CURRICULUM VITAE

John H. Christy
Staff Biologist, Emeritus – Behavior
Smithsonian Tropical Research Institute

J. H. Christy
9749 NE Sunny Hill Circle
Bainbridge Island, Washington, 98110
U.S.A.

Degrees

1970	B.Sc., Lewis and Clark College, Biology, English Literature
1980	Ph.D., Cornell University, Population Ecology, Animal Behavior

Positions

1978-83	Research Associate, Belle W. Baruch Institute for Marine Biology and Coastal Research, University of South Carolina
1980-81	Visiting Assistant Professor, Biology Department, University of South Carolina
1983-84	Visiting Research Scholar, Smithsonian Tropical Research Institute (STRI)
1984-16	Staff Biologist, STRI
1988-92	and Assistant Director for Marine Research, STRI
1990-03	and Scientific Advisor, Punta Culebra Marine Exhibition Center, STRI
2003-05	and Scientific Director, Punta Culebra Marine Exhibition Center, STRI
2005-08	and Director, Punta Culebra Nature Center, STRI
2016-	Staff Scientist, Emeritus, STRI

Fellowships, awards, scholarly recognition

1971-74, 76	Cornell Summer Research Fellowships
1973	Cornell Three-year Teaching Fellowship
1976	Outstanding Teaching Assistant, Section of Neurobiology and Behavior, Cornell University
1988-92	Certificates of Recognition (5) for Exceptional Service in Administration, Smithsonian Tropical Research Institute
1997	Research Fellow, Japanese Society for the Promotion of Science
1999	Senior Visiting Professor, Walailak University, Thailand
2005	Senior Visiting Scholar, University of Nebraska
2005	Invited author, Evolutionary Ecology of Social and Sexual Systems, Oxford
2006	Invited author, Wings: Essays on Invertebrate Conservation Invited author (declined), Encyclopedia of Ecology: Animal Communication
2007	Invited author, Chemical Communication in Crustaceans, Springer
2007	Invited symposium speaker, International Congress for Invertebrate Reproduction and Development, STRI, Panama

2009	Invited symposium speaker, Annual meeting of the Crustacean Society and the Carcinological Society of Japan, Shinagawa, Japan
2010	Invited author, Treatise on Zoology, special edition on Brachyura
2011	Invited symposium speaker, Society for Integrative and Comparative Biology, Salt Lake, Utah
2011	Invited Symposium Speaker, Annual Meeting of the Crustacean Society, Honolulu, Hawaii
2011	Meritorious Service as Editor, Animal Behavior, Animal Behavior Society

Grants and student support

Twenty-three grants from diverse agencies totaling approximately $855,000

Publications

1. **Christy, J. H.** 1978. Adaptive significance of reproductive cycles in the fiddler crab *Uca pugilator*: a hypothesis. *Science* 199:453-455.
2. **Christy, J. H.** 1980. The mating system of the sand fiddler crab *Uca pugilator*. Ph.D. thesis, Cornell University
3. **Christy, J. H.** 1982. Burrow structure and use in the sand fiddler crab, *Uca pugilator* (Bosc). *Anim. Behav*. 30:487-494.
4. **Christy, J. H.** 1982. Adaptive significance of semilunar cycles of larval release in fiddler crabs (genus *Uca*): test of an hypothesis. *Bio. Bull*. 163:251-263.
5. **Christy, J. H.,** and S. E. Stanczyk. 1982. Timing of larval production and flux of invertebrate larvae in a well-mixed estuary, pp. 489-503. In: V. E. Kennedy (ed.), Estuarine Comparisons, Academic Press, NY.
6. **Christy, J. H.** 1983. Female choice in the resource-defense mating system of the sand fiddler crab, *Uca pugilator*. *Behav. Ecol. Sociobiol*. 12:169-180.
7. **Christy, J. H.,** and M. Salmon. 1984. Ecology and evolution of mating systems of fiddler crabs (genus *Uca*). *Biol. Rev*. 59:483-509.
8. **Christy, J. H.** 1986. Timing of larval release by intertidal crabs on an exposed shore. *Bull. Mar. Sci.* 39(2):176-191.
9. **Christy, J. H.** 1987. Competitive mating, mate choice and mating associations of brachyuran crabs. *Bull. Mar. Sci*. 41(2):177-191.
10. **Christy, J. H.** 1987. Female choice and the breeding behavior of the fiddler crab *Uca beebei*. *J. Crust. Biol*. 7(4)624-635.
11. **Christy, J. H.** 1988. Pillar function in the fiddler crab *Uca beebei* (I): Effects on male spacing and aggression. *Ethology* 78:53-71.
12. **Christy, J. H.** 1988. Pillar function in the fiddler crab *Uca beebei* (II): Competitive courtship signaling. *Ethology* 78:113-128.
13. **Christy, J. H.** 1989. Rapid development of megalopae of the fiddler crab *Uca pugilator* reared over sediment: Implications for models of larval recruitment. *Mar. Ecol. Prog. Ser.* 57(3):259-265.
14. **Christy, J. H.,** and M. Salmon. 1991. Comparative studies of reproductive behavior in mantis

shrimps and fiddler crabs. *Amer. Zool*. 31:329-337.
15. Schober, U. M. and **J. H. Christy**. 1993. Sand disposal of the painted ghost crab *Ocypode gaudichaudii* (Decapoda: Ocypodidae): a possible role in courtship. *Marine Biology* 116:53-60.
16. **Christy, J. H.,** and U. M. Schober. 1994. A test for resource-defense mating in the fiddler crab *Uca beebei*. *Anim. Behav*. 48:795-802.
17. Morgan, S. G. and **J. H. Christy**. 1994. Plasticity, constraint and optimality in reproductive timing. *Ecology* 75(8):2185-2203
18. Morgan, S. G., and **J. H. Christy**. 1995. Adaptive significance of the timing of larval release. *Am. Nat*. 145:457-479.
19. Backwell, P. R. Y., M. D. Jennions, **J. H. Christy** and U. M. Schober. 1995. Pillar building in the fiddler crab *Uca beebei*: evidence for a condition-dependent ornament. *Behav. Ecol. Sociobiol.* 36:185-192.
20. **Christy, J. H.** 1995. Mimicry, mate choice and the sensory trap hypothesis. *Am. Nat*. 146:171-181.
21. **Christy, J. H.,** and P. R. Y. Backwell. 1995. The sensory exploitation hypothesis. *Trends Ecol. Evol.* 10:417.
22. Morgan, S. J., and **J. H. Christy**. 1996. Survival of marine larvae under the countervailing selective pressures of photodamage and predation. *Liminol. Oceanogr*. 41:498-504.
23. Strumbauer, C., J. S. Levinton and **J. H. Christy**. 1996. Molecular phylogeny of fiddler crabs: test of the hypothesis of increasing behavioral complexity in evolution. *Proc. Nat. Acad. Sci. USA* 93:10855-10857.
24. Levinton, J. S., C. Strumbauer and **J. H. Christy**. 1996. Molecular data and biogeography: resolution of a controversy over evolutionary history of a pan-tropical group of invertebrates. *J. Exp. Mar. Biol. Ecol*. 203:117-131.
25. Morgan, S. J., and **J. H. Christy**. 1997. Planktivorous fishes as selective agents for reproductive synchrony. *J. Exp. Mar. Biol. Ecol*. 209:89-101.
26. **Christy, J. H**. 1997. Deception: the correct path to enlightenment? *Trends Ecol. Evol.* 12: 160.
27. Backwell, P. R. Y., M. Jennions, N. I. Passmore and **J. H. Christy**. 1998. Synchronized courtship in fiddler crabs. *Nature* 391: 31-32.
28. **Christy, J. H.**, S. Goshima and T. J. Kreuter. 1998. Nemertean predation on the tropical fiddler crab *Uca musica*. *Hydrobiologia* 365:233-239.
29. Backwell, P. R. Y., P. O'Hara, and **J. H. Christy**. 1998. Shorebird foraging and estimating prey availability. *Anim. Behav*. 55:1659-1667.
30. Koga, T., P. R. Y. Backwell, M. D. Jennions, and **J. H. Christy**. 1998. Elevated predation risk changes mating behavior and courtship in a fiddler crab. *Proc. Royal Soc. B.* 265:1385-390.
31. **Christy, J. H**., and S. G. Morgan. 1998. Estuarine immigration by crab postlarvae: mechanisms, reliability, and adaptive significance. *Mar. Ecol. Prog. Ser.* 174:51-65
32. Backwell, P. R. Y., M. Jennions, **J. H. Christy** and N. I. Passmore. 1999. Female choice in the synchronously waving fiddler crab *Uca annulipes*. *Ethology* 105:415- 421.
33. Backwell, P. R. Y, **J. H. Christy**, S. R. Telford, M. D. Jennions and N. I. Passmore. 2000 Dishonest signaling by a fiddler crab. *Proc. Royal Soc. B.* 267:1-6.
34. Gray, H., and **J. H. Christy**. 2000. Predation by the grapsid crab, *Armases angustum*, on the

tadpoles of the green poison dart frog *Dendrobates auratus. Crustaceana* 78:1023-1025.
35. Koga, T., P.R.Y. Backwell, **J. H. Christy**, M. Murai and E. Kasuya. 2001. Male biased predation of a fiddler crab. *Anim. Behav.* 62:201-207.
36. **Christy, J. H.**, P. R. Y. Backwell and S. Goshima. 2001. The design and production of a sexual signal: hoods and hood building by male fiddler crabs *Uca musica*. *Behaviour* 138:1065-1083.
37. **Christy, J. H**., P. R. Y. Backwell, S. Goshima and T. Kreuter. 2002. Sexual selection for structure building by courting male fiddler crabs: an experimental study of behavioral mechanisms. *Behav. Ecol*. 13:366-374
38. deRivera, C. E., P. R. Y. Backwell, **J. H. Christy** and S. L. Vehrencamp. 2003. Density affects female and male mate searching in the fiddler crab *Uca beebei*. *Behav. Ecol. Sociobiol.* 53:72-83.
39. **Christy, J. H**., P. R. Y. Backwell and U. Schober. 2003. Interspecific attractiveness of structures built by courting male fiddler crabs: experimental evidence of a sensory trap *Behav. Ecol. Sociobiol.* 53:84-91.
40. **Christy, J. H**., J. Baum, and P. R. Y. Backwell. 2003. Attractiveness of sand hoods built by courting male fiddler crabs *Uca musica*: test of a sensory trap hypothesis. *Anim. Behav.* 66:89-94.
41. Jennions M.D., Backwell P.R.Y., Murai M., **Christy J. H.** 2003. Hiding behaviour in fiddler crabs: How long should prey hide in response to a potential predator? *Anim. Behav.* 66: 251-257
42. **Christy, J. H.** 2003. Reproductive timing and larval dispersal of intertidal crabs: the predator avoidance hypothesis. *Revista Chilena de Historia Natural* 76:177-185.
43. Kim, T. W., **J. H. Christy,** and J. C. Choe. 2004. Semidome building as sexual signaling in the fiddler crab Uca lactea (Brachyura: Ocypodidae) Journal *of Crust. Biol.* 24:673-679.
44. **Christy, J. H.** 2004. How did the lizard get its horns? *Science* 305:1909.
45. Backwell. P.R.Y, Jennions, M. D., Wada, K, Murai, M and **J. H. Chris**ty. 2006. Synchronous waving in two species of fiddler crabs. *Acta Ethologica* 9:22-25
46. **Christy, J. H.,** and P. R. Y. Backwell. 2006. No preference for exaggerated courtship signals in a sensory trap. *Anim. Behav.* 71:1239-1246
47. Ribeiro, P., **J. H. Christy**, J. R. Rissanen and T. W. Kim. 2006. Males are attracted by their own courtship signals. *Behav. Ecol. Sociobiol.* 61:81-89
48. **Christy, J. H**., and P. R. Y. Backwell. 2006. Signaling safety: fiddler crab courtship. *Wings: Essays on Invertebrate Conservation.* 29(2):13-17.
49. Kim, T. W., **Christy, J. H**. and J. C. Choe. 2007 Sexual signals of safety. *PLoS-One*, 5 (May 9): DOI: 10.1371/journal.pone.0000422
50. **Christy, J. H. 2007**. Predation and the reproductive behavior of fiddler crabs (genus *Uca*), pp. 211-231, In: Evolution of Social Behavior of Crustaceans (M. Thiel and J. E. Duffy, eds.) Oxford University Press: Oxford.
51. **Christy, J. H.** 2007. Imitación elección de pareja y la hipótesis de trampa sensorial, pp 127 – 134, In: Ecología y Evolución en los Trópicos, E. G. Leigh, Jr., E. A. Herre, J. B. C. Jackson, and F. Santos-Granero (eds). Panama, Editora Nova Art
52. Kim, T. W., **Christy J. H**., Dennenmoser, S., Choe, J. 2009. The strength of a female mate preference increases with predation risk. *Proc. Royal Soc. London B*. 276:775-780

53. Robertson, D.R., **Christy, J. H.**, Collin, R., Cooke, R. G., D'Croz, L., Kaufmann, K. W. Heckadon, S. M., Maté, J. L., O'Dea, A., and M. E. Torchin. 2009. The Smithsonian Tropical Research Institute: Marine Research, Education, and Conservation in Panama, pp. 72-93. In: M. A. Land, I. G. Macintyre and K. Rützler (eds), Proceedings of the Smithsonian Marine Science Symposium, *Smith. Cont. Mar. Sci. 38*, Smithsonian Institution Scholarly Press, DC.
54. Kim, T. W., **Christy, J. H**., Rissanen, J. R. Ribeiro, P. D. and J. Choe. 2010. The effect of food addition on the reproductive intensity and timing of both sexes of an intertidal crab. *Mar. Ecol. Prog. Ser.* 401:183-194
55. López-Duarte, P. C, **Christy, J. H.,** and R. A. Tankersley. 2011. A behavioral mechanism for dispersal in fiddler crab larvae (genus Uca) varies with adult habitat, not phylogeny. *Limno. Oceanog.* 56*:*1879-1892
56. **Christy, J. H.,** and D. Rittschof. 2011. Deception in visual and chemical communication in Crustaceans, pp 313-333. In: M. Thiel and T Breithaupt (eds.), Chemical Communication in Crustaceans. Springer, Heidelberg, Germany
57. **Christy, J. H.** 2011. Timing of egg hatching and larval release by brachyuran crabs: patterns, adaptive significance and control. *Int. Comp. Biol.* 51:62-72 doi: 10.1093/icb/icr013
58. Kasatani, A., Wada K., Yusa, Y. and **J. H. Christy**. 2011. Courtship tactics by male *Ilyoplax pusilla* (Brachyura, Dotillidae) *J. Ethol.* (online) doi: 10.1007/s10164-011-0296-7
59. Kerr, K. A., **Christy, J. H.**, Collin, R., and F. Guichard. 2012. Reducing error in reproductive timing caused by temperature variation: interspecific differences in behavioural adjustment by fiddler crabs. *Mar. Ecol. Prog. Ser.* 459: 1-16.
59. Dennenmoser, S. and **J. H. Christy**. 2013 The design of a beautiful weapon: compensation for opposing sexual selection on a trait with two functions. *Evolution* 67: 1181-1188.
60. Lombardo, R, **Christy, J. H**., and R. Cipriani. 2013 The false limpet *Siphonaria gigas*, a simultaneous hermaphrodite, lives in pairs on the Pacific coast of Panama. *Mar. Biol.* 160: 729-735.
61. Matsumasa, M., Murai, M. and **J. H. Christy**, 2013. A low-cost sexual ornament reliably signals male condition in the fiddler crab *Uca beebei. Animal Behaviour* 85: 1335-1341
62. Swanson, B. O., George M. N., Anderson S. P. and **J. H. Christy**. 2013. Evolutionary variation in the mechanics of fiddler crab claws. *BMC Evolutionary Biology* 13: 137
63. **Christy J. H.** 2013. The Design of a Beautiful Weapon. The Ocean Blog, The Ocean Portal. Endara, A., video; Waters, H, and Knolwton N., editors. National Museum of Natural History (09/09/2013).
64. Kerr, K.A., **Christy, J.H.**, Joly-Lopez, Z., Luque, J., Collin, R., and F. Guichard 2014. Timing reproduction when temperature varies: behavioral mechanisms in fiddler crabs. *PLoS ONE* 9(5): e97593. doi:10.1371/journal.pone.0097593.
65. How, M. J**., Christy**, **J. H**., Roberts, N. W. and N. J. Marshall 2014. Null point of discrimination in crustacean polarisation vision. *J. Exp. Biol.* 217, 2462-2467 doi: 10.1242/ jeb.103457
66. Kim, T. W., and **J. H. Christy** 2015. A mechanism for visual orientation may facilitate courtship in a fiddler crab. *Anim. Behav.* 101:61-66
67. Shih, H-T., Ng, P. K. L. and **J. H. Christy**. 2015. *Uca* (*Petruca*), a new subgenus for the rock fiddler crab *Uca panamensis* (Stimpson, 1859) from Central America, with comments on some species of *Minuca* Bott, 1954 and *Leptuca* Bott, 1973. *Zootaxa* 4034 (3): 471–494

68. How, M., **J. H. Christy**, Temple, S. E., Hemmi, J. M. Marshall, N. J and N. W. Roberts. 2015. Target detection is enhanced by polarization vision in a fiddler crab. *Current Biology* 25: 1-5
69. **Christy**, **J. H**., and K. Wada 2015. Social ethology. --- In: P. Castro, P.J.F. Davie, D. Guinot, F.R. Schram & J.C. Von Vaupel Klein (eds.), Treatise on Zoology – Anatomy, Taxonomy, Biology – The Crustacea, complementary to the volumes translated from the French of the Traité
70. Shih, H-T., Ng, P. K. L. & J. H. Christy. 2015. Uca (Petruca), a new subgenus for the rock fiddler crab Uca panamensis (Stimpson, 1859) from Central America, with comments on some species of Minuca Bott, 1954 and Leptuca Bott, 1973. Zootaxa 4034 (3): 471–494.de Zoologie, **9**(C)(I), Decapoda: Brachyura (Part 1). (Brill, Leiden.)
71. Lim, S., Yong, A. & **J. H. Christy** 2016. Ontogenetic changes in diet and related morphological adaptations of *Ocypode gaudichaudii*. *Invertebrate Biology* 135: 117-136.
72. **Christy, J. H.** 2015/2016 Traces, pp 73-79. In: M. M. Goosen (ed.) I. Kopelman; *Entanglement. Notes on Representation, Volume 7*. Roma Publications and the Smithsonian Tropical Research Institute, Panama.
73. Ribeiro, P. D., **Christy, J. H.**, Nuñez, J. D., and O. O. Iribarne 2016. Hood-building and mating mode in the temperate fiddler crab *Uca uruquayensis* Nobili, 1901. *J. Crust. Biol.* 36: 507-514.
74. deVries, M.S., Stock, B.C., Christy, J.H., Goldsmith, G.R., Dawson, T.E. 2016. Specialized morphology corresponds to a generalist diet: linking form and function in smashing mantis shrimp crustaceans. Oecologia 182: 429-442. doi:10.1007/s00442-016-3667-5
75. Perez D.M., **Christy J.H.**, and P. R. Y. Backwell 2016 (in press) Choosing a mate in a high predation environment: female preference in the fiddler crab *Uca terpischores*. *Ecol. Evol.* 6 (20), 7443-7450
76. Luque, J., **Christy, J**., Hendy, A. J. W., Rosenberg, M., Kerr, K. A., Portell, R. W., and Palmer, A. R. 2017 (in press) Quaternary intertidal and supratidal crabs (Decapoda, Brachyura) from tropical America and their systematic affinities. *Journal of Systematic Palaeontology* (manuscript No. TJSP-2016-0099)

Abstracts and book reviews

1. Christy, J. H. 1979. Resource-defense polygyny in the sand fiddler crab *Uca pugilator*. *Amer. Zool.* 19(4):933A.
2. Christy, J. H. 1984. Timing of larval release by crabs from cobble beaches on the Pacific Coast of Panama. *Amer. Zool*. 24(3):39A.
3. Christy, J. H. 1985. Studies in Adaptation: The Behavior of Higher Crustacea. S. Rebach and D. W. Dunham, eds. *BioScience.* 35(1):55.
4. Christy, J. H. 1985. Iconography in the courtship behavior of the fiddler crab *Uca beebei*. *Amer. Zool*. 25(4):60A
5. Christy, J. H. 1988. Attractiveness, mate Choice and a sensory trap in the fiddler crab *Uca beebei. Amer. Zool*. 28:133A.
6. Christy, J. H., S. Goshima and T. J. Kreuter. 1996. Incidental mate choice in the fiddler crab *Uca musica. Amer. Zool.* 36:93A.

7. Lombardo, R., J. H. Christy and J. R. Rissanen. 2005. Social monogamy in a simultaneous hermaphrodite. *SICB Final Program and Abstracts, 13.4, p. 180.*
8. Christy, J. H., J. R. Rissanen and P. R.Y. Backwell. 2006. A one-day pause in the biweekly courtship cycle of a tropical fiddler crab allows females to avoid releasing larvae during twilight. *Integ. Comp. Biol.* 45:977.
9. Christy, J. H. and S. Dennenmoser. 2007. Fiddler crab claws are both beautiful and powerful weapons: A paradox resolved. *Integ. Comp. Biol.* 46:e25.
10. Christy, J. H and L. E. Vargas. 2010. Allometry of male fiddler crab genitalia varies with size relationships in mating pairs: a test of the one-size-fits-all hypothesis *Integ. Comp. Biol.* 50 (suppl 1):e28
11. Christy, J. H. 2011. Timing of hatching in brachyuran crabs: patterns and control. *Integ. Comp. Biol.* 51 (suppl 1): e23
12. DeVries, M. S. and J. H. Christy. 2012 Why stomatopods are striking. *Integ. Comp. Biol.* 51 (suppl 1): e47
13. Christy, J. H. 2013. Extreme synchrony, amplitude modulation and phase reversals in the semilunar reproductive cycle of the intertidal false limpet *Siphonaria gigas* on a rocky shore in Panama. *Integ. Comp. Biol* 53 (suppl 1): e34

Research Presentations, 2010 – current

2010 Christy, L. E. Vargas. Allometry of male fiddler crab genitalia varies with size relationships in mating pairs: a test of the one-size-fits-all hypothesis. SICB Annual Meeting, Seattle

2010 Christy J. H. STRI: On Our Best Behavior. STRI Bambi seminar series, Barro Colorado Island

2010 Kerr, K. J. Christy, F. Guichard, R. Collin, Z. Joly-Lopez, J. Luque. Strategies for Timing Reproduction Across Temperature Variation in Fiddler Crabs (*Uca*): Implications for Precision of Larval Release. 35th Conference, Quebec Society for the Biological Study of Behaviour, Montreal.

2011 Christy, J.H. The Timing of Egg Hatching and Larval Release by Brachyuran Crabs: Patterns, Adaptive Significance and Control. Symposium: Environmentally Cued Timing Across Taxa; Society for Integrative and Comparative Biology Annual Meeting, Salt Lake City

2011 Christy, J.H and D. Rittschof. Deception in Visual and Chemical Communication in Crustaceans; Winter Animal Behavior Meeting, Steamboat Springs

2011 Christy, J.H. The Timing of Egg Hatching and Larval Release by Brachyuran Crabs: Patterns, Adaptive Significance and Control. Tupper Seminar Series, STRI, Panama

2011 Christy, J.H and D. Rittschof. Deception in Visual and Chemical Communication in Crustaceans; Tupper Seminar Series, STRI, Panama

2011 Christy J. H. and P. Ribeiro. Exaggeration of a Sexual Signal – Not by Female Choice; STRI, Culebra Nature Center. Three presentations to students from the University of Copenhagen, Eastern Carolina University and Butler University.

2011 Christy, J. H., P. C. López-Duarte, and R. A. Tankersley. How You Get to the Sea Depends on Where You Start Your Journey; The Crustacean Society Summer Meeting, Honolulu

2012 Christy, J. H., and S. Dennenmoser. The Design of a Beautiful Weapon. Winter Animal Behavior Meeting, Steamboat Springs

2012 deVries, M and J. H. Christy. Why stomatopods are striking. Society of Integrative and Comparative Biology, Charleston

2012, Portell, R. W., Luque, J., Hendy, A. J. W. and J. H. Christy. Fidelity of marine invertebrate death and fossil assemblages in a coastal marine ecosystem, Bahia Bique, Panama. Geological Society of America, Charlotte, SC

2012 Christy, J. H. The design of a beautiful weapon: compensation for opposing sexual selection on a trait with two functions. Bambi Seminar Series, Barro Colorado Island, Panama

2013 Christy, J. H. Extreme synchrony, amplitude modulation and phase reversals in the semilunar reproductive cycle of the intertidal false limpet *Siphonaria gigas* on a rocky shore in Panama, Contributed paper, Society of Integrative and Comparative Biology, January

2013 Christy, J. H. and Ribeiro, P. Exaggeration of a sexual signal – not by female choice. Contributed Paper, Winter Animal Behavior Society, January

2013 Christy, J. H., Ribeiro, P and Dennenmoser, S , Sexually-selected traits with multiple functions: exaggeration, pleiotropy and compensation, Invited and sponsored seminar, University of Texas, Austin, March

2013. Christy, J. H., Mistaking anthropomorphic metaphor for reality in studies of animal communication. Invited and sponsored seminar, University of Texas, Austin.March

2013 Christy, J. H. Ribeiro, P and Dennenmoser, S Sexually-selected traits with multiple functions: exaggeration, pleiotropy and compensation, COMPORTA 2013 - 1er Congreso Argentino de Biología del Comportamiento, Mar Del Plata, Invited and sponsored keynote speaker, April

2013 Christy, J. H. Ribeiro, P and Dennenmoser, S Sexually-selected traits with multiple functions: exaggeration, pleiotropy and compensation, Invited and sponsored seminar, University of Montana, May

2013 Christy, J. H., Mistaking anthropomorphic metaphor for reality in studies of animal communication.Invited and sponsored seminar, University of Montana, May

2013 Christy, J. H. What the dancing fiddler crabs has to tell us about natural and sexual selection. Invited talk, Savey Women Exchanging Relevant Views (SWERV, women's' discussion group), Bainbridge Island, August

2013 Christy, J. H. Ribeiro, P and Dennenmoser, S Sexually-selected traits with multiple functions: exaggeration, pleiotropy and compensation, invited and sponsored seminar University of Alberta, September

2013 Christy, J. H. Ribeiro, P and Dennenmoser, S. Sexually-selected traits with multiple functions: exaggeration, pleiotropy and compensation, invited and sponsored seminar, Gonzaga University, September

2013 Christy, J. H. What the dancing fiddler crab has to tell us about natural and sexual selection – Scary males, safe sex and sensory traps in fiddler crab courtship. Islandwood Learning Center, Bainbridge Island, December, invited presentation.

2014 Christy, J. H. Extreme synchrony, amplitude modulation and phase reversals in the semilunar reproductive cycle of the intertidal false limpet *Siphonaria gigas* on a rocky shore in Panama. Behavior Discussion Group, STRI, June

2014 Christy, J. H. Extreme synchrony, amplitude modulation and phase reversals in the semilunar reproductive cycle of the intertidal false limpet *Siphonaria gigas* on a rocky shore in Panama. International Society for Behavioral Ecology, New York, July

2015 Christy, J and Vargas, L. Sexual selection of fiddler crab genitalia behaves like Goldilocks. Winter Animal Behavior Conference, Steamboat Springs, Colorado
2015 How, M., Christy, J., Shelby E Temple, S. E., Hemmi, J. M., Marshall, N., and Roberts, N. Target detection is enhanced by polarization vision in a fiddler crab. Gordon Research Conference, Neuroethology: Behavior, Evolution & Neurobiology**,** Lucca, Italy.
2016 Maya S. deVries, M. S., Stock, B. C. and Christy, J. H. A vicious coral reef predator: morphological specialization broadens the diet of a mantis shrimp. 13th International Coral Reef Symposium, Hawai'i.
2016 Christy, J. H. Extreme synchrony, amplitude modulation and phase reversals in the semilunar reproductive cycle of the intertidal pulmonate limpet *Siphonaria gigas* on a rocky shore in Panama - and we think we know why! Winter Animal Behavior Conference, Steamboat Springs, Colorado

Advisor-mentor

I have advised approximately 95 students (interns through postdoctoral fellows) in 33 years on the STRI staff. Since my retirement and move to the USA, I have declined to mentor new students, except for largely independent postdoctoral fellows.
I currently (January 2017) advise:
Inga Geipel, Postdoctoral Fellow

Professional societies

Animal Behavior Society
Crustacean Society
International Society for Behavioral Ecology
Sigma Xi
Society for Integrative and Comparative Biology

Editorial services

Editorial Board, *Journal of Experimental Marine Biology and Ecology,* 1992-2016
Associate Editor, *Animal Behaviour*, 2009-2010

Reviewer for (50 journals, 5 granting agencies):

Journals: *American Naturalist, Animal Behaviour, Aquatic Biology, Behavioral Ecology, Behavioral Ecology and Sociobiology, Behaviour, Biological Bulletin, Biological Journal of the Linnaean Society, Biology Letters, Bio Medical Central – Biology*, *Biotropica, Bulletin of Marine Science, Crustaceana, Current Biology, Current Zoology, Ecological Monographs, Ecology,*

Estuaries, Ethology, Evolution, Fisheries Research, Functional Ecology, Gulf and Caribbean Research, Hydrobiologia, Invertebrate Biology, Invertebrate Reproduction and Development, Journal of Benthic Research, Journal of Biogeography, Journal of Crustacean Biology, Journal of Ethology, Journal of Evolutionary Biology, Journal of Experimental Marine Biology and Ecology, Journal of the Marine Biological Association of the United Kingdom, Journal of Zoology, Journal of Zoological Sciences, Limnology and Oceanography, Marine and Freshwater Research, Marine Biology, Marine Ecology, Marine Ecology Progress Series, Nature Communications, Naturwissenshaft, Oecologia, *Physiological and Biochemical Zoology, Proceedings of the Royal Society B*, *Physiological and Biochemical Zoology, Proceedings of the National Academy of Sciences, Psyche, Trends in Ecology and Evolution, Waterbirds*

Granting agencies: Biotechnology and Biological Sciences Research Council, UK., Marsden Fund, New Zealand; National Geographic Society, National Research Council, Canada, National Science Foundation, USA.

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