CURRICULUM VITAE

**Carl D. Schlichting**

Professor and Head

Department of Ecology and Evolutionary Biology

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**EDUCATION**

1984 Ph.D. in Botany, University of Texas at Austin. Donald A. Levin, advisor. Dissertation: "Studies on phenotypic plasticity in annual *Phlox*"

1980 M.A. in Biology (Ecology and Evolution), SUNY at Stony Brook. Douglas J. Futuyma, advisor. Thesis: "Wound‑induced responses of forest trees to gypsy moth herbivory"

1976 B.S. in Zoology, Ohio State University.

**PROFESSIONAL EXPERIENCE**

2014-present: *Head*, Department of Ecology and Evolutionary Biology, University of Connecticut

2002-present: *Professor*, Department of Ecology and Evolutionary Biology, University of Connecticut, Storrs Campus.

2000-2002: *Professor*, Department of Ecology and Evolutionary Biology, University of Connecticut, Hartford Regional Campus.

1994-2000: *Associate Professor*, Department of Ecology and Evolutionary Biology, University of Connecticut, Hartford Regional Campus.

1988‑1994: *Assistant Professor*, Department of Ecology and Evolutionary Biology, University of Connecticut, Hartford Regional Campus.

 1984‑1988: *Postdoctoral* - Research scientist, Department of Biology, Penn State University; advisor, Andrew G. Stephenson.

**RESEARCH AREAS**

Phenotypic evolution; Evolution and ecology of phenotypic plasticity (reaction norms).

## RESEARCH GRANTS

External

2012- Dimensions of Biodiversity: ParallelEvolutionary radiations in *Protea* and

 2016 *Pelargonium* in the Greater Cape Floristic Region. **National Science Foundation** (DEB-1242294) ***C.D. Schlichting****,* K.E. Holsinger,C.S. Jones. $**512,000.** (was Collaborative ***NSF***: J.O. Borevitz, University of Chicago: $**544,558.**)

2011- Dimensions of Biodiversity: ParallelEvolutionary radiations in *Protea* and

 2015 *Pelargonium* in the Greater Cape Floristic Region. **NSF** (DEB-1046328). ***C.D. Schlichting****,* K.E. Holsinger,C.S. Jones & J.A. Silander: $**1,976,670**. (Collaborative ***NSF***: A.M. Latimer, University of California, Davis: $**475,414.)**

2006- International Research Experience for Students - Biodiversity Hotspots:

 2010 Ecological and Evolutionary Patterns and Process in the Cape Floristic Region

of South Africa. ***NSF***(OISE-0623341). J.A. Silander, K.E. Holsinger,C.S. Jones, ***C.D. Schlichting***: $**149,923**.

2008- Dissertation Research: Do egg size effects cascade through salamander

2010 ontogeny? Allometric engineering of maternal provisioning. ***C.D. Schlichting***, K. Schwenk and T. Landberg. ***NSF****:* $**12,000**.

2000 - A multilevel investigation of leaf shape diversification in *Pelargonium.* A.B.

 2002 Nicotra, C.S. Jones, ***C.D. Schlichting***. ***Australian National Research Council***,

 *A*$**111,000**.

1993 - Genetics of reaction norms of *Arabidopsis*.

 1995 ***C.D. Schlichting***. ***NSF*** *Population Biology*, $**106,872**.

1992- Dissertation Research: Reaction norms of ontogenetic trajectories in *Lobelia*.

1994***C.D. Schlichting*** and Massimo Pigliucci. ***NSF****:* $**6,500**.

Internal

 2016 Biological risk and big data: sustainability and resilience in the era of global change.

(PI: M Urban; Co-PIs: C Auer,CS Elphick, G Likens, A Mackay, *C.D. Schlichting*) Provost’s Academic Plan Competition, $**300,000**.

 1999 Investigation of leaf shape diversification in *Pelargonium.*

 *C.D. Schlichting* and C. S. Jones. UConn Research Foundation, $**5,270**.

1994 Dual compartment plant growth chamber. R. Crain, J.P. Gogarten, W-D. Reiter, *C.D. Schlichting*. UConn Res. Found, $**19,925**.

1990 - Plant adaptation to variable environments: roles of genetic variation and

 1995 phenotypic plasticity. R. Chazdon, K. Holsinger, D. Miller, S. Pacala, *C.D. Schlichting*, J. Silander. UCRF Innovative Research Award, $**49,000**.

1990 - Experimental studies of plant mating systems.

 1994 *C.D. Schlichting***,** G. Anderson, K. Holsinger. UConn Res. Foundation, $**9,430**.

1989 - Genetic variation in male and female functions of *Lobelia cardinalis*,

1. *C.D. Schlichting*. UConn Research Foundation, $**9,275**.

## TRAINING GRANT

***NSF: RTG*** -award to UConn EEB, 5 years, 1994-1998. PI: R.K. Colwell. $3,000,000.

**AWARDS AND HONORS**

1987 Young Investigator's Award, American Society of Naturalists.

1985 Invited contributor to Annual Review of Ecology and Systematics, v17, 1986.

**NESCent Working Groups**

2009 - Evolution and Development of Polyphenisms: Pathways to Innovation and

 2011 Diversification. D.W. Pfennig and A.P. Moczek, Coordinators.

2009 - Costs of Phenotypic Plasticity and Adaptation to Novel Environments.

 2015 C.J. Murren and *C.D. Schlichting*, Coordinators.

**Publications**

Google Scholar metrics: *Citations* **10,708**, *h-index* = **41**, *i50-index* =***37***

<http://scholar.google.com/citations?user=zrAaip4AAAAJ&hl=en>

 **BOOK**

***Phenotypic Evolution: A Reaction Norm Perspective***. *C.D. Schlichting* and M. Pigliucci. 1998. Sinauer Associates, Sunderland, MA. 387 pp., 180 figures. *2009 citations*

 (9 published reviews, see below: *reviews* *of S & P*)

**JOURNAL ARTICLES** (refereed publications numbered sequentially; † grad student coauthor; + undergrad coauthor)

 Published/in press

70. †Mickley, J. G., †Moore, T. E., ***Schlichting***, ***C. D.,*** +DeRobertis, A., +Mason, E., Bagchi, R. *Accepted*. Measuring Microenvironments for Global Change: DIY Environmental Microcontroller Units (EMUs). *Methods in Ecology and Evolution*

69. †Marchal, A., ***C.D. Schlichting***, R. Gobin, P. Balandier, F. Millier, F. Muñoz, L. Paques, and L. Sanchez. 2018*.* Deciphering hybrid larch reaction norms using random regression. *G3: Genes|Genomes|Genetics*. *DOI*: 10.1534/g3.118.200697

68. †Moore, T. E., R. Bagchi, M. Aiello-Lammens, ***Schlichting***, ***C. D.*** 2018**.** Spatial autocorrelation inflates niche breadth-range size relationship. *Global Ecology and Biogeography DOI*: 10.1111/geb.12818

67. †Moore, T. E., ***C.D. Schlichting***, M. Aiello-Lammens, †K. Mocko, C. S. Jones. 2018. Divergent trait and environment relationships among parallel radiations in *Pelargonium* (Geraniaceae): a role for evolutionary legacy? *New Phytologist* 219: 794-807. *DOI*: 10.1111/nph.15196

66. †Prussing, C., M. Moreno, M. P. Saavedra, S. A. Bickersmith, D. Gamboa, F. Alava, ***C.D. Schlichting,*** K. J. Emerson, J. M. Vinetz, J. E. Conn. 2018. Decreasing proportion of *Anopheles* *darlingi* biting outdoors between long-lasting insecticidal net distributions in peri-Iquitos, Amazonian Peru. *Malaria Journal.* 17: 86. *DOI*: 10.1186/s12936-018-2234-4

65. Senft-Batoh, C. D., H. G. Dam, S. E. Shumway, G. H. Wikfors, ***C.D. Schlichting***. 2015. Influence of predator–prey evolutionary history, chemical alarm-cues, and feeding selection on induction of toxin production in a marine dinoflagellate. *Limnology and Oceanography* 60:318-328. *DOI*: 10.1002/lno.10027

64. †Mitchell, M., †T. E. Moore, †H. K. Mollmann, J. E. Carlson, †K. Mocko, H. Martinez-Cabrera, C. Adams, J. A. Silander Jr., C. S. Jones, ***C.D. Schlichting***, K. E. Holsinger. 2015. Functional traits in parallel evolutionary radiations and trait-environment associations in the Cape Floristic region of South Africa. *American Naturalist* 185: 525-537. *DOI*: 10.1086/680051

63. Murren, C. J., J. R. Auld, H. S. Callahan, C. K. Ghalambor, C. A. Handelsman, M. A. Heskel, J. Kingsolver, H. J. Maclean, J. Masel, H. Maughan, D. W. Pfennig, R. A. Relyea, S. Seiter, E. C. Snell-Rood, U. K. Steiner, ***C. D. Schlichting***. 2015. Constraints on the evolution of phenotypic plasticity: limits and costs of phenotype and plasticity. *Heredity* 115:293-301*.* DOI: 10.1038/hdy.2015.8

62. ***Schlichting,*** ***C. D.*** andM.A. Wund. 2014. Phenotypic plasticity and epigenetic marking: an assessment of evidence for genetic accommodation. *Evolution* 68:656-672. *DOI:* 10.1111/evo.12348

61. Murren, C. J., †H. J. Maclean, S. E. Diamond, U. K. Steiner, †M. A. Heskel, †C. A. Handelsman, C. K. Ghalambor, J. R. Auld, H. S. Callahan, D. W. Pfennig, R. A. Relyea, ***C. D. Schlichting***, and J. Kingsolver. 2014. Evolutionary change in continuous reaction norms. *American Naturalist* 183: 453-467*. DOI:* 10.1086/675302

60. Jones, C.S., H.I. Martinez Cabrera, A.B. Nicotra, †K. Mocko, E.M. Marais, ***C. D. Schlichting***. 2013. Phylogenetic influences on leaf trait integration in *Pelargonium* (Geraniaceae): convergence, divergence, and historical adaptation to a rapidly changing climate. *American Journal of Botany* 100: 1306-1321.

59. †McKeon, S.N., ***C.D. Schlichting***, M.M. Póvoa, and J.E. Conn. 2013. Ecological suitability and spatial distribution of five *Anopheles* species in Amazonian Brazil. *American Journal of Tropical Medicine and Hygiene* 88:1079-1086.

58. †Martinez Cabrera, H.I., ***C. D. Schlichting***, J.A. Silander, C.S. Jones. 2012. Low levels of climate niche conservatism may explain clade diversity patterns in the South African genus *Pelargonium* L'Her. (Geraniaceae). *American Journal of Botany* 99:954-960.

57. Pfennig, D.W., M.A. Wund, E.C. Snell-Rood, †T. Cruickshank, ***C. D. Schlichting***,and A.P. Moczek. 2010. Phenotypic plasticity's impacts on diversification and speciation. *Trends in Ecology & Evolution* 25(8):459-467*.*

56. Jones, C. S., F. T. Bakker, ***C.D. Schlichting*** and A. B. Nicotra. 2009. Leaf shape evolution in the South African genus *Pelargonium* L’ Hér. (Geraniaceae). *Evolution* 63: 479-497.

55. ***Schlichting, C.D*.** 2008. Hidden reaction norms, cryptic genetic variation and evolvability. *In* The Year in Evolutionary Biology 2008. C. D. Schlichting and T. A. Mousseau, Eds. Ann. NY Acad. Sci. 1133: 187-203.

54. Nicotra, A. B., M.J. Cosgrove, A. Cowling, C. S. Jones and ***C.D. Schlichting***. 2008. Leaf shape linked to photosynthetic rates and temperature optima in South African *Pelargonium* species. *Oecologia* 154:625-635.

53. Nicotra, A. B., †J. P. Hermes, C. S. Jones and ***C.D. Schlichting***. 2007. Geographic variation and plasticity to water and nutrients in *Pelargonium australe*. *New Phytologist* 176:136-149.

52. Pigliucci, M., C. J. Murren and ***C.D. Schlichting***. 2006. Phenotypic plasticity and evolution by genetic assimilation. *Journal of Experimental Biology* 209: 2362-2367.

51. Póvoa, M.M., R.T.L. de Souza, R.N.L. Lacerda, E. Santa Rosa, D. Galiza, J.R. de Souza, R.A. Wirtz, ***C.D. Schlichting*** and J.E. Conn. 2006. The importance of *Anopheles albitarsis* E and *An. darlingi* in human malaria transmission in Boa Vista, state of Roraima, Amazonian Brazil. *Mem Instituto Oswaldo Cruz* 101: 163-168.

50. Núñez-Farfán, J. and ***C.D. Schlichting***. 2005. Natural selection in *Potentilla glandulosa* revisited. *Evolutionary Ecology Research* 7: 105-119.

49. †Engelmann, K.E. and ***C.D. Schlichting***. 2005. Coarse- versus fine-grained water stress in *Arabidopsis thaliana* (Brassicaceae). *American Journal of Botany* 92: 101-106.

47. Póvoa, M.M., J.E. Conn, ***C.D. Schlichting***, J.C.O.F. Amaral, M.N.O. Segura, A.N.M. da Silva, C.C.B. dos Santos, R.N.L. Lacerda, R.T.L. de Souza, D. Galiza, E.P. Santa Rosa, R.A. Wirtz. 2003. Malaria vectors, epidemiology, and the re-emergence of *Anopheles darlingi* in Belém, Pará, Brazil. *Journal of Medical Entomology* 40: 379-386.

44**. *Schlichting, C.D*.** 2003*.* The origins of differentiation via phenotypic plasticity. *Evolution & Development* 5:98-105.

42. †Morales, E. A., F. R. Trainor and ***C.D. Schlichting***. 2002. Evolutionary and ecological implications of plastic responses of algae. *Constancea* 83: <http://ucjeps.berkeley.edu/constancea/83/morales_etal/plasticity.html>

40. ***Schlichting, C.D*.** and H. Smith. 2002. Phenotypic plasticity: linking molecular mechanisms with evolutionary outcomes. *Evolutionary Ecology* 16:189-211. *DOI*: 10.1023/A:1019624425971

38. Conn, J.E., R.C. Wilkerson, M.N.O. Segura, R.T.L. de Souza, ***C.D. Schlichting***, R.A. Wirtz, M.M. Povoa. 2002*.* Emergence of a new Neotropical malaria vector facilitated by human migration and changes in land use. *American J. Tropical Medicine & Hygiene* 66: 18-22*.*

37. Núñez-Farfán, J. and ***C.D. Schlichting***. 2001*.* Evolution in changing environments: The ‘synthetic’ work of Clausen, Keck and Hiesey. *Quarterly Review of Biology* 76: 433-457.

35. Pigliucci, M., †G.A. Tyler III, and ***C.D. Schlichting***. 1999*.* Mutational effects on constraints on character evolution and phenotypic plasticity in *Arabidopsis* *thaliana.* *Journal of Genetics* 77: 95-103.

34. Pigliucci, M., and ***C.D. Schlichting***. 1998*.* Reaction norms of *Arabidopsis*. V. Flowering time controls phenotypic architecture in response to nutrient stress. *Journal of Evolutionary Biology* 11:285-301*.*

33. Callahan, H.S., M. Pigliucci, and ***C.D. Schlichting***. 1997. Developmental phenotypic plasticity: where ecology and evolution meet molecular biology. *BioEssays* 19:519-525.

32. †Nicotra, A.B., R.L. Chazdon, and ***C.D. Schlichting***. 1997. Patterns of genotypic variation and phenotypic plasticity of light response in two tropical *Piper* species. *American Journal of Botany* 84:1542-1552.

31. Pigliucci, M., †P. diIorio, ***C.D. Schlichting***. 1997. Phenotypic plasticity of growth trajectories in two species of *Lobelia* in response to nutrient availability. *Journal of Ecology* 85: 265-276.

30. Pigliucci, M., and ***C.D. Schlichting***. 1997. On the limits of quantitative genetics for the study of phenotypic evolution. *Acta Biotheoretica* 45:143-160.

29. ***Schlichting, C.D*.**, and V.A. Delesalle. 1997*.* Stressing the differences between male and female functions in hermaphroditic plants. *Trends in Ecology and Evolution* 12:51-52.

28. †Pigliucci, M., ***C.D. Schlichting***, C. Jones, K. Schwenk. 1996. Developmental reaction norms: the interactions among allometry, ontogeny and plasticity. *Plant Species Biology* 11:69-85.

27. †Pigliucci, M., and ***C.D. Schlichting****.* 1996.Reaction norms of *Arabidopsis*. IV. Relationships between plasticity and fitness. *Heredity* 76:427-436.

26. †Pigliucci, M. and ***C.D. Schlichting***. 1995*.* Ontogenetic reaction norms in *Lobelia siphilitica* (Lobeliaceae): response to shading. *Ecology* 76:2134-2144.

25. ***Schlichting, C.D*.**, and †M. Pigliucci.1995. Lost in phenotypic space: environment-dependent resemblance among *Phlox* populations. *International Journal of Plant Sciences* 156:542-546.

24. †Pigliucci, M., and ***C.D. Schlichting***. 1995. Reaction norms of *Arabidopsis*. III. Geographic variation and response to nutrients in 26 populations. *American Journal of Botany*. 82:1117-1125.

23. Via, S., R. Gomulkiewicz, G. de Jong, S.E. Scheiner, ***C.D. Schlichting*** and P. van Tienderen. 1995*.* Adaptive phenotypic plasticity: consensus and controversy. *Trends in Ecology and Evolution* 10:212-217.

22. †Pigliucci, M., ***C.D. Schlichting***, and †J. Whitton. 1995. Reaction norms of *Arabidopsis*. II. Response to stress and unordered environmental variation. *Functional Ecology* 9:537-547.

21. †Pigliucci, M., †J. Whitton, and ***C.D. Schlichting***. 1995. Reaction norms of *Arabidopsis*. I. Plasticity of characters and correlations across water, nutrient and light gradients. *Journal of Evolutionary Biology* 8: 421-438.

20. ***Schlichting, C.D*.**, and †M. Pigliucci. 1995. Gene regulation, quantitative genetics, and the evolution of reaction norms. *Evolutionary Ecology* 9:154-168.

18. ***Schlichting, C.D*.**, and †M. Pigliucci. 1993. Control of phenotypic plasticity via regulatory genes. *American Naturalist* 142:366-370.

17. ***Schlichting, C.D*.**, and B. Devlin. 1992. Pollen and ovule sources affect seed production of *Lobelia cardinalis* (Lobeliaceae). *American Journal of Botany* 79:891-898.

16. Quesada, M., ***C.D. Schlichting***, J.A. Winsor, and A.G. Stephenson. 1991. Effects of genotype on pollen performance in *Cucurbita pepo*. *Sexual Plant Reproduction* 4:208-214.

15. ***Schlichting, C.D*.**, A.G. Stephenson, †L.A. Small, J.A. Winsor. 1990. Pollen loads and progeny vigor in *Cucurbita pepo*: the next generation. *Evolution* 44:1358‑1372.

14. ***Schlichting, C.D*.**, and D.A. Levin. 1990. Phenotypic plasticity in *Phlox*. III. Variation among natural populations of *P. drummondii*. *Journal of Evolutionary Biology* 3:411‑428.

13. ***Schlichting, C.D*.** 1989. Phenotypic integration and environmental change. *BioScience* 39:460‑464.

12. ***Schlichting, C.D*.** 1989. Phenotypic plasticity in *Phlox*. II. Plasticity of character correlations. *Oecologia* 78:496‑501.

11. ***Schlichting, C.D*.**, and B. Devlin. 1989. Male and female reproductive success in the hermaphroditic plant *Phlox drummondii*. *The American Naturalist* 133:212‑227.

 9. ***Schlichting, C.D*.**, and D.A. Levin. 1988. Phenotypic plasticity in *Phlox*. I. Wild and cultivated populations of *P. drummondii*. *American Journal of Botany* 75:161‑169.

 8. Stephenson, A.G., J.A. Winsor, ***C.D. Schlichting***, †L.E. Davis. 1988. Pollen competition, non‑random fertilization and progeny fitness: a reply to Charlesworth. *American Naturalist* 132:303‑308.

 7. ***Schlichting, C.D*.**, A.G. Stephenson, J.A. Winsor, †L.E. Davis. 1987. Pollen competition and offspring variability. *Evolutionary Trends in Plants* 1:35‑39.

 6. ***Schlichting, C.D*.** 1986. The evolution of phenotypic plasticity in plants. *Annual Review of Ecology and Systematics* 17:667‑693.

 5. ***Schlichting, C.D*.**, and D.A. Levin. 1986. Phenotypic plasticity: an evolving plant character. *Biological Journal of the Linnean Society* 29:37‑47.

 4. ***Schlichting, C.D*.**, and D.A. Levin. 1986. Effects of inbreeding on phenotypic plasticity in *Phlox drummondii*. *Theoretical and Applied Genetics* 72:114‑119.

 2. †Bixby, P.J., †L.E. Davis, ***C.D. Schlichting***, A.G. Stephenson. 1986. Correlations between rapid germination and seedling vigor in the common zucchini (*Cucurbita pepo*). *Proc. Pennsylvania Academy of Science* 60:33‑35.

 1. ***Schlichting, C.D*.**, and D.A. Levin. 1984. Phenotypic plasticity of annual *Phlox*: tests of some hypotheses. *American Journal of Botany* 71:252‑260.

**BOOK CHAPTERS**

48. ***Schlichting, C.D*.**, and C.J. Murren. 2004. Evolvability and the raw materials for adaptation. pp. 18-29 in: *Molecular Genetics and Ecology of Plant Adaptation*. Q. C. B. Cronk, J. Whitton, R. H. Ree and I. E. P. Taylor (eds.) Ottawa, Ontario, NRC Research Press.

46. ***Schlichting, C.D*.** 2004. The diversity of complexity. pp. 3-17 in: *Phenotypic Integration: Studying the Ecology and Evolution of Complex Phenotypes*. M. Pigliucci and K. A. Preston, Oxford University Press.

45. ***Schlichting, C.D*.** 2003*. Environment.* Pp. 108-113in: *Keywords and Concepts in Evolutionary Developmental Biology*. B.K. Hall and W.M. Olson, editors. Harvard University Press.

39. ***Schlichting, C.D.*** 2004*.* The role of phenotypic plasticity in diversification. Pp. 191-200in: *Phenotypic Plasticity: Functional and Conceptual Approaches*, T.J. DeWitt and S.M. Scheiner, eds. Oxford University Press.

36. Murren, C.J., R. Julliard, ***C.D. Schlichting***, and J. Clobert. 2001*.* Dispersal, individual phenotype and phenotypic plasticity. pp. 261-272 in: *Dispersal*,J. Clobert, J.D. Nichols, E. Danchin, and A. Dhondt, eds. Oxford University Press.

19. Stephenson, A.G., †M.R. Quesada, ***C.D. Schlichting*** and J.A. Winsor. 1995. Consequences of variation in pollen load size. pp 233-244 in: *Experimental and molecular approaches to plant biosystematics*, P.C. Hoch and A.G. Stephenson (eds.). Monographs in Systematic Botany from the Missouri Bot. Garden, vol 53.

10. Stephenson, A.G., J.A. Winsor, and ***C.D*.** ***Schlichting.*** 1988. Evidence for non‑random fertilization in the common zucchini, *Cucurbita pepo*. pp. 333‑338 in: *Sexual Reproduction in Higher Plants*. M. Cresti, R. Gori, E. Pacini (eds.). Springer‑Verlag, Berlin.

 3. ***Schlichting, C.D*.** 1986. Environmental stress reduces pollen quality in *Phlox*: compounding the fitness deficit. pp. 483‑488 in: *Biotechnology and Ecology of Pollen*, D. Mulcahy, G. Bergamini Mulcahy, E. Ottaviano (eds.). Springer‑Verlag, NY.

 **OTHER**

43. ***Schlichting, C.D*.** 2002*.* Phenotypic plasticity in plants (introduction to special issue). *Plant Species Biology* 17: 85-88

41. ***Schlichting, C.D*.** 2002*. Phenotypic Plasticity.* Independent entry, pp. 883-886 in: *The Encyclopedia of Evolution*. M. Pagel, editor.

 **PENDING / IN PREP**

†Chu, V. M., M. A. M. Sallum, T. E. Moore, W. Lainhart, ***C. D. Schlichting*** and J. E. Conn. *Submitted*. Regional variation in life history traits and plastic responses to temperature of the major malaria vector *Nyssorhynchus darlingi* in Brazil. *Scientific Reports.*

Moore, T. E., C. S. Jones, C. Chong, and ***C. D. Schlichting***. *Submitted*. Trait-trait and trait-environment relationships differ between divergent rainfall regimes: intraspecific trait variation across multidimensional environmental gradients.  *Journal of Ecology*.

†van de Kerke, S., B. Shrestha, Robert K. Jansen, ***C. D. Schlichting***, C. S Jones, S. Mohammadin, M.-L. Weng, M. E. Schranz, T. A. Ruhlman, S. Hosseini, F. T. Bakker. *Submitted.* Younger crown node and resolved phylogenetic issues in *Pelargonium.* *Molecular Phylogenetics and Evolution.*

***Schlichting***, ***C. D.,*** T. E.Moore, C. S. Jones and A. B. Nicotra. *In prep*. Evolution of phenotypic plasticity in the genus *Pelargonium.*

†Mickley, J. G. and ***C. D. Schlichting***. *In revision.* Heritable variation in petal number, correlated selection responses, and merosity in *Phlox drummondii.*

***Schlichting,*** ***C. D.,*** J. R. Auld, H. S. Callahan, C. K. Ghalambor, C. A. Handelsman, M. A. Heskel, J. Kingsolver, J. Masel, H. Maughan, D. W. Pfennig, R. A. Relyea, S. Seiter, E. Snell-Rood, U. K. Steiner, C. J.Murren. *Rejected.*Detecting costs of phenotypic plasticity. *Evolution*.

**BOOK REVIEWS**

1985 Review of *Evolutionary Ecology*, B. Shorrocks, ed. *Brittonia* 37:234.

1988 Review of *Differentiation Patterns in Higher Plants*, K.M. Urbanska, ed. Plant Genetics Newsletter 5(1):6‑7.

1989 Review of *Plant* *Reproductive Ecology: Patterns and Strategies*, J. and L. Lovett Doust, eds. Plant Genetics Newsletter 5(3):19.

1992 Review of *Evolutionary Genetics and Environmental Stress*, A. Hoffman and P. Parsons. Plant Genetics Newsletter.

1993 Review of *Evolutionary Developmental Biology*, B. Hall. Plant Genetics Newsletter 10(1):8-9.

2003 Environment rules. (Review of *Developmental Plasticity and Evolution*, M.J. West-Eberhard) *Trends in Ecology & Evolution* 18**:** 496-497.

2006 Review of *The Plausibility of Life: Resolving Darwin’s Dilemma* (2005) by Marc W. Kirschner & John C. Gerhart, Yale University Press. *Quarterly Review of Biology* 81:169-170.

2007 Themes on Variation*.* (Review of *Variation: A Central Concept in Biology*. B. Hallgrímsson &

Brian K. Hall, eds. Elsevier Academic Press). *BioScience* 57:372-373.

2009 An Uneven Guide to Eco-Devo.(Review of *Ecological Developmental Biology: Integrating Epigenetics, Medicine and Evolution*. S.F. Gilbert and D. Epel. Sinauer Associates). *BioScience* 59: 1000-1001.

**Reviews of S&P*, Phenotypic Evolution: A Reaction Norm Perspective***

Chang, G. C., and A. R. Smith. 1999. Review of "*Phenotypic Evolution: A Reaction Norm* *Perspective*". *Animal Behaviour* 57:1169-1170.

Hanken, J. 1999. An alternative evolutionary synthesis. *TREE* 14:162-163.

Hufford, L. and R. Gomulkiewicz. 1999. *Phenotypic Evolution: A reaction norm perspective. Systematic Botany* 24*:*686*-*688*.*

Hutchings, J. 1999. *Phenotypic Evolution: A Reaction Norm Perspective.* *Ecoscience* 6:297.

Orr, H. A. 1999. An evolutionary dead end? *Science* 285:343-344.

Roff, D. 1999. Review of "*Phenotypic Evolution: A Reaction Norm Perspective*". *Heredity* 82:344.

Scheiner, S. M. 1999. Towards a more synthetic view of evolution. *Am. J. Bot*. 86:145-148.

Stone, J. R. 2000. *Quarterly Review of Biology* 75:55-56.

Weiss, K. M. 1999. *Phenotypic evolution: A reaction norm perspective*. *American Journal of Physical Anthropology* 109:144-146.

**GRADUATE STUDENTS**

 Massimo Pigliucci. ***Ph.D. 1994****.* *Dissertation:* Developmental and adult phenotypic plasticity in plants: environmental effects on character correlations and fitness.

 1996 *Dobzhansky Prize winner, SSE.*

 *Currently****:*** Professor, Dept. of Philosophy, CUNY, Lehman College.

 Jennifer Butler. ***M.S.******1997.*** Coursework degree;

 *Currently****:*** Laboratory Coordinator, Willamette College.

Courtney Murren. ***Ph.D. 1999***. *Dissertation*: An ecological-genetic examination of reproduction in a tropical epiphytic orchid across a fragmented forest habitat.

 *Currently:*Professor, College of Charleston, SC.

 Kathleen Englemann. ***Ph.D. 2004***. *Dissertation*: Effects of coarse- and fine-grained water stress on *Arabidopsis thaliana*.

 *Currently:*Associate Professor, University of Bridgeport.

 James Phelps. M.S. student, 2003-2004.

 Corie Cann.***M.S.******2006***. Conservation and Biodiversity. Coursework degree.

 Tobias Landberg. ***Ph.D. 2010.*** *Dissertation*: Reaction norm evolution in mole salamanders (*Ambystoma*). (co-advised with Kurt Schwenk)

 *Currently:* Assistant Professor, Arcadia University.

Katherine Shaw, ***Ph.D. 2014***. Plasticity of male mating behavior in 3-spined sticklebacks. *Currently:* Assistant Professor, Saddleback College, Mission Viejo, CA.

 James Mickley, ***Ph.D. 2017***. The adaptive nature of stasis for petal number: can pollinator-mediated stabilizing selection explain five-petaled flowers?

 *Currently:* PostDoctoral Researcher, Bagchi lab, UConn.

 Timothy Moore, ***Ph.D. 2018***. Patterns of trait and range size variation in an evolutionary radiation: the role of environmental gradients.

 *Currently:* PostDoctoral Researcher, Schlichting lab, UConn.

 Tanisha Williams. Ph.D. student. Adaptability to climate change in *Pelargonium* species.

**TEACHING EXPERIENCE**

Evolution and Human Diversity Evolution (undergraduate and graduate)

Evolutionary Developmental Biology Introductory Biology, majors and non-majors

Introductory Botany Plant Physiological Ecology

Graduate seminars: Evolution, Plant reproduction, Plant Evolution, Evolutionary Developmental Biology, Ecological Genomics, Phenotypic plasticity

**SERVICE**

*Departmental:*

 Department Head – 7/2014 to 6/2019

 Interim Department Head – 11/2013 to 6/2014

*committees*

 *Graduate Admissions & Awards*: 2005, Chair, 2006 - 2013

 *Searches*:

Faculty*- i*) Evolutionary Biology - 1990; *ii*) Plant Structure/Function - 1990; *iii*) Plant Molecular Systematics - 1992; *iv*) Fish Biologist - 1994; *v*) Animal Biologist (UConn Waterbury) - 1994; *vi*) Evolutionary Biology - 1997; *vii*) Paleobiology - 2005; *viii*) Plant Ecological/Evolutionary Genomics – 2012; *ix*)Ecological/Evolutionary Responses to Global Change - 2013

Staff - *i*) Greenhouse manager - 1993; *ii*) Undergraduate Advisor – 2011

 *Promotion, Tenure, Reappointment* (elected): 1990, 1991, 1994 (chair), 1996, 1997 (chair), 2000, 2002, 2004, 2006, 2011, 2012

 *Seminars*: 1990/91; 1997/98

 *Awards*: 1991, 1993 - 1997, 1999, 2002 – 2006, 2013

 *Greenhouse*: 1995 - 2011

*College*

 *Dean's Advisory Committee* (Promotion, Tenure, Reappointment), 2000–2002

*University*

 AAUP Executive Committee (*elected*), 2006-2007

 University Senate (*elected*), 1999–2002

 Budget Committee (University Senate), 2001–2002

 Advisory Board, University Teaching Institute, 1998–2000

 Faculty Standards Committee (University Senate), 1996–1998

 Strategic Plan Implementation Committee, Research Task Force, 1995–1997

 Board, Center for Conservation and Biodiversity: 1993–1998

*Hartford Regional Campus*

 Search Committee for Director for the Hartford Campus, 2000–2001

 TriCampus Faculty Committee (*elected*), 1997–1999

 Program and Curriculum Committee, 1996

**PROFESSIONAL SOCIETIES**

AAAS American Society of Naturalists

Botanical Society of America Society for the Study of Evolution

European Society for Evolutionary Biology

Pan-American Society for Evolutionary Developmental Biology

**PROFESSIONAL SERVICE**

Editor, *The Year in Evolutionary Biology*, *Annals of the New York Academy of Sciences*: 2006-10

Associate Editor, *Journal of Evolutionary Biology*: 1995–2002

Editorial Board*, Plant* *Species* *Biology*: 1999–

Panelist - NSF (Division of Environmental Biology), Dissertation Improvement: 1993 & '94

* NSF (DEB) Ecological & Evolutionary Processes (2009)
* NSF (DEB) Dimensions of Biodiversity (2011; 2013; 2016)
* USDA, Biology of Weedy and Invasive Plants (2000)
* Academy of Finland (2004), Helsinki

Reviewer – Proposals: *NSF* (Ecology; Population Biology, Dimensions of Biodiversity), *USDA*, UConn Research Foundation, *NERC* (Great Britain), Finnish National Science Foundation; Austrian Science Foundation; VolkswagenStiftung; Israel Science Foundation

Reviewer – Journals(~15 manuscripts/year): *Nature, PNAS, Science, American Naturalist, Evolution, Ecology, Am. J. Botany, J. Evol. Biology, J. Ecology, Ecology Letters, Oikos, Genetics, Heredity, PLoS ONE, J. Heredity, Canadian J. Botany, TREE, Plant Cell & Environment, Biotropica, Tree Physiology, Plant and Soil …*

Botanical Society of America, Web site committee (2003 - 2006)

### SYMPOSIA & SEMINARS

 **Invited Symposium Presentations**

8/18 Evolution of Phenotypic Plasticity, Congress of European Society for Evolutionary Biology (*ESEB)*. Montpellier, France

6/09 Darwin Bicentennial lecture: *Recent advances in Phenotypic Plasticity and Phenotypic Evolution*. @ Evolutionary biology 2009: Phylogeny, speciation, co-evolution, development, genomes, life histories, plasticity. What is new? Rennes, Brittany, France

11/08 *Dissecting an evolutionary radiation: Leaf shape diversity & phenotypic plasticity in* Pelargonium*. Evolutionary Ecology Symposium* at the Meeting of the Ecological Society of Mexico, Merida.

11/08 Darwin Bicentennial lecture: *Ecological genetics from Darwin to the present*. UNAM Institute of Ecology, Mexico City.

2/08 *Hidden reaction norms and the evolution of phenotypic plasticity*. **Plenary Address** TREEBREEDEX: European network on forest tree breeding and genetics. Madrid.

7/07 Jones, C.S., **Schlichting**, **C.D**., Nicotra, A.B., Bakker, F.T., Martinez Cabrera, H. *A case history: leaf shape evolution and functional diversification in the South African genus Pelargonium (Geraniaceae)*. Chicago, Botanical Society of America.

 9/05 *The Drivers of Evolution*, Cividale, Italy

 6/05 *Phenotypic Diversity and Evolution*, Kristineberg Marine Research Station, Sweden

12/02 *Molecular genetics and ecology of plant adaptation,* Univ. of British Columbia

 1/02 *Eco-Devo (Ecological Developmental Biology)*. Society for Integrative & Comparative Biology, Irvine, CA

 5/01 *The Evolutionary Significance of Phenotypic Plasticity,* Can. Soc. Zoologists. Ontario.

 4/99 *Causes, consequences and mechanisms of dispersal at the individual, population and community level.* Roscoff, France.

 3/98 *Phenotypic Plasticity in Plants*, Sede Boker, Israel

 8/97 *Evolution of Plant Life Histories*, 6th Congress of European Society for Evolutionary Biology (*ESEB*), Arnhem, The Netherlands

 4/96 *Differentiation Patterns of Plants and Adaptive Mechanisms*, Society for the Study of Species Biology, Kyoto, Japan

 9/89 *Reaction Norms*, 2nd Congress of *ESEB*, Rome

 6/88 *Reaction Norms*, Soc. Study of Evolution, Asilomar, CA

 6/87 *Young Investigator Awards*, Amer. Soc. Naturalists, Bozeman, MT

**Symposia Organized**

 7/15 ***Plant Diversity in the GCFR: From Genomes to Biomes***, Kirstenbosch National Botanical Gardens, Cape Town, South Africa. 26 speakers over 2 days: 12 South African, 8 North American, 4 European, 2 Australian

 8/97 ***The Genetic Basis of Plasticity***, 6th Congress of European Society for Evolutionary Biology, Arnhem, The Netherlands (with M. Pigliucci)

 8/97 ***Adaptive Phenotypic Plasticity in Plants***, Bot. Soc. America, Montreal, Canada (with M. Pigliucci)

**Invited Seminars**

|  4/164/12 | College of CharlestonUniversity of Minnesota |
| --- | --- |
| 10/11 | Illinois State University |
|  4/09 | SUNY @ Stony Brook |
|  3/07 | Dalhousie, Halifax NS |
| 10/04 | Yale University |
| 10/04 | University of Wisconsin |
| 1/04 | Penn State University |
| 9/03 | University of Cape Town |
| 8/03 | Australian National University |
| 4/03 | University of Texas  |
| 3/03 | University of Maryland |
| 3/01 | UNAM, Evolutionary Ecology Dept. *(2)* |
| 3/00 | Stanford University |
| 3/99 | Penn State University |
| 4/98 | KBS, Michigan State Univ. |
| 12/98 | University of Vermont |
| 11/98 | Clark University |
| 6/97 | UC Santa Barbara |
| 10/97 | SUNY @ Stony Brook |

| 11/95 | Univ. of Tennessee, Knoxville |
| --- | --- |
| 2/94 | New Mexico State |
| 10/93 | Rutgers |
| 4/93 | F. Bazzaz Lab, Harvard |
| 3/93 | McGill University |
| 10/91 | Brown University |
| 11/90 | New England Bot. Club, @ Harvard |
| 10/90 | Indiana University |
| 12/88 | Univ. of Mass., Amherst |
| 10/88 | Eastern Connecticut |
| 4/88 | Univ. of Connecticut |
| 3/88 | University of Windsor |
| 2/88 | Memphis State University |
| 4/87 | Univ. of Pennsylvania |
| 3/87 | UC Santa Barbara |
| 2/87 | UC Irvine |
| 3/86 | Indiana University |
| 12/85 | Rutgers |
| 7/85 | KBS, Michigan State Univ. |

### CONTRIBUTED PAPERS

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| --- | --- |
| 6/136/076/02 | SSE, Snowbird, UTBSA, ChicagoESA, Albuquerque  |
| 6/00 | SSE, Bloomington, IN |
| 6/99 | ASN/SSE, Madison, WI |
| 6/98 | SSE, Vancouver |
| 6/97 | ASN/SSE, Boulder |
| 6/96 | SSE, St. Louis |
| 10/95 | SE Pop. Ecology & Genetics, NC |
| 7/95 | ASN/SSE, Montreal  |
| 6/94 | ASN/SSE, Athens, GA |
| 10/93 | PBONE, URI  |
| 6/93 | ASN/SSE, Snowbird, UT |
| 6/92 | ASN/SSE, Berkeley |
|  |  |
| 6/92 | Int. Org. Pl. Biosystematists, St. Louis |
| 8/87 | AIBS, Columbus, OH |
| 6/87 | ASN/SSE, Asilomar  |
| 4/87 | PA Acad. of Science |
| 4/86 | PA Acad. of Science |
| 7/85 | Pollen Biotech. and Ecology, UMass |
| 6/85 | ASN/SSE, Chicago  |
| 6/84 | ASN/SSE, Crested Butte |
| 8/83 | AIBS, North Dakota |
| 8/82 | Plant Population Biology, Oaxtepec, Mexico |
| 6/82 | ASN/SSE, Stony Brook |
| 6/81 | ASN/SSE, Iowa City |

ASN/SSE = Amer. Soc. of Naturalists/Soc. for Study of Evolution meetings; BSA = Botanical Society of America meetings; PBONE = Pop. Biol. of New England