

Personal

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Date of birth: June 27, 1958; Place of birth: Ann Arbor, Michigan, USA; Citizenship: USA

Education

Dartmouth College, Hanover, New Hampshire, 1981, B.A. Biology (cum laude)
Cornell University, Section of Neurobiology and Behavior, Ithaca, New York, 1989,
Ph.D. in Chemical Ecology; Advisors: Thomas Eisner and Jerry Meinwald

Scientific Positions

Adjunct Professor, Friedrich Schiller University, Jena, (1999-present)
Founding Director, Max Planck Institute for Chemical Ecology (1996- present)
Adjunct Professor, Brigham Young University, (2000-present)
Affiliated Professor, Royal Veterinary and Agricultural University of Denmark (2005-2009)
Adjunct Scientist, Boyce Thompson Institute for Plant Research (2003-2009)
Adjunct Professor, Section of Ecology and Evolutionary Biology, Cornell University (2002-2009)
Founder and Director, International Max Planck Research School, Jena (2002 - 2007)
Managing Director, Max Planck Institute for Chemical Ecology, Jena (2002-2005)
Co-Founder and Director, Virtual Institute for Biotic Interactions (2002-2008)
Professor, Department of Biology, SUNY Buffalo (1996-1998)
Associate Professor, Department of Biology, SUNY Buffalo (1994-1996)
Assistant Professor, Department of Biology, SUNY Buffalo (1989-1994)
Member of the German Centre for Integrative Biodiversity Research (iDiv) (2012-)

Scientific Service and Honors

Journals

Senior Editor, *eLife* (2011 – present)
Associate Editor, *Journal of Integrative Plant Biology* (2010-present)
Associate Editor, *Oecologia* (1996-2001)
Associate Editor, *Ecological Studies Series* (2001-2003)
Board of Editors, *Chemoecology* (2006-2008)
Associate Editor, *The Plant Journal* (2000-2008)

Scientific Societies

European Molecular Biology Organization EMBO (2014)

National Academy of Science (USA) (2013)
Nationale Akademie der Wissenschaften Leopoldina (2013)
Berlin Brandenburgische Akademie der Wissenschaften (2001)
Wissenschaftskolleg Berlin (2000)

Advisory Boards

SNF (CH) Priority Program “Plant Survival in Natural and Agricultural Ecosystems”
Chairman, MPG-Forschungsperspektiven Commission (2002-2008)
Rapporteur, Commission for IMPRSs of the Max-Planck-Society (2010-2014)
Copenhagen Plant Science Centre (2011-2016)
Lytle Preserve, Brigham Young University (2000-2019)
Institute of the Chemistry and Dynamics of the Geosphere, Jülich (2002-2008)
Wissenschaftlichen Programmbeirat Umweltforschung, FZ Jülich (2005-2008)
Minerva Center for Arid Ecosystems Research, Hebrew University (2004-2006)
Max Planck Digital Library (2005-2011)
MPG-Center for Information Management (1998-2011)
Wissenschaftskolleg, Berlin (2000-2006)
Swiss NSF Priority Program “Plant Survival in Natural and Agricultural Ecosystems”
Priority Program “Biological radiations” (2001-2011)
DFG Priority Program "Trophic interactions and dynamics of communities" (2004-2010)
Chinese Academy of Sciences, Tibetan Plateau Research Institute (2002-2004)
International Scientific Advisory Board of the Research Program “History of the Max Planck Society”

MPG-Director Searches

MPI for Evolutionary Biology, Ploen (2 directors)
MPI Molecular Plant Physiology, Golm (2 directors)
MPI Plant Breeding Research, Cologne (4 directors)
MPI Terrestrial Microbiology, Marburg (2 directors)
MPI Ornithology, Seewiesen (3 directors)
MPI Limnology, Plön (3 directors)
MPI Developmental Biology, Tübingen
MPI Molecular Genetics, Berlin
MPI Biogeochemistry, Jena (2 directors)
MPI in Florida, USA (3 directors)
MPI for Ornithology, Radolfzell (2 directors)
Berufungskommission für Gruppenleiter "Biodiversity", MPIS Köln und Marburg
Selbstständige Nachwuchsgruppen MPG (3 competitions)
Selbstständige Nachwuchsgruppen Jagiellonian University, Krakow, MPG (2011)
Selbstständige Nachwuchsgruppen, Biodiversity Research, MPG (2009-11)
MPI for Economics (2 directors)

Scientific Awards

Jean-Marie Delwart Award, 2014
European Research Council (ERC) Senior Researcher Award (2012-2017)
International Society for Chemical Ecology, Silverstein-Simeone Award (1998)
Presidential Young Investigator Award (1991-1996)
A.D. White Graduate Fellowship, Cornell University (1985-1988)

National Science Foundation, Predoctoral Fellowship (1985-1988)
 Florence Fletcher Botany Prize, Dartmouth College (1980)

Honors

Listed in the The World's Most Influential Scientific Minds 2015, Thomson Reuters Web of Science rankings

International Conferences organized

Symposium "New Directions in Plant-Insect Interactions" Feb, 2005
 Chairman: Gordon Research Conference on Floral and Vegetable Volatiles" Aug 2009
 Max Planck Symposium on "Evolutionary Biology", March, 2009

Students (directly supervised and funded)

20 current PhD students

50 Ph.D students, theses completed

Thomas Ohnmeiss (1996); Ursula Schittko (2000); Catherine Preston (2001); André Keßler (2002); Matthias Held (2003); Claudia Voelckel (2004); Jorge Zavala (2004); Dominik Schmidt (2004); Rayko Halitschke (2004); Jin-Ho Kang (2006); Caroline von Dahl (2007), Anke Steppuhn (2007), Silvia Schmidt (2007), Jianqiang Wu (2007), Channabasavangowda Rayapuram (2007), Anja Paschold (2008), Shree Pandey (2008), Jens Schwachtje (2008), Jinsong Wu (2008), Beatrice Berger (2008), Sirsha Mitra (2009), Harleen Kaur (2009), Long Hoa Hoang (2009), Navaporn Onkokesung (2010), Markus Hartl (2010), Samir Ansour (2010), Arjen van Doorn (2011), Dahai Yang (2011), Hendrik Wünsche (2011), Paola Gilardoni (2011), Christian Hettenhausen (2011), Stefan Meldau (2012), Alexander Weinhold (2012), Maria Heinrich (2012), Meredith Schuman (2012), Tohir Bozorov (2012), Lynn Ullmann-Zeunert (2013), Melkamu Woldemariam (2013), Danny Kessler (2013), Truong Son Dinh (2013), Dorothea Meldau (2013), Stefan Schuck (2013), Jyotasa Gulati (2013), Pavan Kumar (2013), Felipe Yon (2014), Michael Stitz (2014), Mariana Stanton (2014), Variluska Fragosa (2014), Arne Weinhold (2014), Martin Schaefer (2015), Spoorthi Poreddy (2016)

Five PhD students have won the **MPG Otto Hahn Medal**: André Kessler, Rayko Halitschke, Jianqiang Wu, Shree Prakash Pandey, Meredith Schuman

Two PhD students awarded the **Beutenberg Campus Prize**: Claudia Voelckel, Shree Pandey

6 current MA students

44 Diploma, MA and BA students, theses completed

Mike Karb (1995); Michael Euler (1994); Catherine A. Preston (1996); Gladys Lynds (1996); Eric Schmelz (1995); Laura Morse (1994); Neda Diab (1995); Romy Becker (1999); Rayko Halitschke (1999); Sybille Schmidt (2000); Claudia Voelckel (2000); Elisabeth Pohlon (2000); Grit Glawe (2000); Rainer Saedler (2002); Jens Schwachtje (2002); Caroline von Dahl (2002); Ben Bubner (2003); Anja Paschold (2004); Hendrik Wuensche (2005); Dirk Link (2006); Stefan Meldau (2006); Christian Hettenhausen (2007); Tina Riedel (2007); Celia Diezel (2007); Alexander Weinhold (2008); Melanie Skibbe (2008); Evelyn Körner (2008); Cornelia Linse (2008); Holger Merker (2009); Lynn Ullmann (2009); Michael Stitz (2009); Yvon Stampnik (bachelor thesis) (2009), Adriana Prehl (2010), Christine Fischer (2010), Sven Heiling (2010), Martin

Schaefer (2010), Christine Lembke (bachelor thesis) (2011), Franziska Eberl, (bachelor thesis) (2011), Maria Knyrim (bachelor thesis) (2011), Christoph Brütting (2012), Julia Kästner (2013), Nina Alejandro Perez (2013), Ali Nawaz (2014), Bharath Ramraj (2014)

Publications

See google scholar: <http://scholar.google.de/citations?user=MVeVpjUAAAJ&hl=de>

Orcid: <http://orcid.org/0000-0001-5371-2974>

See web of science: <http://www.researcherid.com/rid/K-1809-2013>

Researcher ID: K-1809-2013

I. Journal Articles

1. Schultz, J.C., I.T. Baldwin, and P.J. Nothnagle. 1981. Hemoglobin as a binding substrate in the quantitative analysis of plant tannins. **Journal of Agriculture and Food Chemistry** 19: 823-826.
2. Schultz, J.C., and I.T. Baldwin. 1982. Oak leaf quality declines in response to defoliation by gypsy moth larvae. **Science** 217: 149-151.
3. Schultz, J.C., P.J. Nothnagle, and I.T. Baldwin. 1982. Seasonal and individual variation in leaf quality of two northern hardwoods tree species. **American Journal of Botany** 69: 753-759.
4. Baldwin, I.T., R.K. Olson, and W.A. Reiners. 1983. Protein binding phenolics and the inhibition of nitrification in subalpine balsam fir soils. **Soil Biology and Biochemistry** 15: 419-423.
5. Baldwin, I.T., and J.C. Schultz. 1983. Rapid changes in tree leaf chemistry induced by damage: Evidence for communication between-plants. **Science** 221: 277-279.
6. Schultz, J.C., and I.T. Baldwin. 1983. Changes in tree quality in response to defoliation **CANUSA Proc.**, pp. 83-87.
7. Baldwin, I.T., and J.C. Schultz. 1984. Tannins lost from sugar maple (*Acer saccharum marsh*) and yellow birch (*Betula allegheniensis* Britt.) leaf litter. **Soil Biology and Biochemistry** 16: 421-422.
8. Baldwin, I.T., and J.C. Schultz. 1984. Damage- and communication-induced changes in yellow birch leaf phenolics. **Proc. N.A. Forest Biology Workshop** 8: 25-34.
9. Rashid, K., I.T. Baldwin, J. Babisch, J.C. Schultz, and R.O. Mumma. 1985. Mutagenicity tests with gallic and tannic acid in the *Salmonella* mammalian microsome assay. **Journal of Environmental Science and Health** 20: 153-165.
10. Baldwin, I.T., J.C. Schultz, and D. Ward. 1987. Patterns and sources of leaf tannin variation in yellow birch (*Betula allegheniensis*) and sugar maple (*Acer saccharum*). **Journal of Chemical Ecology** 13: 1069-1078.
11. Rossiter, M.C., J.C. Schultz, and I.T. Baldwin. 1988. Relationships among defoliation, red oak phenolics, and gypsy moth growth and reproduction. **Ecology** 69: 267-277.
12. Baldwin, I.T., and J.C. Schultz. 1988. Phylogeny and the patterns of leaf phenolics in gap- and forest-adapted *Piper* and *Miconia* understory shrubs. **Oecologia** 75: 105-109.
13. Baldwin, I.T. 1988. Damage-induced alkaloids in tobacco: Pot-bound plants are not inducible. **Journal of Chemical Ecology** 14: 1113-1120.
14. Baldwin, I.T. 1988. Short-term damage-induced increases in tobacco alkaloids protect plants. **Oecologia** 75: 367-370.
15. Baldwin, I.T. 1988. The alkaloidal responses of wild tobacco to real and simulated herbivory. **Oecologia** 77: 378-381.

16. Baldwin, I.T. 1989. Mechanism of damage-induced alkaloid production in wild tobacco. **Journal of Chemical Ecology** 15: 1661-1680.
17. Baldwin, I.T., C.L. Sims, and S.E. Kean. 1990. The reproductive consequences associated with inducible alkaloidal responses in wild tobacco. **Ecology** 70: 252-262.
18. Baldwin, I.T. 1990. Herbivory simulations in ecological research. **Trends in Ecology and Evolution**. 5: 91-93.
19. Baldwin, I.T., D.B. Dusenberry, and T. Eisner. 1990. Squirtting and refilling of p-benzoquinone production in defensive glands of *Diploptera punctata*. **Journal of Chemical Ecology** 16: 2823-2834.
20. Baldwin, I.T., and T.E. Ohnmeiss. 1993. Alkaloidal responses to damage in *Nicotiana* native to North America. **Journal of Chemical Ecology** 19: 1143-1153.
21. Baldwin, I.T., M.J. Karb, and P. Callahan. 1993. Foliar and floral pyrethrins of *Chrysanthemum cinerariaefolium* are not induced by leaf damage. **Journal of Chemical Ecology** 19: 2081-2087.
22. Baldwin, I.T., and P. Callahan. 1993. Autotoxicity and chemical defense: nicotine accumulation and carbon gain in solanaceous plants. **Oecologia** 94: 534-541.
23. Eisner, T.E., I.T. Baldwin, and J. Conner. 1993. Circumvention of prey defense by a predator: ant lion vs. ant. **Proceedings of the National Academy of Sciences, USA** 90: 6716-6720.
24. Ohnmeiss, T.E., and I.T. Baldwin. 1994. The allometry of nitrogen allocation to growth and an inducible defense under nitrogen-limited growth. **Ecology** 75: 995-1002.
25. Baldwin I.T., R.C. Oesch, P.M. Merhige, and K. Hayes. 1993. Damage-induced root nitrogen metabolism in *Nicotiana sylvestris*: testing C/N predictions for alkaloid production. **Journal of Chemical Ecology** 19: 3029-3043.
26. Baldwin, I.T., and T.E. Ohnmeiss. 1994. Coordination of photosynthetic and alkaloidal responses to leaf damage in uninducible and inducible *Nicotiana sylvestris*. **Ecology** 75: 1003-1014.
27. Baldwin, I.T., M.J. Karb, and T.E. Ohnmeiss. 1994. Allocation of ^{15}N from nitrate to nicotine: production and turnover of a damage-induced mobile defense. **Ecology** 75: 1703-1713.
28. Baldwin, I.T., and E. Schmelz. 1994. Constraints on an induced defense: the role of canopy area. **Oecologia** 97: 424-430.
29. Baldwin, I.T., and T.E. Ohnmeiss. 1994. Swords into plowshares? *Nicotiana sylvestris* does not use nicotine as a nitrogen source under nitrogen-limited growth. **Oecologia** 98: 385-392.
30. Baldwin, I.T., and S. Huh. 1994. Primary function for a chemical defense? Nicotine does not protect *Datura stramonium* L from UV damage. **Oecologia** 97: 243-247.
31. Baldwin, I.T., E.A. Schmelz, and T.E. Ohnmeiss. 1994. Wound-induced changes in root and shoot jasmonic acid pools correlate with induced nicotine synthesis in *Nicotiana sylvestris* Spegazzini and Comes **Journal of Chemical Ecology** 20: 2139-2157.
32. Baldwin, I.T., L. Stascak-Kozinski, and R. Davidson. 1994. Up in smoke: I. Smoke-derived germination cues for the post-fire annual *Nicotiana attenuata* Torr Ex Watson. **Journal of Chemical Ecology** 20: 2345-2371.
33. Baldwin, I. T., and L. Morse. 1994. Up in smoke: II. Germination of *Nicotiana attenuata* in response to smoke-derived cues and nutrients in burned and unburned soils. **Journal of Chemical Ecology** 20: 2373-2391.
34. Baldwin, I. T., and M.J. Karb. 1995. Plasticity in allocation of nicotine to reproductive parts in *Nicotiana attenuata*. **Journal of Chemical Ecology** 21: 897-909.
35. Baldwin, I.T., and E. Schmelz. 1996. Immunological "memory" in the induced accumulation of nicotine in wild tobacco. **Ecology** 77: 236-246.
36. Euler, M., and I.T. Baldwin. 1996. The chemistry of defense and appressory in the corollas

- of *Nicotiana attenuata*. **Oecologia** 107: 102-112.
37. Baldwin, I.T., E.A. Schmelz, and Z.-P. Zhang. 1996. Effects of octadecanoid metabolites and inhibitors on induced nicotine accumulation in *Nicotiana sylvestris*. **Journal of Chemical Ecology** 22: 61-73.
38. Baldwin, I.T. 1996. Methyl jasmonate-induced nicotine production in *Nicotiana attenuata*: inducing defenses in the field without wounding. **Entomologia Experimentalis et Applicata** 80: 213-220.
39. Baldwin, I.T. 1996. Inducible defenses and population biology. **Trends in Ecology & Evolution** 11: 104-105.
40. Baldwin, I.T. 1996. Allometric limits to the induced accumulation of nicotine in wild tobacco. **Plant Species Biology** 11: 107-114.
41. Baldwin, I.T., Z-P. Zhang, N. Diab, T.E. Ohnmeiss, E.S. McCloud, G.Y. Lynds, and E.A. Schmelz. 1997. Quantification, correlations and manipulations of wound-induced changes in jasmonic acid and nicotine in *Nicotiana sylvestris*. **Planta** 201: 397-404.
42. Ohnmeiss, T., E.S. McCloud, G.Y. Lynds, and I.T. Baldwin. 1997. Within-plant relationships among wounding, jasmonic acid, and nicotine: implications for defence in *Nicotiana sylvestris*. **New Phytologist** 137: 441-452.
43. Zhang, Z-P., and I.T. Baldwin. 1997. Transport of [2-¹⁴C]jasmonic acid from leaves to roots mimics wound-induced changes in endogenous pools in *Nicotiana sylvestris*. **Planta** 203: 436-441.
44. McCloud, E.S., and I.T. Baldwin. 1997. Herbivory and caterpillar regurgitants amplify the wound-induced increases in jasmonic acid but not nicotine in *Nicotiana sylvestris*. **Planta** 203: 430-435.
45. Baldwin, I.T., C.A. Preston, M.A. Euler, and D. Gorham. 1997. Patterns and consequences of benzyl acetone floral emissions from *Nicotiana attenuata* plants. **Journal of Chemical Ecology** 23: 2327-2343.
46. Zhang, Z-P., T. Krumm, and I.T. Baldwin. 1997. Structural requirements of jasmonates and mimics for nicotine induction in *Nicotiana sylvestris*. **Journal of Chemical Ecology** 23: 2777-2789.
47. Baldwin, I.T., D. Gorham, E.A. Schmelz, C. Lewandowski, and G.Y. Lynds. 1998. Allocation of nitrogen to an inducible defense and seed production in *Nicotiana attenuata*. **Oecologia** 115: 541-552.
48. van Dam, N.M., and I.T. Baldwin. 1998. Costs of jasmonate-induced responses in plants competing for limited resources. **Ecology Letters** 1: 30-33.
49. Baldwin, I.T. 1998. Jasmonate-induced responses are costly but benefit plants under attack in native populations. **Proceedings of the National Academy of Sciences, USA** 95: 8113-8118.
50. Lynds, G.Y., and I.T. Baldwin. 1998. Fire, nitrogen, and defensive plasticity in *Nicotiana attenuata*. **Oecologia** 115: 531-540.
51. Mitchell-Olds, T., J. Gershenson, W. Boland, and I.T. Baldwin. 1998. Chemical ecology in the molecular era. **Trends in Plant Sciences** 3: 362-365.
52. Preston, C.A., and I.T. Baldwin. 1999. Positive and negative signals regulate germination in the post-fire annual, *Nicotiana attenuata*. **Ecology** 80: 481-494.
53. Baldwin, I.T. 1999. Inducible nicotine production in native *Nicotiana* as an example of adaptive phenotypic plasticity. **Journal of Chemical Ecology** 25: 3-30.
54. Baldwin, I.T., and C.A. Preston. 1999. The eco-physiological complexity of plant responses to insect herbivores. **Planta** 208: 137-145.
55. Preston, C.A., C. Lewandowski, A.J. Enyedi, and I.T. Baldwin. 1999. Tobacco mosaic virus inoculation inhibits wound-induced jasmonic acid-mediated responses within but not between plants. **Planta** 209: 87-95.
56. Baldwin, I.T. 2000. Review for Phytochemistry of Handbook of Functional Plant

- Ecology. Ed. F.I. Pugnaire and F. Valladares. **Phytochemistry** 53: 159-160.
57. Schittko, U., C.A. Preston, and I.T. Baldwin. 2000. Eating the evidence? *Manduca sexta* larvae can not disrupt jasmonate induction in *Nicotiana attenuata* through rapid consumption. **Planta** 210: 343-346.
58. Laue, G., C.A. Preston, and I.T. Baldwin. 2000. Fast-track to the trichome: induction of N-acyl non-nicotines precedes nicotine induction in *Nicotiana repanda*. **Planta** 210: 510-514.
59. van Dam, N.M., K. Hadwich, and I.T. Baldwin. 2000. Induced responses in *Nicotiana attenuata* affect behavior and growth of the specialist herbivore *Manduca sexta*. **Oecologia** 122: 371-379.
60. Baldwin, I.T., and W. Hamilton. 2000. Jasmonate-induced responses of *Nicotiana sylvestris* result in fitness costs due to impaired competitive ability for nitrogen. **Journal of Chemical Ecology** 26: 915-952.
61. Kahl J., D.H. Siemens, R.J. Aerts, R. Gaebler, F. Kühnemann, C.A. Preston, and I.T. Baldwin. 2000. Herbivore-induced ethylene suppresses a direct defense but not an indirect defense against an adapted herbivore. **Planta** 210: 336-342.
62. Ohnmeiss, T.E., and I.T. Baldwin. 2000. Optimal defense theory predicts the ontogeny of an induced nicotine defense. **Ecology** 81: 1765-1783.
63. Karban R., I.T. Baldwin, K.J. Baxter, G. Laue, and G.M. Felton. 2000. Communication between plants: induced resistance in wild tobacco plants following clipping of neighboring sagebrush. **Oecologia** 125: 66-71.
64. Halitschke R., A. Kessler, J. Kahl, A. Lorenz, and I.T. Baldwin. 2000. Ecophysiological comparison of direct and indirect defenses in *Nicotiana attenuata*. **Oecologia** 124: 408-417.
65. Voelckel, C., U. Schittko, and I.T. Baldwin. 2001. Herbivore-induced ethylene burst reduces fitness costs of jasmonate- and oral secretion-induced defenses in *Nicotiana attenuata*. **Oecologia** 127: 274-280.
66. Hermsmeier, D., U. Schittko, and I.T. Baldwin. 2001. Molecular interactions between the specialist herbivore *Manduca sexta* (Lepidoptera, Sphingidae) and its natural host *Nicotiana attenuata*. I. Large scale changes in the accumulation of growth- and defense-related plant mRNAs. **Plant Physiology** 125: 683-700.
67. Schittko, U., D. Hermsmeier, and I.T. Baldwin. 2001. Molecular interactions between the specialist herbivore *Manduca sexta* (Lepidoptera, Sphingidae) and its natural host *Nicotiana attenuata*. II. Accumulation of plant mRNAs in response to insect-derived cues. **Plant Physiology** 125: 701-710.
68. Halitschke, R., U. Schittko, G. Pohnert, W. Boland, and I.T. Baldwin. 2001. Molecular interactions between the specialist herbivore *Manduca sexta* (Lepidoptera, Sphingidae) and its natural host *Nicotiana attenuata*. III. Fatty acid-amino acid conjugates in herbivore oral secretions are necessary and sufficient for herbivore-specific plant responses. **Plant Physiology** 125: 711-717.
69. Winz, R. A., and I.T. Baldwin. 2001. Molecular interactions between the specialist herbivore *Manduca sexta* (Lepidoptera, Sphingidae) and its natural host *Nicotiana attenuata*. IV. Insect-induced ethylene reduces jasmonate-induced nicotine accumulation by regulating putrescine N-methyltransferase transcripts. **Plant Physiology** 125: 2189-2202.
70. van Dam, N.M., and I.T. Baldwin. 2001. Competition mediates costs of jasmonate-induced defenses, N acquisition and transgenerational plasticity in *Nicotiana attenuata*. **Functional Ecology** 15: 406-415.
71. van Dam, N.M., M. Horn, M. Mares, and I.T. Baldwin. 2001. Ontogeny constrains systemic protease inhibitor response in *Nicotiana attenuata*. **Journal of Chemical Ecology** 27: 547-568.

72. Preston, C.A., G. Laue, and I.T. Baldwin. 2001. Methyl jasmonate is blowing in the wind, but can it act as a plant-plant airborne signal? **Biochemical Systematics & Ecology** 29: 1007-1023.
73. Kessler, A., and I.T. Baldwin. 2001. Defensive function of herbivore-induced plant volatile emissions in nature. **Science** 291: 2141-2144.
74. van Dam, N.M., U. Hermenau, and I.T. Baldwin. 2001. Instar-specific sensitivity of specialist *Manduca sexta* larvae to induced defences in their host plant *Nicotiana attenuata*. **Ecological Entomology** 26: 578-586.
75. Pohlon, E., and I.T. Baldwin. 2001. Artificial diets "capture" the dynamics of jasmonate-induced defenses in plants. **Entomologia Experimentalis et Applicata** 100: 127-130.
76. Voelckel, C., T. Krügel, K. Gase, N. Heidrich, N.M. van Dam, R. Winz, and I.T. Baldwin. 2001. Anti-sense expression of putrescine N-methyltransferase confirms defensive role of nicotine in *Nicotiana sylvestris* against *Manduca sexta*. **Chemoecology** 11: 121-126.
77. Baldwin, I.T., R. Halitschke, A. Kessler, and U. Schittko. 2001. Merging molecular and ecological approaches in plant-insect interactions. **Current Opinion in Plant Biology** 4: 351-358.
78. Keinänen, M., N.J. Oldham, and I.T. Baldwin. 2001. Rapid HPLC screening of jasmonate-induced increases in tobacco alkaloids, phenolics and diterpene glycosides in *Nicotiana attenuata*. **Journal of Agricultural and Food Chemistry** 49: 3553-3558.
79. Ziegler, J., M. Keinänen, and I.T. Baldwin. 2001. Herbivore-induced allene oxide synthase transcripts and jasmonic acid in *Nicotiana attenuata*. **Phytochemistry** 58: 729-738.
80. Baldwin I.T. 2001. An ecologically motivated analysis of plant-herbivore interactions in native tobacco. **Plant Physiology** 127: 1449-1458.
81. Baldwin I.T., A. Kessler, and R. Halitschke. 2002. Volatile signaling in plant-plant herbivore interactions: what is real? **Current Opinion in Plant Biology** 5: 351-354.
82. Preston, C.A., H. Betts, and I.T. Baldwin. 2002. Methyl jasmonate as an allelopathic agent: sagebrush inhibits germination of a neighboring tobacco, *Nicotiana attenuata*. **Journal of Chemical Ecology** 28: 2343-2369.
83. Kessler, A., and I.T. Baldwin. 2002. Plant responses to insect herbivory: The emerging molecular analysis. **Annual Review of Plant Biology** 53: 299-328.
84. Heil, M., and I.T. Baldwin. 2002. Fitness costs of induced resistance: the emerging experimental support for a slippery concept. **Trends in Plant Science** 7: 61-67.
85. Park, J-H., R. Halitschke, H.B. Kim, I.T. Baldwin, K.A. Feldmann, and R. Feyereisen. 2002. A knock-out mutation in allene oxide synthase results in male-sterility and defective wound signal transduction in *Arabidopsis* due to a block in jasmonic acid biosynthesis. **The Plant Journal** 31: 1-12.
86. Bohlmann J., E.J. Stauber, B. Krock, N.J. Oldham, J. Gershenson, and I.T. Baldwin. 2002. Gene expression of 5-epi-aristolochene synthase and formation of capsidiol in roots of *Nicotiana attenuata* and *N. sylvestris*. **Phytochemistry** 60: 109-116.
87. Kessler, A., and I.T. Baldwin. 2002. *Manduca quinquemaculata*'s optimization of intra-plant oviposition to predation, food quality, and thermal constraints. **Ecology** 83: 2346-2354.
88. Krügel, T., M. Lim, K. Gase, R. Halitschke, and I.T. Baldwin. 2002. *Agrobacterium*-mediated transformation of *Nicotiana attenuata*, a model ecological expression system. **Chemoecology** 12: 177-183.

89. Krock B., S. Schmidt, C. Hertweck, and I.T. Baldwin. 2002. Vegetation-derived ABA and 4 terpenes enforce dormancy in seeds of the post-fire annual *Nicotiana attenuata*. **Seed Science Research** 12: 239-252.
90. Kessler, A., and I.T. Baldwin. 2002. Plant mediated tritrophic interaction and biological pest control. **AgBiotechNet**, Vol. 4 June, ABN 089.
91. Glawe, G., J. Zavala, A. Kessler, M.N. van Dam, and I.T. Baldwin. 2003. Ecological costs and benefits of trypsin protease inhibitor production in *Nicotiana attenuata*. **Ecology** 84: 79-90.
92. Voelckel, C., and I.T. Baldwin. 2003. Detecting herbivore-specific transcriptional responses in plants with multiple DDRT-PCR and subtractive library procedures. **Physiologia Plantarum** 118: 240-252.
93. Baldwin, I.T. 2003. "Curing" of *Nicotiana attenuata* leaves by small mammals does not decrease nicotine contents. **Western North American Naturalist** 63: 114-117.
94. Roda, A.L., N.J. Oldham, A. Svatos, and I.T. Baldwin. 2003. Allometric analysis of the induced flavonols on the leaf surface of wild tobacco (*Nicotiana attenuata*). **Phytochemistry** 62: 527-536.
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9. Schmidt, D. D., Kant, M.R. and Baldwin I.T. 2009 Molecular ecology of plant competition. In: N. Stewart, ed., **Weedy and Invasive Plant Genomics** Blackwell Scientific Publishing.
10. Barazani, O., and I.T. Baldwin. 2013 A mixed bag: The plant growth-promoting *Sebacina vermicifera* impairs defense mechanisms against herbivores. In A. Varma, G. Kost, R. Oelmüller, eds. *Piriformospora indica, Sebacinales and their Biotechnological Applications*, pp. 251-262.
11. Hartl, M., Kellmann, J.-W., and I.T. Baldwin 2011. Wie Gentechnik und Freilandversuche zu einem besseren Verständnis von Ökosystemen beitragen. In: E.-M. Neher, eds., **Aus den Elfenbeintürmen der Wissenschaft**, pp. 47-84. Wallstein Verlag, Göttingen
12. Schuman, M. C. and Baldwin, I.T. (2012). Asking the ecosystem if herbivory-inducible plant volatiles (HIPVs) have defensive functions. In: G. R. Iason, M. Dicke and S. E. Hartley eds., **The ecology of plant secondary metabolites: genes to global processes**, Ecological Reviews. p.p. 287-307. Cambridge University Press, Cambridge, UK.

VI. Non reviewed publications:

1. Baldwin, I.T. 1988. A model system for induced plant defenses. **NY Food and Life Science Quarterly** 17: 21-22.
2. Baldwin, I.T., and T. Eisner. 1989. The wars between the plants and the predators. **Science Year**: 119-131.
3. Baldwin, I.T. 1998. Ökologische Auswirkungen der Jasmonatinduktion auf Pflanzen in natürlichen Populationen. **Max-Planck-Gesellschaft Jahrbuch 1998**
4. Baldwin, I. T. 1990 Nicotine and nitrogen in *Nicotiana*: the integration of defensive and civilian responses to damage. **Bulletin of the Ecological Society of America** 71: 83.
5. Baldwin, I.T. 2002. Die Rolle der Pflanze in tritrophischen Interaktionen. **Max-Planck-Gesellschaft Jahrbuch 2002**.
6. Baldwin, I.T. 2007. Genforschung auf der Ebene des Organismus: Wie man Molekularbiologen für Freilandstudien ausrüstet. **Max-Planck-Gesellschaft Jahrbuch 2007**.
7. Hettenhausen, C., Baldwin, I. T., Wu, J. (2014). Virus-induced gene silencing in plant MAPK research. In G. Komis, J. Šamaj (Eds.), Plant MAP Kinases: Methods and Protocols (pp. 1-266). **Humana Press**.

V. Books

1. Karban, R., and I.T. Baldwin. 1997. **Induced Responses to Herbivory**. Chicago University Press.

Invited Research Lectures (since 2000)

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|----------|---|
| 22.02.00 | Keystone Symposium in Plant Signaling, Taos, NM |
| 14.04.00 | ISCOL Conference, Cornell University, Ithaca, NY |
| 27.04.00 | Dept. of Biology, University of Rostock, Germany |
| 20.05.00 | Plant Signaling 2000 International Symposium, State College, PA |
| 05.06.00 | INRA, Versailles, France |
| 06.08.00 | Ecological Society of America, Snowbird, UT |
| 03.09.00 | Complex Biological Systems Symposium, Kunming, China |
| 24.09.00 | Biosynthesis and Accumulation of Secondary Products, Halle, Germany |
| 13.10.00 | SFB Symposium, Würzburg, Germany |
| 17.11.00 | John Innes Center, Norwich, UK |
| 01.12.00 | University of Utah, Salt Lake City, UT |
| 12.12.01 | University of Fribourg, Switzerland |
| 15.02.01 | Swiss Zoological and Botanical Society, University of Neuchatel, Switzerland |
| 21.02.01 | MPI for Plant Breeding, Cologne, Germany |
| 25.02.01 | Gordon Conference, Plant-Herbivore Interactions, Ventura, CA |
| 26.04.01 | IOBC Conference, Wageningen, The Netherlands |
| 25.05.01 | DFG Schwerpunkt treffen, Halle, Germany |
| 30.05.01 | MPI for Plant Physiology, Golm, Germany |
| 06.08.01 | 11 th International Symposium on Insect-Plant Relationships, Elsinore, Denmark |
| 10.09.01 | Course de troisième cycle (2 lectures) Neuchatel, Switzerland |
| 24.09.01 | ESF Herbivory resistance workshop in Grosskochberg, Germany |
| 30.10.01 | Insect-Resistance Transgenic Symposium, Wageningen, The Netherlands |

14.11.01	DFG Schwerpunkt for Ecophysiology, Universitaet Bielefeld, Germany
13.12.01	Biology Department, University of Bayreuth, Germany
10.01.02	Biology Department, University of Darmstadt, Germany
12.01.02	Biology Department, CNB, University of Madrid, Spain
23.01.02	Institute for Phytosphere Research, Jülich, Germany
13.03.02	University of Bern, Faculty of Botany, Switzerland
14.-03.02	Symposium: Plant Survival in Ecosystems, Neuchatel, Switzerland
10.06.02	Plant Biology Canada 2002, Calgary, Canada
06.08.02	19 th Annual Meeting of ISCE, Hamburg, Germany
27.08.02	Tibetan Plateau Research, Beijing, China
19.09.02	Gesellschaft für Ökologie, Cottbus, Germany
27.09.02	Botaniker Tagung, Freiburg im Breisgau, Germany
21.10.02	Stevens Institute for Technology, Hoboken, NJ
22.10.02	Boyce Thompson Institute, Ithaca, NY
23.10.02	Cornell University, Ithaca, NY
24.10.02	LeTourneau memorial lectureship, University of Idaho, Moscow, ID
13.11.02	Symposium on Biodiversity and Ecology, Cracow, Poland
28.11.02	MPG Research Symposium, Berlin, Germany
18.01.03	NAS: Sackler Symposium, Irvine, CA
04.02.03	Symposium Forschungszentrums für Umwelt u. Gesundheit, Neuherberg, Germany
18.02.03	SFB 607 Second International Symposium, Weihenstephan, Germany
31.03.03	SEB (Society for Experimental Biology) Annual Meeting, Southampton, UK
19.04.03	WIKO, "The origin of consciousness," Istanbul, Turkey
28.04.03	Department of Plant and Microbial Biology, UC Berkeley, CA
08.10.03	Stevens Institute for Technology, Hoboken, NJ
13.10.03	Michigan State University, MI
15.10.03	University of Michigan, Ann Arbor, MI
04.11.03	Colloquium der GDCh, Aachen, Germany
26.02.04	Isreer Naturstofftage, Kaufbeuren, Germany
26.03.04	Institut de Biologie Moleculaire des Plantes, Strassburg, France
05.04.04	"Frontiers of Science Seminar Series," USDA/ARS, Gainesville, FL
01.04.04	OA publishing in the MPG, York, UK
07.04.04	University of California, Riverside, CA
26.04.04	MPI Terrestrial Microbiology, Marburg, Germany
03.05.04	Institute for Phytosphere Research, Jülich, Germany
06.05.04	International Workshop on PR-Proteins and Induced Resistance, Elsinore, Denmark
07.09.04	Botanische Konferenz, Braunschweig, Germany
10.09.04	Botanische Konferenz, Braunschweig, Germany
14.09.04	Institut für Allgemeine Botanik, FSU, Jena, Germany
22.09.04	John Innes Centre, Norwich, UK
01.10.04	Symposium "Entwicklungsbiologie," Berlin, Germany
02.10.04	Symposium "Plants & Microorganisms," Berlin, Germany
13.10.04	EPSO conference, Ischia, Italy
14.11.04	Zurich University, Zurich, Switzerland
18.11.04	ESA meeting, Salt Lake City, UT
17.01.05	BioRhiz EU Conference, Wageningen, The Netherlands
10.03.05	APHIS, Washington, D.C.
23.03.05	Hangzhou University, Hangzhou, China
28.03.05	CAS for Genetics and Development, Beijing, China
29.03.05	CAS for Botany, Beijing, China
30.03.05	CAS for Zoology, Beijing, China

- 11.04.05 MPI for Entwicklungsbiologie Tübingen, Germany
 13.04.05 Georgia Tech, Atlanta, USA
 28.04.05 Société Francaise Biologie Végétale, Arcachon, France
 22.05.05 Science and Art Conference, MOEL, Jena and Berlin, Germany
 26.05.05 Harvard University, Cambridge, MA
 12.06.05 Tufts University, Boston, MA
 17.08.05 Institute of Molecular Biology, University of Copenhagen, Denmark
 19.08.05 2nd European symposium on Plant Lipids, University of Copenhagen, Denmark
 23.08.05 Arabidopsis Summer School, Utrecht University, Utrecht, The Netherlands
 05.09.05 DFG, Bad Honnef, Germany
 04.10.05 Annual Meeting of the German Zoological Society, Bayreuth, Germany
 24.01.06 Biorhiz workshop, Jena, Germany
 03.02.06 University of Zürich, Zürich, Switzerland
 10.02.06 Harvard University, Cambridge, MA
 10.04.06 Purdue University, West Lafayette, IN
 18.05.06 University of British Columbia, Vancouver, Canada
 22.05.06 Cornell University, Ithaca, NY
 26.05.06 Harvard University, Cambridge, MA
 19.07.06 GRC Plant Molecular Biology, Holderness School, Plymouth, NH
 27.09.06 University of Tel Aviv, Tel Aviv, Israel
 29.09.06 Leibniz Institute of Plant Genetics and Crop Plant Research, Gatersleben, Germany
 03.11.06 Symposium: Genes in Ecology, Ecology in Genes , University of Kansas City, USA
 05.12.06 Rothamsted Research Station, Harpenden, England
 08.12.06 Carlsberg Laboratories, Denmark
 13.12.06 University of Delhi, New Delhi, India
 15.12.06 NCL, Pune, India
 15.01.07 Plant & Animal Genome XV Conference San Diego, CA
 18.01.07 Sao Paulo, Brazil
 18.02.07 GRC Plant Herbivore Interactions, Ventura, CA
 16.04.07 IMPRS basic lecture, Jena, Germany
 05.05.07 Symposium “Jerry Meinwald’s 80th birthday”, Ithaca, USA
 24.07.07 Chairperson, ISCE Meeting, Jena, Germany
 04.09.07 Linnaeus Symposium: Stockholm. Sweden
 13.09.07 XI Brazilian Congress of Plant Physiology, Gramado, Brazil
 04.10.07 Korean Max-Planck-Symposium on Biosciences and Materials Science, Seoul, Korea
 08.10.07 GRC - Floral and Vegetative Scents, Les Diablerets, Switzerland
 01.11.07 University of Cambridge, Department of Plant Sciences, United Kingdom
 28.11.07 Symposium of the Biology and Medicine Section of the MPG, Berlin, Germany
 19.12.07 Göttinger Zentrum für Molekulare Biowissenschaften, Göttingen, Germany
 20.01.08 Pomona College, Claremont, CA
 22.01.08 Stanford University, San Francisco, CA
 24.01.08 Brigham Young University, Provo, USA
 31.01.08 ECROPS Seminar, Erlangen
 19.02.08 University of Bern, Bern, Switzerland
 29.07.08 B.&M. Gates Foundation, Seattle, WA, USA
 18.04.08 SLU Arnap, Parismåla, Sweden
 16.09.08 Rank Prize Funds, Windermere, UK
 23.09.08 Minisymposium in Plant Biology, Köln, Germany
 08.10.08 International Congress on Cell Biology, Seoul, South Korea
 09.11.08 Delwart Symposium, Bruxelles, Belgium
 08.01.09 Workshop on Future Horizons in Plant Science, Chevy Chase, MD, USA

13.03.09	University of California, Davis, CA, USA
26.03.09	Tanner lecture at Brigham Young University, Provo, Utah, USA
06.04.09	EPS graduate school, Lunteren, The Netherlands
07.04.09	European Plant Science Organisation, Bruxelles, Belgium
23.06.09	8th International Conference on the Plant Hormone Ethylene, Ithaca, United States
09.08.09	Chairperson, GRC "Floral and Vegetative Volatiles", Oxford, United Kingdom
27.08.09	ISCE Conference, Neuchatel, Switzerland
09.09.09	Tansley lecture, BES, Hatfield, United Kingdom
15.10.09	Paul Feeny Symposium, Ithaca, USA
21.10.09	MPI for Breeding Research, Germany
30.10.09	John-Innes Centre, Norwich, United Kingdom
13.11.09	American Philosophical Society, Philadelphia, USA
17.11.09	University of Florida, Gainesville, USA
14.01.10	The 7th Okazaki Biology Conference, Kakegawa, Japan
11.04.10	University of Neuchatel, Neuchatel, Switzerland
03.03.10	Centre of Life and Food Sciences, Weihenstephan, Germany
05.03.10	Human Frontier Science Program, Strasbourg, France
15.04.10	University of Sussex, Brighton, United Kingdom
16.04.10	Bond Life Sciences Centre, University of Missouri, Columbia, USA
26.07.10	Banff Centre, Calgary, USA
05.07.10	IUPAC International Congress of Pesticide Chemistry, Melbourne, Australia
15.10.10	Instituto Gulbenkain de Ciéncia, Setúbal, Portugal
18.11.10	Lund University, Lund, Sweden
21.11.10	Section Symposium, Berlin, Germany
24.11.10	6 th Workshop of Genetics, Berlin, Germany
30.11.10	University of Helsinki, Helsinki, Sweden
16.12.10	Life and Society Forum at MPI-CBG, Dresden, Germany
31.01.11	University of Copenhagen, Denmark
19.02.11	American Association for the Advancement of Science, Washington, USA
11.03.11	Virginia Tech, Roanoke, VA, USA
20.04.11	Danford Center, Missouri, USA
27.08.11	2 nd International Symposium on Integrative Plant Biology, Lanzhou, China
20.09.11	Botanical Conference, Berlin, Germany
27.10.11	University of Lausanne, Switzerland
28.10.11	University of Geneve, Switzerland
14.11.11	Biocentrum Helsinki, Helsinki, Finland
27.11.11	Symposium at Ringberg Castle, Kreuth, Germany
03.12.11	Cold Spring Harbor Laboratory, USA
15.12.11	National Centre for Biological Sciences, Bangalore, Indien
09.01.12	Center for Plant Molecular Biology, Tuebingen, Germany
23.02.12	Cologne Spring Meeting, Cologne, Germany
31.01.12	Gordon Research Conference - Plant Volatiles, Ventura, CA, USA
23.03.12	Syngenta, Stein, Switzerland
06.07.12	HFSP Awardees Meeting, Deagu, Republic of Korea
10.07.12	EVO DEVO Lisbon, Portugal
13.07.12	Seminar at IGC, Lisbon, Portugal
27.08.12	SOL2012, Neuchatel, Switzerland
31.08.12	Seminar at University of Strasbourg, France
20.09.12	XXIX Reunión Argentina de Fisiología Vegetal, Mar del Plata, Argentina
17.10.12	Minerva Festival, Jerusalem, Israel
15.11.12	University of Exeter, Exeter, United Kingdom

22.01.13	University of Leiden, The Netherlands
13.03.13	The Ohio State University, USA
14.03.13	Florida Max-Planck-Foundation, USA
29.07.13	John Innes Center, Norwich, UK
13.08.13	25th Congress of the Scandinavian Plant Physiology Society, Helsingør, Denmark
19.08.13	International Chemical Ecology Conference 2013, Melbourne, Australia
01.10.13	Botanikertagung 2013, Tübingen, Deutschland
15.10.13	10th Solanaceae Conference Genome versus Phenome, Beijing, China
28.10.13	North Carolina Plant Molecular Biology Lecture Series, Research Triangle PK, NC, USA
20.11.13	32 New Phytologist Symposium, Buenos Aires, Argentina
06.12.13	Seminar Max-Planck-Institute for Infection Biology, Berlin, Germany
07.02.14	Keystone Symposia Conference, Breckenridge, CO, USA
03.04.14	Recomb Conference, Pittsburgh, Pennsylvania, USA
27.03.14	University of Utah, Salt Lake City, USA
24.04.14	Haberlandt lecture, FU Berlin, Germany
22.05.14	Leopoldina, Halle, Germany
27.03.14	University of Utah, Salt Lake City, USA
03.04.14	18th Annual International Conference on Research in Computational Molecular Biology, Pittsburgh, USA
24.04.14	Freie Universität Berlin, Haberlandt –Lecture, Berlin, Germany
22.05.14	Inaugural lecture at the National Academy Leopoldina, Halle, Germany
09.07.14	14 th HFSP Awardees Meeting/ Human Frontiers Science Program, Lugano, Switzerland
15.07.14	Graduate Biology School Symposium, Biotechnology Institute Thurgau, Konstanz, Germany
27.10.14	Kick-off Meeting at Kunming Institute of Botany, Kunming, China
07.11.14	PSC Symposium 2014, Zürich, Switzerland
19.01.15	Weizmann Institute of Science, Tel Aviv, Israel
22.01.15	Vienna Biocenter, Vienna, Austria
03.02.15	University of Lausanne, Lausanne, Switzerland
20.02.15	Indian Institute of Science Education and Research (IISER-Kolkata), Kolkata, India
22.02.15	Chemical Ecology KS Krishnan School for Chemical Ecology, Bangalore, India
07.04.15	Storer Lectureship in Life Sciences, University of California, Davis, USA
27.05.15	Copenhagen Plant Science Center, Copenhagen, Denmark
28.10.15	EMBO Meeting, Heidelberg, Deutschland
31.10.15	Delwart Symposium, Brussels, Belgium
07.01.16	University of Cambridge, United Kingdom
18.03.16	University of Michigan, USA

Funded Grants: since 2000

MPG--Establishment of an International Max Planck Research School in Jena, "The Exploration of Ecological Interactions with Molecular and Chemical Techniques." 2,019,000 Euros

MPG--Establishment of a Proteomics Facility in Jena. 700,000 Euros

MPG--Upgrade of the NMR Facility in Jena. 650,000 Euros

DFG--FOR 456--The Role of Biodiversity for Element Cycling and Trophic Interactions: An Experimental Approach in a Grassland Community. 148,000 Euros

DFG--SPP1152--Evolution of Metabolic Diversity. The evolution of herbivore-regulated secondary metabolism during polyploid speciation in native *Nicotiana*. 46,000 Euros

DFG--Graduiertenkollegs: Funktions- und Regenerationsanalyse belasteter Ökosysteme. 609,580 Euros

EU--Marie Curie Research Training Network - EU Framework 6, Biotic Interactions

in the Rhizosphere as Structuring Forces for Plant Communities (BIORHIZ) 450,000 Euros

Helmholtz Society-- Establishment of a Virtual Institute of Biotic Interactions.

900,000 Euros

NATO-- Using Combinatorial Peptide Libraries to Find Systemin-like Signals in *Nicotiana*. 105,000 Euros

MPG--Partnergroup India, Max Planck Partner Groups at Indian Partner Institutions, Developing a pest protection strategy for chickpea based on proteinase inhibitor defenses. 100,000 Euros

Humboldt Foundation--Programm zur Förderung von Instituts-partnerschaften.

Chemistry, ecological function and biological activity of acyclic diterpenoid glycosides and related secondary metabolites in different plants of the family *Solanaceae*. 55,000 Euros

MPG--NGS-Einzelprojekt, Sequencing of the *Nicotiana attenuata* genome 574,000 Euros

MPG--MPG Partnergroup of the Max Planck Institute for Chemical Ecology at the Institute of Science Education and Research, Kolkata, 60,000 Euros

MPG--MPG Kick-off meeting of the Max Planck Institute for Chemical Ecology at the Institute of Science Education and Research, Kolkata, 20,000 Euros

EU7--[IDEAS] European Research Council (ERC) Ecological performance of arrhythmic plants in nature. 2,496,000 €

HFSP--(Human Frontier Science Program) Are roots in the dark? 300,000 US\$

MPG--MPG Partnergroup in Host-Parasite Interactions at the Kunming Institute of Botany (KIB-CAS) 100,000E

GLRP--(Global Research Laboratory Program South Korea) 570,000 US\$