating the response of seabirds to changes in the availability and distribution of small pelagic prey resources" (Ph.D.; SAFS 2012) [co-supervisor with Glenn Van Blaricom]
11. Gavin Fay: "Spatial modelling for monitoring and management of marine metapopulations" (Ph.D.; SAFS 2012)
12. Dusanka Poljak: "Impact of Ocean Acidification on Recruitment and Yield of Bristol Bay Red King Crab" (MS; SAFS 2013)
13. Cody Szuwalski: "Reaching management objectives given uncertainty: A management strategy evaluation of the eastern Bering Sea snow crab (*Chionocetes opilio*) fishery?" (Ph.D; SAFS 2014)

#### *Committees*

1. Gakushi Ishimura (MS) [2001–2003] (thesis title: "Bioeconomic model approach for a fluctuating fish stock: Bioeconomic assessment of harvest strategies for the Pacific whiting fishery").
2. Brandon Chasco (MS) [2002–2004] (thesis title: "Run Reconstruction and in-season forecasting of sockeye salmon in Chignik, Alaska").
3. Carolina Minte-Vera (Ph.D.) [2001–2004] (thesis title: "Meta-Analysis of Density-dependent Somatic Growth").
4. Trevor A. Branch (Ph.D.) [2001–2004] (thesis title: "Individual quotas as a management tool for multispecies fisheries").
5. Lucy Flynn (MS) [2003–2005] (thesis title: "Quantification and Prediction of Bristol Bay, Alaska, Sockeye Salmon (*Oncorhynchus nerka*) Run Timing").
6. Tim Miller (Ph.D.) [2003– 2005] (thesis title: "Estimation of Catch Parameters from a Fishery Observer Program with Multiple Objectives").
7. Ian Stewart (Ph.D.) [2002–2006] (thesis title: "Stock assessment with an evaluation of structural uncertainty, and model performance applied to English sole").
8. Eric Ward (Ph.D.) [2003–2006] (thesis title: "Incorporating model selection and decision analysis into population dynamics modeling").

9. Carey McGillaird (MS) [2005 –2006] (thesis title: “The importance of space and the state of the fishery in models of no-take marine reserves”)
10. Jordan Watson (MS) [2006–2007] (thesis title: “Trade-offs in the design of fishery closures: silky shark bycatch management in the Eastern Pacific Ocean tuna purse seine fishery”)
11. Kristen Broms (MS) [2007–2008] (thesis title: “Small game population reconstruction: Model development and applications”)
12. Alex da Silva (Ph.D.) [2001– 2008] (thesis title: “Population dynamics of the blue shark, *Prionace glauca*, in the North Atlantic Ocean”)
13. Ian Taylor (Ph.D.) [2002–2008] (thesis title: “Modeling spiny dogfish population dynamics in the Northeast Pacific”)
14. Robin Thomson (Ph.D.) [2004–2008] (thesis title: “Statistical inference for movement behaviour using animal tracking data”)
15. Judith Little (Ph.D.) [2003-2009] (thesis title: “Evaluating linkages in the social-ecological system of U.S. West Coast fisheries from ecological and spatial perspectives”)
16. Dawn Dougherty (MS) [2007-2009] (thesis title: “The effects of management scale: A simulation study for U.S. Pacific coast groundfish”)
7. Teresa Mongillo (MS) [2007-2009] (thesis title: “Estimated polychlorinated biphenyl (PCB) and polybrominated diphenyl ether (PBDE) accumulation in Southern Resident killer whales”)
8. Hans Nesse (MS) [2007-2009] (thesis title: “Correlates of the decline of the Steller sea lion in the North Pacific”)
9. Gaku Ishimura (Ph.D.) [2007-2010] (thesis title: “Transboundary management of a fish stock under climate variability: The case of Pacific sardine in the California current ecosystem”)
10. Tony Jaecks (MS) [2009-2010] (thesis title: “Population dynamics and trophic ecology of Dolly Varden in the Iliamna River, Alaska: Life history of freshwater fish relying on marine food subsidies”)
11. Suresh Sethi (Ph.D.) [2009-2010] (thesis title: “Fisheries Management with People in Mind: Assessing and Managing Risk”)
12. Juan Valero (Ph.D.) [2004-2011] (thesis title: “Spatial dynamics, recruitment trends and sustainability of Pacific NW geoduck clams (*Panopea generosa*)”)
13. Amanda Bradford (Ph.D.) [2007-2011] (thesis title: “Population characteristics and dynamics of the critically endangered western gray whale”)
14. Rebecca Jablonski-Diehl (MS) [2009-2011] (thesis title: “Facing the Future of the International Whaling Commission: Addressing Environmental Threats through Organizational Learning”)
15. Chad Wilsey (Ph.D.) [2009-2011] (thesis title: “Cumulative effects of military training, cowbird management, and climate-induced changes in fire regimes on the Fort Hood Black-capped Vireo population”)
16. Steven Barbeaux (Ph.D.) [2006-2011] (thesis title: “Scientific acoustic data from commercial fishing vessels: Eastern Bering Sea walleye pollock (*Theragra chalcogramma*)”)
17. Kevin See (Ph.D.) [2009-2011] (thesis title: “State-space population dynamics models with applications to population viability analysis, the conservation of sagebrush birds in the Great Basin and estimating fisheries CPUE indices”)
18. Nicolas Guiérrez (Ph.D.) [2006-2011] (thesis title: “Managing Invertebrate Fisheries: Biology, Spatial Structure and Community-based Governance”)

19. Neala Kendall (Ph.D.) [2009-2011] (thesis title: “Fishery selection and Pacific salmon life histories: patterns and processes”)
20. Eva Dusek (Ph.D.) [2005-2012] (thesis title: “Modeling impacts of harmful algal blooms on shellfish: can we predict shellfish harvest closures using oceanographic and food web models? ”)
21. Carey McGilliard (Ph.D.) [2008-2012] (thesis title: “Utility and implications of no-take marine reserves in fishery management strategies”)
22. Kresmir Williams (Ph.D.) [2008-2013] (thesis title: “Evaluation of Midwater Trawl Selectivity and Its Influence on Acoustic-Based Fish Population Surveys”)
23. Allan Hicks (Ph.D.) [2006-2013] (thesis title: “The utility of catch-per-unit-effort when assessing and managing long-lived fish stocks”)
24. Cole Monnahan (MS) [2011-2013] (thesis title: “Population Trends of the Eastern North Pacific Blue Whale”)

### **POSTDOCTORAL FELLOWS SUPERVISED**

**Current:** Kotaro Ono (2014-present), Elizabeth Council (2014-present)

**Past:** Catherine Holt (2006-2008), Bob Lessard (2008), Ian Taylor (2008-2010), Teresa A’mar (2009-2010), James Murphy (2009-2010) Mathieu Woillez (2011-2012); Ivonne Ortiz (2008-2013), Elizabeth Moffit (2009-2014), Carey McGilliard (2012-2014), Pamela Woods (2012-2014), Athol Whitten (2013-2014)

### **ACADEMIC ADMINISTRATION EXPERIENCE**

2001 - present Planned and co-ordinated the UW-NMFS mini-workshop series  
 2001 - 2003 University of Washington Faculty Senator  
 2002 - present Quantitative Committee, SAFS  
 2003 Chair: Marine Ecology Position Search Committee  
 2005 – 2007 Member: Recruitment, Admissions, and Scholarship Committee  
 2006 Member: JISAO Director Search Committee  
 2007 – 2013 Member: JISAO Council  
 2007 – present Member: SAFS School Council  
 2007 – 2012 Chair: Recruitment, Admissions, and Scholarship Committee  
 2008 Member: SMA Search Committee  
 2011 – 2012 Associate Director, SAFS  
 2012 – present Director, SAFS  
 2014 Chair: Friday Harbor Director Search Committee

## PROFESSIONAL ACTIVITY

### *Appointments (major committees)*

1. Member: Scientific Committee of the International Whaling Commission, 1990 – present
2. Chair: Southern Shark Fishery Assessment Group (Australia), 1995 – 2001.
3. Member: Northern Prawn Fishery Assessment Group, Australia (Australia), 1996 – 2000.
4. Scientific Member: Southern Shark Fishery Management Committee (Australia), 1997 – 2001
5. Member: IUCN Standards and Petitions Working Group, 1998 - present
6. Member: Pacific Fishery Management Council Scientific and Statistical Committee, 2001 – present (Chair Coastal Pelagic Subcommittee)
7. Participant: Working Group on Integration of Marine Protected Areas and Fishery Science and Management, 2004 – 2006.
8. Member: PSMFC Panel on “Strengthening Scientific Input and Ecosystem-Based Fishery Management for the Pacific and North Pacific Fishery Management Councils”, 2005.
9. Member: North Pacific Research Board Science Panel, 2005 – 2014
10. Member: North Pacific Research Board Ecosystem Modeling Committee, 2006
11. Member: North Pacific Fishery Management Council Crab PLAN Team, 2007 – present
12. Member: Evaluating the Effectiveness of Stock Rebuilding Plans of the 2006 Fishery Conservation and Management Reauthorization Act, 2012 – 2014.
13. Honorary Associate, Center for Marine Science, University of Tasmania, 2005 – 2009
14. Editorial Boards: *Population Ecology*, *The Open Source Fish Science Journal*, *African Journal of Marine Science*
15. Associate Editor: *Journal of Applied Ecology*, *Fisheries Research*
16. Guest Editor: *Fisheries Research* - Special Issue on GLMs, GAMs and GLMMs in fisheries
17. Guest Editor: *Fisheries Research* – Special Issue on Harvest strategies
18. Guest Editor: *Fish & Fisheries* – Special Issue on Ecosystem Based Fisheries Management
19. Guest Editor: *Fisheries Research* – Special Issue on Stock Synthesis
20. Guest Editor: *Fisheries Research* – 5<sup>th</sup> International Billfish Symposium
21. Guest Editor: *Fisheries Research* – Data-poor stock Assessment and Management

### *Peer reviewer*

I review 2-3 papers per month. The journals for which I have reviewed manuscripts since 2001 include: *African Journal of Marine Science*, *AFS Symposium Series*, *Aquatic Living Resources*, *Bulletin of Marine Science*, *Canadian Journal of Fisheries and Aquatic Sciences*, *CCAMLR Science*, *Conservation Biology*, *Ecology Letters*, *Ecological Modelling*, *Ecological Applications*, *Environmental Biology of Fishes*, *Fish and Fisheries*, *Fisheries Research*, *Fishery Bulletin*, *ICES Journal of Marine Science*, *Journal of Agricultural, Biological and Environmental Statistics*, *Journal of Applied Ecology*, *Journal of Cetacean Research and Management*, *Journal of Marine Systems*, *Journal of Northwest Atlantic Fisheries Science*, *Journal of Zoology*, *Limnology and Oceanography: Methods*, *Marine and Freshwater Research*, *Marine Ecology Progress Series*, *Marine Mammal Science*, *New Zealand Journal and Marine and Freshwater Research*, *Population Ecology*, *North American Journal of Fisheries*

*Management, The Open Source Fish Science Journal, South African Journal of Marine Science, Transactions of the American Fisheries Society.*

Since 2001, I have reviewed grant applications for: Cooperative Institute for Marine Resources Studies; DEFRA (United Kingdom) Florida Sea Grant College Program; Foundation for Research and Development (Australia); Great Lakes Fishery Commission; JIMAR, Pelagic Fisheries Research Program; Natural Environment Research Council (United Kingdom); National Research Foundation (South Africa); North Pacific Research Board; NSERC (Canada); Pacific States Marine Fisheries Commission.

#### *Awards*

1. Jamieson Memorial Bursary - awarded on the basis of matriculation symbols (South Africa – 1983).
2. Jacob Burlank Scholarship - awarded to the top student in Mathematics II who intends progressing to Mathematics III (South Africa – 1984).
3. Roderick Noble Scholarship - awarded to the B.Sc graduate from UCT with the most outstanding academic record throughout his/her undergraduate career (South Africa – 1985).
4. Southern Life Book Prize - awarded to the top student in the B.Sc. (Hons) Computer Science class (South Africa – 1986).
5. Myer Levinson (EMDIN) Scholarship - awarded to the UCT student who is most successful in his/her B.Sc. (Hons) degree and who intends furthering his/her research in the year following the award of the scholarship (South Africa – 1986).
6. Croll Memorial Scholarship - awarded to the UCT student who is most successful in his/her B.Sc (Hons) degree and who intends furthering his/her research in the year following the award of the scholarship (South Africa – 1986).
7. South African College Croll Scholarship - awarded on the basis of examination results to a UCT student who intends furthering his/her research in the year following the award of the scholarship (South Africa – 1988).
8. S2A3 Medal - awarded by the South African Association for the Advancement of Science for the best M.Sc. dissertation in the Sciences at UCT (South Africa – 1988).
9. K. Radway Allen Award - awarded for an outstanding contribution in fish or fisheries science (Australia - 1999).
10. CSIRO Gold Medal (2009).
11. COFS Distinguished Teaching Awards (USA – 2003 & 2005).
12. COFS Distinguished Research Award (USA – 2008).
13. 2011 Best Paper Award: *Fishery Bulletin* (USA 2012).
14. Oscar Elton Sette Award – awarded to an outstanding marine fishery biologist by the Marine Fisheries Section of the American Fisheries Society (USA – 2012).
15. UW Distinguished Teaching Award (USA – 2013).
16. AFS Western Division Award of Excellence (USA – 2013).
17. Elected to the Washington Academy of Sciences (USA – 2014)

#### *Recent (2001-2013) invited talks / keynotes addresses*

1. Invited speaker: DFO Fisheries Management Studies Working Group, Dartmouth, 25-29 June 2001.
2. Invited speaker: Life Histories, Assessment and Management of Crustacean Fisheries, La Coruña, 8-14 October 2001.

3. Invited speaker: DFO Workshop on Implementing the Precautionary Approach in Assessment Advice, Ottawa, 10-14 December 2001.
4. Keynote speaker: Elasmobranch Fisheries: Managing for Sustainable Use and Biodiversity Conversation, 24<sup>th</sup> Annual NAFO meeting, Santiago de Compostela, 11-13 September 2002.
5. Invited speaker: Oregon Chapter American Fisheries Society, 39<sup>th</sup> Annual Meeting, Eugene, 26-28 February 2003.
6. Invited speaker: American Fisheries Society, 133<sup>rd</sup> Annual Meeting, Quebec, 11-13 August 2003.
7. Invited speaker: Pre-conference Workshop on Assessment and Management of Deepsea Fisheries, Dunedin, 27-29 November 2003.
8. Keynote speaker: Deep Sea 2003 Conference, Queenstown, 1-5 December 2003.
9. Invited speaker: World Fisheries Congress, Vancouver, 2-6 May 2004.
10. Keynote speaker: 2004 World Conference on Natural Resource Modelling, Melbourne, 12-15 December 2004.
11. Keynote speaker: ICES Symposium on Fisheries Management Strategies, Galway, 27-30 June 2006.
12. Keynote speaker: 10<sup>th</sup> National Stock Assessment Workshop, Port Townsend, 5-8 June 2008.
13. Keynote speaker. 5<sup>th</sup> World Fisheries Congress, Yokohama, 20-24 October 2008.
14. Keynote speaker. National Ecosystem Modelling Workshop II, Annapolis, 25-27 August 2009.
15. Keynote speaker. International Statistical Ecology Conference 2012, 3-6 July 2012
16. Keynote speaker. Selectivity: theory, estimation, and application in fishery stock assessment models, La Jolla, 13 March 2013.
17. Invited speaker. Managing Our Nation's Fisheries, Washington DC, 6-9 May 2013.
18. Keynote speaker. Assessment of billfishes: Current status and some future directions. 5<sup>th</sup> International Billfish Symposium, 4-8 November 2013.

#### **INTERNATIONAL SCIENTIFIC MEETINGS ATTENDED**

1. IWC Comprehensive Assessment Workshop on Management Procedures, Lowestoft, February 1989 (Invited participant).
2. ICSEAF Ad hoc Working Group on Stock Assessment Methodology, Madrid, June 1989 (South African delegate).
3. ICSEAF Ad hoc Working Group on Revision of Statistical Standards, Madrid, June 1989 (South African delegate).
4. IWC Comprehensive Assessment Workshop on Management Procedures, Oslo, February 1990 (Invited participant).
5. IWC Scientific Committee meeting, Noordwijk, June 1990 (Invited participant).
6. IWC Comprehensive Assessment Workshop on Management Procedures, Tokyo, December 1990 (Invited participant).
7. Benguela Tropic Functioning Symposium, Cape Town, September 1991.
8. Benguela Ecology Programme Workshop on Seal-fishery Biological Interactions, Cape Town, September 1991.
9. ICCAT SCRS meeting, Madrid, November 1991 (US delegate).
10. Workshop on Risk Evaluation and Biological Reference Points for Fisheries Management, Halifax, November 1991.



11. Conference - "Hake: Fisheries; Products and Markets", Bremerhaven, November 1991.
12. IWC Comprehensive Assessment Workshop on Management Procedures, Copenhagen, March 1992 (Invited participant).
13. IWC Scientific Committee meeting, Glasgow, June 1992 (Invited participant).
14. Marine Linefish Symposium, Durban, October 1992.
15. IWC Scientific Committee meeting, Kyoto, April-May 1993 (Invited participant).
16. ICCAT Bluefin Stock Assessment Session, Madrid, September 1993 (US delegate).
17. Modelling of Fisheries Management Strategies, Dublin, February 1994.
18. IWC Scientific Committee meeting, Puerto Vallarta, May 1994 (Invited participant).
19. ICCAT Albacore Research Program Final Meeting, Sukarrieta, May 1994 (South African participant).
20. Global Trends in Fisheries Management Conference, Seattle, June 1994.
21. ICCAT Bluefin Stock Assessment Session, Fuengirola, September 1994 (US delegate).
22. ICCAT SCRS meeting, Madrid, November 1994 (US delegate).
23. North Pacific Symposium on Invertebrate Stock Assessment and Management, Nanaimo, March 1995.
24. IWC Scientific Committee meeting, Dublin, May 1995 (Invited participant).
25. IUCN / WWF Threatened Species Meeting, London, May 1996 (Invited participant).
26. NRC Stock Assessment Workshop, Los Angeles, May 1996 (Invited participant).
27. IWC Scientific Committee meeting, Aberdeen, June 1995 (Invited participant).
28. ICCAT albacore species meeting, Taipei, August 1996 (South African delegate).
29. 5<sup>th</sup> International Conference and Workshop on Lobster Biology and Management, February 1997.
30. Workshop on Harp Seal - Fishery Interactions in the Northwest Atlantic, February, 1997 (Invited participant).
31. Review of Japanese Research Programme in the Antarctic, Tokyo, May 1997 (Invited participant).
32. Workshop on Research and Management of the Namibian Fur Seal Population, Swakopmund, June 1997.
33. American Fisheries Society Annual Meeting, Monterey, August 1997.
34. IWC Scientific Committee meeting, Bournemouth, September 1997 (Invited participant).
35. Workshop on Research and Management of the Stocks of Cape hake off Namibia, Swakopmund, October 1997 (Invited participant).
36. IUCN Criteria and Categories Review Scoping Workshop, London, March 1998 (Invited participant).
37. IWC Scientific Committee meeting, Muscat, April 1998 (Invited participant).
38. Conference - "Confronting Uncertainty in the Evaluation and Implementation of Fisheries Management Systems", November 1998.
39. Workshop - EU Concerted Action "Evaluation and comparison of methods for estimating uncertainty in harvesting fish from natural populations", Key Largo, January 1999.
40. IUCN Criteria and Categories Review: Marine Workshop, Tokyo, January 1999.
41. American Fisheries Society Endangered Marine Fishes Workshop, Gloucester, March 1999.

42. IWC Scientific Committee meeting, Grenada, May 1999 (Invited participant).
43. Workshop - EU Concerted Action "Evaluation and comparison of methods for estimating uncertainty in harvesting fish from natural populations", Nantes, May 1999.
44. IUCN Criteria and Categories Review Workshop, Cambridge, June 1999.
45. 17<sup>th</sup> Lowell Wakefield Fisheries Symposium, Anchorage, November 1999.
46. IWC Workshop on the Development of an Aboriginal Subsistence Whaling Management Procedure, Seattle, November 1999 (Invited participant).
47. Workshop - EU Concerted Action "Evaluation and comparison of methods for estimating uncertainty in harvesting fish from natural populations", Madrid, January 2000.
48. Review of Japanese Research Programme in the North Pacific, Tokyo, February 2000 (Invited participant).
49. IWC Scientific Committee meeting, Adeliade, June 2000 (Invited participant).
50. Workshop - EU Concerted Action "Evaluation and comparison of methods for estimating uncertainty in harvesting fish from natural populations", Reyjavik, August 2000.
51. Pacific Management Council, September 2000.
52. Workshop – Stock assessment techniques for hermaphroditic marine fisheries, St Petersburg, September 2000 (Invited participant).
53. Workshop – Review of assessments for Cape hake and rock lobster (BENEFIT programme), November 2000 (Invited participant).
54. IWC Workshop on the Development of an Aboriginal Subsistence Whaling Management Procedure, Seattle, December 2000 (Invited participant).
55. Review of NZ rock lobster assessment, Wellington, June 2001.
56. DFO workshop on Intensive Fishery Evaluations, Halifax, June 2001 (Invited Speaker).
57. IWC Scientific Committee meeting, London, July 2001 (Invited participant).
58. ICCAT workshop on bluefin tuna mixing, Madrid, September 2001 (US delegate).
59. Ecological Modelling Workshop, Hobart, August 2001 (Invited participant).
60. Conference - Life Histories, Assessment and Management of Crustacean Fisheries, La Coruña,, October 2001 (Invited speaker).
61. 2001 BENEFIT workshop, Cape Town, November 2001 (Invited participant).
62. DFO Workshop on Implementing the Precautionary Approach in Assessment Advice, Ottawa, December 2001 (Keynote speaker).
63. January 2002 Workshop on North Pacific minke Implementation Simulation Trials, Seattle, January 2002 (Invited participant).
64. Fourth Workshop on the Development of an Aboriginal Subsistence Whaling Management Procedure (AWMP), 23-26 January 2002, Invited Participant.
65. IWC Scientific Committee, Shimonoseki, April–May 2002 (Invited participant).
66. IWC Modelling Workshop on Cetacean-Fishery Competition, La Jolla, June 2002 (Invited participant).
67. ICCAT bluefin tuna assessment session, Madrid, July 2002 (US delegate).
68. Conference - Elasmobranch Fisheries: Managing for Sustainable Use and Biodiversity Conversation, 24<sup>th</sup> Annual NAFO meeting, Santiago de Compostela, September 2002 (Keynote speaker).
69. Workshop - An Ecosystem Approach to Fisheries Management in the Southern Benguela: Introducing the Concept and Looking at Our Options, Cape Town, December 2002 (Invited speaker).

70. BENEFIT Stock Assessment Workshop 2002, Cape Town, December 2002, (Invited participant).
71. IWC Workshop of North Pacific Implementation Simulation Trials, Seattle, January 2003 (Invited participant).
72. Testing of Spatial Structure Models Workshop, Scripps Institution of Oceanography, San Diego, January 2003 (Invited participant).
73. Workshop to Develop Improved Methods for Providing Harp and Hooded Seal Harvest Advice, Woods Hole, February 2003 (Invited participant).
74. Oregon Chapter American Fisheries Society, 39<sup>th</sup> Annual Meeting, Eugene, 26-28 February 2003 (Invited Speaker).
75. American Fisheries Society, 133<sup>rd</sup> Annual Meeting, Quebec, 11-13 August 2003 (Invited Speaker).
76. 21<sup>st</sup> Lowell Wakefield Fisheries Symposium, Anchorage, 22–25 October 2003.
77. Pre-conference Workshop on Assessment and Management of Deepsea Fisheries, Dunedin, 27-29 November 2003 (Invited Speaker).
78. Deep Sea 2003 Conference, Queenstown, 1-5 December 2003 (Keynote speaker).
79. BENEFIT Stock Assessment Workshop 2003, Cape Town, January 2003 (Invited participant).
80. World Fisheries Congress, 2-6 May 2004, Vancouver, Canada.
81. Fifth Workshop on the Development of an Aboriginal Subsistence Whaling Management Procedure, 21-24 March 2004, Seattle (Invited participant).
82. IWC Scientific Committee, Sorrento, June-July 2004 (Invited participant).
83. Working Group on Integration of Marine Protected Areas and Fishery Science and Management, Santa Cruz, 6-8 October 2004 (Invited participant).
84. BENEFIT Stock Assessment Workshop 2004, Cape Town, 6-11 December 2004 (Invited participant).
85. 2004 World Conference on Natural Resource Modelling, Melbourne, 12-15 December 2004 (Keynote Speaker).
86. Intersessional Workshop on the *pre-Implementation Assessment* of western North Pacific Bryde's Whales, Tokyo, 21-25 March 2005 (Invited Participant).
87. Scientific Committee of the International Whaling Commission, 30 May – 10 June, 2005, Ulsan, Korea (Invited Participant).
88. Working Group on Integration of Marine Protected Areas and Fishery Science and Management, Santa Cruz, 27-29 June 2005 (Invited Participant).
89. Working Group on Integration of Marine Protected Areas and Fishery Science and Management, Santa Cruz, 17-19 October 2005 (Invited participant).
90. First Intersessional Workshop on the Western North Pacific Bryde's Whales Implementation, Shizuoka, 25-29 October 2005 (Invited Participant).
91. MCM/NRF/Industry SA Rock Lobster International Stock Assessment Workshop, Cape Town, 29 November–3 December 2005 (Invited Participant).
92. Second workshop on the Testing of Spatial Structure Models (TOSSM), Potsdam, 17-21 March 2006 (Invited Participant).
93. Working Group on Integration of Marine Protected Areas and Fishery Science and Management, Santa Cruz, 21-22 April 2006 (Invited participant).
94. IUCN Standards and Petition Sub-Committee, Charlottesville, 13-14 May 2006.
95. First Intersessional Workshop on Progress Towards a Bowhead Whale Implementation Review, Seattle, 24-27 April 2006 (Invited Participant).
96. Scientific Committee of the International Whaling Commission, St Kitts, 26 May – 6 June, 2006 (Invited Participant).

97. Western Pacific workshop on policy, enforcement and sustainable trade for the CITES Appendix II listed humphead/Napoleon wrasse, *Cheilinus undulates*, 5-7 June 2006, Hong Kong (FAO Participant).
98. ICES Symposium on Fisheries Management Strategies, Galway, 27-30 June 2006 (Keynote speaker).
99. Working Group on Integration of Marine Protected Areas and Fishery Science and Management, Santa Cruz, 17-19 July 2006 (Invited participant).
100. Second Intersessional Workshop on the Western North Pacific Bryde's Whales Implementation, Yokohama, 10-14 December 2006 (Invited Participant).
101. 2nd Intersessional Workshop to prepare for the 2007 Bowhead Whale Implementation Review, Seattle, 12-17 January 2007 (Invited Participant).
102. Marine Science in Alaska Conference, Anchorage, 20-24 January 2007 (Participant).
103. 3<sup>rd</sup> Intersessional Workshop to Prepare for the 2007 Bowhead Whale Implementation Review and to Consider Progress on the Greenland Research Programme, Copenhagen, 20-25 March 2007 (Invited Participant).
104. Scientific Committee of the International Whaling Commission, Anchorage, 5-18 May 2007 (Invited Participant).
105. Modelling Ecosystem Interactions for Informing an Ecosystem Approach to Fisheries: Best Practices in Ecosystem Modelling, Tivoli, 3-6 July 2007 (Invited Participant).
106. SA Sardine-Anchovy and Rock Lobster Resources International Assessment Workshop, Cape Town, 9-13 July 2007 (Invited Reviewer).
107. 137<sup>th</sup> Annual Meeting of the American Fisheries Society, San Francisco, 2-6 September 2007 (Invited Speaker).
108. National Workshop on Modelling Tools for Ecosystem Approaches to Management, Victoria, 22-25 October 2007 (Invited Speaker).
109. IWC MSYR Workshop, Seattle, 16-19 November 2007 (Invited Participant).
110. Expert Review Panel to Review MSY-related Reference Points in Use in New Zealand Fisheries, 28 January – 1 February 2008 (Invited Reviewer).
111. AWMP Workshop on Greenlandic Fisheries, Copenhagen, 26-29 March 2008 (Invited Participant).
112. First Intersessional RMP Workshop on the North Atlantic Fin Whales, Copenhagen, 31 March – 4 April 2008 (Invited Participant).
113. 10<sup>th</sup> National Stock Assessment Workshop, Port Townsend, 6-8 May 2008 (Keynote speaker).
114. Scientific Committee of the International Whaling Commission, Anchorage, 31 May – 13 June 2008 (Invited Participant).
115. IUCN Standards and Petitions Working Group, Geneva, 7-8 July 2008 (Invited Participant).
116. CCAMLR Workshop to Review Input Data for Antarctic marine Ecosystem Models, Hobart, 11-15 August 2008 (Invited Participant).
117. Keynote speaker: 5<sup>th</sup> World Fisheries Congress, Yokohama, 20-24 October 2008 (Keynote speaker).
118. IWC Intersessional Meeting on Southern Hemisphere Humpback Whale Assessment Methodology, Seattle 3-6 February 2009 (Invited Participant).
119. IWC Intersessional Meeting on MSYR for Baleen Whales, Seattle, 6-8 February 2009 (Invited Participant).
120. IWC Workshop on Whales and Climate Change, Siena, 21-25 February 2009 (Invited Participant).

121. Second Intersessional Workshop of the North Atlantic Fin Whale *Implementation*, Copenhagen, 12-22 March 2009 (Invited Participant).
122. Second AWMP Workshop on Greenlandic Fisheries, Copenhagen, 24-27 March 2009 (Invited Participant).
123. Scientific Committee of the International Whaling Commission, Maderia, 31 May – 12 June 2009 (Invited Participant).
124. National Ecosystem Modelling Workshop II, Annapolis, 25-27 August 2009 (Keynote speaker).
125. NRF – MCM Stock Assessment Workshop, Cape Town, 30 November – 4 December 2009 (Invited Participant).
126. 3<sup>rd</sup> AWMP Workshop on Greenlandic Hunts, Copenhagen, 14-17 December 2009 (Invited Participant).
127. Scientific Assessment Group, Honolulu, 23-25 January 2010 (Invited Participant).
128. Scientific Committee of the International Whaling Commission, Agadir, 30 May – 11 June 2010 (Invited Participant).
129. NRF – MCM Stock Assessment Workshop, Cape Town, 29 November – 3 December 2010 (Invited Participant).
130. First RMP Intersessional Workshop for western North Pacific common minke whales, 14-17 December 2010 (Invited Participant).
131. International Fisheries Stock Assessment Workshop, Cape Town, 29 November – 3 December 2009 (Invited Participant).
132. 2011 AWMP Workshop with a focus on eastern gray whales, 28 March – 1 April, 2011 (Invited Participant)
133. Scientific Committee of the International Whaling Commission, Tromso, 30 May – 11 June 2011 (Invited Participant).
134. NRF – MCM Stock Assessment Workshop, Cape Town, 29 November – 3 December 2011 (Invited Participant).
135. First RMP Intersessional Workshop for western North Pacific common minke whales, 12-16 December 2011 (Invited Participant).
136. Scientific Committee of the International Whaling Commission, Panama City, 11-23 June 2012 (Invited Participant).
137. International Statistical Ecology Conference 2012, Sundvolden, 3-6 July 2012, (Keynote speaker).
138. 8<sup>th</sup> Regular Session of the Scientific Committee of the Western and Central Pacific Fisheries Commission, Busan, 7 August 2012 (Invited Speaker).
139. NRF – MCM Stock Assessment Workshop, Cape Town, 26 - 30 November 2012 (Invited Participant).
140. Fourth AWMP Workshop on the Development of SLAs for the Greenlandic Hunts, Copenhagen, 15-18 December 2012 (Invited Participant)
141. Selectivity: theory, estimation, and application in fishery stock assessment models, La Jolla, 13 March 2013 (Keynote Speaker).
142. Second Intersessional Workshop on the *Implementation Review* for western North Pacific common minke whales, La Jolla, 19-23 March 2013 (Invited Participant).
143. Fourth Intersessional Workshop on the Review of MSYR, La Jolla, 26-28 March 2013 (Invited Participant).
144. Managing Out Nations Fisheries, Washington DC, 7-9 May 2013 (Invited speaker).

145. Scientific Committee of the International Whaling Commission, Jeju, 3-15 June 2013 (Invited Participant).
146. MARAM/DAFF Stock Assessment Workshop, Cape Town, 2 - 6 December 2013 (Invited Participant).
147. Intersessional Workshop on the *Implementation Review* for North Atlantic fin whales, Copenhagen, 6-8 January 2014 (Invited Participant).
148. AWMP Intersessional Workshop on Developing *SLAs* for the Greenland Hunts, Copenhagen, 8-11 January 2014 (Invited Participant).