

## DAVID A. BAUM

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### EDUCATION

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- 1982-1985 St. Catherine's College, University of Oxford, B.A. (Hons.), Botany.  
1986-1991 Washington University in St. Louis, Ph.D. in Evolutionary and Population Biology

### APPOINTMENTS

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- 1991-1993 Postdoctoral research fellow (K. Sytsma), Department of Botany, UW-Madison  
1993-1994 Postdoctoral research trainee (A. Bleecker), Department of Botany, UW-Madison  
1994-1998 Assistant Professor, Department of Organismic and Evolutionary Biology, Harvard University  
1998-2001 Associate Professor, Department of Organismic and Evolutionary Biology, Harvard University (awarded tenure, May 2000)  
2001-2004 Associate Professor, Department of Botany UW-Madison  
2002- Research Associate, Missouri Botanical Garden, St. Louis.  
2004- Professor, Department of Botany, UW-Madison  
2008-2012 Chair, Department of Botany, UW-Madison  
2010- Director, J. F. Crow Institute for the Study of Evolution, UW-Madison  
2012-2014 Interim Associate Director for Students, Wisconsin Institute for Discovery UW-Madison

### RESEARCH INTERESTS

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Plant evolution and systematics. The molecular basis of morphological evolution. Pollination biology and floral evolution. Phylogenetic theory. Origin of life chemistry.

### MAJOR AWARDS AND HONORS

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- 2015 Chancellor's Distinguished Teaching Award, UW-Madison  
2010 Fellow of the University of Wisconsin Teaching Academy  
2009-2014 Letters and Sciences Hamel Family Faculty Fellowship, UW-Madison  
2008 Christiansen Fellowship, St. Catherine's College, Oxford  
2007-2008 John Simon Guggenheim Foundation Fellowship  
2006 Elected Fellow of the American Association for the Advancement of Science  
1999-2004 National Science Foundation, Career Award.  
1996-1999 Alfred P. Sloan Foundation Young Investigator Award in Molecular Evolution

### ACTIVE GRANTS

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National Science Foundation, Systematics Program (DEB-1354793). Collaborative Research:  
**Multilocus phylogenetics and species delimitation using sequence-capture and next-gen sequencing and its application in *Adansonia* (Malvaceae).** \$670,384. 2/1/13-1/31/16. PI (co-PIs = Cecile Ané, Corrinne Grover, Jonathan Wendel)

University of Wisconsin Graduate School Interdisciplinary Research Grant. **Selecting for life-like chemistry on mineral surfaces.** \$75,000. PI (co-PIs = Samuel Gellman, Tehshik Yoon, Judith Burstyn, Kalin Vetsigian).

## BOOKS

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Baum, D. A. and Smith, S.D. 2013. *Tree-thinking: An Introduction to Phylogenetic Biology*. Roberts & Company. (<http://www.roberts-publishers.com/authors/smith-stacey/tree-thinking-an-introduction-to-phylogenetic-biology.html>).

Reviews:

*Trends in Ecology and Evolution* (27: 657–658):

<http://www.sciencedirect.com/science/article/pii/S0169534712001899>)

*Systematic Biology* (62: 634-637):

<http://sysbio.oxfordjournals.org/content/62/4/634>)

Losos, J. Baum, D. A., D. Futuyma, H. Hoekstra, R. Lenski, A. Moore, D. Schluter, and M. Whitlock (eds.). 2013. *The Princeton Guide to Evolution*. Princeton University Press.

## JOURNAL ARTICLES AND BOOK CHAPTERS (90)

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Carvalho-Sobrinho, J. G., de Queiroz, L. P., Alverson, W. S., Alcantara, S., da Mota, A. C. and Baum, D. A. Submitted. Revisiting the phylogeny of Bombacoideae (Malvaceae): novel relationships, morphologically cohesive clades, and a new tribal classification based on multilocus phylogenetic analyses.

Baum, D. A. In Review. Autogenous theories for the origin of eukaryotic cells. *American Journal of Botany*.

Stenz, N., Larget, B., Baum, D. A. and Ané, C. In review. Exploring tree-like and non-tree-like patterns using genome sequences: An example using the inbreeding plant species *Arabidopsis thaliana* (L.) Heynh. *Systematic Biology*

Scott, A. D. and Baum, D. A. Accepted. Branching out: An introduction to tree thinking. *Encyclopedia of Evolutionary Biology* (R. Kliman Ed.). Elsevier Press.

Baum, D. A. In press. Selection and the origin of cells. *Bioscience*.

Rangan H., Bell, K. L., Baum, D. A., Fowler, R., McConvell, P., Saunders, T., Spronck, S., Kull, C. A., and Murphy, D. J. 2015. New genetic and linguistic analyses show ancient human influence on baobab evolution and distribution in Australia. *PLoS ONE* 10(4): e0119758. doi: 10.1371/journal.pone.0119758. [[link](#)]

Baum, D. A. and Baum, B. 2015. We've got the evolution of complex cells inside-out. *New Scientist*. 3008: 28-29. <http://www.biomedcentral.com/1741-7007/12/76>

Baum, D. A. and Baum, B. 2014. An inside-out origin of the eukaryotic cell. *BMC Biology*. 12:76. [coverage including [The Economist](#) and [F1000](#) - statistics at [Altmetrics](#)]

Carvalho-Sobrinho, J. G., Alverson, W. S., da Mota, A. C., Machado, M. C. and Baum, D. A.. 2014. A new deciduous species of *Pachira* (Malvaceae, Bombacoideae) from a Seasonally Dry Tropical Forest in northeastern Brazil. *Systematic Botany* 39(1): 260-267.

Davis, C. C., Schaefer, H., Xi, Z., Baum, D. A., Donoghue, M. J., & Harmon, L. J. 2014. Long-term morphological stasis maintained by a plant–pollinator mutualism. *Proceedings of the National Academy of Sciences*, 111(16): 5914-5919.

Baum, D. A. 2013. Developmental causation and the problem of homology. *Philosophy and Theory in Biology*, 5, <http://dx.doi.org/10.3998/ptb.6959004.0005.003>

Baum, D. A. 2013. The origin of primary plastids: A pas de deux or a ménage à trois? *The Plant Cell* 25: 4-6.

Baum, D. A. 2013. Phylogenetics and the History of Life. In Losos, J. D. A. Baum, D. Futuyma, H. Hoekstra, R. Lenski, A. Moore, D. Schluter, and M. Whitlock (eds.). 2013. *The Princeton Guide to Evolution*. Princeton University Press.

- Martins, T. R., Berg, J. J., Blinka, S., Rausher, M. D. and Baum, D. A. 2013. Precise spatio-temporal regulation of the anthocyanin biosynthetic pathway leads to petal spot formation in *Clarkia gracilis* (Onagraceae). *New Phytologist* 197: 958–969. [Commentary: *New Phytologist* 197: 687–689]
- Cacho, N. I. and Baum, D. A. 2012. The Caribbean slipper spurge *Euphorbia tithymalooides*, the first example of a ring species in plants. *Proceedings of the Royal Society B-Biological Sciences*. 279: 3377-3383. [Commentary: *Nature* 486, 442]
- Cellinese, N., Baum, D. A., and Mishler, B. D. 2012. Species and phylogenetic nomenclature. *Systematic Biology*. 61(5): 885-891.
- Correa, R., Stanga, J., Larget, B., Roznowski, A., Shu, G., Dilkes, B., and Baum, D. A. 2012. An assessment of transgenomics as a tool for identifying genes involved in the evolutionary differentiation of closely related plant species. *New Phytologist* 193: 494–503.
- Duarte, M.C., Esteves, G. L., Salatino, M. L. F., Walsh, K. C., and Baum, D. A. 2011. Phylogenetic analyses of *Eriotheca* and related genera (Bombacoideae, Malvaceae). *Systematic Botany*. 36: 690–701
- Prenner, G., Cacho, N. I., Baum, D. A., and Rudall P. J. 2011. Is *LEAFY* a useful marker gene for the flower–inflorescence boundary in the *Euphorbia* cyathium? *Journal of Experimental Biology*. 62: 345–350
- Liu, N., Sliwinski M.K., Correa, R. and Baum, D. A. 2011. Possible contributions of *TERMINAL FLOWER 1* to the evolution of rosette flowering in *Leavenworthia* (Brassicaceae). *New Phytologist* 189:616-28.
- Oyama, R. K., Jones, K. N., and Baum, D. A. 2010. Sympatric sister species of Californian *Antirrhinum* and their transiently specialized pollinators. *American Midland Naturalist* 164(2):337-347.
- Eckardt, N. A., and Baum, D. A. 2010. The Podostemad Puzzle: The Evolution of Unusual Morphology in the Podostemaceae. *The Plant Cell Online*, 22(7): 2104-2104.
- Koopman, M. and Baum, D. A. 2010. Isolating nuclear genes and identifying lineages without monophyly: An example of closely related species from Southern Madagascar. *International Journal of Plant Sciences*. 171: 761-771.
- Cacho, N. I., Berry, P. E., Olson, M. E., Steinmann, V. W., and Baum, D. A. 2010. Are spurred cyathia a key innovation? Molecular systematics and trait evolution in the slipper-spurges (Pedilanthus clade - *Euphorbia*, Euphorbiaceae). *American Journal of Botany* 97: 493–510.
- Yue, J.-P., Sun, H., Baum, D. A., Al-Shehbaz, I. L., and Ree, R. 2009. Molecular phylogeny of *Solms-laubachia* (Brassicaceae) s.l., based on multiple nuclear and plastid DNA sequences, and its biogeographic implications. *Journal of Systematics and Evolution* 47(5): 402-415.
- Smith, S. D., Ané, C., and Baum, D. A. 2009. Macroevolutionary tests of pollination syndromes: A reply to Fenster et al. *Evolution* 63: 2763–2767.
- Smith, J. J., Baum, D. A., and Moore A. 2009. The need for molecular genetic perspectives in evolutionary education (and vice versa). *Trends in Genetics* 25: 427-429. [Forum]
- Baum, D. A. 2009. Species as ranked taxa. *Systematic Biology* 58:74–86.
- Smith S. D., Izquierado, P., Hall, S.J., and Baum, D. A. 2008. Comparative pollination biology of sympatric and allopatric Andean *Iochroma* (Solanaceae). *Annals of the Missouri Botanical Garden* 95: 600-617.
- Janka, H., von Balthazar, M., Alverson, W. S., Baum, D. A., Semir, J., and Bayer, C. 2008. Structure, development, and evolution of the androecium in Adansoniaeae (core Bombacoideae, Malvaceae s.l.). *Plant Systematics and Evolution* 275: 69-91
- Koopman, M. M. and Baum, D. A. 2008. Phylogeny and biogeography of Hibisceae (Malvaceae) on Madagascar. *Systematic Botany* 33: 364-374.
- Baum, D. A. and Offner, S. 2008. Phylogenies and tree thinking. *American Biology Teacher* 70: 222-229.

- Bosch, J. A., Heo, K., Sliwinski, M. K., and Baum, D. A. 2008. An exploration of *LEAFY* expression in independent evolutionary origins of rosette flowering in Brassicaceae. *American Journal of Botany* 95:286-293.
- Davis, C. C., P. Endress, and Baum, D. A. 2008. The evolution of floral gigantism. *Current Opinions in Plant Biology* 11:49-57.
- Smith, S. D., Ané, C., and Baum, D. A. 2008. The role of pollinator shifts in the floral diversification of *Iochroma* (solanaceae). *Evolution* 62: 793–806.
- Smith, S. D., Kolberg, V. J., and Baum, D. A. 2008. Morphological and cytological evidence for homoploid hybridization in *Iochroma* (Solanaceae). *Madroño* 55:280–284
- Smith, S. D. and Baum, D. A. 2007. Systematics of Iochrominae (Solanaceae): Patterns in floral diversity and interspecific crossability. *Acta Horticulturae*. 745:241-254.
- Sliwinski, M. K., Bosch, J. A., Yoon, H.-S., von Balthazar, M. and Baum, D. A. 2007. The role of two *LEAFY* paralogs from *Idahoa scapigera* (Brassicaceae) in the evolution of a derived plant architecture. *The Plant Journal* 51:211-219 [cover].
- Davis, C.C., Latvis, M., Nickrent, D. L., Wurdack, K. J., and Baum, D. A. 2007. Floral gigantism in Rafflesiaceae. *Science* 315: 1812.
- Baum, D. A. 2007. Concordance trees, concordance factors, and the exploration of reticulate genealogy. *Taxon* 56: 417-426.
- Ané, C., Larget, B., Baum, D. A., Smith, S. D., & Rokas, A. 2007. Bayesian estimation of concordance among gene trees. *Molecular Biology and Evolution* 24: 412-426 (corrigendum - 24:1575).
- Sliwinski, M. K., White, M.A., Maizel, A., Weigel, D., and Baum, D. A. 2006. Evolutionary divergence of *LFY* function in the mustards *Arabidopsis thaliana* and *Leavenworthia crassa*. *Plant Molecular Biology* 62: 279-289.
- Smith, S. D. and Baum, D. A. 2006. Phylogenetics of the florally-diverse Andean clade Iochrominae (Solanaceae). *American Journal of Botany* 93: 1140-1153.
- von Balthazar, M. Schönenberger, J. Alverson, W. S., Janka, H. Bayer, C., and Baum, D. A. 2006. Structure and evolution of the androecium in the Malvatheca clade (Malvaceae s.l.) and implications for Malvaceae and Malvales. *Plant Systematics and Evolution* 260:171-197.
- Baum, D. A. and Hileman, L.C. 2006. A genetic model for the origin of flowers. Chap. 1 in “Flowering and its manipulation” (C. Ainsworth, ed.), Blackwell Publishing, Sheffield, UK.
- Baum, D. A., DeWitt Smith, S., and Donovan, S. S. 2005. The tree thinking challenge. *Science*, 310: 979-980 (Perspectives).
- Baum, D. A., Yoon, H. S., and Oldham, R. L. 2005. Molecular evolution of the transcription factor *LEAFY* in Brassicaceae. *Molecular Phylogenetics and Evolution*, 37:1-14.
- Howarth, D. G. and Baum, D. A. 2005. Genealogical evidence of homoploid hybrid speciation in an adaptive radiation of *Scaevola* (Goodeniaceae) in the Hawaiian islands. *Evolution*, 59: 948-961.
- Nyffeler, R., Bayer C., Alverson, W. A., Yen, A., Whitlock, B. A., Chase M. W. and Baum, D. A. 2005. Phylogenetic analysis of the Malvadendrina clade (Malvaceae s.l.) based on plastid DNA sequences. *Organisms Diversity and Evolution* 5: 109-123.
- Di Stilio, V., Kramer, E., and Baum, D. A. 2005. Floral MADS box genes and homeotic gender dimorphism in *Thalictrum dioicum* (Ranunculaceae), a new model for the study of dioecy. *The Plant Journal* 41:755-766.
- Smith, J. F., S. B. Draper, Hileman, L. C. and Baum, D. A. 2004. A phylogenetic analysis within tribes Gloxinieae and Gesnerieae (Gesneroideae: Gesneriaceae). *Systematic Botany* 29: 947–958.
- Baum, D. A., DeWitt Smith, S., Yen, A., Alverson, W. S., Nyffeler, R., Whitlock, B. A. and Oldham, R. L. 2004. Phylogenetic relationships of Malvatheca (Bombacoideae and Malvoideae; Malvaceae s.l.) as inferred from plastid and nuclear DNA sequences and their bearing on the mallow radiation. *American Journal of Botany* 91: 1862-1870

- von Balthazar, M., W. S. Alverson, J. Schönenberger, and Baum, D. A. 2004. Comparative floral development and androecium structure in Malvoideae (Malvaceae s.l.). International Journal of Plant Science. 165: 445-473.
- Yoon, H. S. and Baum, D. A. 2004. A transgenic test of parallelism in plant morphological evolution. Proceedings of the National Academy of Sciences, U.S.A. 101:6524-6529.
- Conti, E., Rutschmann, F., Eriksson, T., Sytsma, K. J., Baum, D. A. 2004. Calibration of molecular clocks and the biogeographic history of Crypteroniaceae: a reply to Moyle. Evolution 58: 1874-1876.
- Oyama, R. K. and Baum, D. A. 2004. Phylogenetic relationships of North American *Antirrhinum* (Veronicaceae). American Journal of Botany 91: 918-925.
- Cavender-Bares, J., Ackerly, D.D. Baum, D. A., and F.A. Bazzaz. 2004. Phylogenetic overdispersion in Floridian oak communities. American Naturalist 163: 823-843.
- Smith, J. F., Hileman, L. C., Powell, M. P. and Baum, D. A. 2004. Evolution of *GCYC*, a Gesneriaceae homolog of *CYCLOIDEA*, within Gesneroideae (Gesneriaceae). Molecular Phylogenetics and Evolution 31: 765-779.
- Levin, R. A., W. L. Wagner, P. C. Hoch., W. J. Hahn, A. Rodriguez, Baum, D. A., L. Katinas, E. A. Zimmer, and K. J. Sytsma. 2004. Paraphyly in Tribe Onagraceae: Insights into phylogenetic relationships of Onagraceae based on nuclear and chloroplast sequence data. Systematic Botany 29: 147-164.
- Howarth, D. G, Gustafsson, M. H. G., Baum, D. A., and Motley T. J. 2003. Phylogenetics of the genus *Scaevola* (Goodeniaceae): Implications for dispersal patterns across the Pacific Basin and colonization of the Hawaiian Islands. American Journal of Botany 90: 915-923.
- Hileman, L. C., E. M. Kramer, and D. A. Baum. 2003. Differential regulation of symmetry genes and the evolution of floral morphologies. Proceedings of the National Academy of Sciences of the United States of America 100:12814-12819
- Hileman, L. C. and Baum, D. A.. 2003. Why do paralogs persist? Molecular evolution of *CYCLOIDEA* and related floral symmetry genes in Antirrhineae (Veronicaceae). Molecular Biology and Evolution 20 (4): 591- 600
- Baum, D. A. 2003. Bombacaceae, *Adansonia*, Baobab, *Bozy*, *Fony*, *Renala*, *Ringy*, *Za*. Pages 339-342. In The Natural History of Madagascar (S. M. Goodman and J. P. Benstead, eds.), Chicago University Press, Chicago, IL
- Conti, E., T. Eriksson, J. Schonenberger, K. J. Sytsma, Baum, D. A. 2002. Early Tertiary out-of-India dispersal of Crypteroniaceae: Evidence from phylogeny and molecular dating. Evolution 56:1931-1942.
- Baum, D. A.. 2002. Identifying the genetic causes of phenotypic evolution: A review of experimental strategies. 493-507 In Q. C. B. Cronk, R. M. Bateman, and J. Hawkins, (eds.) *Developmental Genetics and Plant Evolution*, Taylor and Francis, London.
- Baum, D. A. and M. J. Donoghue. 2002. Transference of Function, heterotopy, and the evolution of plant development. Pages 52-69 In Q. C. B. Cronk, R. M. Bateman, and J. A. Hawkins, (eds.) *Developmental Genetics and Plant Evolution*, Taylor and Francis, London.
- Howarth, D. G. and Baum, D. A. 2002. Phylogenetic utility of a nuclear intron from Nitrate Reductase for the study of closely related plant species. Molecular Phylogenetics and Evolution. 23:525-528.
- Nyffeler, R. and D. A. Baum. 2001. Systematics and character evolution in *Durio* s. lat. (/Malvaceae/Helicteroideae/Durioneae or Bombacaceae - Durioneae). Organisms Diversity and Evolution, 3:165-178.
- Baum, D. A. and M. J. Donoghue. 2001. A likelihood framework for the study of adaptation. Pages 24-44 In: S. Orzack and E. Sober (eds.), *Adaptationism and Optimality*, Cambridge University Press, New York.
- Whitlock, B. A., C. Bayer, and D. A. Baum. 2001. Phylogenetic relationships and floral evolution of the Byttnerioideae ("Sterculiaceae" or Malvaceae s.l.) based on sequences of the chloroplast gene *ndhF*. Systematic Botany 23: 420-437.

- Nyffeler, R. and D. A. Baum. 2000. Phylogenetic relationships of the durians (Bombacaceae-Durioneae or /Malvaceae/Helicteroidae/Durioneae) based on chloroplast and nuclear ribosomal DNA sequences. *Plant Systematics and Evolution*. 224: (1-2) 55-82 2000
- Shu, G. G., W. Amaral, L. C. Hileman, and D. A. Baum. 2000. *LEAFY* and the evolution of rosette flowering in violet cress (*Jonopsidium acaule*, Brassicaceae). *American Journal of Botany* 87(5):634-641.
- Alverson, W. S., R. Nyffeler, B. Whitlock, C. Bayer, and D. A. Baum. 1999. Phylogenetic analysis of the core Malvales based on sequences of *ndhF*. *American Journal of Botany* 86:1474-1486.
- Shu, G. G. D. A. Baum, and L. J. Mets. 1999. Detection of Gene Expression Patterns in Various Plant Tissues Using Non-Radioactive mRNA *in situ* Hybridization. *WWW Journal of Biology* 4: 4-7 (<http://epress.com/w3jbio/vol4/shu/index.html>)
- Baum, D. A. and B. A. Whitlock. 1999. Genetic control of petal evolution. *Current Biology* 9:R525-R527.
- Oginuma, K., W. S. Alverson,, and D. A. Baum. 1999. A cytological study of three genera of neotropical Bombacaceae. *Acta Phytotax. Geobot.* 50:173-178.
- Whitlock, B. A. and D. A. Baum. 1999. Phylogenetic relationships of *Theobroma* and *Herrania* (Sterculiaceae) based on sequences of the nuclear gene *Vicilin*. *Systematic Botany* 24:128-138
- Baum, D. A., W. S. Alverson, and R. Nyffeler. 1998. A durian by any other name: Taxonomy and nomenclature of the core Malvales. *Harvard Papers in Botany* 3:313-330.
- Baum, D. A.. 1998. Individuality and the existence of species through time. *Systematic Biology* 47:641-653.
- Donoghue, M. J., R. H. Ree, and D. A. Baum. 1998. Phylogeny and the evolution of flower symmetry in the Asteridae. *Trends in Plants Science* 3:311-317.
- Baum, D. A., R. Small, and J. F. Wendel. 1998. Biogeography and floral evolution of Baobabs (*Adansonia*, Bombacaceae) as inferred from multiple data sets. *Systematic Biology* 47:181-207
- Baum, D. A.. 1998. The evolution of plant development. *Current Opinions in Plant Biology* 1:79-86.
- Alverson, W. S., Karol, K. G., D. A. Baum, M. W. Chase, S. M. Swensen, R. McCourt, K. J. Sytsma. 1998. Circumscription of the Malvales and relationships to other Rosidae: Evidence from *rbcL* sequence data. *American Journal of Botany* 85:876-887.
- Sytsma, K. J., and D. A. Baum. 1996. Molecular phylogenies and the diversification of angiosperms. Pp. 314-386, D. W. Taylor and L. J. Hickey (eds.), *Flowering plant origin, evolution, and phylogeny*, Chapman and Hall, New York.
- Baum, D. A.. 1996. The ecology and conservation of the baobabs of Madagascar. *Primate Report* 46: 311-328.
- Baum, D. A.. 1995. A systematic revision of *Adansonia* (Bombacaceae). *Annals of the Missouri Botanical Garden* 82:440-470.
- Baum, D. A.. 1995. The comparative pollination and floral biology of Baobabs (*Adansonia*--Bombacaceae). *Annals of the Missouri Botanical Garden* 82:322-348.
- Baum, D. A. and M. J. Donoghue. 1995. Choosing between alternative phylogenetic species concepts. *Systematic Botany* 20:560-573.
- Baum, D. A. and K. L. Shaw. 1995. Genealogical perspectives on the species problem. *Monographs in Systematic Botany from the Missouri Botanical Garden* 53:289-303.
- Baum, D. A.. 1994. *rbcL* and seed-plant phylogeny. *Trends in Ecology and Evolution* 9:39-41.
- Baum, D. A., K. Sytsma and P. Hoch. 1994. A molecular phylogenetic analysis of *Epilobium* based on sequences of nuclear ribosomal DNA. *Systematic Botany* 19:363-388.
- Baum, D. A. and K. Oginuma. 1994. A revision of chromosome numbers in Bombacaceae with new counts for *Adansonia*. *Taxon* 43:11-20.
- Baum, D. A.. 1992. Phylogenetic species concepts. *Trends in Ecology and Evolution* 7:1-2.
- Baum, D. A. and A. Larson. 1991. Adaptation reviewed: A phylogenetic methodology for studying character macroevolution. *Systematic Zoology* 40:1-18.

## OTHER PUBLICATIONS

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- Baum, D. A. 2015. In Search of Cell Evolution by Franklin Harold [book review]. Reports of the National Center for Science Education. [35\(3\)](#).
- Mach, J., and Baum, D. A. 2009. Functional and Phylogenetic Analysis of the Glutathione Transferase Gene Family in Poplar. *The Plant Cell Online*, 21(12): 3716-3716
- Baum, D. A. 2008. Forward. In Wickens, G. E., & Lowe, P. (2008). *The Baobabs: The Pachycauls of Africa, Madagascar and Australia*. Springer.
- Baum, D. A. 2008. Reading a Phylogenetic Tree: The Meaning of Monophyletic Groups. *Nature Education* 1(1). [Web article](#).
- Baum, D. A. 2008. Trait Evolution on a Phylogenetic Tree: Relatedness, Similarity, and the Myth of Evolutionary Advancement. *Nature Education* 1(2). [Web article](#).
- Baum, D. A. 2004. The Species Problem: Biological Species, Ontology, and the Metaphysics of Biology, by David N Stamos [book review]. *Quarterly Review of Biology*. 79: 64-65.
- Baum, D. A. and C. D. Day. 2004. Cryptic bracts revealed: Cryptic bracts exposed: Insights into the regulation of leaf expansion. *Developmental Cell* 6: 318-319.
- Baum, D. A., J. Doebley, V. F. Irish, E. M. Kramer. 2002. Missing links: The genetic architecture of the flower and floral diversification: Response. *Trends in Plant Science* 7:31-34.

## INVITED SYMPOSIUM TALKS (last 5 years)

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- Developmental Causation and the Problem of Homology. *Philosophy of Biology at Madison*. Madison, June 2012.
- The case for genealogical over trait-based species concepts. “Species: From Concepts to Conservation.” Chicago, April 2011.
- Using Bayesian concordance analysis to explore the phylogenetic diversity that exists within genomes. *New Frontiers in Plant Systematics and Evolution*. Beijing, China, July 2010.
- The diversity of evolutionary trees. *Phylogenetic Trees, Logical Methods in the Humanities Workshop*, Stanford University, Palo Alto, CA. 2010.
- Evolutionary transgenomics: A forward genetic screen for genes causing species differences. *Current Frontiers in Evolution, Development, and Genomics*, Indiana University, Bloomington, IN. 2009.
- The importance and challenge of teaching tree thinking. *Teaching Molecular Evolution*. Society for Molecular Biology and Evolution, Iowa City, IA. 2009.
- Meristem identity genes and architectural evolution in Brassicaceae. *Evolution of Plant Development*, Plant Biology Symposium, Riverside, CA. 2009.
- Developmental causality as a basis for homology and genetic identity. *Development and Homology*. MORPH minicourse, Boulder, CO. 2009.
- Evolutionary transgenomics in Brassicaceae: status and prospects. *Phylogenomics Workshop*. Brassica 2008. Lillehammer, Norway. 2008.

## RECENT COLLOQUIA (excluding talks at UW-Madison)

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- La Trobe University, Department of Ecology, Environment, and Evolution, Apr 2015
- University of Melbourne, Department of Bioscience, Mar 2015
- Melbourne Museum, Systematics Colloquium, Mar 2015
- Royal Botanic Gardens, Melbourne, Feb 2015
- University of Virginia, Dept. Biology, Sep. 2014

## NAMED LECTURES

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University of Wisconsin, Madison, **David Baum Lecture**, Sep. 2013

University of Washington, Seattle, **Melinda Denton Lecture**, May 2007

University of Cambridge, **Kenneth Sporne Lecture**, Dept. Plant Sciences, February 2008

## OFF CAMPUS SERVICE

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### **Editorial:**

Board of Reviewing Editors, *Science*, 2010-

Associate editor, *Evolution Outreach and Education*, 2014-

Co-Editor, *The Plant Cell*, 2006-2012

Associate Editor, *International Journal of Plant Sciences*, 2003-2012

Editorial board, *Organisms, Diversity and Evolution*, 2000-2011

Editorial board, *Molecular and Developmental Evolution*. 1999-2012

Review board: *Yearbook of Science and Technology in Society*. 2003-2005

Associate Editor, *Systematic Biology*, 1995-2000

Associate Editor, *Evolution*, 2000-2003

Ad hoc journal/grant proposal reviewer for: AAAS symposium proposals; African Journal of Biotechnology; American Naturalist, American Journal of Botany, Annals of Forest Science; Australian Journal of Botany, Biological Journal of the Linnaean Society, Biological Reviews, BioScience, BMC Evolutionary Biology, BMC Plant Biology, Botanical Studies, Cladistics, Columbia University Press, Developmental Genetics, Evolution, Evolution and Development, Evolutionary Education and Outreach, Fruits, International Journal of Plant Science, Genetics, Israel Journal of Ecology and Evolution, Journal of Heredity, Journal of Tropical Ecology, Journal of Tropical Forestry Science, Journal of Zoology, Marsden Fund (New Zealand), National Science Foundation (ADVANCE fellows program, ATOL program, Biotic Surveys and Inventories, International Programs, Systematic Biology, Population Biology, Developmental Mechanisms, HBCU Program), Molecular Biology and Evolution, Molecular Phylogenetics and Evolution, National Research Fund (South Africa), Nature Reviews Genetics, New Phytologist, Newton Fund (Cambridge University), Philosophy and Theory in Biology, Planta, Plant Journal, Plant Cell, Plant Physiology, PLoS, PLoS One, Proceedings of the National Academy of Sciences, Proceedings of the Royal Society - B, Science, Smithsonian Institution Press, Smithsonian Institution Scholarly Studies Program, Systematic Biology, Systematic Botany, Trends in Ecology and Evolution, Trends in Plant Science, UK Basic and Biomedical Science Research Council, USDA-CSREES.

Promotion/tenure reviews: Barnard College, Brigham Young University, Cambridge University, Harvard University (4), University of Maryland, Washington State University, Yale University (2), University of South Dakota, University of Alaska - Fairbanks, University of Texas - Austin, University of Minnesota (2), Rutgers University, St. John's University, Michigan State University; University of Alberta, University of Florida (2), Wayne State University, Tulane University.

Fellowship reviews: Newnham College Cambridge, MacArthur Foundation, Guggenheim Foundation.

Grant panelist: NSF ADVANCE fellows program; NSF Plant Developmental Mechanisms; NSF Assembling the Tree of Life (ATOL) program.

Consultant on new Advance Placement Tests in Biology, The College Entrance Examination Board. Fall 2010.

### **Service to scholarly societies:**

#### *Elected:*

American Genetics Association: Council member (2013-2015)

Society of Systematic Biology: Council member (2001-2003; 2010-2012)  
AAAS: American Association for the Advancement of Science, Electorate Nominating Committee of the Section on Biological Sciences (2015-2018)

*Appointed:*

Botanical Society of America: Education committee (2013-2016); *ad hoc* committee on endowment (1999-2000)  
American Genetics Association: Stephen J. O'Brien Awards Committee (2013-2015); Publications Committee.  
American Society of Plant Taxonomists: Awards and Nominations Committee (2010-2011)  
International Society of Phylogenetic Nomenclature: Nominating Committee (2007-2009)  
Multinational Arabidopsis Steering Committee: Comparative Genomics and Natural Variation Subcommittee (2006-2007).  
Society of Systematic Biology: Graduate Research Awards Committee (2000); Nominating Committee (2004-2005); Mayr Award Committee (2011); AAAS representative (2010-2012); Joint Committee on Creationism (2005-2007)  
Society for the Study of Evolution: Hamilton Award Committee (2011); Student Diversity Program Conference Mentor (2011).

**Symposia organized:**

*Enhancing Student Learning through Feedback.* UW-Madison Teaching Academy Fall Symposium, October 2013 (Co-Chair of organizing committee)  
*Grading: From theory to practice.* UW-Madison Teaching Academy Fall Symposium, September 2012 (Chair of organizing committee)  
*Green, Gene, Growing Machines: The Evolutionary Shaping of Plant Form.* AAAS Annual Meeting, Chicago IL, February 2009.  
*Species in Phylogenetic Nomenclature.* International Society for Phylogenetic Nomenclature. New Haven CT, June 2006 (with Benoit Dayrat).  
*Evidence for Evolution: Updating Darwin's Case.* UW-Madison Darwin Day Outreach Symposium. Madison, WI, Feb. 11, 2006. (with Dana Geary and others).  
*Teaching phylogeny at the introductory and precollege levels.* Evolution 2005, Fairbanks, AK, 2005. (with S. Donovan)  
*Developmental regulators and the evolution of plant morphology,* Evolution 2004, Fort Collins, CO, 2004. (with C. Richards and P. Reeves)  
*The genetics of flower evolution,* International Botanical Congress, St. Louis, Missouri, 1999. (with P. Cubas)

**Outreach workshops and courses:**

*Evolutionary Biology.* Two-day course for grandparents and grandchildren as part of Grandparents University. Madison WI, July 2012.  
*The challenge and importance of teaching tree thinking.* Half-day module in the WI leads (CESA6) workshop for K6-9 teachers. Green Lake, WI, Sep. 2011.  
*The challenge and importance of teaching tree thinking.* Half-day module in Crow/NESCent workshop for K6-12 teachers. Madison, WI, Aug. 2011.  
*The challenge and importance of teaching tree thinking.* Half-day module for K6-12 teachers at the UW-Madison Darwin Day Outreach Symposium, Madison, WI, Feb. 2011.  
*Unity and Diversity of Life.* Science Master's Institute, Madison Metropolitan School District & the University of Wisconsin. Four-day course for middle school teachers. June 2009.  
*Unity and Diversity of Life.* Science Master's Institute, Madison Metropolitan School District & the University of Wisconsin. Four-day course for middle school teachers. July 2008.  
*Diversity of Life/Cellular Structure and Function.* Science Master's Institute, Madison Metropolitan School District & the University of Wisconsin. Four day course for middle school teachers. July 2007.

*Evolution and tree thinking.* Three-day workshop for South African High School Teachers, July 2005.

*Molecular Systematics.* One-week workshop offered at the University of Madagascar, Antananarivo, Jan. 2005.

*The tree of life: Using phylogenies in the biology classroom.* Wisconsin Teacher Enhancement Program, University of Wisconsin. July 2004.

*The tree of life: Using phylogenies in the high school biology classroom (Genetics 677).* Wisconsin Teacher Enhancement Program, University of Wisconsin. June 2003.

*Phylogeny and Bioinformatics.* One-day module in the Arabidopsis molecular biology course. Cold Spring Harbor Laboratory. July 2003.

*The tree of life: Using phylogenies in the high school biology classroom (5 days full-time).* A course for teachers. Center for Innovation in Urban Education, Northeastern University. July 2000.

*Systematics theory module* (Organization for Tropical Studies, Tropical Plant Systematics course, Costa Rica). August 2000.

*The tree of life: Using phylogenies in the high school biology classroom (5 days full-time).* A course for teachers (for professional development points or graduate credit). Center for Innovation in Urban Education, Northeastern University. July 1999.

*How to build a phylogenetic tree.* Mini-course (2 days full-time), University of Sao Paulo, ESALQ campus, Piracicaba, Brazil. November 1998.

*Systematics theory module* (Organization for Tropical Studies, Tropical Plant Systematics course, Costa Rica). August 1998.

*Systematics theory module* (Organization for Tropical Studies, Tropical Plant Systematics course, Costa Rica). August 1996.

### **Sample of outreach/education presentations**

*Active learning in large lecture classes.* 45 minute podcast discussion. March 2013.

[https://uwmadison.box.com/files/0/f/713162783/1/f\\_6896633796](https://uwmadison.box.com/files/0/f/713162783/1/f_6896633796)

*Teaching tree thinking.* Presentation for local teachers in the NESCent/Crow workshop in teaching evolution. February 2013

*Teaching tree thinking.* Presentation for local teachers in the NESCent/Crow workshop in teaching evolution. August 2012

*Teaching tree thinking.* Presentation for local teachers at Evolution 2012 annual meeting in Ottawa CA. July 2012

*The challenge and importance of teaching tree-thinking.* Wisconsin Society of Science Teachers Annual Conference, Mar. 9 2012.

*Darwin and the Tree of Life.* Wednesday Nite at the Lab, UW-Madison Biotechnology Center, Dec. 21, 2011.

*Darwin and the Tree of Life.* UW Showcase Series (Wisconsin Alumni Association), Capitol Lakes Retirement Community, Nov. 1, 2011.

*Tree-thinking.* Presentation to rising 9<sup>th</sup> graders in the UW-Madison PEOPLE program, June 24, 2011.

*The importance and challenge of teaching tree thinking.* Presentation to middle and high school teachers at the UW-Darwin Day, Feb. 12, 2011.

*How scientists study evolution.* Workshop for grades 3-5. Shorewood Elementary School Science Night, Aril 29, 2010.

*How scientists study evolution.* Workshop for grades 3-5. Randall Elementary School Super Science Saturday, March 13, 2010.

*Big Gene Hunter: Looking for major genes that underlie plant morphological evolution.* 4<sup>th</sup> Tuesday Club, UW-Madison, Jan. 2010.

*Darwin and the Tree of Life.* The Faculty Coterie, UW-Madison, Nov. 2009.

*Understanding the Tree of Life.* North/Eastside Senior Coalition, Warner Park Community Recreation Center, Madison, April 2009.

*Teaching tree thinking.* Best practices in teaching evolution brownbag. University of Wisconsin, Madison, March 2009.

*Understanding the Tree of Life.* Knapp-Kohler seminar, Knapp House, University of Wisconsin, Madison, March 2009

*Understanding the Tree of Life.* Finding Mystery, Reverence and Wonder in Science. First Unitarian Society, Madison, Mar. 2009.

*UW-Madison Darwin Day Outreach Symposium.* MC and panel moderator. Feb. 2009

*Evidence for Evolution.* FUS Doubters Club. May 8, 2006.

*Overview of the Evidence for Evolution.* UW-Madison Darwin Day 2006. Feb. 11, 2006.

*A Scientific Metaphysic.* Knapp-Kohler seminar, Knapp House, University of Wisconsin, April 16, 2005.

## Radio/TV

WORT, Perpetual Motion Machine, Thursday, February 3, 2011 7:01 pm. (30 minute interview on Darwin Day plans)

Wisconsin Public Radio, University of the Air. Feb. 15, 2009. (60 minute interview on the Darwin Bicentennial).

Air America Radio, Lee Wilcox Show, May 5, 2006 (30 minute discussion of evolution)

Wisconsin Public Radio, University of the Air. Jan. 29, 2006. (60 minute discussion of evidence for evolution) (<http://clipcast.wpr.org:8080/ramgen/wpr/uoa/uoa060129.rm>)

Wisconsin Student Radio (WSUM), Mad Science, Aug 18, 2006 (45 min discussion)

## Outreach Publications

*Evidence for Evolution.* Enhanced Podcast: [http://engage.doit.wisc.edu/podcasting/examples/Darwin's legacy independent of beliefs](http://engage.doit.wisc.edu/podcasting/examples/Darwin's%20legacy%20independent%20of%20beliefs). Op-ed published in the Daily Cardinal (UW-Madison Student newspaper), 2/9/2010. (<http://www.dailycardinal.com/opinion/darwin-s-legacy-independent-of-beliefs-1.1122464>)

*Commentary on Common Ancestry and Natural Selection in Darwin's Origin.* On the Human. (<http://onthehuman.org/2010/06/common-ancestry-and-natural-selection-in-darwin%e2%80%99s-origin/comment-page-1/#comment-1435>)

## Other Outreach

MentorNet Mentor (2007-). Five mentees.

## UNIVERSITY OF WISCONSIN SERVICE

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### Current:

Department of Botany: Advancement Committee (Chair, 2012-); Finance Committee (2013-)  
Evolution Coordinating Committee (Chair, 2002-2013; co-chair 2013-2014)  
Undergraduate Advisor: Biology Evolution Option (currently 10 advisees)  
Biology Majors Program Committee (2013-)

### Past:

Department of Botany:  
Plant physiology faculty search committee (2012-2013); **Chair (2008-2012; 2015-2016);** Cecile Ané Advisory Committee (2004-2012); Eve Emshwiller Mentoring Committee (2006-2012); Botany Faculty Search Committee (chair) (2004-2005); TA Evaluation and Awards Committee (2003-2005, chair 2004-2005); Colloquium Committee (chair; 2001-2007); Capital Equipment Committee (2001-2007); Plant Structure Search Committee (2002-2003); Bret Larget Mentoring Committee (2002-2005); Chris Day Mentoring Committee (2004-2007); Marisa Otegui Mentoring Committee (2005-2009). Budget Subcommittee (2003-2005); Curriculum Committee (2003-2006); TA Training

Committee (chair, 2004-2008); Space Committee (chair, 2005-2007); Herbarium Director Search Committee (2006-2007); Graduate Program Review Committee (chair, 2006-2007); Faculty Senator (2002-2005), Alternate (2005-2007); Evolution Initiative: Chair, Evolution Coordinating Committee (2005-2010) J. F. Crow Institute for the Study of Evolution: **Director (2010-2013)**. Laboratory of Genetics: Genetics Training Program: Admissions Committee (2004); Genetics Training Program: Curriculum Committee (2005-2010): Bret Peyseur Mentoring Committee, Genetics, (2005-2010). College of Letters and Science: Office of Service Learning & Community Based Research Faculty Advisory Committee (2010): Molecular Biology Major External Review Committee (2004); TA training, 2010: panelist on “TAing lab courses.” Institute for Cross-College Biology Education Transitional Advisory Committee (2004-2005) Introductory Biology (151/152) Executive Committee (2006-2007). Graduate School: Biological Sciences Fellowship committee (2005-2008) University Book Store Academic Excellence Award Selection Committee (Member 2003-2006; Chair 2005-2006) Biological Sciences Strategic Planning Committee (2005-2008; Chair, 2006-2007) Middle School Natural Sciences Education Committee (2006-2007) Introductory Biology Innovation Committee (2011-2012) UW Teaching Academy, Executive Committee (2011-2013) UW Teaching Academy, Assessment Subcommittee (Chair, 2011-2013) UW-TEaCH: Member, U-CLaSS development team (2015) Department of Zoology, Evolutionary Biology Faculty Search Committee (2013-2014) Physics Academic Program Review Committee (2013-2014)

## TEACHING INTERESTS

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Undergraduate course in introductory biology (genetics and evolution) and biological diversity; graduate courses in phylogenetics and pedagogy; outreach workshops for teachers on evolutionary biology and tree thinking, and; educational research on teaching tree thinking, group selection, and other problematic concepts in evolutionary biology.

## TEACHING AWARDS

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University Housing Honored Instructor Award: 2013, 2014

## COURSES (in last five years)

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[Typical enrollments: Botany 130 = 180-200 students; Botany/Zoology 151/152 = 250-350 students; Botany 940 = 6-12 students; Botany 563 = 15-25 students]

*Introductory Biology* (Bot/Zoo 152). 5 cr. Spring 2014 (50%)

*Plant Systematics & Evolution Seminar* (Bot 940). “Statistical Evidence of Common Ancestry.” 1 cr. Spring 2014 (33%)

*Foundations of Evolution* (Bot 575). 3 cr. Fall 2013 (100%)

*General Botany* (Bot 130). Fall 2013 (50%)

*Phylogenetic Analysis of Molecular Data* (Bot 563). 3 cr. Spring 2013 (100%)

*General Botany* (Bot 130). 3 cr. Fall 2012 (50%)

*Plant Systematics & Evolution Seminar* (Bot 940). 1 cr. Fall 2012 (25%)

*Teaching Evolution* (Genetics 993). 1 cr. Fall 2012 (50%)

*Plant Systematics & Evolution Seminar* (Bot 940). “The concept of homology.” Spring 2012 (100%)

*Instructional Material Development* (Bot 575). Developing instructional materials for teaching evolution (20 participants). Spring 2012 (50%)  
*Introductory Biology* (Bot/Zoo 151). 5 cr. Fall 2011 (50%)  
*Teaching Evolution* (Genetics 993). 1 cr. Fall 2011 (50%)  
*Phylogenetic Analysis of Molecular Data* (Bot 563). 3 cr. Spring 2011 (100%)  
*General Botany* (Bot 130). 5 cr. Fall 2010 (50%)  
*Plant Systematics & Evolution Seminar* (Bot 940). 1 cr. “Major Transitions in Evolution.” Fall 2010 (33%)  
*Best Practices in Teaching Evolution* (Genetics 993-002). Fall 2010 (50%)  
*Introductory Biology* (Bot/Zoo 151). Fall 2009 (Section chair and 50%)  
*Plant Systematics & Evolution Seminar* (Bot 940). “Darwin’s Abominable Mystery.” Fall 2009 (25%)  
*Phylogenetic Analysis of Molecular Data* (Bot 563). Spring 2009 (100%)  
*Plant Systematics & Evolution Seminar* (Bot 940). “On the Origin of Species: 150 years on.” Spring 2009 (25%)

## GUEST LECTURES

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*Integrated Biological Sciences Summer Research Program*. Summer 2014 (One lecture on *Evolution: the BIG big idea*)  
*Evolutionary Biology* (Zoology 410). Spring 2014 (One lecture on plant evolution)  
*Integrated Biological Sciences Summer Research Program*. Summer 2013 (One lecture on *Evolution: the BIG big idea*)  
*Evolutionary Biology* (Zoology 410). Spring 2013 (One lecture on plant evolution)  
*Evolutionary Biology* (Zoology 410). Spring 2012 (One lecture on plant evolution)  
*Genetics freshman seminar* (Genetics). Spring 2012 (one lecture and one small group activity on evolution and tree thinking)  
*Exploring Biology* (Biology 375). Spring 2012 (One lecture as Charles Darwin)  
*Integrated Biological Sciences Summer Research Program*. Summer 2012 (One lecture on Evolution)  
*Exploring Biology* (Biology 375). Fall 2011 (One lecture on Evolution)  
*Integrated Biological Sciences Summer Research Program*. Summer 2011 (One lecture on Evolution)  
*Exploring Biology* (Biology 375). Fall 2010 (One lecture on Evolution)  
*Integrated Biological Sciences Summer Research Program*. Summer 2010 (One lecture on Evolution)  
*Exploring Biology* (Biology 375). Spring 2010 (One lecture on Evolution)  
*Integrated Biological Sciences Summer Research Program*. Summer 2009 (Three classes on Evolution).  
*Integrated Biological Sciences Summer Research Program*. Summer 2008 (Four classes on Evolution).  
*Evolution, Integrated Biological Sciences Summer Research Program*. Summer 2007 (Four classes on Evolution).  
*Ecology, and Genetics* (Biocore 301) Fall 2004 (Phylogeny module – 2 lectures)

## ADVISING/MENTORING

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### Harvard University

Visiting Professors: Kristina Jones (1997-2000); Claire Williams (1998); James Smith (2000).  
Post-doctoral (current position): **Elena Conti** (1995-1996; Professor, Institut für Systematische Botanik, Zürich), **William Alverson** (1995-1997; Senior Scientist, University of

Wisconsin Botany Department), **Guoping Shu** (1996-1998; Senior Vice President, Beijing Lantron Seed Corp), **Reto Nyffeler** (1997-2000; Curator of Phanerogams, Institut für Systematische Botanik, Zürich), **Ho-Sung Yoon** (1999-2001; Professor, Department of Biology, Kyungpook National University, Daegu, South Korea), **Alan Yen** (1999-2001; Intellectual Property, University of Washington, Seattle), **Veronica Di Stilio** (1999-2001; Associate Professor, University of Washington, Seattle).

Doctoral students advised as primary advisor (graduation date; current position): **Weber Amaral** (1998; Professor, University of São Paulo ESALQ and CEO, Brazilian Center for Biofuels), **Barbara Whitlock** (2000; Associate Professor, Miami University) Primary advisor = Peter Stevens), **Ryan Oyama** (2002; Research Scientist, Pioneer Hi-Bred, Waimea, Kauai, Hawaii), **Lena Hileman** (2002; Associate Professor, University of Kansas), **Dianella Howarth** (2002; Associate Professor, St. John's University),

Doctoral students advised as interim advisor: **Kobinah Abdul-Salim** (2002; Assistant Professor, Ohio State University; Primary Advisor Peter Stevens), **Charles Davis** (2002; Associate Professor, Harvard University; Primary advisor Michael Donoghue), **Richard Ree** (2001; Associate Curator, Field Museum of Natural History; Primary advisor Michael Donoghue)

#### University of Wisconsin

Scientific Visitors: Kweon Heo (Sabbatical, 2006). Maria Logacheva (Visiting Post-doc, 2009).

Post-doctoral (dates; current position): **Ho-Sung Yoon** (2001-2002; Professor, Department of Biology, Kyungpook National University, Daegu, South Korea), **Maria von Balthazar** (2002-2003; Universitätsassistentenstelle, University of Vienna), **Mathieu Perret** (2003; Curator, Univ. of Genève Herbarium). **Marek Sliwinski** (2003-2006; Associate Professor, Univ. of N. Iowa). **Ning Liu** (2007-2009; Post-doctoral fellow, University of Nebraska - Lincoln). **John Stanga** (2010-2012; Post-doctoral fellow, University of Georgia).

Previous PhD students (dates; current position): **Stacey Smith** (2001-2006 Botany; Assistant Professor, University of Colorado - Boulder); **Margaret Hanes** (nee Koopman) (2003-2008 Botany; Assistant Professor and Herbarium Director, Eastern Michigan University); **Ivalú Cacho** (2003-2009 Botany; Postdoctoral Fellow, Univ. California - Davis); **Raúl Correa** (2004-2010 Genetics; Postdoctoral Fellow, Baylor University); **Talline Martins** (2005-2011 Genetics; Postdoctoral Fellow, Duke Univ.).

Current Doctoral Students: **Abigail Mazie** (2008-; Botany); **Pulikesi Chittu Rajangam** (2008-; Plant Breeding/Plant Genetics); **Alison Scott** (2010-; Botany); **Nisa Karimi** (2014-; Botany); **Michael Berg** (2014-; Botany).

Other current doctoral committees: Martin Bontrager (Genetics) Lauren Brooks (Zoology); Alfonso Doucette (Botany); Chloe Drummond (Botany); Heidi Horn (Zoology); Daniel Minahan (Zoology); Matthew Pace (Botany); Jeffrey Rose (Botany); Claudia Solis Lemus (Statistics); Alejandro Zuluaga (Botany).

Former doctoral committees (year of graduation): Benjamin Adamczyk (Botany – 2009); Rafael Arevalo (Botany - 2014); Brent Berger (Botany - 2012); Kirsten Bomblies (Genetics – 2004); Jane Bradbury (Botany – 2013); Sara Carlson (Yale University – 2010); Samuel Donovan (Curriculum and Instruction – 2005); Andrew Gardner (Botany – 2013); Benjamin Grady (Botany - 2012); Philip Gonsiska (Botany - 2010); Jocelyn Hall (Botany – 2003); Andrew Hipp (Botany – 2004); Rachel Jabaily (Botany – 2009); Eunsoo Kim (Botany – 2006); Zachary Lemmon (Genetics – 2014); Ruiyan Luo (Statistics – 2007); Candace Moore (Botany - 2013); John Pritchard (Plant Breeding/ Plant Genetics – 2004); Ricarda Riina-Olivares (Botany – 2006); Laura Shannon (Genetics – 2013); Heejung Shim (Statistics – 2010); Terra Theim (Botany – 2006); Benjamin Van Ee (Botany – 2006); Laura Vaughn (Genetics – 2010); Jay Walker (Botany – 2006); Brian Walsh (Botany – 2014); Michael White (Genetics – 2011); Evelyn Williams (Botany - 2011); Qiong Zhao (Genetics – 2006).

Visiting graduate students: Mariano Avino (2005); Jipei Yue (2006); Anders Larsen (2007); Marilia Duarte (2009).

Master's degree advisor: Rebecca Oldham (Botany - 2003-2006)

Masters committees: Mathew Nelsen (Botany 2005); Gemma May (Zoology 2004).

Undergraduate research assistants/independent study: **Karen Walsh** (2001-2004; Awarded Hilldale Fellowship and Sophomore Summer Apprenticeship). **Rachel Warrich** (2002). **Tara Mehta** (2002-2004; Undergraduate Research Scholars Program). **Steven Hall** (2002-2004; Awarded Sophomore Summer Apprenticeship and George Enfield Frazer, Jr. Scholarship;). **Nicole Van Abel** (2004-; Awarded Sophomore Summer Apprenticeship and Honors Senior Thesis Grant); **Justin Bosch** (2004-2006; Awarded Hilldale Fellowship); **Adam Clements** (2004-2005; Undergraduate Research Scholars Program); **Mai Xiong** (2004-2005; Undergraduate Research Scholars Program). **Christopher Lizon** (2005); **Vanessa Kolberg** (2005-2006); **Steven Blinka** (2006-2009; L&S Honors Program Research Award); **Kevin Miller** (2006-2008); **David Silverman** (2007); **Raman Kutty** (2007-2008); **Brittany Ota** (2007-2008); **Brandon Weathersby** (2007); **Rebecka Pralle** (2007-2009); **Jacob Smith** (2007-2008); **Arielle Woods** (2008); **Evan Nondorf** (2008); **Jaime Shier** (2008); **Amanda Teschke** (2008-2009); **Jeremy Berg** (2008-2010; Frits Went Research Scholarship); **Tanjina Shabu** (2008-2011); **Bohkyeong Suh** (2009-2011); **Colton Skenandore** (2010); **Caitlin Riegert** (2010); **Aaron Roznowski** (2010-2011; Frits Went Undergraduate Research Scholarship); **Pa Yiar Khang** (2010-2011; NSF EDEN research internship); **John Kernien** (2010-2011); **Emily Kief** (2010-); **Morgan Sell** (2010-2011); **Jacob Kream** (2011); **Thomas Coolidge** (2010-2011); **Thiago Braga** (2011); **Ajay Shah** (2011); **Sean Kundinger** (2011-2012); **Robele Kebede** (2011-2012); "Mimi" Young Yoon (2012-2014; Frits Went Research Scholarship); **MacKenzie Taychert** (2012); **Emma Watermolen** (2012-2014); **Noah Stenz** (2013-2014); **Wonuk Lee** (2013-2014); **Alexandra Cohn** (2013; L&S Sophomore Summer Apprenticeship); **AnaElise Beckman** (2013; L&S Sophomore Summer Apprenticeship); **Richard Muggli** (2013-2014); **Margaret Habib** (2014-).

High School interns: Daniel Wear (2011, 2012); Norah Ntambi (2011; PEOPLE program)