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**Tracy K. Collier**

Curriculum Vitae

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**EDUCATION**

University of Washington, Seattle, WA	- B.Sc.	1976	Fisheries
University of Washington, Seattle, WA	- M.Sc.	1978	Fisheries
University of Washington, Seattle, WA	- Ph.D.	1988	Fisheries

**POSITIONS HELD** (paid and faculty)

2016-present **RPI Associate**

2012-present **Consultant** to NOAA, LCP Chemical Natural Resource Damage Assessment, Bottlenose Dolphins in Brunswick GA.

2010-present **Member**, Delta Independent Science Board, Delta Stewardship Council

2015-2016 **Consultant** to Peters Band and Shxw'owhámel First Nation, Trans Mountain Pipeline Expansion Project.

2014-2016 **Consultant** to Southern Institute of Spatial Planning and Vietnam Ministry of Construction, Revised Mekong Delta Regional Plan 2030 and Vision 2050.

2010-2016 **Technical Advisor**, NOAA Marine Mammal/Sea Turtle Technical Working Groups for Natural Resource Damage Assessment, Deepwater Horizon Oil Spill

2015 **Independent Expert Panel Member**. Reviewing the long-term management strategy for dredged materials in the Delta. US Army Corps of Engineers, San Francisco District.

2014 **U.S. Coordinator and Co-Chair**, 2014 Salish Sea Ecosystem Conference.

2013-2015 **Chair**, Delta Independent Science Board, Delta Stewardship Council

2013-2014 **Chair** of Independent Science Advisory Panel, Ecosystem Restoration Program, Dept. Fish and Wildlife, State of California

2012-2014 **Science Director**, Puget Sound Partnership

2012-2013 **Vice-chair**, Delta Independent Science Board, Delta Stewardship Council

2011-2012 **Member**, Great Lakes Restoration Initiative Action Plan Review Panel, USEPA Science Advisory Board

2010-2012 **Consultant** to Haisla First Nation, Enbridge Trans-Canada Pipeline Environmental Assessment

2010-2014 **Science Advisor**, NOAA Oceans and Human Health Initiative

2003-2010 **Division Director**, Environmental Conservation Division, Northwest Fisheries Science Center (NWFSC), NOAA Fisheries

2004-2008 **Adjunct Professor**, Dept. Veterinary Microbiology and Pathology Washington State University

2004-2010 **Affiliate Faculty**, Dept. Molecular and Environmental Toxicology, Oregon State University

2004-2006 **Principal Investigator**, Oceans and Human Health Initiative, NWFSC

2003-2004 **Courtesy Faculty**, Dept. Molecular and Environmental Toxicology, Oregon State University

1999-2000 **Salmon Recovery Team**, NWFSC

1996-1997 **Principal Investigator** on studies to determine injury to fishery resources in Rhode Island salt ponds following the *North Cape* oil spill

1995-2005 **Center Coordinator** for habitat science, NWFSC

1994-2003 **Program Manager**, Ecotoxicology and Environmental Fish Health Program, NWFSC

1994-1996 **Principal Investigator** on study funded by NMFS Restoration Center and USEPA to determine efficacy of subtidal remediation.

1994-2010 **Research Advisor** for National Research Council Postdoctoral Research Associate Program

1993-2003 **Division Coordinator** for Natural Resource Damage Assessment and Restoration Science

1992-1996 **Research Group Leader**, Biochemical Pathology Group, ECD

1992-2010 **Supervisory Research Chemist**, ECD, NMFS

1992-1994 **Assistant Branch Manager**, Ecotoxicology Branch of the ECD, NMFS

1990-1994 **Division Coordinator** for Natural Resource Damage Assessment/Restoration after the *Exxon Valdez* oil spill

1993 **Visiting Scientist**, Laboratory of Marine Molecular Biology, Bergen, Norway.

1991 **Chief Scientist**, Natural Resources Damage Assessment, Subtidal Fish, *Exxon Valdez* Oil Spill

1988-1992 **Assistant Task Manager**, Biochemistry Task of the ECD

1978-1992 **Research Chemist**, ECD

1976-1978 **Fishery Biologist**, ECD

1972-1976 **Biological Aid/Physical Science Technician**, ECD

#### **COMMITTEE AND PUBLIC SERVICE (unpaid)**

2016-present International co-Chair, International Symposium on Toxicity Assessment

2015-present Co-Principal Investigator, NAS Gulf Research Program. Modeling stress-associated health effects of multiple impacted ecosystem services in the Gulf of Mexico.

2013-present Advisory Committee for Washington Sea Grant

2009-present International Scientific Committee, International Symposium on Toxicity Assessment

2009-present Appointed to pool of experts for GESAMP (Group of Experts on Scientific Aspects of Marine Protection), advising the United Nations.

2016 Selection Committee, Brown-Nichols Science Award. 9/15/16.

2016 Review panel member, CA Sea Grant review of Bay/Delta science fellows. 2/3-4/16.

2015 Meeting at the invitation of the Puget Sound Partnership with WA State Senator Christine Rolfes and staff, WA Dept. Ecology, and local citizens to discuss net pen activities in Puget Sound 9/14/15.

2015 Co-chair, 17<sup>th</sup> International Symposium on Toxicity Assessment, Bellingham, WA. 8/2-7/15.

2015 Review panel member, Effects of Climate Change on Human Health. NOAA Climate Program Office, Silver Spring MD. 3/9-10/15.

2014 Mentor for Interagency Ecological Program, Early Career mentoring luncheon 2/28/14.

2013-2015 Editorial Board, *Environments*

2012-2015 Advisory Panel/Coordinating Committee member, Salish Sea Marine Survival of Salmon project.

2012 External Review Panel for Hollings Marine Laboratory, NOAA

2011-2015 Chair of Toxicology Sub-group, 2010-2011 Cetacean Unusual Mortality Event in Northern Gulf of Mexico Working Group

2011-2012 Member, Puget Sound Science Panel, Puget Sound Partnership

2011-2012 Member, Board of Directors, People for Puget Sound  
2010-2012 Steering Committee, Cumulative Effects of Underwater Anthropogenic Sound on Marine Mammals, NCEAS  
2010-2012 Ocean Policy Task Force member for Water Quality, NOAA  
2010 Chair of Advisory Panel, Contaminants of Emerging Concern for Coastal and Marine Ecosystems in California, David and Lucile Packard Foundation  
2008-2010 Technical Working Group, Sacramento River fall chinook ‘collapse’  
2008-2009 Governance committee, Puget Sound Monitoring Consortium  
2008-2014 Editorial Board, Journal of Marine Biology  
2007-2010 Aquatic Toxicology Editor, Environmental Toxicology and Chemistry  
2006-2010 Executive Committee for Puget Sound Nearshore Partnership (PSNP).  
2006-2010 Scientific Advisory Board, Unexplained Neurotoxicity in Biological Organisms of Northern Europe. Stockholm University, Stockholm, Sweden.  
2006 Ad-Hoc Committee for Water Quality, Puget Sound Partnership  
2005-2011 Steering Committee for APEC Marine Environmental Training and Education Center (AMETEC), Geoje Island, South Korea.  
2004-2012 Science Advisor for ‘EarthSky’, national radio series.  
2004-2005 Biological Review Team, Cherry Point herring status review  
2004-2009 Management Committee, Puget Sound Assessment and Monitoring Program  
2003-2005 Habitat Restoration Implementation Team, NOAA  
1999-2001 Chair, Promotion Review Board, ECD, NWFSC  
1999 PMAC Review Board, Conservation Biology Division, NWFSC  
1999-2004 Steering Committee, Puget Sound Ambient Monitoring Program  
1996-2000 Essential Fish Habitat Team, National Marine Fisheries Service  
1996-2000 Technical Advisory Panel to Cook Inlet Keeper Program  
1996-1998 Controlling Toxic Inputs Working Group of Puget Sound/Georgia Basin Transboundary Task Force  
1995-1996 Strategic Planning Team for Northwest Fisheries Science Center  
1995-1997 Management Committee for Puget Sound Estuary Program  
1994-2000 Environmental Monitoring Committee, Cook Inlet Regional Citizens Advisory Council  
1994-1996 Scientific Advisory Committee, Marine Science Society of the Pacific Northwest  
1993-1994 Chair, Technical Advisory Panel for Damage Assessment Regulations Team of NOAA

## **AWARDS**

2006 Silver Medal for Exceptional Federal Service, Dept. of Commerce, Hurricane Katrina Emergency Response  
2006 NOAA Fisheries Employee of the Year  
2005 Bronze Medal for Superior Federal Service, Dept. of Commerce. NOAA Coastal Storms Program  
2004 Special Act Award for proposal establishing a NOAA Center of Excellence in Oceans and Human Health.  
2004 Award from NOAA Fisheries HQ, for scientific contributions to NOAA Oil and Dispersant Summit.  
2004 Bronze Medal from US Environmental Protection Agency, for contributions to the West Region National Coastal Assessment Program.  
2003 Special Act Award, US Delegate to T/V Prestige Oil Spill, Galicia, Spain  
1999 Bronze Medal for Superior Federal Service, Dept. of Commerce. Essential Fish Habitat Team  
1994, 1996, 2002 Outstanding Performance Award, NMFS, NOAA  
1987, 1991, 1998 Sustained Superior Performance Award, NMFS, NOAA  
1984, 1990 Outstanding Performance Award, NMFS, NOAA

1986 Best Student Platform Presentation, PANWAT Annual Meeting  
1984 Elected to Society of the Sigma Xi  
1972 National Merit Scholar

### PROFESSIONAL MEMBERSHIPS (past and present)

American Fisheries Society, American Meteorological Society, Marine Technology Society, The Ocean Society, Society of the Sigma Xi, Society of Environmental Toxicology and Chemistry (SETAC), Pacific Northwest SETAC, Taiwan Cetacean Society (first foreign member).

### SCIENTIFIC PUBLICATIONS

- Sandifer, P.A., L.C. Knapp, **T.K. Collier**, A.L. Jones, R.-P. Juster, C.R. Kelble, R.K. Kwok, J.V. Miglarese, L.A. Palinkas, D.E. Porter, G.I. Scott, L.M. Smith, W.C. Sullivan, and A.E. Sutton-Grier. 2016. A conceptual model to assess stress-associated health effects of multiple ecosystem services degraded by disaster events in the Gulf of Mexico and elsewhere. *Journal of Environmental Management* (submitted).
- Takeshita R., L.H. Sullivan, C.R. Smith, **T.K. Collier**, A. Hall, T. Brosnan, T.K. Rowles, and L.M. Schwacke. 2016. The Deepwater Horizon oil spill marine mammal injury assessment. *Endangered Species Research* (submitted).
- Lennart Balk, L., P-Å Hägerroth, H. Gustavsson, L. Sigg, G. Åkerman, Y.R. Muñoz, D.C. Honeyfield, U. Tjärnlund, K. Oliveira, K. Ström, S.D. McCormick, S. Karlsson, M. Ström, M. van Manen, A.-L. Berg, H. P. Halldórsson, J. Strömquist, **T. K. Collier**, H. Börjeson, T. Mörner, and Tomas Hansson. 2016. Widespread episodic thiamine deficiency in Northern Hemisphere wildlife. *Scientific Reports* (in press).
- Smith, C.R., T.K. Rowles, L.B. Hart, F.I. Townsend, R.S. Wells, E.S. Zolman, B.C. Balmer, B. Quigley, M. Ivančić, W. Mc Kercher, M.C. Tumlin, K.D. Mullin, J.D. Adams, Q. Wu, W. McFee, **T.K. Collier**, L.H. Schwacke. 2016. Slow recovery of Barataria Bay dolphin health following the Deepwater Horizon Oil Spill (2013-2014), with evidence of persistent lung disease and impaired stress response. *Endangered Species Research* (in press).
- Ylitalo, G.M., **T.K. Collier**, B.F. Anulacion, K. Juaire, R.H. Boyer, D.A.M. da Silva, J.L. Keene, and B.A. Stacy. 2016. Determining oil and dispersant exposure in sea turtles from the Northern Gulf of Mexico resulting from the *Deepwater Horizon* oil spill. *Endangered Species Research* (in press).
- Mitchelmore, C., C. Bishop, and **T.K. Collier**. 2016. Toxicological estimation of mortality of oceanic sea turtles oiled during the *Deepwater Horizon* oil spill. *Endangered Species Research* (in press).
- Beyer, J., H.C. Trannum, T. Bakke, P.V. Hodson, and **T.K. Collier**. 2016. Environmental effects of the *Deepwater Horizon* oil spill: A review. *Mar. Poll. Bull.* 110:28-51. <http://dx.doi.org/10.1016/j.marpolbul.2016.06.027>
- Trtanj, J., L. Jantarasami, J. Brunkard, J., **T.K. Collier**, J. Jacobs, E. Lipp, S. McLellan, S. Moore, H. Paerl, J. Ravenscroft, M. Sengco, and J. Thurston. 2016. Climate Impacts on Water-Related Illness. Ch 6 in: A. Crimmins, J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J. Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, Eds. *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. U.S. Global Change Research Program, Washington, DC, 312 pp. <http://dx.doi.org/10.7930/J0R49NQX>
- Laetz, C.A., S.A. Hecht, J.P. Incardona, **T.K. Collier**, and N.L. Scholz. 2015. Ecotoxicological risk of mixtures in: C. Amiard-Triquet, J.-C. Amiard, and C. Mouneyrac (eds) *Aquatic Ecotoxicology: Advancing Tools for Dealing with Emerging Risks*. Elsevier. pp 441-462.
- Johnson, L.L., G.M. Ylitalo, M.S. Myers, B.F. Anulacion, J. Buzitis, and **T.K. Collier**. 2015. Aluminum smelter-derived polycyclic aromatic hydrocarbons and flatfish health in the

- Kitimat marine ecosystem, British Columbia, Canada. *Science of the Total Environment* 512-513:227-239.
- Collier, T.K.** 2014. Integration of environmental health and marine ecosystem services. In: *Understanding the Connections Between Coastal Waters and Ocean Ecosystem Services and Human Health: Workshop Summary*. R.M. Martinez and E. Rusch (Eds.) Institute of Medicine, National Academies Press. pp 13-19.  
<http://www.iom.edu/Reports/2014/Understanding-the-Connections-Between-Coastal-Waters.aspx>
- Schwacke, L.H., C.R. Smith, F.I. Townsend, R.S. Wells, L.B. Hart, B.C. Balmer, **T.K. Collier**, S. De Guise, M.M. Fry, L.J. Guillette, Jr., S.V. Lamb, S.M. Lane, W.E. McFee, N.J. Place, M.C. Tumlin, G.M. Ylitalo, E.S. Zolman, and T.K. Rowles. 2014. Response to comment on health of common bottlenose dolphins (*Tursiops truncatus*) in Barataria Bay, Louisiana following the *Deepwater Horizon* oil spill. *Environmental Science and Technology* 48(7). DOI:10.1021/es5009278
- Collier, T.K.**, N. Denslow, E. Gallagher, M. Kostich, and D. Lattier. 2014. Evaluating Stressors in the San Francisco Estuary Using Biomarkers. Final Report of an Independent Scientific Advisory Panel to California Department of Fish and Wildlife, Ecological Research Program. 41 pp. <https://www.dfg.ca.gov/erp/biomarkers.asp>
- Collier, T.K.**, B.F. Anulacion, M.R. Arkoosh, J.P. Dietrich, J.P. Incardona, L.L. Johnson, G.M. Ylitalo, and M.S. Myers. 2014. Effects on fish of polycyclic aromatic hydrocarbon (PAH) and naphthenic acid exposures. In Tierney, K.B. (ed.) *Fish Physiology Volume 33: Organic Chemical Toxicology of Fishes*. Elsevier. pp 195-255.
- Schwacke, L.H., C.R. Smith, F.I. Townsend, R.S. Wells, L.B. Hart, B.C. Balmer, **T.K. Collier**, S. De Guise, M.M. Fry, L.J. Guillette, Jr., S.V. Lamb, S.M. Lane, W.E. McFee, N.J. Place, M.C. Tumlin, G.M. Ylitalo, E.S. Zolman, and T.K. Rowles. 2014. Health of common bottlenose dolphins (*Tursiops truncatus*) in Barataria Bay, Louisiana, following the *Deepwater Horizon* oil spill. *Environmental Science and Technology* 48:93-103.
- Redman, S., K. Stiles, M. Neuman, A. Knaster, K. Dzinbal, A. Mitchell, K. Boyd, R. Ponzio, K. Currens, and **T.K. Collier**. 2013. Puget Sound Partnership Adaptive Management Framework. Puget Sound Partnership Technical Report 2013-01. Available at [psp.wa.gov](http://psp.wa.gov). 26 pp.
- Collier, T.K.** 2013. Forensic ecotoxicology. In Aris, A.Z., T.H. Tengku Ismail, R. Harun, A.M. Abdullah, and M.Y. Ishak (eds) *From Sources to Solutions*. Springer Science+ Business Media Singapore. pp 503-508.
- da Silva D.A.M., J. Buzitis, W.L. Reichert, J.E. West, S.M. O'Neill, L.L. Johnson, **T.K. Collier**, and G.M. Ylitalo. 2013. Endocrine disrupting chemicals in fish bile: A rapid method of analysis using English sole (*Parophrys vetulus*) from Puget Sound, WA, USA. *Chemosphere* 92:1550-1556.
- Sandifer, P.A., J.M. Trtanj, and **T.K. Collier**. 2013. A perspective on the history and evolution of an Oceans and Human Health “metadiscipline” in the USA. *Microbial Ecology* 65:880-888.
- Collier, T.K.**, M.W.L. Chang, D.W.T. Au, and P.S. Rainbow. 2013. Biomarkers currently used in environmental monitoring. Chapter 15. In Amiard-Triquet, C., P.S. Rainbow, and J.-C. Amiard (eds.) *Ecological Biomarkers: Indicators of Ecotoxicological Effects*. CRC Press, Taylor and Francis Group, LLC. pp 385-409.
- Trtanj, J.M., J.R. Davis, and **T.K. Collier**. 2013. Oceans and human health. In Férard, J.F. and C. Blaise (eds.) *Encyclopedia of Aquatic Ecotoxicology*. Springer Science + Business Media, LLC. pp 797-804.
- Collier, T.K.** 2013. Forensic ecotoxicology. In Férard, J.F. and C. Blaise (eds.) *Encyclopedia of Aquatic Ecotoxicology*. Springer Science + Business Media, LLC. pp 533-538.
- Sandifer P.A., **T.K. Collier**, and J.M. Trtanj. 2012. Coastal ecosystems, sustainable management. In Meyers RA (ed.) *Encyclopedia of Sustainability Science and Technology 4*. Springer Science + Business Media, LLC. pp 2258-2270.

- Incardona, J.P., C.A. Vines, T.L. Linbo, M.S. Myers, C.A. Sloan, B.F. Anulacion, D. Boyd, **T.K. Collier**, S.G. Morgan, G.N. Cherr, and N.L. Scholz. 2012. Potent phototoxicity of marine bunker oil to translucent herring embryos after prolonged weathering. *PLoS ONE* 7(2):e30116.
- Incardona, J.P., C.A. Vines, B.F. Anulacion, D.H. Baldwin, H.L. Day, B.L. French, J.S. Labenia, T.L. Linbo, M.S. Myers, O.P. Olson, C.A. Sloan, S. Sol, F.J. Griffin, K. Menard, S.G. Morgan, J.E. West, **T.K. Collier**, G.M. Ylitalo, G.N. Cherr, and N.L. Scholz. 2012. Unexpectedly high mortality in Pacific herring embryos exposed to the 2007 Cosco Busan oil spill in San Francisco Bay. *Proc. Natl. Acad. Sci.* 109:E51-E58.
- Scholz, N.L., M.S. Myers, S.G. McCarthy, J.S. Labenia, J.K. McIntyre, G.M. Ylitalo, L.D. Rhodes, C.A. Laetz, C.M. Stehr, B.L. French, B. McMillan, D. Wilson, L. Reed, K.D. Lynch, S. Damm, J.W. Davis, and **T.K. Collier**. 2011. Recurrent die-offs of adult coho salmon returning to spawn in Puget Sound lowland urban streams. *PLoS ONE* 6(12):e28013.
- Incardona, J.P., G.M. Ylitalo, M.S. Myers, N.L. Scholz, **T.K. Collier** (NOAA) and C.A. Vines, F.J. Griffin, E. Smith, G.N. Cherr (BML). 2011. The 2007 *Cosco Busan* oil spill: Field and laboratory assessment of toxic injury to Pacific herring embryos and larvae in the San Francisco estuary: Final Report. 82 p. Available online at: [http://www.fws.gov/contaminants/Restorationplans/CoscoBusan/Cosco\\_Settlement/App\\_D\\_Herring\\_Injury\\_Study.pdf](http://www.fws.gov/contaminants/Restorationplans/CoscoBusan/Cosco_Settlement/App_D_Herring_Injury_Study.pdf)
- Nash, S.B., J. Bolton, R. Brownell, **T. K. Collier**, P.R. Dorneles, C. Godard-Codding, F. Gulland, J. Kucklick, L. Schwacke, S. Venn-Watson, P. Burkhardt-Holm, G. Donovan, C. Fossi, A. Hall, C. Rosa, M. Simmonds, T. Rowles, and G. Ylitalo. 2011. Report of the IWC pollution 2000+ phase II workshop. *J. Cetacean Res.* 12 (Suppl):423-436.
- Curtis, L.R., M.R. Arkoosh, C.B. Garzon, **T.K. Collier**, M.S. Myers, J. Buzitis, and M.E. Hahn. 2011. Reduced cytochrome P4501A activity and recovery from oxidative stress during subchronic benzo[a]pyrene and benzo[e]pyrene treatment of rainbow trout. *Toxicol. Appl. Pharmacol.* 254:1-7.
- Arkoosh, M.R., S. Strickland, A. Van Gaest, G.M. Ylitalo, L.L. Johnson, G.K. Yanagida, **T.K. Collier**, and J.P. Dietrich. 2011. Trends in organic pollutants and lipids in juvenile Snake River spring Chinook salmon with different outmigrating histories through the Lower Snake and Middle Columbia Rivers. *Sci. Tot. Environ.* 409:5086-5100.
- Hicken, C.L., T.L. Linbo, D.W. Baldwin, M.L. Willis, M.S. Myers, L. Holland, M. Larsen, N.L. Scholz, **T.K. Collier**, G.S. Rice, M.S. Stekoll, and J.P. Incardona. 2011. Sublethal exposure to crude oil during embryonic development alters cardiac morphology and reduces aerobic capacity in adult fish. *Proc. Natl. Acad. Sci.* 108:7086-7090.
- Van Gaest, A.L., J.P. Dietrich, D.E. Thompson, D.A. Boylen, S.A. Strickland, **T.K. Collier**, F.J. Loge, and M.R. Arkoosh. 2011. Survey of pathogens in hatchery Chinook salmon with different outmigration histories through the Snake and Columbia Rivers. *J. Aquatic Animal Health* 23:62-77.
- Dietrich, J.P., D.A. Boylen, D.E. Thompson, D.K. Spangenberg, C.F. Bravo, E.J. Loboschfsky, G.M. Ylitalo, D.S. Fryer, **T.K. Collier**, M.R. Arkoosh, and F.J. Loge. 2011. An evaluation of the influence of stock origin and outmigration history on the disease susceptibility and survival of juvenile Chinook salmon. *J. Aquatic Animal Health* 23:35-47.
- Bravo C.F., L.R. Curtis, M.S. Myers, J.P. Meador, L.L. Johnson, J. Buzitis, **T.K. Collier**, J.D. Morrow, C.A. Laetz, M.R. Arkoosh. 2011. Biomarker response and disease susceptibility in juvenile rainbow trout *Oncorhynchus mykiss* fed a high molecular weight polycyclic aromatic (PAH) mixture. *Environ. Toxicol. Chem.* 30:1-11.
- Incardona J.P., **T.K. Collier**, and N.L. Scholz. 2011. Oil spills and fish health: exposing the heart of the matter. *J. Exposure Sci. and Environmental Epidemiol.* 21:3-4.
- Hatlen, K., C.A. Sloan, D.G. Burrows, **T.K. Collier**, N.L. Scholz, and J.P. Incardona. 2010. Natural sunlight and residual fuel oils are an acutely lethal combination for fish embryos. *Aquat. Toxicol.* 99:56-64.

- Arkoosh, M.R., D. Boylen, J. Dietrich, B.F. Anulacion, G. Ylitalo, C.F. Bravo, L.L. Johnson, F.J. Loge, and **T.K. Collier**. 2010. Disease susceptibility of salmon exposed to polybrominated diphenyl ethers (PBDEs). *Aquat. Toxicol.* 98:51-59.
- Lindley, S.T., C.B. Grimes, M.S. Mohr, W. Peterson, J. Stein, J.T. Anderson, L.W. Botsford, D.L. Bottom, C.A. Busack, **T.K. Collier**, J. Ferguson, J.C. Garza, A.M. Grover, D.G. Hankin, R.G. Kope, P.W. Lawson, A. Low, R.B. MacFarlane, K. Moore, M. Palmer-Zwahlen, F.B. Schwing, J. Smith, C. Tracy, R. Webb, B.K. Wells, and T.H. Williams. 2009. What caused the Sacramento River fall Chinook stock collapse? U.S. Dept. Commerce, NOAA Tech. Memo., NMFS-SWFSC-447, 62 p.
- Baldwin, D.H., J.A. Spromberg, **T.K. Collier**, and N.L. Scholz. 2009. A fish of many scales: extrapolating sublethal pesticide exposures to the productivity of wild salmon populations. *Ecol. Appl.* 19:2004-2015.
- Johnson, L. L., G. M. Ylitalo, M. S. Myers, B. F. Anulacion, J. Buzitis, W. L. Reichert, and **T. K. Collier**. 2009. Polycyclic aromatic hydrocarbons and fish health indicators in the marine ecosystem in Kitimat, British Columbia. U.S. Dept. Commerce, NOAA Tech. Memo., NMFS-NWFSC-98, 123 p.
- Laetz, C.A., D.H. Baldwin, **T.K. Collier**, V. Herbert, J.D. Stark, and N.L. Scholz. 2009. The synergistic toxicity of pesticide mixtures: Implications for risk assessment and the conservation of Pacific salmon. *Env. Health. Perspectives* 117:348-353.
- Incardona, J.P., Carls, M.G., Day, H.L., Sloan, C.A., Bolton, J.L., **Collier, T.K.**, and Scholz N.L. 2009. Cardiac arrhythmia is the primary response of embryonic Pacific herring (*Clupea pallasii*) exposed to crude oil during weathering. *Env. Sci. Technol.*, 43:201-207.
- O'Neill, S.M., C.F. Bravo, and **T.K. Collier**. 2008. Environmental indicators for the Puget Sound Partnership: A regional effort to select provisional indicators (Phase 1). Report submitted to Puget Sound Partnership, 64 p. Available online at: [Environmental indicators for the puget sound partnership: a regional effort to select provisional indicators \(Phase 1\)](#)
- Stewart, J.R., R.J. Gast, R.S. Fujioka, H.M. Solo-Gabriele, J.S. Meschke, L.A. Amaral-Zettler, E. del Castillo, M.F. Polz, **T.K. Collier**, M.S. Strom, C.D. Sinigalliano, P.D.R. Moeller, and A.F. Holland. 2008. The coastal environment and human health: microbial indicators, pathogens, sentinels and reservoirs. *Environmental Health* 7(Suppl. 2):S3. doi:10.1186/1476-069X-7-S2-S3.
- Sol, S.Y., L.L. Johnson, D. Boyd, O.P. Olson, D.P. Lomax, and **T.K. Collier**. 2008. Relationships between anthropogenic chemical contaminant exposure and associated changes in reproductive parameters in male English sole (*Parophrys vetulus*) collected from Hylebos Waterway, Puget Sound, Washington. *Arch Environ. Contam. Toxicol.* 55:627-638.
- Johnson, L.L., D.P. Lomax, M.S. Myers, O.P. Olson, S.Y. Sol, S.M. O'Neill, J.E. West, and **T.K. Collier**. 2008. Xenoestrogen exposure and effects in English sole (*Parophrys vetulus*) from Puget Sound, WA. *Aquatic Toxicol.* 88: 29-38.
- Carls, M.G., L. Holland, M. Larsen, **T.K. Collier**, N.L. Scholz, and J.P. Incardona. 2008. Fish embryos are damaged by dissolved PAHs, not oil particles. *Aquatic Toxicol.* 88:121-127.
- Olson, O. P., L. Johnson, G. Ylitalo, C. Rice, J. Cordell, **T. K. Collier**, and J. Steger. 2008. Fish habitat use and chemical contaminant exposure at restoration sites in Commencement Bay, Washington. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-NWFSC-88.
- Myers, M.S., B.F. Anulacion, B.L. French, W.L. Reichert, C.A. Laetz, J. Buzitis, O.P. Olson, S. Sol, and **T.K. Collier**. 2008. Improved flatfish health following remediation of a PAH-contaminated site in Eagle Harbor, Washington. *Aquatic Toxicol.* 88:277-288.
- Hom, T., **T.K. Collier**, M.M. Krahn, M.S. Strom, G.M. Ylitalo, W.B. Nilsson, R.N. Paranjpye, and U. Varanasi. 2008. Assessing seafood safety in the aftermath of Hurricane Katrina. Page 73-94. In: *Mitigating Impacts of Natural Hazards on Fishery Ecosystems*, McLaughlin, K.D. (Ed.), American Fisheries Society Symposium 64, 446 pp.
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### **Presentations/Panels/Sessions chaired/Conferences organized**

(partial list, > 300 total)

- Collier, T.K.** 2016. From the DWH oil spill to sustainable seafood and human health: Lessons learned and re-learned. Invited departmental seminar, University of Florida. Gainesville, FL. 11/9/16.
- Collier, T.K.** 2016. Invited foreign chairperson, Workshop to Develop Impact Assessment Guidance (focused on Chinese White Dolphins) for Offshore Wind Farms in Taiwan. National Taiwan University, Taipei. 10/12/16.
- Collier, T.K.** 2016. Conference planning committee, 18<sup>th</sup> International Symposium on Toxicity Assessment. Limeira, Brazil. 6/25-7/3/16.
- Collier, T.K.** 2016. Lessons learned, and unlearned, from the Deepwater Horizon oil spill. Invited speaker, Science and Innovation in Oil Spill Response, Perth, Australia 5/6/16.
- Collier, T.K.** 2015. Lessons in toxicity from the Deepwater Horizon oil spill. Invited keynote speaker, The Toxicity of Power, Fall Symposium of the Integrated Toxicology and Environmental Health Program, Duke University. Durham, NC. 11/13/15.
- Collier, T.K.** 2015. Moving towards sustainable seafood production that improves human health. Invited presentation, 2015 Annual Meeting of the American Public Health Association. Chicago, IL. 11/2/15.
- Collier, T.K.** 2015. Lessons in toxicity from the Deepwater Horizon oil spill. Invited keynote speaker, 17<sup>th</sup> International Symposium on Toxicity Assessment. Bellingham, WA 8/6/15.
- Collier, T.K.** 2015. The effects of oil on marine mammals. Invited speaker, NRDA Workshop on Marine Mammals and Oil. Seattle, WA. 8/4/15.
- Collier, T.K.** 2015. Learning from the Deepwater Horizon oil spill. Invited keynote speaker, PRIMO-18, Trondheim, Norway. 5/25/15.
- Collier, T.K.** 2015. Invited luncheon speaker at retreat for EPA Region 10 Puget Sound Team. 3/26/15.
- Collier, T.K.** 2015. Invited panel member, WA Sea Grant review panel for biennial funding cycle. Seattle, WA 3/22-23/15.
- Collier, T.K.** 2014. Regional planning in large river deltas: Balancing human and ecological needs in the face of climate change. Invited presentation, International Conference in Planning Concepts for Revised Mekong Delta Regional Plan 2030 and Vision 2050. Can Tho, Vietnam. 12/22/14.
- De Meulder, B., K. Shannon, and **T.K. Collier**. 2014. Structuring landscapes in the HCMC mega-region: The challenge to balance nature and city. Invited presentation given by TK Collier, Ho Chi Minh Regional Plan Revision Conference. Ho Chi Minh City, Vietnam. 12/19/14.
- Collier, T.K.** 2014. Source control, toxic chemicals, and biological improvements. Invited presentation, 2014 Toxics Reduction Conference. Seattle, WA. 11/17/14/

- Collier, T.K.** 2014. Chemical contaminants and the life cycle of Pacific salmon in Puget Sound. Keynote address, 2014 STORM (Stormwater Outreach for Regional Municipalities) Symposium, Maltby, WA. 11/4/14.
- Collier, T.K.** 2014. Delta Independent Science Board review of the Bay Delta Conservation Plan and its draft EIR/S, particularly regarding reliance on habitat restoration. Invited presentation, Bay-Delta Science Conference. 10/30/14.
- Collier, T.K.** 2014. Assessing ecological effects following environmental disasters, and associated data needs. Invited presentation, Environmental Disasters Data Management Workshop, Shepherdstown, WV. 9/16/14.
- Correa, L., and **T.K. Collier.** 2014. Communication between scientists and decision makers: the science/policy interface. Invited presentation, Cyberinfrastructure and Water Resources in the Lower Mekong Region. Hanoi, Vietnam. 8/21/14.
- Collier, T.K.** 2014. Selecting and using environmental indicators to assess ecosystem state. Invited presentation, Cyberinfrastructure and Water Resources in the Lower Mekong Region. Hanoi, Vietnam. 8/19/14.
- Collier, T.K.** 2014. Organizer and US co-chair, 2014 Salish Sea Ecosystem Conference. Seattle, WA. 4/29/2014-5/2/2014.
- Collier, T.K.** 2014. A U.S. perspective on Oceans and Human Health efforts in the European Union. Invited presentation, Oceans and Human Health: A rising tide of opportunities and challenges for Europe. Mawgan Porth, Cornwall, UK. 3/21/14.
- Collier, T.K.** 2014. Chemical contaminants, seafood safety, and public health. Keynote presentation, International Conference on Seafood Safety, Quality, and Traceability. Muscat, Sultanate of Oman.
- Collier, T.K.** 2014. Evaluating stressors in the San Francisco Estuary using biomarkers. Invited presentation, Interagency Ecological Program Annual Workshop. Folsom, CA 2/27/14.
- Collier, T.K.** 2013. Science in support of large ecosystem recovery: Perspectives from California's Delta and Puget Sound. Invited seminar, Monster Seminar Jam series, Northwest Fisheries Science Center, Seattle, WA. 12/5/13.
- Collier, T.K.** 2013. Forensic ecotoxicology: Linking contaminant exposures to biological effects in field studies. Keynote presentation, 2013 International Conference on Environmental Forensics. Kuala Lumpur, Malaysia. 11/13/13.
- Collier, T.K.** 2013. Effects of PAHs on fish: Relevance for determination of sediment quality criteria and oil spill response. Invited presentation, International Conference on Environmental Mutagens, Iguassu Falls, Brazil. 11/4/13.
- Collier, T.K.** 2013. Exposure and sub-lethal effects of PAHs in Puget Sound fish: Relevance for determination of sediment quality criteria. Invited lecture, University of Campinas, School of Technology, Limeira, Brazil. 11/1/13.
- Collier, T.K.** 2013. Chemical contaminants and the life cycle of Pacific salmon in Puget Sound. Invited presentation, Swiss Center for Applied Ecotoxicology. Zurich, Switzerland. 10/18/13.
- Collier, T.K.** 2013. Chemical contaminants and their effects on salmon and other biota in Puget Sound. Invited presentation, WA Dept. Ecology Local Source Control Specialists workshop. Bellevue, WA 9/11/13.
- Collier, T.K.** 2013. Puget Sound Science 201: Polycyclic aromatic hydrocarbons and shoreline armoring as threats to the health of Puget Sound. Invited presentation, King County ECO Net Quarterly meeting, Seattle, WA 3/22/13.
- Collier, T.K.** 2013. Oceans and human health (and climate change). Invited presentation, Colloquium on Human Dimensions and Ocean Health in a Changing Climate, Univ. S. California, Los Angeles, CA. 3/12/13.
- Collier, T.K.** 2013. The environmental and public health implications of the Deepwater Horizon oil spill. Invited presentation, 16<sup>th</sup> Biennial Conference of the International Society for Toxicity Assessment. Cape Town, South Africa. 2/22/13.



- Collier, T.K.** 2012. Invited panel member, OR Sea Grant review panel on contaminants of emerging concern and tsunami debris from Japan. Corvallis, OR 12/5/12.
- Collier, T.K.** 2012. Integration of environmental health and marine ecosystem services. Invited presentation, Institute of Medicine Roundtable on Environmental Health Sciences, Research, and Medicine. Washington, DC. 11/13/12.
- Collier, T.K.** 2012. The Puget Sound Partnership monitoring program, and Science Panel recommendations. Invited presentation, Workshop on Marine Survival of Salmon and Steelhead in the Salish Sea. Bellingham, WA. 11/6/12.
- Collier, T.K.** 2012. Invited moderator, 4<sup>th</sup> South Sound Science Symposium. Shelton, WA. 10/30/12.
- Collier, T.K.** 2012. The environmental and public health implications of the Deepwater Horizon oil spill. Invited plenary presentation, 12<sup>th</sup> Brazilian Congress of Ecotoxicology, Porto de Galinhas, Pernambuco, Brazil. 9/27/12.
- Collier, T.K.** 2012. Applying toxicology and chemistry during responses to oil spills and other releases of hazardous substances. Invited mini-course, 12<sup>th</sup> Brazilian Congress of Ecotoxicology, Porto de Galinhas, Pernambuco, Brazil. 9/25/12.
- Collier, T.K.** 2012. Monitoring of major spills – the importance and challenge – an overview of the developing landscape. Invited presentation, The PREMIAM Conference (Pollution Response in Emergencies: Marine Impact Assessment and Monitoring), London, England. 7/4/12.
- Collier, T.K.** 2012. Chemical contaminants, pathogens, and algal toxins and their effects on human and ecosystem health. Invited course with 14 lectures, CETESB (Environmental Company of São Paulo), São Paulo, Brazil. 6/26-29/12.
- Collier, T.K.** 2012. Impacts on human and ecosystem health of chemical contaminants in aquatic systems – evaluation and risk management. Invited seminar, CETESB (Environmental Company of São Paulo), São Paulo, Brazil. 6/25/12.
- Collier, T.K.** 2012. Assessing seafood safety after the BP Deepwater Horizon oil release. Invited presentation, 2012 Gordon Research Conference on Oceans and Human Health. Biddeford, ME 6/6/12.
- Collier, T.K.** 2012. Hazardous chemical releases associated with Hurricanes Katrina and Rita, and assessment of seafood safety. Invited presentation, 2012 Gordon Research Conference on Oceans and Human Health. Biddeford, ME 6/5/12.
- Collier, T.K.** and D.J. Grimes. 2012. Chairs, 2012 Gordon Research Conference on Oceans and Human Health. Biddeford, ME 6/3-6/8/12.
- Collier, T.K.** 2012. Considerations for a career in Oceans and Human Health. Invited presentation, 2012 Gordon Research Seminar on Oceans and Human Health. Biddeford, ME 6/3/12.
- Collier, T.K.** 2012. The importance of understanding thiamine deficiency syndrome. Invited presentation to Swedish business owners and philanthropists. Stockholm, Sweden 5/24/12.
- Collier, T.K.** 2012. Member of External Panel for review of Hollings Marine Laboratory. Charleston, SC 2/28-29/12.
- Collier, T.K.** 2012. Organizing committee for National Climate Assessment Health Sector Workshop, Northwest Region. Seattle, WA. 2/23-24/12.
- Collier, T.K.** 2012. Oil spills, seafood safety, and public health. Invited presentation, Winter Meeting of the Norwegian Society for Pharmacology and Toxicology, Beitostølen, Norway. 1/27/12.
- Collier, T.K.** 2012. Polycyclic aromatic hydrocarbons (PAHs) as threats to environmental and human health. Invited presentation, Winter Meeting of the Norwegian Society for Pharmacology and Toxicology, Beitostølen, Norway. 1/26/12.
- Collier, T.K.** 2012. Invited participant, Oil In Ice workshop, to develop research strategy for Fram Centre, Tromsø, Norway. 1/23-24/12.
- Collier, T.K.** 2011. Why fish need clean water too. Invited mini-course, taught in conjunction with the 1<sup>st</sup> International Workshop on Environmental Health, at the University of Sao Paulo, Sao Paulo, Brazil. 12/16/11.

- Collier, T.K.** 2011. Chemical contaminants, seafood safety, and public health. Invited speaker, 1<sup>st</sup> International Workshop on Environmental Health. University of Sao Paulo, Sao Paulo, Brazil.
- Collier, T.K.** 2011. External opponent, Ph.D. defense for Louise Kiel Jensen, University of Tromsø, Norway. 11/11/11.
- Collier, T.K.**, S. M. Moore, and J.M. Trtanj. 2011. Training the next generation of scientists in Oceans and Human Health. 21<sup>st</sup> Biennial Conference of the Coastal and Estuarine Research Federation, Daytona Beach, FL. 11/7/11.
- Collier, T.K.** and S. M. Moore. 2011. Session chairs, Training the next generation of scientists in Oceans and Human Health. 21<sup>st</sup> Biennial Conference of the Coastal and Estuarine Research Federation, Daytona Beach, FL. 11/7/11.
- Collier, T.K.** 2011. Chemical contaminants, seafood safety, and public health. Invited keynote speaker, 15<sup>th</sup> International Symposium on Toxicity Assessment. Hong Kong, 7/7/11.
- Collier, T.K.** 2011. Chemical contaminants and seafood safety. Invited keynote presentation, Symposium on Seafood Safety and Quality, sponsored by Oman Ministry of Agriculture and Fisheries Wealth. Muscat, Sultanate of Oman. 5/31/11.
- Collier, T.K.** 2011. Reopening fisheries after an oil spill: Tainting, chemical analysis, and risks to human health. PRIMO-16, Long Beach, CA. 5/18/11.
- Collier, T.K.**, T.K. Rowles, L.H. Schwacke, and J.M. Trtanj. 2011. Using sentinel species to better inform human health assessments following the Deepwater Horizon oil spill. Invited presentation, Aerospace Medical Association, Anchorage, AK. 5/10/11.
- Collier, T.K.** and A.H. Ringwood. 2011. Invited session moderators, Ecosystem Effects of Oil Spills. Gulf Oil Spill Focused Topic Meeting, SETAC. Pensacola, FL. 4/26-27/11.
- Collier, T.K.** 2011. Emerging concerns about the effects and fate of chemical contaminants in marine biota. Invited conference plenary, Envirotax 2011. Darwin, Australia, 4/18/11.
- Collier, T.K.** 2011. Interactions between Puget Sound and human health. Invited lecture, WA Children's Environmental Health Working Group, Seattle, WA. 4/14/11.
- Collier, T.K.** 2011. Contributions of marine products to global nutrition, and implications of changing climate. Invited seminar, University of Washington/NOAA Oceans and Human Health Seminar Series, Seattle, WA. 3/1/11.
- Collier, T.K.** 2011. Overview of NOAA's Oceans and Human Health Initiative. Invited presentation, NSF Workshop on Ecology of Marine Infectious Diseases, San Juan, Puerto Rico. 2/12/11
- Collier, T.K.** 2011. Session chair, Fate and Effects of Oil Spills. Sponsored by National Research Council of Norway. Houston, TX. 2/8/11.
- Collier, T.K.** 2011. Invited panelist, Human Health Impacts of the Gulf Oil Spill, Nat'l Council for Science and the Environment, Washington, DC, 1/21/11.
- Collier, T.K.** 2011. Invited panelist on NPR's Science Friday, Washington, DC, 1/21/11.
- Collier, T.K.** 2010. New science regarding the effects of oil spills on marine resources. Invited presentation, King County Bar Association, Seattle, WA, 12/8/10.
- Collier, T.K.** and T.K. Rowles. 2010. NOAA data to support investigations of human health effects resulting from the Deepwater Horizon oil spill. Invited presentation, Nat'l Institutes of Health Interagency Meeting on Data Needs for Assessing Human Health Impacts of the Deepwater Horizon Oil Spill, Washington, DC 11/17/10.
- Collier, T.K.** 2010. The seafood 'dilemma': Balancing human health benefits and both real and perceived risk—a case in point, re-opening fisheries after an oil spill. Invited seminar, Center for Food Safety and Applied Nutrition, FDA, Gaithersburg MD. 11/16/10.
- Collier, T.K.** 2010. Represented NOAA at NY Academy of Sciences workshop and evening gala on Global Nutrition Initiative. New York, NY. 11/15/10.
- Collier, T.K.** 2010. Toxic chemical contaminants and Puget Sound. Invited presentation, SETAC North America, Portland, OR. 11/10/10.

- Collier, T.K.** 2010. What a long, strange trip it's been: Striving to understand the stress posed by toxic chemicals in Puget Sound. Invited departmental seminar, School of Aquatic and Fisheries Sciences, University of Washington, Seattle, WA 11/04/10.
- Collier, T.K.** 2010. Reopening fisheries after an oil spill: Tainting, chemical analysis, and human health. Invited presentation, 45<sup>th</sup> Session of the UJNR Panel on Toxic Microorganisms, Scientific Sessions. Seattle, WA 11/02/10.
- Collier, T.K.** 2010. Understanding the connections between ocean health and human health. Invited class lecture, Aichi Prefectural University, Nagoya, Japan. 10/27/10.
- Collier, T.K.** 2010. Environmental criteria for PAHs and implications of recent findings on aquatic animal health. Invited presentation, Physical and Chemical Impacts of Marine Organisms – for Conservation of Biodiversity and Sustainability. Aichi Prefectural University, Nagoya, Japan.
- Walker, S., and **T.K. Collier.** 2010. Panelists for Institute of Medicine workshop on Gulf Long-term Follow-up of Workers. Tampa, FL 9/22/10.
- Collier, T.K.** 2010. Potential for marine ecological and human health impacts from chemicals of emerging concern (CECs). Invited presentation, California and the World Ocean 2010. San Francisco, CA. 9/9/10.
- Collier, T.K.** 2010. Polycyclic aromatic hydrocarbons (PAHs) as threats to environmental and human health. Invited presentation, 3<sup>rd</sup> Summer Course on Environmental and Human Health, City University of Hong Kong. 7/15/10.
- Collier, T.K.** 2010. Sentinel species concepts in NOAA's Oceans and Human Health Program. Invited presentation, 3<sup>rd</sup> Summer Course on Environmental and Human Health, City University of Hong Kong. 7/15/10.
- Collier, T.K.** 2010. Seafood safety and human health. Invited presentation, 3<sup>rd</sup> Summer Course on Environmental and Human Health, City University of Hong Kong. 7/14/10.
- Collier, T.K.** and J. Turner. 2010. Oceans and Human Health: An Emerging Discipline. Invited presentation, 3<sup>rd</sup> Summer Course on Environmental and Human Health, City University of Hong Kong. 7/14/10.
- Collier, T.K.** 2010. Review of sea turtle/oil spill literature. Invited presentation, Sea Turtle and Marine Mammal NRDA Workshop, New Orleans, LA. 6/29/10.
- Collier, T.K.** 2010. Reopening fisheries after an oil spill: Tainting, chemical analysis, and human health. Keynote presentation, Assoc. Official Analytical Chemists, Annual Meeting of Pac NW Section, Tacoma, WA 6/22/10.
- Collier, T.K.,** T. Noji, J. Kurland, B. Hoffman, and J. Rapp. 2010. An assessment of current processes for providing habitat science for management. Invited presentation, NOAA Fisheries 1<sup>st</sup> National Habitat Assessment Workshop. St. Petersburg, FL. 5/19/10.
- Collier, T.K.** 2010. Potential sea turtle exposure to chemical contaminants: Contaminants of emerging concern (CECs). Invited presentation, NOAA Sea Turtle and Contaminants Workshop. Washington, DC. 5/3/10.
- Collier, T.K.** 2010. Contaminants of emerging concern in coastal and marine ecosystems. Invited presentation, Pollution 2000. Sausalito, CA. 2/23/10.
- Collier, T.K.** 2010. Impacts of copper on the sensory biology and behavior of salmon. Invited presentation, Alaska Forum on the Environment. Anchorage, AK. 2/9/10.
- Collier, T.K.** 2009. Contaminated sediments and fish health: The Bad, the Good, and the Ugly. Invited presentation, Green Sturgeon Workshop. Oakland, CA. 12/2/09.
- Collier, T.K.** 2009. Monitoring for biological effects of oil spills in sub-Arctic U.S. water: Added effects of biomarkers? Invited presentation at workshop on 'Biomarkers—what role can they play in environmental management related to oil and gas activities offshore?' Paris, France. 11/27/09.
- Collier, T.K.** 2009. Report and conclusions from July 2009 Sousa conservation workshop. Invited presentation, Indo-Pacific Humpback Dolphin Conservation Action Plan meeting, Taipei, Taiwan. 11/1/09.

- Collier, T.K.** 2009. Sentinel species concepts in NOAA's OHHI. Invited presentation, NOAA OHHI All-PI meeting. Seattle, WA. 10/7/09.
- Collier, T.K.** 2009. Toxic chemicals and our aquatic ecosystems: how bad is it? Invited presentation, Pacific Fisheries Legislative Task Force. Astoria, OR. 9/18/09.
- Collier, T.K.** 2009. Introduction to the subject of toxic chemicals and salmon in the Columbia River. Invited presentation, Northwest Power and Conservation Council, Columbia River Estuary Science-Policy Exchange. Astoria, OR. 9/10/09.
- Collier, T.K.,** L.L. Johnson, and J.P. Incardona. 2009. Environmental criteria for PAHs and implications of recent findings on aquatic animal health. Invited plenary presentation, International Society for Toxicity Assessment, 14<sup>th</sup> meeting. Metz, France. 8/31/09.
- Collier, T.K.** 2009. Polycyclic aromatic hydrocarbons (PAHs) as threats to environmental and human health. Invited plenary presentation, International Symposium on Environmental Pollution, Ecology, and Human Health. Tirupati, India. 7/26/09.
- Collier, T.K.** 2009. Opening keynote address, International Symposium on Environmental Pollution, Ecology, and Human Health. Tirupati, India. 7/25/09.
- Collier, T.K.** 2009. Working group chair, Group of experts evaluating conservation strategies for *Souisa chinensis*. Taipei, Taiwan, 7/21/09.
- Collier, T.K.** 2009. Strategies for habitat protection in coastal areas. Invited presentation (for Tom Bigford) at Symposium on Conservation Strategies for *Souisa chinensis* in Taiwan 2009. Taipei, Taiwan. 7/20/09.
- Collier, T.K.** 2009. Effect of petrochemicals on cetaceans and their prey base. Invited presentation at Symposium on Conservation Strategies for *Souisa chinensis* in Taiwan 2009. Taipei, Taiwan.
- Collier, T.K.** 2009. NOAA's One Health Approach and its use in early warning systems. Invited presentation to GEO workshop on Priority Earth Observation Needs for Environmental Change and Human Health. Geneva, Switzerland. 7/10/09.
- Collier, T.K.** 2009. Environmental stressors and disease. Invited presentation to GEOSS Workshop XXVII - Health and the Environment. Geneva, Switzerland. 7/7/09.
- Collier, T.K.** 2009. Presented testimony on "Effects of endocrine disrupting compounds on fish and wildlife" before U.S. House of Representatives Subcommittee on Insular Affairs, Oceans, and Wildlife. Washington, DC. 6/09/09.
- Collier, T.K.** 2009. Session chair, Ecological Relevance, at PRIMO-15, Bordeaux, France. 5/19/09.
- Collier, T.K.,** D.A. Baldwin, J.A. Spromberg, M.R. Arkoosh, L.L. Johnson, S. Hecht, and N.L. Scholz 2009. Linking contaminant-associated reductions in fish health to impaired population viability, in order to turn PRIMO into action. Platform presentation at PRIMO-15, Bordeaux, France. 5/19/09.
- Collier, T.K.** 2009. Co-organizer of workshop "Chemicals of emerging concern" in Costa Mesa, CA. 4/27-29/09.
- Collier, T.K.** 2009. Linking contaminant-associated reductions in fish health to impaired population viability, in order to support management actions. Invited presentation, annual meeting of Pacific Northwest Chapter of SETAC. Port Townsend, WA. 4/18/09.
- Collier, T.K.** 2009. Organizer (in conjunction with NOS), Contaminants of Emerging Concern (CEC) Workshop: Adapting NOAA monitoring and research to address CEC management in coastal, marine, and Great Lakes environments. Costa Mesa, CA. 3/11-12/09.
- Collier, T.K.** 2009. Developing programs to ensure seafood safety and enhance human health: A U.S. perspective. Invited seminar, Symposium on Recent Trends in Environmental Pollution and Impacts. Burapha University, Chonburi, Thailand. 3/4/09.
- Collier, T.K.** 2009. Fish health, from mechanistic studies to population models, as a tool for assessing impacts of chemical contaminants. Invited seminar, Symposium on Recent Trends in Environmental Pollution and Impacts. Burapha University, Chonburi, Thailand. 3/4/09.
- Collier, T.K.** 2009. Invited review panel member, Hudson River Foundation. New York, NY. 2/12/09.
- Collier, T.K.** 2009. Toxic chemicals in the biota of the Salish Sea. Session chair, Puget Sound/Georgia Basin research conference. Seattle, WA. 2/10/09.

- Collier, T.K.** 2009. Activities and capabilities of environmental and human health programs at the Northwest Fisheries Science Center. Invited presentation, A One Health Approach? Integrating NOAA's Marine Organism and Human Health Related Data for Use in Early Warning Systems. Silver Spring, MD. 2/3/09.
- Collier, T.K.** 2009. Fish health, from mechanistic studies to population models, as a tool for assessing impacts of chemical contaminants. Invited seminar, National Institute for Environmental Studies, Center for Environmental Risk Research, Tsukuba, Japan. 1/14/09.
- Collier, T.K.** 2009. Fish health, from mechanistic studies to population models, as a tool for assessing impacts of chemical contaminants. Invited departmental seminar, Stanford University, Hopkins Marine Station, Pacific Grove, CA 1/9/09.
- Collier, T.K.** 2009. Toxic stormwater runoff: impacts on salmon in Seattle creeks. Invited presentation to the Seattle City Council. Seattle, WA 1/5/09.
- Collier, T.K.** 2008. Developing programs to ensure seafood safety and enhance human health: A U.S. perspective. Invited lecture, KORDI/AMETEC. Biochemical responses of fish to oil spills and other marine pollutants. Geoje Island, Korea. 11/4/08.
- Anulacion, B.F., S.Y. Sol, and **T.K. Collier**. 2008. Obtaining high quality environmental samples. Invited lecture, KORDI/AMETEC. Biochemical responses of fish to oil spills and other marine pollutants. Geoje Island, Korea. 11/3/08.
- Collier, T.K.** 2008. The impacts of oil spills on both wild and cultured marine organisms. Invited lecture, KORDI/AMETEC. Biochemical responses of fish to oil spills and other marine pollutants. Geoje Island, Korea. 11/3/08.
- Collier, T.K.** 2008. Workshop organizer. KORDI/AMETEC. Biochemical responses of fish to oil spills and other marine pollutants. Geoje Island, Korea. 11/2-14/08.
- Collier, T.K.** 2008. Developing programs to ensure seafood safety and enhance human health: A U.S. perspective. Invited seminar, Ås, Norway. 10/20/08.
- Collier, T.K.** 2008. The effects of chemical contaminants on fish habitats, fish health, and fish populations. Invited seminar, Marine Environmental Laboratory, Int'l Atomic Energy Administration. Monaco. 10/15/08.
- Collier, T.K.** 2008. External opponent, Ph.D. defense for Tomas Hansson, Stockholm University. Stockholm, Sweden. 10/3/08.
- Collier, T.K.** and L.L. Johnson. 2008. Toxic chemical contaminants and salmon in the Columbia River. Invited presentation to the Northwest Power and Conservation Council. Kalispell, MT. 7/15/08.
- Collier, T.K.** 2008. Working together to protect human and environmental health from toxic chemicals. Invited presentation, Society of American Indians in Government, 5<sup>th</sup> Annual Training Conference. Traverse City MI. 6/4/08.
- Collier, T.K.** 2008. Overview of NOAA's Oceans and Human Health Initiative and the West Coast Center for Oceans and Human Health. Invited presentation, Society of American Indians in Government, 5<sup>th</sup> Annual Training Conference. Traverse City MI. 6/4/08.
- Collier, T.K.** 2008. Recent findings on algal toxins, organic chemicals, and marine mammal health (with some chemical ecology for dessert). Invited 'brown bag' seminar, NOAA Fisheries Office of Protected Resources, Silver Spring, MD. 5/28/08.
- Collier, T.K.** 2008. Session chair, Oil Spills and Aquaculture. World Aquaculture 2008. Busan, Korea. 5/23/08.
- Collier, T.K.** 2008. The impacts of oil spills on both wild and cultured marine organisms. Invited keynote speaker, World Aquaculture 2008. Busan, Korea. 5/23/08.
- Collier, T.K.** 2008. Breakout group lead for discussion of NOAA Climate Change priorities. Invited participant at NOAA Climate Change and LMR workshop. Seattle, WA. 5/14/08.
- Collier, T.K.** 2008. Toxic chemical contaminants and Puget Sound. Invited presentation at Puget Sound Symposium hosted by CH2M Hill, Bellevue, WA. 4/16/08.

- Collier, T.K.** 2008. Group lead for discussion of NMFS Habitat Science initiative. Invited participant at NMFS' national meeting of Assistant Regional Administrators for Habitat. Silver Spring, MD. 4/8/08.
- O'Neill, S.M and **Collier, T.K.** 2008. Selecting provisional environmental indicators to determine progress in protecting and restoring the Puget Sound ecosystem. Invited presentation to the Leadership Council of the Puget Sound Partnership. 3/26/08.
- Collier, T.K.** 2008. Invited participant, Water Environment Research Foundation sponsored workshop: Developing a cross-sector research collaboration to address trace organics in receiving water. Alexandria, VA. 3/12-13/08.
- Collier, T.K.**, W.W. Dickhoff, and U. Varanasi. 2008. The seafood dilemma: A way forward. Invited presentation in Oceans and Human Health session, Ocean Sciences 2008. Orlando, FL, 3/3/08.
- Collier, T.K.** 2008. Fish health, from mechanistic studies to population models, as a tool for assessing effects of chemical contaminants and other stressors. Invited conference keynote address, 37<sup>th</sup> annual meeting of the Interagency Ecological Program. Asilomar, CA, 2/27/08.
- Collier, T.K.** 2008. Invited review panel member, National Oceans and Human Health external grants review panel. Arlington, VA. 2/20-22/08.
- Collier, T.K.** 2008. Working our way up the biological scale from biomarkers to population dynamics: effects of pesticides on fish. Guest lecturer, Environmental Health 590, University of Washington, Seattle, WA. 2/13/08.
- Collier, T.K.** and S.M. O'Neill. 2008. Selecting provisional environmental indicators to determine progress in protecting and restoring the Puget Sound ecosystem. Invited presentation to the Ecosystem Coordination Board of the Puget Sound Partnership. 2/8/08.
- O'Neill, S.M and **Collier, T.K.** 2008. Selecting provisional environmental indicators to determine progress in protecting and restoring the Puget Sound ecosystem. Invited presentation to the Leadership Council of the Puget Sound Partnership. 1/28/08.
- Collier, T.K.** D. Baldwin, C. Laetz, J. Incardona, J. Spromberg, and N. Scholz. 2007. Assessing the effects of pesticides, singly and in combination, on fish health and fish populations. Invited conference keynote presentation, "Modern Agriculture: Issues and the Way Forward". Kuala Lumpur, Malaysia. 12/5/07.
- Collier, T.K.**, W.W. Dickhoff, and U. Varanasi. 2008. The seafood dilemma: A way forward. Invited presentation at OHH All P-I Annual Meeting, Muskegon, MI. 10/23/07.
- Collier, T.K.** and S.M. O'Neill. 2007. Protecting estuaries from toxic contaminants: What role is there for Biological Observing Systems (BiOS)? Invited presentation at 2007 State of the Estuary Conference, Oakland, CA, 10/18/07.
- Collier, T.K.** 2007. Considerations for use and/or removal of creosote-treated wood along the shoreline of Bainbridge Island, WA. Invited presentation at public town hall meeting by the City of Bainbridge Island. Bainbridge Island, WA. 10/15/07.
- Collier, T.K.**, G.M. Ylitalo, and M.M. Krahn. 2007. Chemical contaminants and southern resident killer whales (*Orcinus orca*). Invited presentation at 12<sup>th</sup> Annual Symposium/Workshop on Cetacean Ecology and Conservation. Threats and Strategies: Reflections of the Year of the Dolphin. Taipei, Taiwan. 10/9/07.
- Collier, T.K.**, Assessing seafood safety in the aftermath of Hurricane Katrina. Invited presentation, AFS Special Symposium *Mitigating impacts of natural disasters on fisheries ecosystems*. 137<sup>th</sup> Annual Meeting, American Fisheries Society, San Francisco, CA. 9/5/07.
- Collier, T.K.** 2007. Restored urban streams in the Pacific Northwest as indicators of ecosystem health. Invited presentation, Fort Johnson Seminar Series. Charleston, SC. 8/31/07.
- Collier, T.K.** 2007. Putting the 'eco' into ecotoxicology. Invited presentation, Hollings Marine Laboratory Brown Bag Seminar Series. Charleston, SC. 8/30/07.
- Collier, T.K.** 2007. Urbanizing coastal streams in the Pacific Northwest as sentinel habitats. Invited presentation, Coastal Zone '07. Portland, OR. 7/26/07.
- Collier, T.K.** 2007. Session chair, Oceans and Human Health. Coastal Zone '07. Portland, OR. 7/23/07.

- Collier, T.K.** 2007. Pesticides and Pacific salmon: linking exposure to physiology, behavior, growth, survival, and long-term productivity. 14<sup>th</sup> Symposium on Pollutant Responses in Marine Organisms PRIMO-14. Florianopolis, Brazil. 5/9/07.
- Collier, T.K.** 2007. Session chair (with Sue Codi), Endocrine Disruption and Biological Modeling. 14<sup>th</sup> Symposium on Pollutant Responses in Marine Organisms PRIMO-14. Florianopolis, Brazil. 5/9/07.
- Collier, T.K.** 2007. National Core Coastal Indicators Workshop. Invited participant and breakout group (Water Quality) rapporteur. Linthicum Heights, MD. 5/1-3/07.
- Collier, T.K.**, S.M. O'Neill, J.E. West, and N.L. Scholz. 2007. Toxic chemical contaminants and Puget Sound. 2007 Georgia Basin/Puget Sound Research Conference. Vancouver, BC. 3/29/07.
- Collier, T.K.** 2006. Establishing programs to ensure seafood safety and enhance human health. Invited keynote address, 2006 Qingdao Symposium on Marine Environmental Monitoring. Qingdao, China. 11/10/06.
- Collier, TK.**, F.J. Loge, M.R. Arkoosh, L.L. Johnson, and T.R. Ginn. 2006. Increased disease-induced mortalities in outmigrant salmon due to environmental stressors. VIIth International Congress on the Biology of Fish, St. John's, Newfoundland. 7/22/06.
- Collier, TK.** 2006. Fish health, from mechanistic studies to population models, as a tool for assessing effects of chemical contaminants. Invited presentation, VIIth International Congress on the Biology of Fish, St. John's, Newfoundland. 7/20/06.
- Collier, TK.** 2006. Course Organizer. Methods and strategies for conducting environmental assessments in developing economies. AMETEC Training Course, Geoje Island, Korea. 6/12-6/22/06.
- Collier, TK.** 2006. Connecting ecosystems to human health in Puget Sound. Invited speaker, Puget Sound Toxics Forum, Seattle, WA. 4/5/06.
- Collier, TK.** 2006. Using modeling and empirical data to estimate population level effects from sub-lethal stress. Invited seminar, San Francisco Estuary Institute, Oakland, CA. 3/14/06.
- Collier, TK.** 2006. Using biology to assess the effectiveness of remediation and restoration activities. Invited presentation, Assoc. State and Territorial Solid Waste Management Officials. San Francisco, CA. 3/14/06.
- Collier, TK.** 2006. Assessing seafood safety after Hurricane Katrina: Is there a role for OHHI in environmental emergencies? Invited presentation, OHH Principal Investigators Meeting. Charleston, SC. 1/19/06.
- Collier, TK.** 2006. Sentinel species concepts in NOAA's WCCOHH Program. Invited presentation, OHH Principal Investigators Meeting. Charleston, SC. 1/19/06.
- Collier, TK.** 2005. Effects of Hurricane Katrina on fisheries in the northern Gulf of Mexico. Invited speaker and panelist for special session 'The Science of Environmental Catastrophes: 2005, the Year of the Hurricane'. SETAC National Conference, Baltimore MD 11/16/05.
- Johnson LL, OP Olson, GY Ylitalo, C Rice, and **TK Collier**. 2005. Fish habitat use and chemical contaminant exposure at restoration sites in Commencement Bay, Washington. Interactive presentation by Tracy Collier. SETAC National Conference, Baltimore MD 11/15/05.
- Collier, TK.** 2005. Effects of land-based runoff on the health of anadromous and marine fish: From Seattle rain to hurricanes. Invited presentation. APEC Symposium, Protection of the Marine Environment from Land-based Sources of Pollution. Busan, Korea. 11/3/05.
- Collier TK.** 2005. Session chair. Contaminants, Oceans, and Human Health. Estuarine Research Federation Annual Meeting, Norfolk, VA. 10/18/05.
- Incardona, **TK Collier**, and NL Scholz. 2005. Invited presentation. Estuarine Research Federation Annual Meeting, Norfolk, VA. 10/18/05.
- Collier, T.K.**, BF Anulacion, SY Sol, GM Ylitalo, and LL Johnson. 2005. PAH-induced impairment of fish health in Kitimat Arm, BC: Contaminant sources vs contaminant effects. Invited presentation. Estuarine Research Federation Annual Meeting, Norfolk, VA. 10/18/05.

- Loge, F, MR Arkoosh, T Ginn, LL Johnson, **TK Collier**. 2005. Impact of environmental stressors on the dynamics of disease transmission. Invited presentation, presented by **TK Collier**. Estuarine Research Federation Annual Meeting, Norfolk, VA. 10/17/05.
- Collier, T.K.** (2005). Assessing the effects of storm runoff on fish and their ecosystems. Presented at Coastal Storms Project Final Wrap-up and Constituent Outreach workshops, in Jacksonville and Daytona Beach, FL 1/25 and 1/26/05.
- Collier, T.K.** (2004). Toxic chemicals affect both ocean ecosystems and human health. Invited departmental seminar. Xiamen University, Department of Chemistry. Xiamen, Fujian, China. 12/10/04.
- Collier, T.K.** (2004). Environmental monitoring for toxic chemicals in aquatic ecosystems. Short course taught at Xiamen University, Department of Chemistry. Xiamen, Fujian, China. 12/8-9/04.
- Collier, T.K.** (2004). Session chair. Water quality restoration in and around the built environment. 2<sup>nd</sup> National Conference on Coastal and Estuarine Habitat Restoration. Seattle, WA 9/14/04.
- Collier, T.K.** (2004). Northwest Fisheries Science Center research in Puget Sound. Seminar presented to NOAA's Chesapeake Bay Office, Annapolis, MD 8/24/04.
- Collier, T.K.** (2004). Impacts of oil and dispersants on NOAA trust resources. Presented at NOAA Dispersants Summit, Washington DC 7/27/04.
- Collier, T.K.** (2004). Current aquatic toxicology issues related to Superfund site management decisions. Presented to USEPA Region IX Biological Technical Assessment Group, Oakland, CA 7/21/04.
- Collier, T.K.** (2004). Workgroup co-chair. "Extension of molecular and computational information to risk assessment and regulatory decision-making". Pellston Workshop sponsored by SETAC/SOT "Emerging Molecular and Computational Approaches for Cross-Species Extrapolations". Portland, OR 7/18-7/23/04.
- Collier, T.K.** (2004). Modern approaches for linking contaminant exposure to meaningful biological endpoints. Presented at APEC workshop "Modern Approaches to Linking Exposure to Toxic Compounds and Biological Effects". Brisbane, Australia. 7/13/04.
- Collier, T.K.** (2004). Co-organizer, "Modern Approaches to Linking Exposure to Toxic Compounds and Biological Effects". Workshop sponsored by Asia-Pacific Economic Cooperation, Brisbane, Australia. 7/10-7/17/04.
- Collier, T.K., J.P. Meador, and N.L. Scholz** (2004). Toxicology issues associated with the use of treated wood in surface waters. Presented at a workshop entitled 'Use and permitting of treated wood in the San Francisco estuary', sponsored by the Bay Planning Coalition. Oakland, CA 6/3/04.
- Collier, T.K.** (2004). Overview of NWFSC research plans under NOAA's Oceans and Human Health Initiative. Presented to NOAA OHH workshop, Silver Spring, MD. 5/4/04.
- Collier, T.K.** (2004). ECD capabilities for environmental assessments and seafood safety research. Presented to Tsleil-Waututh First Nation and EcoTrust. Seattle, WA. 4/27/04.
- Collier, T.K.** (2004). Effects of oil on fisheries: Lessons from the EXXON Valdez and beyond. Symposium Plenary Address, 11<sup>th</sup> Symposium, Sample Handling for Environmental and Biological Analysis. Baiona, Spain, April 19, 2004.
- Collier, T.K.** (2004). Session chair, Special Session on the Prestige Oil Spill. 11<sup>th</sup> Symposium, Sample Handling for Environmental and Biological Analysis. Baiona, Spain, April 19, 2004.
- Collier, T.K.** (2004). Overview of ECD research pertinent to natural resource injury assessment in Portland Harbor. Presented to Portland Harbor Trustees. April 8, 2004.
- Collier, T.K.** (2004). Toxic chemicals and endangered species. Invited departmental seminar at Duke University. Durham, NC, 2/27/04.
- Collier, T.K., L.L. Johnson, M.R. Arkoosh, N.L. Scholz, and J.P. Meador** (2004). Toxic contaminants in PNW estuaries, and effects on Pacific salmon. Invited presentation, Annual Meeting of Oregon Chapter, AFS. Sunriver, OR, 2/18/04.
- Collier, T.K.** (2004). Endocrine disruption and developmental abnormalities: 'New' toxicology threats



- for estuarine fish. Invited presentation at CALFED Workshop ‘Contaminant Stressors in the Bay-Delta Watershed’. Sacramento, CA. 2/4/04
- Collier, T.K.** J Labenia, MS Myers, JA Spromberg, and NL Scholz (2004). Prespawn mortality in adult coho salmon: Interaction between urban environments and weather. Invited presentation at 2004 national meeting of the American Meteorological Society, Symposium on ‘The Nexus Between Urban and Coastal Environments’. Seattle, WA. 01/14/04.
- Collier, T.K.** (2003). Session organizer and chair (with S. Marshall Adams). Making Ecotoxicology Studies Relevant: The ‘So What’ Question. SETAC North America conference, Austin, TX. 11/12/03.
- Collier, T.K.** J.S. Labenia, J.A. Spromberg, N.L. Scholz (2003). Prespawn mortality in coho salmon of hatchery origin: So what? Invited presentation at SETAC North America conference, Austin, TX. 11/11/03.
- Collier, T.K.** (2003). Session organizer and chair (with Jocelyne Hellou). Predicting Field Effects of PAHs from Laboratory Studies. SETAC North America conference, Austin, TX. 11/11/03.
- Collier, T.K.** (2003). Salmon Toxicology 101. Invited presentation at NW Salmon Recovery Conference. Seattle, WA 11/05/03.
- Collier, T.K.** (2003). Possible management actions for dealing with contaminant loads in southern resident killer whales. Presented at ‘Disease, Pollution and Contaminants: A Workshop to Discuss Management Measures for Puget Sound Killer Whales’. Seattle, WA 10/24/03
- Collier, T.K.** (2003). Endocrine disruption and developmental abnormalities: ‘New’ toxicology threats for estuarine fish. Invited plenary presentation at 6<sup>th</sup> Biennial State of the Estuary Conference, Oakland, CA 10/21/03.
- Collier, T.K.** (2003). Do toxic chemicals limit the productivity of aquatic ecosystems? Invited departmental lecture at University of Stockholm, Stockholm, Sweden. 10/1/03.
- Collier, T.K.** and G.M. Ylitalo. (2003). Chemical contaminants in cultured fish: Risks, perceptions, and precautions. Invited lecture at Norges Landbrukshøgskole, Ås, Norway. 9/29/03.
- Collier, T.K.** and G.M. Ylitalo. (2003). Invited short course on seafood as a source of contaminant exposure for Native Americans. Presented at Water Quality Training course sponsored by Northwest Environmental Training Center, Randle, WA, 9/17/03.
- Collier, T.K.** and M.R. Arkoosh (2003). Contaminant effects on immune function of endangered fish. Invited platform presentation, 133<sup>rd</sup> American Fisheries Society Annual Meeting. Quebec City, Quebec, Canada. 8/13/03.
- Collier, T.K.** (2003). Ecotoxicology at the Northwest Fisheries Science Center. AMS-NOAA Teacher Workshop, NWFSC, Seattle, WA 6/26/03.
- Collier, T.K.** (2003). Ecotoxicology at the Northwest Fisheries Science Center. Kenmore Senior tour group. NWFSC, Seattle, WA 6/24/03.
- Collier, T.K.** (2003). Presentation to student orientation session for NOAA’s Educational Partnership Program. Seattle, WA. 6/10/03
- Collier, T.K.** J Labenia, MS Myers, GM Ylitalo, and NL Scholz (2003). Extreme PRIMO—Premature mortality of adult coho salmon associated with stormwater discharges. Platform presentation, PRIMO 12. Safety Harbor, FL. 5/9/03.
- Collier, T.K.** (2003). Determining tissue and sediment effects thresholds for protecting aquatic species from harmful effects of toxic contaminants (PAHs, TBT, PCBs). Invited lecture, PRIMO 12 Short Course on Aquatic Toxicology. Safety Harbor, FL. 5/9/03.
- Collier, T.K.** (2003). Do toxic chemicals limit the productivity of our aquatic ecosystems? Invited departmental seminar. Alfred Wegener Institute for Polar and Sea Research. Bremerhaven, Germany. 4/25/03.
- Ylitalo, G.M., J. Buzitis, K. Lynch, L. Reed, S.M. O’Neill, J.E. West, M.M. Krahn, and **T.K. Collier**. (2003). Recent exposure of adult coho salmon from Puget Sound to polycyclic aromatic hydrocarbons. Puget Sound/Georgia Basin Research Conference.

- Collier, T.K.** (2003). Lessons from the T/V Prestige oil spill in Galicia, Spain. Invited lecture for 'Science of Oil Spills' course, HAZMAT/ORR. Seattle, WA 3/20/03.
- Collier, T.K.** (2003). Toxic contaminants and environmental fish health. Invited presentation to the Columbia River Inter-Tribal Fisheries Commission Water Quality Workshop. Warm Springs Indian Reservation. 3/14/03.
- Collier, T.K.** (2003). Pre-spawn mortality in Pacific salmon on the northwest coast of North America. Invited departmental seminar, Oregon State University, Corvallis, OR 3/5/03.
- Collier, T.K.** (2003). A traditional Thanksgiving on the Spanish coast—response to the Prestige oil spill. ECD seminar series, Seattle, WA. 1/26/03.
- Collier, T.K.** (2002). Member of US Delegation to assist in response to T/V Prestige oil spill. La Coruña, Spain. 11/26/02-12/06/02.
- Collier, T.K.** (2002). Salmon, pesticides, and other toxic compounds. Invited presentation to the Pacific Fisheries Legislative Task Force. Catalina Island, CA. 11/23/02.
- Collier, T.K.** and L.L. Johnson (2002). Assessing effects of PAH contamination in a marine system and communicating risk across cultures. Presented at SETAC, Salt Lake City UT. 11/17/02.
- Collier, T.K.** (2002). Conference organizer. Workshop on Modern Approach to Linking Exposure to Toxic Compounds and Biological Health, Ansan, Korea. 9/02.
- Collier, T.K.** (2002). Linking exposure to toxic compounds to impaired biological health of Pacific salmon. Invited presentation. Ansan, Korea. 9/02.
- Collier, T.K.** (2002). Determining causality between contaminant exposure and biological responses in field studies in the marine environment. Invited presentation. Ansan, Korea. 9/02.
- Collier, T.K.** (2002). Conference organizer. Workshop on PCBs in the Puget Sound/Georgia Basin ecosystem. Sponsored by PNWSETAC, NOAA, and USEPA. Friday Harbor, WA 9/02.
- Collier, T.K.** (2002). Chemical habitat quality and salmon health. Invited speaker. Independent Multidisciplinary Science Team. Corvallis, OR. 5/20/02.
- Collier, T.K.** (2002). Chemical contaminants and salmon health: Issues for the Willamette River. Invited speaker. Pacific Northwest SETAC annual meeting. Portland, OR. 5/18/02.
- Collier, T.K.** (2002). Effects of contaminated sediments on marine and estuarine animals. Invited speaker. Pacific Estuarine Research Society. Portland, OR 5/3/02.
- Collier, T.K.** (2002). Polycyclic aromatic hydrocarbons in the aquatic environment: Still an emerging issue after 25 years? Invited departmental seminar, UC Riverside, Riverside, CA. 4/24/02.
- Collier, T.K.** (2002). Overview of Ecotoxicology and Environmental Fish Health Program. Presented at NWFSC/CIMRS collaboration planning meeting. Newport, OR. 4/3/02.
- Collier, T.K.** (2002). Chemical habitat quality and salmon health. Invited speaker. Salmonid Restoration Federation Annual Meeting. Ukiah, CA. 2/28/02.
- Collier, T.K.** (2002). Panel reviewer. CALFED Ecosystem Restoration Program. Davis CA. 2/25-2/27/02.
- Collier, T.K.** (2000). Review of NOAA/NMFS white papers on sediment and tissue thresholds for chemical contaminants. Invited speaker at PNWSETAC Annual meeting. Lacey, WA. 5/11/00.
- Collier, T.K.** (2000). After listing, then what? The salmon recovery process. Presentation at ECD Science Forum, 5/24/00.
- Collier, T.K.** (1999). The science of contaminated sediments. Invited presentation at Northwest Regional Conference on Contaminated Sediments. Portland, OR. June 24, 1999.
- Collier, T.K.** (1998). The impacts of chemical contaminants on marine and estuarine animals in Washington State. Invited presentation, Eliminating Toxic and Bioaccumulative Chemicals: A Challenge to Washington State. Tacoma, WA. December 2, 1998.
- Collier, T.K.** (1998). Host, NMFS National Habitat Managers meeting, Seattle, WA. 10/5-10/8/98. (presentations incomplete between 1997 and 2002)
- Collier, T.K.** (1997). Conference organizer. 3rd Annual Conference on Fisheries, Habitat, and Pollution. Charleston, SC. 11/6-11/8/97.

- Collier, T.K.** (1997). Invited participant and rapporteur, NATO Advanced Regional Study Workshop. Biomarkers: A Pragmatic Basis for Remediation of Severe Pollution in Eastern Europe. Cieszyn, Poland. September 20-25, 1997.
- Collier, T.K.** (1997). Session chair, Xenobiotic transformation enzymes. Ninth Int'l Symposium on Pollutant Responses in Marine Organisms, Bergen, Norway, 4/28/97.
- Myers, M.S., B. French, W.L. Reichert, M.L. Willis, B.F. Anulacion, **T.K. Collier**, and J.E. Stein. (1997). Reductions in CYP1A expression and hydrophobic DNA adducts concentration in liver neoplasms in English sole: Further evidence supporting the "resistant hepatocyte" model of hepatocarcinogenesis in this species. Presented at Ninth Int'l Symposium on Pollutant Responses in Marine Organisms, Bergen, Norway, 4/28/97.
- Anulacion, B.F., M.S. Myers, M.L. Willis, and **T.K. Collier**. (1997). Quantitation of CYP1A expression in two flatfish species showing different prevalences of contaminant-induced hepatic disease. Presented at Ninth Int'l Symposium on Pollutant Responses in Marine Organisms, Bergen, Norway, 4/28/97.
- Collier, T.K.**, L.L. Johnson, C.M. Stehr, M.S. Myers, and J.E. Stein. A comprehensive assessment of the impacts of contaminants on fish from an urban waterway. Presented at 9th Int'l Symposium on Pollutant Responses in Marine Organisms, Bergen, Norway, 4/30/97.
- Collier, T.K.** Injury endpoints in natural resource damage assessment: A case study. Invited paper and panel discussion at ASTM-sponsored Seventh Symposium on Environmental Toxicology and Risk Assessment: Biomarkers and Risk Assessment. St. Louis, MO. 4/9/97.
- Anulacion, B.F., B.D. Bill and **T.K. Collier** (1996). Stability of cytochrome P4501A-associated enzyme activity in frozen tissue specimens from teleosts. Presented at 17th Annual Meeting SETAC, 11/96, Washington, DC.
- Collier, T.K.**, B.F. Anulacion, B.D. Bill, and A. Goksøyr (1996). Hepatic CYP1A in winter flounder along the Eastern seaboard: Results from seven years of monitoring. Presented at 17th Annual Meeting SETAC, 11/96, Washington, DC.
- Collier, T.K.**, L.L. Johnson, M.S. Myers, and J.E. Stein (1996). The ecotoxicological consequences of increasing urbanization of coastal areas. Presented at Int'l Symposium on Environ. Chem. and Toxicol., 7/15/96. Sydney, Australia.
- Collier, T.K.** (1996). The ecotoxicological consequences of increasing urbanization of coastal areas. Invited Faculty Seminar, presented at the Royal Melbourne Institute of Technology. 7/11/96, Melbourne, Australia.
- Collier, T.K.** (1996). Invited Departmental Seminar, presented at the Royal Melbourne Institute of Technology. 7/12/96, Melbourne, Australia.
- Anulacion, B.F., T. Hom, W.L. Reichert, and **T.K. Collier**. (1995). Temporal changes in CYP1A, DNA adducts, and contaminant residues in fish removed from contaminated sites. Presented at 2nd SETAC World Congress, Vancouver, B.C. November 9, 1995.
- Collier, T.K.** (1996). Injuries to natural resources in the Duwamish River. Presentation to Elliott Bay Natural Resource Trustees and the Boeing Company. Seattle, WA, 11/6/96.
- Collier, T.K.** (1996). **Session chair**. Processes of contaminant cycling. Fifth Annual Meeting of the North Pacific Marine Science Organization (PICES). Nanaimo, B.C. October, 1996.
- Collier, T.K.** (1995). National review panel member for five-year review of Puget Sound Ambient Monitoring Program. Seattle, WA. 9/26-9/28/95.
- Collier, T.K.** (1995). Biological indicators of oil exposure and effects in vertebrate species. Presentation to State of Alaska personnel responsible for Natural Resource Injury and Damage Assessment. Presented at request of NOAA's Damage Assessment Center. Anchorage, AK. 9/27/95.
- Collier, T.K.** (1995). NOAA's restoration research program, problems, and goals: Providing a scientific framework for restoration. Presented at the First Annual Northwest Natural Resource Damages Conference. Bellevue, WA. 9/21/95.

- Collier, T.K.** (1995). Biological indicators of contaminant exposure and effects. Presentation to Oregon and Washington personnel responsible for Natural Resource Injury and Damage Assessment. Presented at request of NOAA's Damage Assessment Center. Seattle, WA. 9/18/95.
- Collier, T.K.** (1995). The science of habitat restoration. Lecture presented at Seabeck Annual Adult Education/Family Retreat seminar series. Seabeck, WA. 7/27/95.
- Collier, T.K.** (1995). Salmon issues in the Pacific Northwest. Lecture presented at Seabeck Annual Adult Education/Family Retreat seminar series. Seabeck, WA. 7/26/95.
- Collier, T.K.** (1995). Marine mammal issues facing the National Marine Fisheries Service. Lecture presented at Seabeck Annual Adult Education/Family Retreat seminar series. Seabeck, WA. 7/25/95.
- Collier, T.K.** (1995). The EXXON Valdez oil spill: an example of NWFSC science in action. Lecture presented at Seabeck Annual Adult Education/Family Retreat seminar series. Seabeck, WA.
- Collier, T.K.** (1995). Assessing the efficacy of remediation of contaminated estuarine sediments. **Keynote address** at joint meeting of Pacific Estuarine Research Society and Pacific Northwest Society of Environmental Toxicology and Chemistry. Seattle, WA. 5/12/95.
- Collier, T.K.** (1995). Presentation to Hylebos Waterway/Commencement Bay Trustees on preliminary results of fish injury assessments and proposal for continued work. Tacoma, WA. 4/11/95.
- Collier, T.K.**, LL Johnson, MS Myers, E Casillas, JE Stein, and U Varanasi (1995). Incorporation of biomarkers into ecological risk assessments of contaminated nearshore marine habitats. Invited paper at ASTM-sponsored Fifth Symposium on Environmental Toxicology and Risk Assessment: Biomarkers and Risk Assessment. Denver, CO. 4/5/95.
- Collier, T.K.**, LL Johnson, MS Myers, E Casillas, JE Stein, and U Varanasi (1995). Incorporation of biomarkers into ecological risk assessments of contaminated nearshore marine habitats. Presented at PRIMO-8, Monterey, CA. 4/3/95.
- Collier, T.K.**, (1995). **Session Chair**. Xenobiotic biotransformation enzymes: Molecular Biological Aspects. PRIMO-8, Monterey, CA. 4/3/95.
- Gallagher, E.P., P.L. Stapleton, **T.K. Collier**, U. Varanasi, and D.L. Eaton. (1995). Biochemical and molecular characterization of glutathione S-transferase expression in English sole and starry flounder. PRIMO-8, Monterey, CA. 4/3/95.
- Collier, T.K.** 1995. Incorporation of biomarkers into ecological risk assessments of contaminated nearshore marine habitats. Presented at 1995 Marine Ecosystem Monitoring Network Meeting, Nanaimo, B.C. 3/29/95.
- Collier, T.K.** (1995). Presentation to Washington State Dept. of Ecology staff on use of biomarkers and screening methods for performing environmental assessment. Olympia, WA, 3/9/95.
- Collier, T.K.** (1995). Participant in South Florida Coastal Ocean Ecosystem Workshop. Miami, FL. 2/27-2/28/95.
- Collier, T.K.** (1995). Use of flatfish for monitoring Alyeska ballast water treatment plant in Valdez, AK. Invited participant at meeting between Prince William Sound RCAC, Alyeska, and USEPA. Seattle, WA, 1/18/95.
- Anulacion, B.F., M.S. Myers, M.L. Willis, and **T.K. Collier**. (1994). Quantitation of immunohistochemically localized CYP1A in two flatfish species showing different prevalences of contaminant-induced neoplasia. Presented at PANWAT Annual Meeting, Newport, OR, 10/8/94.
- Anulacion, B.F., M.S. Myers, M.L. Willis, and **T.K. Collier**. (1994). CYP1A expression in two flatfish species showing different prevalences of contaminant-induced hepatic disease. Presented at Int'l Symposium on Aquatic Animal Health, Seattle, WA. 9/7/94.
- Myers, M.S., L. L. Johnson, O.P. Olson, C. M. Stehr, M.L. Willis, **T.K. Collier**, B. B. McCain, S.-L. Chan, and U. Varanasi. (1994). Relationships between toxicopathic hepatic lesions and exposure to chemical contaminants in marine Bottomfish species from the Northeast and Pacific Coasts of the United States. Presented at Int'l Symposium on Aquatic Animal Health, Seattle, WA. 9/6/94.
- Collier, T.K.** (1994). Remediation of contaminated subtidal sediments: How do we proceed? Invited keynote address at 3rd International Marine Biotechnology Conference. Tromsø, Norway. 8/11/94.

- Collier, T.K.** and L.J. Field. (1994). Eagle Harbor: A case study for remediation of a subtidal Superfund site. Presented at 6th Annual Superfund Environmental Evaluation Workshop. Boston, MA 4/28/94.
- Collier, T.K.**, J.E. Stein, A. Goksøyr, M.S. Myers, J.W. Gooch, R.J. Huggett, and U. Varanasi. (1994). Biomarkers of PAH exposure and effects in fish from the Elizabeth River, Virginia. Presented at 6th Annual Superfund Environmental Evaluation Workshop. Boston, MA 4/27/94.
- Collier, T.K.** (1994). Participant at NOAA Science Review for Coastal Ecosystem Health. Miami, FL. 4/19-4/22/94.
- Reichert, W. L., M. S. Myers, B. French, **T. K. Collier**, J. E. Stein, and U. Varanasi. (1994). Molecular epizootiology: Relationships among hepatic DNA adducts, cytochrome P4501A levels and lesions involved in hepatic neoplasia in marine fish. Presented at 85th Annual Meeting of the American Association for Cancer Research in vol 35 of the AACR Proceedings, pg 102 , Abstract #607
- Collier, T.K.** (1994). Invited participant at Implementation Management Structure workshop for designing ecosystem approaches to restoration following the EXXON Valdez oil spill. Sponsored by Exxon Valdez Oil Spill Trustee Council, Anchorage, AK. 4/13-4/15/94.
- Varanasi, U., **T.K. Collier**, M.M. Krahn, and S.-L. Chan. (1994). Incorporation of screening technologies into early response and sampling strategies: Lessons from the *EXXON Valdez* oil spill. Presented at Prevention, Response, and Oversight 5 years after the *Exxon Valdez* Oil Spill. Anchorage, AK. 3/25/94. Presented by T.K. Collier.
- Collier, T.K.** (1994). Invited participant at Implementation Management Structure workshop for designing ecosystem approaches to restoration following the EXXON Valdez oil spill. Sponsored by Exxon Valdez Oil Spill Trustee Council, Anchorage, AK. 3/21-3/23/94.
- Collier, T.K.** (1994). NRDA/Restoration studies being conducted and planned by Environmental Conservation Division. Presented at EC Seminar Series, Seattle, WA. 2/16/94.
- Collier, T.K.** (1994). Overview of Environmental Conservation Division research directed towards NRDA studies of Commencement Bay/Hylebos Waterway. Presented to the Commencement Bay Natural Resource Trustees, Seattle, WA. 2/8/94.
- Collier, T.K.** (1993). Invited participant, Prince William Sound Ecosystem Study Planning Workshop. Cordova, AK. 12/4-12/6/93.
- Collier, T.K.**, B. F. Anulacion, J. E. Stein, A. Goksøyr, and U. Varanasi. (1993). A field evaluation of cytochrome P4501A as a biomarker of contaminant exposure in three species of flatfish. Presented at 14th Annual Meeting SETAC, 11/18/93, Houston, TX.
- Collier, T.K.** (1993). **Panel Chair**. Technical advisory panel to review guidance documentation developed by Univ. Wyoming/WEST, Inc. for Natural Resource Injury/Damage Assessment under OPA90. Laramie, WY, 11/4/93-11/5/93, and Houston, TX, 11/15/93.
- Varanasi, U., J.E. Stein, L.L. Johnson, **T.K. Collier**, M.S. Myers, and E. Casillas. (1993). Evaluation of biomarkers of contaminant exposure and effects in coastal ecosystems. Presented at ICES, Dublin, Ireland, September, 1993.
- Johansen, L.K., W.T. Roubal, and **T.K. Collier**. (1993). Characterization of glutathione S-transferases (GST) in two benthic fish species with differing susceptibilities to chemical carcinogenesis. Presented at PNWSETAC Annual Meeting, Newport, OR, May 20, 1993.
- Anulacion, B.F. and **T.K. Collier**. (1993). Cytochrome P4501A and associated enzyme activities in fish removed from polluted environments and from fish exposed and depurated in the laboratory. Presented at PNWSETAC Annual Meeting, Newport, OR, May 21, 1993.
- Collier, T.K.** (1993). Using biomarkers to determine contaminant exposure and associated biological effects in aquatic organisms. Lecture presented at the High Technology Center in Bergen, Norway.
- Collier, T.K.** (1993). ECD research and assessment of the EXXON Valdez oil spill. Lecture presented at the High Technology Center in Bergen, Laboratory of Marine Molecular Biology. Bergen, Norway. April 30, 1993.
- Collier, T.K.** (1993). The utilization of species differences for understanding contaminant-induced disease processes. Lecture presented at National Veterinary Institute, Oslo, Norway.

- Collier, T.K.**, B.F. Anulacion, A. Goksøyr, C. Grunwald, I. Wirgin, and U. Varanasi. (1993). Relationships between induction of cytochrome P4501A and contaminant residues in feral teleosts. Paper presented at 7th International Symposium on Pollutant Responses in Marine Organisms, Göteborg, Sweden, April 21, 1993.
- Collier, T.K.**, J.E. Stein, A. Goksøyr, M.S. Myers, J.W. Gooch, R.J. Huggett, and U. Varanasi. (1993). Biomarkers of PAH exposure and effects in oyster toadfish (*Opsanis tau*) from the Elizabeth River, Virginia. Paper presented at 7th International Symposium on Pollutant Responses in Marine Organisms, Göteborg, Sweden, April 21, 1993.
- Myers, M.S., M.L. Willis, A.-M. Husøy, A. Goksøyr, and **T.K. Collier**. (1993). Immunochemical localization of cytochrome P4501A in contaminant-associated hepatic lesions of English sole (*Pleuronectes vetulus*). Paper presented at 7th International Symposium on Pollutant Responses in Marine Organisms, Göteborg, Sweden, April 21, 1993.
- Collier, T.K.** (1993). **Session Chair**, CYP1A Induction. 7th International Symposium on Pollutant Responses in Marine Organisms, Göteborg, Sweden, April 20, 1993
- Egaas, E., J.G. Falls, W.C. Dauterman, **T.K. Collier**, and J.U. Skåre (1993). The comparative in vitro glutathione S-transferase activity in selected plants, fish, insects, and mammalian species measured with four different second substrates. Paper presented at 7th International Symposium on Pollutant Responses in Marine Organisms, Göteborg, Sweden, April 20, 1993.
- Collier, T.K.** (1993). Using biomarkers to determine contaminant exposure and associated biological effects in aquatic organisms. Lecture presented at the Norwegian Institute for Water Research, Oslo, Norway, April 19, 1993.
- Collier, T.K.**, M.M. Krahn, C.A. Krone, L.L. Johnson, M.S. Myers, S.-L. Chan, and U. Varanasi. (1993). Oil exposure and effects in subtidal fish following the EXXON Valdez oil spill. Presented at the 1993 International Oil Spill conference, March 31, 1993, Tampa Bay, FL.
- Collier, T.K.**, W.T. Roubal, L.K. Johansen, E.P. Gallagher, E. Egaas, and U. Varanasi (1993). Characterization of glutathione S-transferases (GST) in feral species with different susceptibilities to chemical carcinogenesis. Presented at Society of Toxicology 32nd Annual Meeting, March 16, 1993, New Orleans, LA.
- Egaas, E., J.G. Falls, W.C. Dauterman, **T.K. Collier**, and J.U. Skaare (1993). The glutathione S-transferase-mediated metabolism of atrazine in selected plants, fish, insects and mammalian species. Presented at SETAC World Conference, March, 1993 in Lisbon, Portugal.
- Collier, T.K.** (1993). Participation in strategic planning workshop to develop predictive capabilities under NOAA's Comprehensive Coastal Initiative. Silver Spring, MD, 2/15/93-2/17/93.
- Casillas, E., L.L. Johnson, D. Misitano, **T.K. Collier**, J.E. Stein, B.B. McCain, and U. Varanasi. (1993). Inducibility of spawning, reproductive success, and egg production of flatfish species from urban and nonurban areas of Puget Sound, Washington. *Mar. Environ. Res.* 35:227 (Abstract).
- Collier, T.K.** (1993). **Session Chair**, Subtidal Session, EXXON Valdez Oil Spill Symposium, February 3, 1993, Anchorage, AK.
- Collier, T.K.**, M. M. Krahn, C. A. Krone, L. L. Johnson, M. S. Myers, S.-L. Chan, and U. Varanasi (1993). Survey of oil exposure and effects in subtidal fish following the EXXON Valdez oil spill: 1989-1991. Presented at EXXON Valdez Oil Spill Symposium, February 4, 1993, Anchorage, AK.
- Myers, M.S., M.L. Willis, A.-M. Husøy, A. Goksøyr, and **T.K. Collier**. (1992). Immunochemical localization of cytochrome P4501A in contaminant-associated hepatic lesions of English sole (*Pleuronectes vetulus*). In: *Proc 13h Annual Mtg SETAC* (Abstract #92). Presented 11/92 in Cincinnati, OH.
- Collier, T.K.** and B.F. Anulacion (1992). Bioindicators of contaminant exposure and effects in fish removed from polluted environments in Puget Sound. PANWAT Proceedings 9:15. Richland, WA.
- Collier, T.K.** (1992). Using species differences to understand cancer in fish. Presented at Ira C. Darling Marine Center, Walpole, ME. 7/20/92.
- Collier, T.K.**, M.S. Myers, W.T. Roubal, L.K. Johansen, and U. Varanasi (1992). Differences in chemical carcinogenesis in two benthic fish species: possible influence of xenobiotic metabolizing

- enzymes. Presented at Gordon Research Conference on Drug Metabolism. Plymouth, New Hampshire. 7/13/92.
- Roubal, W.T., L.K. Johansen, and **T.K. Collier**. (1992). Methods for isolation and partial characterization of glutathione S-transferases from English sole (*Parophrys vetulus*) and starry flounder (*Platichthys stellatus*) from Puget Sound, Washington. Presented at 1st Annual Meeting of the Pacific Northwest Society of Environmental Toxicology and Chemistry, Bellingham, WA.
- Collier, T.K.** (1992). Participation in EXXON Valdez Restoration Science workshop to plan and coordinate subtidal studies. Anchorage, AK. 1/23/92.
- Eufemia, N.A., M.S. Kroen, D.E. Watson, **T.K. Collier**, J.E. Stein, and R.T. DiGiulio (1992). Cytochrome P450 induction and genotoxicity in feral fish collected from the Niagara River ecosystem. *Toxicologist* 12:407. Presented at Society of Toxicology 31st Annual Meeting, Seattle, WA.
- Collier, T.K.** (1991). Participation in Damage Assessment Regulations Team workshop to determine early sampling strategies to be employed after oil spills. Washington, DC. 12/17-12/18/91.
- Collier, T.K.** (1991). Results of ECD research on the effects of the EXXON Valdez oil spill in fish species, and proposed restoration efforts. Presentation to NRDA Management Team and Restoration Planning Work Group, Anchorage, AK. 12/5/91
- Collier, T.K.**, M.S. Myers, and U. Varanasi. (1991). Differences in chemical carcinogenesis in two benthic fish species: Activation, detoxication, and lesion prevalences. In: *Proc 12th Annual Mtg SETAC* (Abstract #92). Presented 11/91 in Seattle, WA.
- Johnson, L.L., E. Casillas, S. Sol, J.E. Stein, **T.K. Collier**, and U. Varanasi. (1991). Effects of chemical contaminants on steroid production and reproductive development in flathead sole, rock sole, and Pacific staghorn sculpin from Puget Sound, Washington. In: *Proc 12th Annual Mtg SETAC* (Abstract #P341). Presented 11/91 in Seattle, WA.
- Collier, T.K.** (1991). Deposition to U.S. District Court concerning NOAA vs the City of Seattle and METRO. 6/13/91.
- Collier, T.K.**, J.E. Stein, H.R. Sanborn, T. Hom, M.S. Myers, and U. Varanasi. (1991). A field study of the relationship between bioindicators of maternal contaminant exposure and egg and larval viability of English sole. Presented at the Sixth International Symposium on Responses of Marine Organisms to Pollutants, Woods Hole, MA, on 4/26/91.
- Collier, T.K.**, B.-T.L. Eberhart, S.D. Connor, A. Goksøyr, and U. Varanasi. (1991). Using cytochrome P450 to monitor the aquatic environment: Results from two years of a national survey. Presented at the Sixth International Symposium on Responses of Marine Organisms to Pollutants, Woods Hole, MA, on 4/24/91.
- Johnson, L.L., E. Casillas, J.E. Stein, **T.K. Collier**, and U. Varanasi. (1991). Contaminant effects on reproductive success in selected benthic fish species. Presented at the Sixth International Symposium on Responses of Marine Organisms to Pollutants, Woods Hole, MA, on 4/26/91.
- Casillas, E., L.L. Johnson, D. Misitano, **T.K. Collier**, J.E. Stein, B.B. McCain, and U. Varanasi. (1991). Inducibility of spawning, reproductive success, and egg production of flatfish species from urban and nonurban areas of Puget Sound, Washington. Presented at the Sixth International Symposium on Responses of Marine Organisms to Pollutants, Woods Hole, MA, on 4/26/91.
- Stein, J.E., **T.K. Collier**, W.L. Reichert, E. Casillas, T. Hom, and U. Varanasi. (1991). Bioindicators of contaminant exposure and sublethal effects in benthic fish from Puget Sound, WA. Presented at the Sixth International Symposium on Responses of Marine Organisms to Pollutants, Woods Hole, MA, on 4/25/91.
- Collier, T.K.** (1991). Cytochrome P450 in ECD research. Seminar presented at Patuxent Wildlife Research Center, Laurel, MD on 4/23/91.
- Collier, T.K.** (1991). Salmonid studies. Presentation at ECD Program Review on 3/26/91
- Collier, T.K.**, B.-T.L. Eberhart, S.D. Connor, and U. Varanasi. (1991). Cytochrome P450 as a bioindicator of contaminant exposure and effects in three species of flatfish from Puget Sound. *Proc Second Ann. Mtg. on Puget Sound Research*.

- Collier, T.K.**, J.E. Stein, S.D. Connor, L.L. Johnson, E. Casillas, and U. Varanasi. (1991). Enhancements to NOAA's Status and Trends Program (NSTP). In: *Proc. 17th Ann Aquatic Toxicity Workshop*, Can. Tech. Report Fish. Aquat. Sci. No. 1774, p. 610.
- Collier, T.K.** (1990). Results of ECD research on the effects of the EXXON Valdez oil spill in fish species. Presentation to NRDA Management Team, Anchorage, AK. 12/8/90.
- Collier, T.K.** J.E. Stein, B.-T.L. Eberhart, L.L. Johnson, E. Casillas, and U. Varanasi. (1990). NOAA'S Status and Trends Program, including present and future enhancements. In: *Proc 11th Annual Mtg SETAC* (Abstract #140).
- Stein, J.E., **T.K. Collier**, E. Casillas, T. Hom, W.L. Reichert, and U. Varanasi. (1990). Bioindicators of exposure and effects in fish: a field study in Puget Sound, WA. In: *Proc 11th Annual Mtg SETAC*.
- Collier, T.K.** (1989). Session Co-chair, Advances in Environmental Assessment I, OCEANS '89 Conference, Seattle, WA. 9/19/89.
- Collier, T.K.** and U. Varanasi (1989). The effects of environmental contaminants on activities of hepatic xenobiotic metabolizing enzymes in English sole (*Parophrys vetulus*). Invited speaker at the Fifth International Symposium on Responses of Marine Organisms to Pollution. Plymouth, England, 4/89.
- Collier, T.K.** and U. Varanasi. (1989). The effects of environmental contaminants on activities of hepatic xenobiotic metabolizing enzymes in English sole (*Parophrys vetulus*). *Mar. Environ. Res.* 28:145-146.
- Collier, T.K.**, B.-T. L. Eberhart and A. Goksøyr. (1989). Immunochemical quantitation of cytochrome P450 IA1 in benthic fish from coastal U.S. waters. *Proc. Pac. NW Assoc. Toxicol.* 6:9.
- Collier, T.K.** and U. Varanasi. (1988). Xenobiotic metabolizing enzymes in two species of benthic fish showing different prevalences of hepatic neoplasms in Puget Sound, Washington. *Aquat Toxicol* 11:400-401.
- Collier, T.K.** and U. Varanasi. (1988). Xenobiotic metabolizing enzymes in two species of benthic fish showing different prevalences of hepatic neoplasms in Puget Sound, Washington. *Mar Environ. Res.* 24:113-114.
- Varanasi, U., **T K. Collier**, D.E. Williams and D.R. Buhler. (1986). Cytochrome P-450 isozymes in the English sole (*Parophrys vetulus*). *The Toxicologist* 6:159.
- Collier, T.K.** and U. Varanasi. (1986). Xenobiotic metabolizing enzymes in two species of benthic fish showing different prevalences of hepatic neoplasms. *PANWAT Proc.* 3:16.
- Collier, T.K.** and U. Varanasi. (1984). Xenobiotic metabolizing enzymes in English sole from Puget Sound. Proc. 188th National Meeting ACS.
- Collier, T.K.** and U. Varanasi. (1984). Field and laboratory studies of xenobiotic metabolizing enzymes in English sole. *PANWAT Proc.* 1:16.
- Collier, T.K.**, E.H. Gruger and U. Varanasi. (1983). The disposition of 2,6-dimethylnaphthalene in coho salmon. Proc. Div. Environ. Chem., 185th National Meeting ACS 23:188-189.
- Collier, T.K.**, D.W. Brown, and D.C. Malins. (1979). Naphthalene metabolites in brain and other organs of rainbow trout (*Salmo gairdneri*). *Fed. Proc.* 38:658.
- Collier, T.K.**, L.C. Thomas, and D.C. Malins. (1978). Disposition and metabolism of dietary naphthalene in coho salmon (*Oncorhynchus kisutch*): Isolation and identification of individual metabolites via HPLC. *Fed. Proc.* 37:693.
- Collier, T.K.** and D.C. Malins. (1978). Disposition and metabolism of naphthalene metabolites in brain of rainbow trout (*Salmo gairdneri*). In: Proceedings 33rd Northwest Regional Meeting, American Chemical Society, Abstract 68.
- Roubal, W.T., **T.K. Collier**, and D.C. Malins. (1976). Metabolism of aromatic hydrocarbons in coho salmon (*Oncorhynchus kisutch*). *Fed. Proc.* 35:1710.