

## CURRICULUM VITAE

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**Degrees:** B.A. with Distinction in Biology, Swarthmore College, 1976  
M.S. in Fisheries, University of Washington, 1978  
Ph.D. in Fisheries, University of Washington, 1981

**Employment:**

2000-present	Professor, School of Aquatic and Fishery Sciences
1990-2000	Associate Professor, School of Fisheries,
1992-1995	Associate Director for Instruction, School of Fisheries
1986-1990	Assistant Professor, School of Fisheries, Univ. of Washington
1984-1985	Research Associate, Department of Oceanography, University of British Columbia, Vancouver, B.C.
1981-1984	Post-doctoral Fellow, University of British Columbia and Pacific Biological Station, Nanaimo, B. C., Canada

### **Research Interests:**

Behavior, ecology, and evolution of fishes, with emphasis on migrations, life history patterns, reproduction, habitat requirements, and conservation of salmon and trout

### **Honors:**

College of Ocean and Fishery Sciences Undergraduate Teaching Award, 1989  
Distinguished Teaching Award, University of Washington, 1991  
Marsha Landolt Distinguished Graduate Mentor Award, University of Washington, 2008  
Excellence in Fisheries Education Award, American Fisheries Society, 2010  
National Research Council panel "The Status of Pacific Northwest Anadromous Salmonids"  
College of Ocean and Fishery Sciences Distinguished Research Award 1998  
Fulbright Fellowship to study in Ireland, 2000  
Elected member, Washington State Academy of Sciences, 2010  
Carl R. Sullivan Fisheries Conservation Award, 2012, from the American Fisheries Society to the Alaska Salmon Program, of which I have been a member since 1987  
National Research Council panel "Ecological Risk Assessment Under FIFRA and ESA"  
Fellow, American Fisheries Society

## Publications

### 1978

- Quinn, T., G.W. Esch, T.C. Hazen and J.W. Gibbons. 1978. Long range movement and homing by largemouth bass (*Micropterus salmoides*) in a thermally altered reservoir. *Copeia* 1978: 542-545.
- Quinn, T.P. 1978. The role of the odors of conspecifics in the locomotor behavior of the blind cave characin, *Astyanax jordani*. Master's thesis, University of Washington.

### 1980

- Quinn, T.P. 1980. Locomotor responses of juvenile blind cave fish, *Astyanax jordani*, to the odors of conspecifics. *Behavioral and Neural Biology* 29: 123-127.
- Quinn, T.P. 1980. Evidence for celestial and magnetic compass orientation in lake migrating sockeye salmon fry. *Journal of Comparative Physiology* 137: 243-248.
- Quinn, T.P., B.S. Miller and R.C. Wingert. 1980. Depth distribution and seasonal and diel movements of ratfish, *Hydrolagus colliei*, in Puget Sound, Washington. *Fishery Bulletin* 78: 816-821.

### 1981

- Brannon, E.L., T.P. Quinn, G.L. Lucchetti and B.D. Ross. 1981. Compass orientation of sockeye salmon from a complex river system. *Canadian Journal of Zoology* 59: 1548-1553.
- Quinn, T.P. 1981. Compass orientation of juvenile sockeye salmon (*Oncorhynchus nerka*). Doctoral dissertation, University of Washington.
- Quinn, T.P., R.T. Merrill and E.L. Brannon. 1981. Magnetic field detection in sockeye salmon. *Journal of Experimental Zoology* 217: 137-142.

### 1982

- Quinn, T.P. and E.L. Brannon. 1982. The use of celestial and magnetic cues by orienting sockeye salmon smolts. *Journal of Comparative Physiology* 147: 547-552.
- Quinn, T.P. 1982. A model for salmon navigation on the high seas. In: E.L. Brannon and E.O. Salo (editors), *Salmon and Trout Migratory Behavior Symposium*. School of Fisheries, University of Washington, pp. 229-237.
- Quinn, T.P. 1982. Intra-specific differences in sockeye salmon fry compass orientation mechanisms. In: E.L. Brannon and E.O. Salo (editors), *Salmon and Trout Migratory Behavior Symposium*. School of Fisheries, University of Washington, pp. 79-85.
- Whitman, R.P., T.P. Quinn and E.L. Brannon. 1982. The influence of suspended volcanic ash on the homing behavior of adult chinook salmon. *Transactions of the American Fisheries Society* 111: 63-69.

### 1983

- Quinn, T.P., E.L. Brannon and R.P. Whitman. 1983. Pheromones and the water source preferences of adult coho salmon (*Oncorhynchus kisutch*). *Journal of Fish Biology* 22: 677-684.

Quinn, T.P. and C. Groot. 1983. Orientation of chum salmon (*Oncorhynchus keta*) after internal and external magnetic field alteration. *Canadian Journal of Fisheries and Aquatic Sciences* 40: 1598-1606.

#### **1984**

- Brannon, E.L., R.P. Whitman and T.P. Quinn. 1984. Responses of returning adult coho salmon to home water and population-specific odors. *Transactions of the American Fisheries Society* 113: 374-377.
- Ogden, J.C. and T.P. Quinn. 1984. Migration in coral reef fishes: Ecological significance and orientation mechanisms. In: J.D. McCleave, G.P. Arnold, J.J. Dodson and W.H. Neill (editors), *Mechanisms of Migration in Fishes*. Plenum Press, New York, pp. 293-308.
- Quinn, T.P. 1984. An experimental approach to fish compass and map orientation. In: J.D. McCleave, G.P. Arnold, J.J. Dodson and W.H. Neill (editors), *Mechanisms of Migration in Fishes*. Plenum Press, New York, pp. 113-123.
- Quinn, T.P. 1984. Homing and straying in Pacific salmon. In: J.D. McCleave, G.P. Arnold, J.J. Dodson and W.H. Neill (editors), *Mechanisms of Migration in Fishes*. Plenum Press, New York, pp. 357-362.
- Quinn, T.P. and C. Groot. 1984. The effect of water flow rate on bimodal orientation of juvenile chum salmon, *Oncorhynchus keta*. *Animal Behaviour* 32: 628-629.
- Quinn, T.P. and J.C. Ogden. 1984. Field evidence of compass orientation in migrating juvenile grunts (Haemulidae). *Journal of Experimental Marine Biology and Ecology* 81: 181-192.
- Quinn, T.P. and K. Fresh. 1984. Homing and straying in chinook salmon (*Oncorhynchus tshawytscha*) from Cowlitz River Hatchery, Washington. *Canadian Journal of Fisheries and Aquatic Sciences* 41: 1078-1082.
- Quinn, T.P. and C. Groot. 1984. Pacific salmon (*Oncorhynchus*) migrations: Orientation vs. random movement. *Canadian Journal of Fisheries and Aquatic Sciences* 41: 1319-1324.

#### **1985**

- Quinn, T.P. and C.A. Busack. 1985. Chemosensory recognition of siblings in juvenile coho salmon (*Oncorhynchus kisutch*). *Animal Behaviour* 33: 51-56.
- Quinn, T.P. 1985. Salmon homing: Is the puzzle complete? Review of A.D. Hasler and A.T. Scholz, *Olfactory Imprinting and Homing in Salmon*. *Environmental Biology of Fishes* 12: 315-317.
- Quinn, T.P. 1985. Homing and the evolution of sockeye salmon, *Oncorhynchus nerka*. In: M.A. Rankin (editor), *Migrations: Mechanisms and Adaptive Significance*. *Contributions in Marine Science, Supplement to Vol. 27*: 353-366.

#### **1986**

- Brannon, E.L., T.P. Quinn, R.P. Whitman, A.E. Nevissi, R.E. Nakatani and C. D. McAuliffe. 1986. The homing of adult chinook salmon after brief exposure to whole and dispersed crude oil. *Transactions of the American Fisheries Society* 115: 823-827.

- Groot, C., T.P. Quinn and T.J. Hara. 1986. Responses of migrating adult sockeye salmon (*Oncorhynchus nerka*) to population-specific odors. *Canadian Journal of Zoology* 64: 926-932.
- Quinn, T.P. and G.M. Tolson. 1986. Evidence of chemically mediated population recognition in coho salmon (*Oncorhynchus kisutch*). *Canadian Journal of Zoology* 64: 84-87.
- Quinn, T.P. and T.J. Hara. 1986. Sibling recognition and olfactory sensitivity in juvenile coho salmon (*Oncorhynchus kisutch*). *Canadian Journal of Zoology* 64: 921-925.
- Quinn, T.P., K.D. Cooke and G. Ellis. 1986. The responses of adult sockeye salmon (*Oncorhynchus nerka*) to a commercial purse seine. *Canadian Technical Report of Fisheries and Aquatic Sciences* 1511: 13 p.
- Quinn, T.P. 1986. Review of McKeown, B.A., Fish Migration, and Smith, R.J.F., The Control of Fish Migration. *Copeia* 1986: 268-269.

### 1987

- Groot, C. and T.P. Quinn. 1987. The homing migration of sockeye salmon to the Fraser River. *Fishery Bulletin* 85: 455-469.
- Matthews, K.R., B.S. Miller and T.P. Quinn. 1987. Movement studies of nearshore demersal rockfishes in Puget Sound, Washington. *Proceedings of the Lowell Wakefield International Rockfish Symposium, Anchorage, Alaska*, pp. 63-72.
- Quinn, T.P. and R.F. Tallman. 1987. Seasonal environmental predictability and homing in riverine fishes. *Environmental Biology of Fishes* 18: 155-159.
- Quinn, T.P. and W.C. Leggett. 1987. Perspectives on the marine migrations of diadromous fishes. *American Fisheries Society Symposium* 1: 377-388.
- Quinn, T.P. and B.A. terHart. 1987. Movements of adult sockeye salmon (*Oncorhynchus nerka*) in British Columbia coastal waters in relation to temperature and salinity stratification: Ultrasonic telemetry results. *Canadian Special Publication in Fisheries and Aquatic Sciences* 96: 61-77.
- Quinn, T.P., C.C. Wood, L. Margolis, B. Riddell and K.D. Hyatt. 1987. Homing in wild sockeye salmon (*Oncorhynchus nerka*) populations as inferred from differences in parasite prevalence and allozyme allele frequencies. *Canadian Journal of Fisheries and Aquatic Sciences* 44: 1963-1971.

### 1988

- Journal of Experimental Biology* 140: 51-63.
- McIsaac, D.O. and T.P. Quinn. 1988. Evidence for a hereditary component in homing behavior of chinook salmon (*Oncorhynchus tshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 45: 2201-2205.
- Quinn, T.P., A.F. Olson and J.T. Konecki. 1988. Effects of anaesthesia on the chemosensory behaviour of Pacific salmon. *Journal of Fish Biology* 33: 637-641.
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### 1989

- Brannon, E.L. and T.P. Quinn. 1989. Odor cues used by homing coho salmon. In: E.L. Brannon and B. Jonsson (editors), Salmon and Trout Migratory Behavior Symposium. pp. 30-34.
- Moser, M.L., A.F. Olson and T.P. Quinn. 1989. Migratory behavior of coho salmon smolts (*Oncorhynchus kisutch*) in Grays Harbor, Washington. Proceedings of the 1988 Chinook and Coho Salmon Workshop. pp. 220-226.
- Quinn, T.P. and S. Courtenay. 1989. Intraspecific chemosensory discrimination in salmonid fishes: Alternative explanations. In: E.L. Brannon and B. Jonsson (editors), Salmon and Trout Migratory Behavior Symposium. pp. 35-41.
- Quinn, T.P., E.L. Brannon and A.H. Dittman. 1989. Spatial aspects of imprinting and homing by coho salmon (*Oncorhynchus kisutch*). Fishery Bulletin 87: 769-774.
- Quinn, T.P. 1989. Review of McDowall, R.M., Diadromy in Fishes. Quarterly Review of Biology 64: 358-359.
- Quinn, T.P. and J.T. Light. 1989. Occurrence of threespine sticklebacks (*Gasterosteus aculeatus*) in the open North Pacific Ocean: migration or drift? Canadian Journal of Zoology 67: 2850-2852.
- Quinn, T.P. 1989. Current controversies in the study of marine migration. Review of Herrnkind, W.F. and A.B. Thistle (eds.) Signposts in the Sea. Environmental Biology of Fishes 26: 311-313.
- Quinn, T.P., B.A. terHart and C. Groot. 1989. Migratory orientation and vertical movements of homing adult sockeye salmon (*Oncorhynchus nerka*) in coastal waters. Animal Behaviour 37: 587-599.

## 1990

- Brannon, E.L. and T.P. Quinn. 1990. A field test of the pheromone hypothesis for homing by Pacific salmon. Journal of Chemical Ecology 16: 603-609.
- Matthews, K.R., T.P. Quinn and B.S. Miller. 1990. The application of ultrasonic transmitters to demersal rockfish movement research on shallow rocky reefs in Puget Sound, Washington. American Fisheries Society Symposium 7: 375-379.
- Moser, M.L., A.F. Olson and T.P. Quinn. 1990. Effects of dummy ultrasonic transmitters on juvenile coho salmon. American Fisheries Society Symposium 7: 353-356.
- Quinn, T.P. 1990. Current controversies in the study of salmon homing. Ethology, Ecology and Evolution 2: 49-63.
- Quinn, T.P. and A.H. Dittman. 1990. Pacific salmon migrations and homing: mechanisms and adaptive significance. Trends in Ecology and Evolution 5: 174-177.
- Quinn, T. P. 1990. Migratory behavior of Pacific salmon in estuaries: recent results with ultrasonic telemetry. In: C. A. Simenstad (editor), Effects of Dredging on Anadromous Pacific Coast Fishes. Washington Sea Grant, Seattle, Washington, pp. 13-25.
- Ruggerone, G.T., T.P. Quinn, I.A. McGregor and T.S. Wilkinson. 1990. Horizontal and vertical movements of adult steelhead trout, *Oncorhynchus mykiss*, in Dean and Fisher channels, British Columbia. Canadian Journal of Fisheries and Aquatic Sciences 47: 1963-1969.

## 1991

- Berman, C.H. and T.P. Quinn. 1991. Behavioural thermoregulation and homing by spring chinook salmon, *Oncorhynchus tshawytscha* (Walbaum), in the Yakima River. *Journal of Fish Biology* 39: 301-312.
- Blair, G.R. and T.P. Quinn. 1991. Homing and spawning site selection by sockeye salmon (*Oncorhynchus nerka*) in Iliamna Lake, Alaska. *Canadian Journal of Zoology* 69: 176-181.
- Moser, M.L., A.F. Olson and T.P. Quinn. 1991. Riverine and estuarine migratory behavior of coho salmon (*Oncorhynchus kisutch*) smolts. *Canadian Journal of Fisheries and Aquatic Sciences* 48: 1670-1678.
- Pascual, M. A. and T. P. Quinn. 1991. Evaluation of alternative models of the coastal migration of adult Fraser River sockeye salmon (*Oncorhynchus nerka*). *Canadian Journal of Fisheries and Aquatic Sciences* 48: 799-810.
- Quinn, T.P. 1991. Models of Pacific salmon orientation and navigation on the open ocean. *Journal of Theoretical Biology* 150: 539-545.
- Quinn, T.P. and R.D. Brodeur. 1991. Intra-specific variations in the movement patterns of marine animals. *American Zoologist* 31: 231-241.
- Quinn, T.P., R.S. Nemeth and D. O. McIsaac. 1991. Patterns of homing and straying by fall chinook salmon in the lower Columbia River. *Transactions of the American Fisheries Society* 120: 150-156.

## 1992

- Bisson, P.A., T.P. Quinn, G.H. Reeves and S.V. Gregory. 1992. Best management practices, cumulative effects, and long-term trends in fish abundance in Pacific Northwest river systems. In: *Watershed Management*. R.J. Naiman (editor). Springer-Verlag, pp.189-232.
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- Quinn, T.P. and A.H. Dittman. 1992. Fishes. In: *Animal Homing*. F. Papi (editor). Chapman and Hall, pp.145-211.
- Quinn, T. P. and G.R. Blair. 1992. Morphological changes in senescing adult male sockeye salmon (*Oncorhynchus nerka* Walbaum). *Journal of Fish Biology* 41: 1045-1047.
- Quinn, T P. and S. Bloomberg. 1992. Fecundity of chinook salmon (*Oncorhynchus tshawytscha*) from the Waitaki and Rakaia rivers. *New Zealand Journal of Marine and Freshwater Research* 26: 429-434.

## 1993

- Blair, G.R., D.E. Rogers and T.P. Quinn. 1993. Variation in life history characteristics and morphology of sockeye salmon (*Oncorhynchus nerka*) in the Kvichak River system, Bristol Bay, Alaska. *Transactions of the American Fisheries Society* 122: 550-559.
- Olson, A.F. and T.P. Quinn. 1993. Vertical and horizontal movements of adult chinook salmon, *Oncorhynchus tshawytscha*, in the Columbia River estuary. *Fishery Bulletin* 91: 171-178.
- Quinn, T.P. 1993. Review of Pearcy, W.G. *Ocean Ecology of North Pacific Salmonids*. *Transactions of the American Fisheries Society* 122: 513-514.

- Quinn, T.P. 1993. A review of homing and straying of wild and hatchery-produced salmon. *Fisheries Research* 18: 29-44.
- Quinn, T. P. and M. J. Unwin. 1993. Life history patterns of New Zealand chinook salmon (*Oncorhynchus tshawytscha*) populations. *Canadian Journal of Fisheries and Aquatic Sciences* 50: 1414-1421.
- Unwin, M. J. and T. P. Quinn. 1993. Homing and straying patterns of chinook salmon (*Oncorhynchus tshawytscha*) from a New Zealand hatchery: spatial distribution of strays and effects of release date. *Canadian Journal of Fisheries and Aquatic Sciences* 50: 1168-1175.

## 1994

- Dittman, A.H. and T.P. Quinn. 1994. Avoidance of a putative pheromone, 17a,20b-dihydroxy-4-pregnene-3-one, by precociously mature chinook salmon (*Oncorhynchus tshawytscha*). *Canadian Journal of Zoology* 72: 215-219.
- Dittman, A.H., T.P. Quinn, W.W. Dickhoff and D.A. Larsen. 1994. Interactions between novel water, thyroxine and olfactory imprinting in underyearling coho salmon (*Oncorhynchus kisutch*, Walbaum). *Aquaculture and Fisheries Management* 25 (Supplement 2): 157-169.
- Nevitt, G.A., A.H. Dittman, T.P. Quinn and W.J. Moody, Jr. 1994. Evidence for a peripheral olfactory memory in imprinted salmon. *Proceedings of the National Academy of Science*. 91: 4288-4292.
- Pascual, M.A. and T.P. Quinn. 1994. Geographical patterns of straying of fall chinook salmon (*Oncorhynchus tshawytscha*) from Columbia River (U.S.A.) hatcheries. *Aquaculture and Fisheries Management* 25 (Supplement 2): 17-30.
- Peterson, N.P., E.F. Prentice and T.P. Quinn. 1994. Comparison of sequential coded-wire and passive integrated transponder tags for assessing overwinter growth and survival of juvenile coho salmon. *North American Journal of Fisheries Management* 14: 870-873.
- Quinn, T.P. 1994. Review of Cloud, J.G. and Thorgaard, G.H., Genetic Conservation of Salmonid Fishes. *Animal Behavior* 48: 1489-1490.
- Quinn, T.P. 1994. How do sharks orient at sea? *Trends in Ecology and Evolution* 9: 277-278.
- Quinn, T.P. 1994. Anthropogenic influences on fish populations of the Georgia Basin. Part I: Salmonids. In: *Review of the Marine Environment and Biota of Strait of Georgia, Puget Sound and Juan de Fuca Strait*. Canadian Technical Report of Fisheries and Aquatic Sciences 1948: 219-229.
- Quinn, T. P. and C. J. Foote. 1994. The effects of body size and sexual dimorphism on the reproductive behaviour of sockeye salmon (*Oncorhynchus nerka*). *Animal Behaviour* 48: 751-761.
- Quinn, T.P., A.H. Dittman, N.P. Peterson and E.C. Volk. 1994. Distribution, survival and growth of sibling groups of juvenile coho salmon, *Oncorhynchus kisutch*, in an experimental stream channel. *Canadian Journal of Zoology* 72: 2119-2123.
- Varnavskaya, N.V., C.C. Wood, R.J. Everett, R.L. Wilmot, V.S. Varnavsky, V.V. Midanaya and T.P. Quinn. 1994. Genetic differentiation of subpopulations of sockeye salmon (*Oncorhynchus nerka*) within lakes of Alaska, British Columbia

and Kamchatka, Russia. Canadian Journal of Fisheries and Aquatic Sciences 51 (Supplement 1): 147-157.

## 1995

- Adkison, M.D., T.P. Quinn and O. Rutten. 1995. An inexpensive, non-disruptive method of in situ dart tagging for visual recognition of fish underwater. North American Journal of Fisheries Management 15: 507-511.
- Berg, O.K., C.J. Foote and T.P. Quinn. 1995. Fish age, nematode, *Philonema oncorhynchi*, infection and development of sexual dimorphism by the adult male sockeye salmon, *Oncorhynchus nerka*, in western Alaska. Canadian Journal of Zoology 73: 1999-2004.
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- Pascual, M.A., T.P. Quinn and H. Fuss. 1995. Factors affecting the homing of Columbia River hatchery-produced fall chinook salmon. Transactions of the American Fisheries Society 124: 308-320.
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- Warner, E.J. and T.P. Quinn. 1995. The horizontal and vertical movements of telemetered rainbow trout (*Oncorhynchus mykiss*) in Lake Washington. Canadian Journal of Zoology 73: 146-153.



## 1996

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### 1997

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