Personal data

Date and place of birth: June 28th, 1958, Uelzen (Germany)
Nationality: German
Family status: Married, one daughter

Narrative

I was trained in Zoology by Carl Hauenschild and in Biochemistry by Fritz Wagner (both Technical University Braunschweig, Germany), in marine ecology by Peter Frank (Woods Hole), in evolutionary theory by Leo Buss (Yale University, postdoctoral advisor), and in molecular genetics by Stephen Dellaporta and Frank Ruddle (Yale University, postdoctoral and research associate advisors). My training in evolutionary and ecological genetics has arisen from running laboratories at Frankfurt University (Ass. Professor), Freiberg University (Assoc. Professor) and Hannover TiHo University (Full Professor) and from working as a Research Associate in different departments at Yale University and at the AMNH New York (Dept. of Invertebrates). Taking advantage of my very strong and traditional organismal training in Germany and my more modern education in the US , I have been combining the bests of both worlds to find new integrative avenues in evolutionary and conservation biology.

Education and Honors

09/28 1979	B.Sc. Biology	Technical University Braunschweig (TUB, Germany)
04/29 1983	B.A. Psychology	TUB
04/28 1984	M.Sc. Biology	TUB (special honors degree'summa cum laude')
SS 1987	'Marine Ecology'	Woods Hole, USA
04/28 1989	Ph.D.	TUB (special honors degree'summa cum laude')
06/06 1994	Habilitation	Frankfurt University (Venia legendi for zoology)
05/13-04/2014	Distinguished Sabbatical Fellow at NESCent (Duke University)	

Academic Positions

5/89 - 3/92	Postdoctoral Research Fellow in the Department of Biology, Yale University, New Haven, USA
4/92 - 5/94	Assistant Professor in the Dept. of Biology, Univ. of Frankfurt, Germany
6/94 – 9/98	Associate Professor (non-tenure) in the Department of Biology, Frankfurt University, Germany
10/98 - 10/99	Associate Professor in the Department of Ecology & Evolution, Freiberg University, Germany
7/13 - 5/14	Distinguished Sabbatcial Scholar at NESCent, Duke University
since 01/93	Research Associate Yale University
since 05/94	Research Affiliate at the Am. Museum of Natural History, New York
since 10/99	Director ITZ and Professor of Zoology, TiHo University Hannover, Germany

Editorial Board/ Associate Editor

Former: J Experimental Zoology (Molecular and Developmental Evolution, MDE),
The Open Gene Therapy Journal (TOGTJ), Open Journal of Genetics (and 8 others)
Present: ERMS register, Molecular Phylogenetics and Evolution (MPE), J of Ecol and Nat Env (JENE),
Frontiers in Ecology & Evolution, PLoS ONE, BioEssays

Grants/Fellowships

1985-1987	Niedersachsen State Graduation Fellowship
1987	Herbert W. Rand Fellowships (Woods Hole, USA)
	German Academic Exchange Fellowship (DAAD)
1989-1992	German Science Foundation (DFG) Postdoctoral Fellowship
1991-1993	NATO Collaborative Research Grant
1992-1994	Helmholtz Research Grant (BMFT, Germany)
1993	German Science Foundation (DFG) Research Grant

1993	Freunde & Förderer J.W. Goethe-University Research Grant
1994	Hermann-Willkomm Research Grant
1994-1995	NATO Collaborative Research Grant
1995	German Science Foundation (DFG) Travel Grant
1996	Freunde & Förderer J.W. Goethe-University Research Grant
1996	German Science Foundation (DFG) Travel Grant
1996	Conservation Biology Award for Graduate Student Project 1996
1997-1999	German Science Foundation (DFG) Research Grant
2000-2003	German Science Foundation (DFG) Research Grant
2003-2005	German Science Foundation (DFG) Research Grant
2001-2005	BMBF Germany (Co-PI)
2001-2005	Human Frontier Science Program (HFSP) Research Award (Co-PIs: Drs. Stephen Dellaporta (Yale) and Peter Holland (Oxford); US$ 750.000).
2006	National Institute of Health (NIH) *Trichoplax* White Paper (Co-PI)
2005-2007	DFG Schi 277/21-1 (Co-PI 8.000 EUR)
	DFG Schi 277/20-1 ('Deep Phylogenies'; 100.000 EUR)
2007	National Science Foundation (NSF DEB-0706893: $5.000.00; SICB Symposium, BS. and Rob DeSalle organizers)
2007-2009	DFG Schi 277/24-2 (Co-PI 11.500 EUR)
	DFG Schi 277/20-2 ('Deep Phylogenies'; 110.000 EUR)
2009-2011	DFG Schi 277/24-3 (Co-PI 11.500 EUR)
	DFG Schi 277/20-3 ('Deep Phylogenies'; 120.000 EUR)
2010-2013	DFG SCHI 277/26-1 ('Placozoa Genetics', 160.000 EUR)
2014-2017	DFG SCHI 277/29-1 ('Placozoa Ecology, 260.000 EUR)

Other Awards

NESCent (Duke University) Distinguished Sabbatical Fellow (2013/14), Senior Ecologist of the Ecological Society of America (2009), Research Associate Yale University (since 1993), Research Associate AMNH, New York (since 1994), Helmholtz, Habilitation Award (1992), Honorary degree TU Braunschweig (1984, 1989), Lower Saxony Graduate Research Award (1985). For my students: Procter & Gamble Environmental Research Prize to Werner Schroth (graduate student), Smithsonian National Museum of Natural History Scientific Achievement Award to Allen Collins (postdoc), National championship and State championship „Young Researcher Award' in earth and spatial sciences to Anna Kernspecht (undergraduate), Alexander von-Humboldt host for Dr. DeJong. 19 graduate students fellowship awards from national and international competition.

Symposia and Meetings Organized

Mol. Genetics of Hydrozoa (Symposium, 3rd Meeting Hydroz Soc, Bodega Bay, USA), 1999
Hox genes and metazoan radiation (Symposium, 8th Congress ESEB, Aarhus, DK), 2001
1st International *Trichoplax* Consortium Meeting (Angus, UK), 2002
2nd International *Trichoplax* Consortium Meeting (Faro, Portugal), 2003
3rd International *Trichoplax* Consortium Meeting (Tampa, USA), 2005
SICB Symposium 'Key Transitions in Animal Evolution' (Phoenix, USA) 2007
1st North German Ecology, Evolution and Development Symposium (Hannover, Germany) 2007
German Science Foundation DMPP Annual Status Meeting (2011)
3rd North German Ecology, Evolution and Development Symposium (Hannover, Germany) 2012

Publications

Books and Volumes:

1. Schierwater B, Streit B, Wagner GP, DeSalle R, eds. (1994) *Molecular Ecology and Evolution: Approaches and Applications*. Birkhäuser, Basel-Boston, 622 pp.
2. DeSalle R, Schierwater B, eds. (1998) *Molecular Approaches to Ecology and Evolution*. Birkhäuser, Basel-Boston, 364 pp.
3. Schierwater B, DeSalle R, eds. (2002) *Hox genes and metazoan radiation*. Special volume Molecular Phylogenetics and Evolution. Academic Press, San Diego, 64 pp.
4. DeSalle R, Schierwater B, eds. (2011) *Key Transitions in Animal Evolution*. Science Publishers & CRC Press, Enfield, 434 pp.
5. Schierwater B, Stadler PF, DeSalle R, Podsialowski, L, eds. (2013) *Mitogenomics and Metazoan Evolution*. Special

volume Molecular Phylogenetics and Evolution. Elsevier, Amsterdam, 311-416.

6. Schierwater B and DeSalle R (2015) Invertebrate Zoology: A Tree of Life Approach. Taylor & Francis, Boca Raton, FL USA 8in prep.).

Selected Review Articles, Book Chapters and Short Communications:

7. Schierwater B, Trager G (1987) Don´t eat if Neptune is angry. Biol Bull 173: 433.
8. Schierwater B, Hauenschild C (1991) Ökologische und genetische Zwänge der Fitness-Optimierung im Fortpflanzungswechsel einer halbsessilen Hydromeduse. Verh Dtsch Zool Ges 84: 326-327.
9. Schierwater B (1992) Ecophysiological consequences of the occurrence of contractile vacuoles in the life cycle of the hydromedusa Eleutheria dichotoma. Verh Dtsch Zool Ges 85: 38.
10. Ender A, Schierwater B (1993) Identification of nuclear markers in Daphnia hybrid complexes by Random amplified Polymorphic DNA (RAPD). Verh Dtsch Zool Ges 86: 45.
11. Kuhn K, Schierwater B (1993) Strain diagnostic RAPD markers in Ancylus fluviatilis. Verh Dtsch Zool Ges 86: 54.
12. Schierwater B, Ender A, Streit B (1993) The use of RAPD markers in molecular phylogenies. Verh Dtsch Zool Ges 86: 58.
13. Streit B, Städler T, Kuhn K, Loew M, Schierwater B (1993) Probing genetic differentiation in Basommatophoran snails using nuclear markers. Verh Dtsch Zool Ges 86: 61.
14. Schierwater B (1994) Die Bedeutung von DNA-Merkmalen für die Analyse phylogenetischer Beziehungen innerhalb der Cnidaria. In: Gutman WF, Mollenhauer D, Peters DS (eds.) *Morphologie & Evolution*. Symp 175 J Senck Naturf Ges . Kramer Verlag, Frankfurt/M: 435-442.
15. Schierwater B, Ender A, Schwenk K, Spaak P, Streit B (1994) The evolutionary ecology of Daphnia. In: Schierwater B, Streit B, Wagner GP, DeSalle R (eds.) *Molecular Ecology and Evolution: Approaches and Applications*. Birkhäuser, Basel-Boston: 495-508.
16. Streit B, Städler T, Kuhn K, Loew M, Brauer M, Schierwater B (1994) Molecular markers and evolutionary processes in hermaphrodite freshwater snails. In: Schierwater B, Streit B, Wagner GP, DeSalle R (eds.) *Molecular Ecology and Evolution: Approaches and Applications*. Birkhäuser, Basel-Boston: 247-260.
17. DeSalle R, Schierwater B (1994) Molecular Systematics. In: Schierwater B, Streit B, Wagner GP, DeSalle R (eds.) *Molecular Ecology and Evolution: Approaches and Applications*. Birkhäuser, Basel-Boston: 283-284.
18. Schierwater B (1996) Homeobox genes and macroevolution? Verh Dtsch Zool Ges 89: 257.
19. Schierwater B, Ender, A, Schroth W, Diez A, Streit B, Holzmann H, Hadrys H (1997) Arbitrarily amplified DNA in ecology an evolution. In: Caetano-Anolles G and Gresshoff PM (eds.) *DNA markers: Protocols, Applications and overviews*. John Wiley & Sons, New York: 313-330.
20. Schierwater B, DeSalle R (1998) Population biology, kinship and fingerprinting. In: DeSalle R, Schierwater B (eds.) *Molecular Approaches to Ecology and Evolution*. Birkhäuser, Basel-Boston: 1-5.
21. DeSalle R, Schierwater B (1998) Higher Taxa and Systematics. In: DeSalle R, Schierwater B (eds.) *Molecular Approaches to Ecology and Evolution*. Birkhäuser, Basel-Boston: 125-129.
22. DeSalle R, Schierwater B (1998) Algorithms. In: DeSalle R, Schierwater B (eds.) *Molecular Approaches to Ecology and Evolution*. Birkhäuser, Basel-Boston: 237-242.
23. Schierwater B, DeSalle R (2002) Evolution and development. Mol Phylogenet Evol 24: 343-344.
24. Dellaporta SL, Buss ?, Weinstock G, Schierwater B (2003) The Trichoplax Genome Consortium. Integr Comp Biol 43: 888
25. Schierwater B, Sallmann H-P (2004) Biodiversity: more crucial than ever. Forschungsmagazin Tierärztliche Hochschule Hannover: Umwelt und Biodiversität, VMK Verlag, 1-2.
26. Schierwater B (2004) Die Messbarkeit von Biodiversität – Ein einfaches Beispiel: Ein Tierstamm mit nur einer Art. Forschungsmagazin Tierärztliche Hochschule Hannover: Umwelt und Biodiversität, VMK Verlag, 6-9.
27. DeSalle R, Schierwater B (2007) Key transitions in animal evolution. Integr Comp Biol 47: 667-669.
28. Schierwater B (2007) Placozoa. In: *McGraw-Hill Encyclopedia of Science & Technology*. 10th ed. McGraw-Hill, N.Y.C.: 621-623.
29. Ball EE, de Jong DM, Schierwater B, Shinzato C, Hayward DC, Miller DJ (2010) Cnidarian gene expression patterns and the origins of bilaterality – are cnidarians reading the same game plan as “higher” animals? In: Schierwater B, DeSalle R, (eds.) *Key Transitions in Animal Evolution*. Science Publishers & CRC Press Enfield pp. 197-216.
30. Schierwater B, DeSalle R (2011) A phylogenomic journey through the animal tree of life: Key innovations in the evolution of Metazoa. In: Schierwater B, DeSalle R, (eds.) *Key Transitions in Animal Evolution*. Science Publishers & CRC Press Enfield, V-IX.
31. Schierwater B, Eitel M, Osigus HJ, von der Chevallerie K, Bergmann T, Hadrys H, Cramm M, Heck L, Jakob W, Lang M, DeSalle R (2011) Trichoplax and Placozoa: one of the crucial keys to understanding metazoan evolution. In: Schierwater B, DeSalle R, (eds.) *Key Transitions in Animal Evolution*. Science Publishers & CRC Press Enfield, pp. 289-326.
32. Schierwater B, Eitel M, von der Chevallerie K, Jakob W (2011) Der Ursprung der Zelldifferenzierung in Metazoen. Forschungsmagazin Tierärztliche Hochschule Hannover: Umwelt und Biodiversität, IPV Medien, 79-82.
33. Schierwater B (2013) Placozoa, Plattentiere. In Westheide W, Rieger R (eds.) *Spezielle Zoologie, Teil 1: Einzeller und Wirbellose Tiere*. Spektrum Verlag; 3. Auflage, (in press)
34. Bernt M, Merkle D, Middendorf M, Schierwater B, Schlegel M, Stadler PF (2013) Computational Methods for Analyses of Mitochondrial Genome Rearrangements. In *Deep Metatzoan Phylogeny The Backbone of the Tree of Life*. De

Gruyter, pp. (in press)

35. Eitel M, Jakob W, Osigus H-J, Paknia o, vdChevallerie K, Bergmann, T, Schierwater B (2013) Trying to resolve the base of the Metazoa. In *Deep Metazoan Phylogeny The Backbone of the Tree of Life*. De Gruyter, pp.
36. Schierwater B, Eitel M (2015) Placozoa. In: Evol Dev Biol Inv I (A. Wanninger, Editor), pp.107-114.
37. DeSalle R, Schierwater B, Hadrys H, (2016) MtDNA: The Tiny Workhorse of Evolutionary Studies. Frontiers Biology (in press).

Peer Reviewed Research Articles:

38. Schierwater B, Klingel H (1985) Food digestibility and water requirements in the djungarian hamster *Phodopus sungorus*. Z Säugetierkd 50: 35-39.
39. Schierwater B, Klingel H (1986) Energy costs of reproduction in the djungarian hamster *Phodopus sungorus* under laboratory and seminatural conditions. Oecologia 69: 144-147.
40. Schierwater B, Mrowka W (1987) Factors influencing oxygen consumption in the cichlid fish *Pseudocrenilabrus multicolor*. Zool Anz 219: 305-312.
41. Mrowka W, Schierwater B (1988) Energy expenditure for mouthbrooding in a cichlid fish. Behav Ecol Sociobiol 22: 161-164.
42. Schierwater B (1989) Allometric changes during growth and reproduction in *Eleutheria dichotoma* (Hydrozoa, Athecata) and the problem of estimating body size in a microscopic animal. J Morphol 200: 255-267.
43. Schierwater B, Hauenschild C (1990) A photoperiod determined life-cycle in an oligochaete worm. Biol Bull 178: 111-117.
44. Schierwater B, Hauenschild C (1990) The position and consequences of a vegetative mode of reproduction in the life-cycle of a hydromedusa and an oligochaete worm. Adv Inv Reprod 5: 37-42.
45. Hadrys H, Schierwater B, Mrowka W (1990) The feeding behaviour of a semi-sessile hydromedusa and how it is affected by the mode of reproduction. Anim Behav 40: 935-944.
46. Schierwater B, Murtha M, Dick M, Ruddle FH, Buss LW (1991) Homeoboxes in Cnidarians. J Exp Zool 260: 413-416.
47. Schierwater B, Piekos B, Buss LW (1992) Hydroid stolonal contractions mediated by contractile vacuoles. J Exp Biol 162: 1-21.
48. Hadrys H, Balick M, Schierwater B (1992) Applications of random amplified polymorphic DNA (RAPD) in molecular ecology. Mol Ecol 1: 55-63.
49. Bridge D, Cunningham CW, Schierwater B, DeSalle R, Buss LW (1992) Class-level relationships in the phylum Cnidaria: Evidence from mitochondrial genome structure. Proc Natl Acad Sci USA 89: 8750-8753.
50. Hadrys H, Schierwater B, DeSalle R, Dellaporta S, Buss LW (1993) Determination of paternities in dragonflies by Random Amplified Polymorphic DNA fingerprinting. Mol Ecol 2: 79-87.
51. Schierwater B, Ender A (1993) Different thermostable DNA polymerases may amplify different amplification patterns. Nucl Acids Res 21: 4647-4648.
52. Streit B, Städler T, Schwenk K, Ender A, Kuhn K, Schierwater B (1994) Natural hybridization in freshwater animals. Ecological implications and molecular tools. Naturwissenschaften 81: 65-73.
53. Schroth W, Schierwater B, Joger J, Streit B (1995) Populationsgenetische Untersuchungen an Mittelmeerkolonien der Unechten Karettschildkröte Caretta caretta. Verh Ges Oekol 24: 151-154.
54. Schierwater B (1995) Arbitrarily amplified DNA in systematics an phylogenetics. Electrophoresis 16: 1643-1647.
55. Schierwater B (1995) Developmental genes as a potential tool to population ecology of complex animal life-cycles? Experientia 51: 539-544.
56. Ender A, Streit B, Städler T, Schwenk K, Schierwater B (1996) RAPD identification of microsatellites in Daphnia. Mol Ecol 5: 437-441.
57. Kuhn K, Streit B, Schierwater B (1996) Homeobox genes in the cnidarian Eleutheria dichotoma: Evolutionary implications for the origin of Antp-class (HOM/Hox) genes. Mol Phylogenet Evol 6: 30-38.
58. Schierwater B, Metzler D, Krüger K, Streit B (1996) The effects of nested primer binding sites on the reproducibility of PCR: Mathematical modeling and computer simulation studies. J Comput Biol 2: 235-251.
59. Schroth W, Streit B, Schierwater B (1996) Evolutionary handicap for sea turtles. Nature 384: 521-522.
60. Prinzinger R, Becker P, Klein JP, Schroth W, Schierwater B (1997) The taxonomic status of Laniarius dubiosus (Rchw. 1899) with additional data on type description of Laniarius liberatus, Bulo Burti Boubou (Smith, Arctander, Fjeldsa & Amir 1991). J Ornithol 138: 283-289.
61. Prinzinger R, Schroth W, Klein JP, Schierwater B (1997) DNA sequence analysis of mitochondrial Cyt-b and the species status of Lanarius dubiosus (Rchw. 1899). J Ornithol 138: 291-296.
62. Ender A, Streit B, Schierwater B (1997) Random amplified microsatellites (RAMS) in Daphnia. Dt Ges Limnol Tagsber 149-152.
63. Schierwater B, Kuhn K (1998) Homology of Hox genes and the zootype concept in early metazoan evolution. Mol Phylogenet Evol 9: 375-381.
64. Schroth W, Streit B, Schierwater B (1998) 'Natal Homing' bei der Meeresschildkröte Caretta caretta: RAPD- und mtDNA-Analyse. Dt Ges Limnol Tgsber 193-196.
65. Schierwater B, Hadrys H (1998) Environmental factors and metagenesis in the hydroid Eleutheria dichotoma. Invertebr Reprod Dev 34: 139-148.
66. Laurent L, Casale P, Bradai MN, Godley BJ, Gerosa G, Broderick C, Schroth W, Schierwater B, Levy AM, Freggi D, Abd El-Mawla NEM, Hadoud DA, Gomati HE, Domingo M, Hadjichristophorou M, Kornaraky L, Dmirayak F, Gautier

Ch (1998) Molecular resolution of marine turtle stock composition in fishery bycatch: a case study in the Mediterranean. Mol Ecol 7: 1529-1542.
67. Mokady O, Dick M, Laschkewitz D, Schierwater B, Buss LW (1998) Over one-half billion years of head conservation? Expression of an ems class gene in Hydractinia symbiolongicarpus (Cnidaria: Hydrozoa). Proc Natl Acad Sci USA 95: 3673-3678.
68. Kuhn K, Streit B, Schierwater B (1999) Isolation of Hox genes from the Scyphozoan Cassiopeia xamachana: Implications for the early evolution of Hox genes. J Exp Zool, Mol Dev Evol 285: 63-75.
69. Schierwater B, Ender A (2000) Sarsia marii spec. nov. (Hydrozoa, Anthomedusae) and the use of 16S rDNA sequences for unpuzzling systematic relationships in Hydrozoa. Sci Mar 64: 117-122.
70. Schierwater B, DeSalle R (2001) Current Problems With the Zootype and the Early Evolution of Hox Genes. J Exp Zool, Mol Dev Evol 291: 169-174.
71. Syed T, Schierwater B (2002) The Evolution of the Placozoa: A new morphological model. Senckenb Lethaea 82: 315-324.
72. Schroth W, Jarms G, Streit B, Schierwater B (2002) Speciation and phylogeography in the cosmopolitic marine moon jelly, Aurelia sp. BMC Evol Biol 2: 1-10.
73. Schierwater B, Dellaporta S, DeSalle R (2002) Is the evolution of Cnox-2 Hox/ParaHox genes multicolored and polygenealogical? Mol Phylogenet Evol 24: 374-378.
74. Sarkar IN, Thornton JW, Planet PJ, Figurski DH, Schierwater B, DeSalle R (2002) An automated phylogenetic key for classifying homeoboxes. Mol Phylogenet Evol 24: 388-399.
75. Syed T, Schierwater B (2002) Trichoplax adhaerens: discovered as a missing link, forgotten as a hydrozoan, re-discovered as a key to metazoan evolution. Vie Milieu 52: 177-187.
76. Collins AG, Meina M, Collins JA, Schierwater B (2003) 28S rDNA data further resolve the phylogeny of Cnidaria. Integ Comp Biol 43: 804
77. Ender A, Schierwater B (2003) Placozoa are not derived cnidarians: Evidence from molecular morphology. Mol Biol Evol 20: 130-134.
78. Jakob W, Sagasser S, Dellaporta SL, Holland PW, Kuhn K, Schierwater B (2004) The Trox-2 Hox/ParaHox gene of Trichoplax (Placozoa) marks an epithelial boundary. Dev Genes Evol 214: 170-175.
79. Voigt O, Collins AG, Pearse VB, Pearse JS, Hadrys H, Ender A, Schierwater B (2004) Placozoa: no longer a phylum of one. Curr Biol 14: R1-R3, R944-R945.
80. Moeller A, Sagasser S, Wiltschko W, Schierwater B (2004) Retinal cryptochrome in a migratory passerine bird: a possible transducer for the avian magnetic compass. Naturwissenschaften 91: 585-588.
81. Collins AG, Winkelmann S, Hadrys H, Schierwater B (2005) Phylogeny of Capitata (Cnidaria, Hydrozoa) and Corynidae in light of mitochondrial 16S rDNA data. Zool Scr 34: 91-99.
82. Hadrys T, DeSalle R, Sagasser S, Fischer N, Schierwater B (2005) The trichoplax PaxB gene: a putative proto-PaxA/B/C gene predating the origin of nerve and sensory cells. Mol Biol Evol 22: 1569-1578.
83. Tomassetti P, Voigt O, Collins AG, Porrello S, Pearse VB, Schierwater B (2005) Placozoans (Trichoplax adhaerens Schulze 1883) in the Mediterranean sea. Meiofauna Marina. 14: 5-7.
84. Schroth W, Ender A, Schierwater B (2005) Molecular biomarkers and adaptation to environmental stress in the moon jelly (Aurelia spp.). Mar Biotechnol 7: 449-461.
85. Collins AG, Cartwright P, McFadden CS, Schierwater B (2005) Phylogenetic Context and Basal Metazoan Model Systems. Integr Comp Biol 45: 585-594.
86. Stoletzki N, Schierwater B (2005) Genetic and color morph differentiation in the Caribbean sea anemone Condylactis gigantea. Mar Biol 147: 747-754.
87. Schierwater B (2005) My favorite animal, Trichoplax adhaerens. BioEssays 27: 1294-1302.
88. Hadrys H, Schroth W, Streit B, Schierwater B, Fincke O (2005) Tree hole odonates as environmental monitors: Non-invasive isolation of polymorphic microsatellites from the neotropical damselfly Megaloprepus caerulatus. Cons Gen 6(3): 481 - 483
89. Collins A, Bentlage B, Matsumoto G, Haddock S, Osborn K, Schierwater B (2006) Solution to the phylogenetic enigma of Tetraplatia, a worm-shaped cnidarian. Biol Lett 2: 120-124.
90. Collins AG, Schuchert P, Marques AC, Jankowski T, Medina M, Schierwater B (2006) Medusozoan phylogeny and character evolution clarified by new large and small subunit rDNA data and an assessment of the utility of phylogenetic mixture models. Syst Biol 55: 97-115.
91. Monteiro AS, Schierwater B, Dellaporta S, Holland PWH (2006) A low diversity of ANTP class homeobox genes in Placozoa. Evol Dev 8:174-182.
92. Cartwright P, Schierwater B, Buss LW (2006) Expression of a Gsx parahox gene, Cnox-2, in colony ontogeny in Hydractinia (Cnidaria: Hydrozoa). J Exp Zool, Mol Dev Evol 306B: 460-469 (DOI: 10.1002/jez.b.21106).
93. Kamm K, Schierwater B, Jakob W, Miller D (2006) Axial patterning and diversification in the Cnidaria predate the Hox system. Curr Biol 16: 920-926.
94. Dellaporta SL, Xu A, Sagasser S, Jakob W, Moreno MA, Buss LW, Schierwater B (2006) Mitochondrial genome of Trichoplax adhaerens supports Placozoa as the basal lower metazoan phylum. Proc Natl Acad Sci USA 103: 8751–8756.
95. Kamm K, Schierwater, B (2006) Ancient complexity of the Non-Hox ANTP Gene Complement in the Anthozoan Nematostella vectensis. Implications for the Evolution of the ANTP Superclass. J Exp Zool, Mol Dev Evol 306B: 589–

596.
96. Schierwater B, DeSalle R (2007) Can we ever identify the Urmetazoan? Integr Comp Biol 47: 670-676.
97. Boero F, Schierwater B, Piraino S (2007) Cnidarian milestones in metazoan evolution. Integr Comp Biol 47: 693-700.
98. Ball EE, de Jong DM, Schierwater B, Shinzato C, Hayward DC, Miller DJ (2007) Implications of cnidarian gene expression patterns for the origins of bilaterality-is the glass half full or half empty? Integr Comp Biol 47: 701-711.
99. Jakob W, Schierwater B (2007) Changing hydrozoan bauplans by silencing Hox-like genes. PlosOne 8: e694.
100. Kamm K, Schierwater B (2007) Ancient linkage of a POU class 6 and an anterior Hox-like Gene in cnidaria: implications for the evolution of homeobox genes. J Exp Zool, Mol Dev Evol 308B: 777-784.
101. Rach J, DeSalle R, Sarkar IN, Schierwater B, Hadrys H (2008) Character-based DNA barcoding allows discrimination of genera, species and populations in Odonata. Proc R Soc London B 275: 237-247.
102. Srivastava M, Begovic E, Chapman J, Putnam N, Hellsten U, Kawashima T, Kuo A, Mitros T, Carpenter M, Signorovich A, Moreno M, Kamm K, Shapiro H, Grigoriev I, Buss L, Schierwater B, Dellaporta S, Rokhsar D (2008) The Trichoplax Genome and the Enigmatic Nature of Placozoans. Nature 454: 955-960.
103. Schierwater B, Kamm K, Srivastava M, Rokhsar D, Rosengarten RD, Dellaporta SL (2008) The Early ANTP Gene Repertoire: Insights from the Placozoan Genome. PLoS ONE 3: e2457.
104. DeSalle R, Schierwater B (2008) An even "newer" animal phylogeny. BioEssays 30: 1043-1047.
105. Schierwater B, de Jong D, DeSalle R (2009) Placozoa, and the evolution of Metazoa and intrasomatic cell differentiation. Int J Biochem Cell Biol 41: 370–379 (doi:10.1016/j.biocel.2008.09.023).
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107. Schierwater B, Eitel M, Jakob W, Osigus HJ, Hadrys H, Dellaporta S, Kolokotronis SO, DeSalle R (2009) Concatenated Molecular and Morphological Analysis Sheds Light on Early Metazoan Evolution and Fuels a Modern "Urmetazoon" Hypothesis. PlosBiology 7: 36-44: e1000020.
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