



# Curriculum Vitae

Prof. Dr. Ian T. Baldwin

Director  
Department of Molecular Ecology  
Max Planck Institute for Chemical Ecology



picture by Tristan Vostry

## Born

June 27, 1958, Ann Arbor, Michigan, USA

## Contact

Hans-Knöll Strasse 8, D - 07745 Jena, Germany

Phone: +49 (0)3641 - 571100

E-Mail: baldwin@ice.mpg.de

## Academic education and degrees

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

## Scientific and academic positions

- 1996 - present **Founding Director, Max Planck Institute for Chemical Ecology, Jena, Germany**
- 1999 - present Adjunct Professor, Friedrich Schiller University, Jena, Germany
- 2000 - present Adjunct Professor, Brigham Young University, Provo, UT, USA
- 2011 - 2020 **Senior editor of *eLife***, Cambridge, UK
- 2012 - present Member of the German Centre for Integrative Biodiversity Research (iDiv), Halle, Leipzig, Germany
- 2005 - 2009 Affiliated Professor, Royal Veterinary and Agricultural University of Denmark
- 2005 - 2009 Adjunct Professor, Department of Ecology and Evolutionary Biology, Cornell University, Ithaca, NY, USA
- 2003 - 2009 Adjunct Scientist, Boyce Thompson Institute for Plant Research, Ithaca, NY, USA
- 2002 - 2007 **Founder and Director, International Max Planck Research School**, Jena, Germany
- 2002 - 2005 Managing Director, Max Planck Institute for Chemical Ecology, Jena, Germany
- 2002 - 2008 Co-Founder and Director, Virtual Institute for Biotic Interactions, Jena, Germany
- 1996 - 1998 Professor, Department of Biology, SUNY Buffalo, NY, USA
- 1994 - 1996 Associate Professor, Department of Biology, SUNY Buffalo, NY, USA
- 1989 - 1994 Assistant Professor, Department of Biology, SUNY Buffalo, NY, USA

## Scientific awards

2019	ISI's 2018, 2017, 2016, 2015 World's Most Influential Scientific Minds, <b>Thomson Reuters</b>
2016	Elected fellow, American Association for the Advancement of Science ( <b>AAAS</b> )
2014	Elected Member of the European Molecular Biology Organization ( <b>EMBO</b> )
2014	Jean-Marie Delwart Award for Chemical Ecology
2013	Elected Member of the <b>National Academy of Sciences (USA)</b>
2013	Gewähltes Mitglied der <b>Nationalen Akademie der Wissenschaften Leopoldina</b>
2012 – 2017	European Research Council (ERC) <b>Senior Researcher Award</b>
2009	Tansley Lecture at the <b>British Ecological Society</b> Annual Meeting 2009
2001	Member of the <b>Berlin-Brandenburg Academy of Sciences and Humanities</b>
1998	<b>International Society for Chemical Ecology</b> , Silverstein-Simeone Award
1991 - 1996	<b>NSF</b> Presidential Young Investigator Award
1985 - 1988	A.D. White Graduate Fellowship, <b>Cornell University</b>
1985 - 1988	<b>National Science Foundation</b> , Predoctoral Fellowship Award
1980	Florence Fletcher Botany Prize, <b>Dartmouth College</b>

## Scientific Service

### Journals:

2019 - present	Editorial board, <b>Annual Review of Plant Biology</b>
2011 - 2020	<b>Senior Editor, eLife</b>
2010 - present	Associate Editor, Journal of Integrative Plant Biology
2006 - 2008	Board of Editors, Chemoecology
2001 - 2003	Associate Editor, Ecological Studies Series
2000 - 2008	Associate Editor, The Plant Journal
1996 - 2001	Associate Editor, Oecologia

### Advisory Boards:

2020 - 2024	<b>CAS Center for Excellence in Biotic Interactions,</b>
1998 - 2011	<b>MPG-Center for Information Management</b>
2000 - 2019	Lytle Preserve, Brigham Young University
2000 - 2006	Wissenschaftskolleg, Berlin
2001 - 2011	Swiss NSF Priority Program "Plant Survival in Natural and Agricultural Ecosystems" Priority Program "Biological radiations"
2002 - 2008	<b>Chairman, MPG-Forschungsperspektiven Commission (Future Research Perspectives of the MPG)</b>
2002 - 2008	SNF (CH) Priority Program "Plant Survival in Natural and Agricultural Ecosystems"
2002 - 2008	Institute of the Chemistry and Dynamics of the Geosphere, Jülich
2002 - 2004	Chinese Academy of Sciences, Tibetan Plateau Research Institute
2004 - 2010	DFG Priority Program "Trophic interactions and dynamics of communities"
2004 - 2006	Minerva Center for Arid Ecosystems Research, Hebrew University

2005 - 2011	<b>Max Planck Digital Library</b>
2005 - 2008	Wissenschaftlichen Programmbeirat Umweltforschung, FZ Jülich
2010- 2014	<b>Rapporteur, Commission for the oversight of all IMPRSs of the Max-Planck-Society</b>
2011 - 2016	Copenhagen Plant Science Centre
2017	Minerva Center of Movement Ecology at the Hebrew University of Jerusalem
2020 - 2024	CAS Center for Excellence in Biotic Interactions (2020 - 2024)
<u>MPG – Director searches</u>	<p>MPI for Geo-Anthropology, Jena (Founding commission)</p> <p>MPI for Infection Biology (1 director)</p> <p>MPI for Evolutionary Biology, Plöen (3 directors)</p> <p>MPI Molecular Plant Physiology, Golm (2 directors)</p> <p>MPI for Marine Microbiology (2 directors)</p> <p>MPI Plant Breeding Research, Cologne (4 directors)</p> <p>MPI Terrestrial Microbiology, Marburg (2 directors)</p> <p>MPI Ornithology, Seewiesen (3 directors)</p> <p>MPI Limnology, Plön (3 directors)</p> <p>MPI Molecular Genetics, Berlin</p> <p>MPI Biogeochemistry, Jena (2 directors)</p> <p>MPI in Florida, USA (3 directors)</p> <p>MPI for Ornithology, Radolfzell (2 directors)</p> <p>MPI for Economics (2 directors)</p> <p>Berufungskommission für Gruppenleiter "Biodiversity", MPIs Köln und Marburg</p> <p>Selbstständige Nachwuchsgruppen MPG (4 competitions)</p> <p>Selbstständige Nachwuchsgruppen Jagiellonian University, Krakow, MPG (2011)</p> <p>Selbstständige Nachwuchsgruppen, Biodiversity Research, MPG (2009-11)</p>
<u>International conferences organized</u>	
Feb 2005	MPG Symposium "New Directions in Plant-Insect Interactions"
Aug 2005	<b>Chairman: Gordon Research Conference on Floral and Vegetable Volatiles"</b>
Mar 2009	Max Planck Symposium on "Evolutionary Biology"
<b>Student training</b>	
<u>PhD Students:</u>	<p><b>6 current PhD students:</b> Rishav Ray, Julia Bing, Lucas Cortés, Sven Heiling, Pooja Snehrashmi Mehta, Caiqiong Yang,</p> <p><b>69 Ph.D. students supervised with theses completed and defended:</b></p>
2020	Henrique Valim, Erica Mc Gale
2019	Maitree Pradham
2018	Christoph Bruetting, Youngsung Joo, Xiang Li, Ming Wang
2017	Van Thi Lu, Nora Adam, Zhihao Ling, Ivan David Meza Canales, Thomas Brockmoeller
2016	Spoorthi Poreddy, Rakesh Santhanam, Dapeng Li
2015	Martin Schaefer, Machado Ricardo
2014	Felipe Yon, Michael Stitz, Mariana Stanton, Variluska Fragoso, Arne Weinhold
2013	Lynn Ullmann-Zeunert, Melkamu Woldemariam, Danny Kessler, Truong Son Dinh, Dorothea Meldau, Stefan Schuck, Jyotasana Gulati, Pavan Kumar

2012	Stefan Meldau, Alexander Weinhold, Maria Heinrich, Meredith Schuman, Tohir Bozorov, Mario Kallenbach
2011	Arjen van Doorn, Dahai Yang, Hendrik Wünsche, Paola Gilardoni, Christian Hettenhausen
2010	Navaporn Onkokesung, Markus Hartl, Samir Ansour
2009	Sirsha Mitra, Harleen Kaur, Long Hoa Hoang
2008	Anja Paschold, Shree Pandey, Jens Schwachtje, Jinsong Wu, Beatrice Berger
2007	Caroline von Dahl, Anke Steppuhn, Silvia Schmidt, Jianqiang Wu, Channabasavangowda Rayapuram
1996 - 2006	Jin-Ho Kang (2006); Claudia Voelckel (2004); Jorge Zavala (2004); Dominik Schmidt (2004); Rayko Halitschke (2004); Matthias Held (2003), André Keßler (2002), Ursula Schittko (2000), Thomas Ohnmeiss (1996),
<u>Prizes of PhD students</u>	Five PhD students André Kessler, Rayko Halitschke, Jianqiang Wu, Shree Prakash Pandey and Meredith Schuman have won the <b>MPG Otto Hahn Medal</b>  Three PhD students Claudia Voelckel (2005), Shree Pandey (2009) and Dapeng Li (2017) were awarded the <b>Beutenberg Campus Award</b> for best Ph.D dissertation
<u>MA , Diploma and BA students</u>	<b>61 MA, Diploma and BA theses completed</b>  Konrad Burkard (2020), Yang Wang (2018), Marycolette Ezediokpu, (2018), Christoph Kreitzer (2016), Nam Thi Hoang Nguyen (2015), Yuji Cai (2015), Thomas Fabisch (2015), Karolin Tröbs (2015), Nabin Pahari (2015), Chuan Shi (2015), Ali Nawaz (2014), Bharath Ramraj (2014), Julia Kästner (2013), Nina Alejandro Perez (2013), Jasmin Herden (2013), Christoph Brütting (2012), Janet Grabengiesser (2012), Maria del Pilar Bonilla (2012), Wencke Walter (2011), Sanosh JKhanal (2011), Christine Lembke (bachelor thesis) (2011), Franziska Eberl, (bachelor thesis) (2011), Maria Knyrim (bachelor thesis) (2011), Adriana Prehl (2010), Christine Fischer (2010), Sven Heiling (2010), Martin Schaefer (2010), Marcus Horn (2010), Holger Merker (2009); Lynn Ullmann (2009), Michael Stitz (2009), Yvon Stampnik, (bachelor thesis) (2009), Alexander Weinhold (2008), Melanie Skibbe (2008), Evelyn Körner (2008), Cornelia Linse (2008), Christian Hettenhausen (2007), Tina Riedel (2007), Celia Diezel (2007), Dirk Link (2006), Stefan Meldau (2006), Hendrik Wuensche (2005), Anja Paschold (2004), Ben Bubner (2003), Rainer Saedler (2002), Jens Schwachtje (2002), Caroline von Dahl (2002), Sybille Schmidt (2000), Claudia Voelckel (2000), Elisabeth Pohlen (2000), Grit Glawe (2000), Romy Becker (1999), Rayko Halitschke (1999), Catherine A. Preston (1996), Gladys Lynds (1996), Neda Diab (1995), Mike Karb (1995), Eric Schmelz (1995), Laura Morse (1994), Michael Euler (1994)
<b>List of publications</b>	
Google scholar	<a href="http://scholar.google.de/citations?user=MVeVpjUAAAAJ&amp;hl=de">http://scholar.google.de/citations?user=MVeVpjUAAAAJ&amp;hl=de</a>
Orchid	<a href="http://orcid.org/0000-0001-5371-2974">http://orcid.org/0000-0001-5371-2974</a>
Web of science	<a href="http://www.researcherid.com/rid/K-1809-2013">http://www.researcherid.com/rid/K-1809-2013</a>
	Researcher ID: K-1809-2013 Number of peer reviewed publications <b>514</b> total listed below– 497 (Web of Science), 492 (Scopus) Hirsch (h) factor: <b>113</b> (Google scholar); <b>90</b> (researcherid); <b>93</b> (Scopus) Ranked <b>8<sup>th</sup></b> of 113,961 researchers in Plant Biology Ioannidis JPA, Boyack KW, Baas J (2020) Updated science-wide author databases of standardized citation indicators. PLoS Biol 18(10): e3000918. <a href="https://doi.org/10.1371/journal.pbio.3000918">https://doi.org/10.1371/journal.pbio.3000918</a>

- 1 Cortés Llorca, L., Li, R., Yon, F., Schäfer, M., Halitschke, R., Robert, C., Kim, S.-G., Baldwin, I. T. (2020). ZEITLUPE facilitates the rhythmic movements of *Nicotiana attenuata* flowers. **The Plant Journal**, 103(1), 308-322. doi:[10.1111/tpj.14732](https://doi.org/10.1111/tpj.14732).
- 2 Guo, H., Lackus, N., Köllner, T. G., Li, R., Bing, J., Wang, Y., Baldwin, I. T., Xu, S. (2020). Evolution of a novel and adaptive floral scent in wild tobacco. **Molecular Biology and Evolution**, 37(4), 1090-1099. doi:[10.1093/molbev/msz292](https://doi.org/10.1093/molbev/msz292).
- 3 Kang, M., Ahn, H., Rothe, E., Baldwin, I. T., Kim, S.-G. (2020). A robust genome-editing method for wild plant species *Nicotiana attenuata*. **Plant Biotechnology Reports**, 14, 585-598. doi:[10.1007/s11816-020-00634-5](https://doi.org/10.1007/s11816-020-00634-5).
- 4 Li, D., Halitschke, R., Baldwin, I. T., Gaquerel, E. (2020). Information theory tests critical predictions of plant defense theory for specialized metabolism. **Science Advances**, 6(24): eaaz0381. doi:[10.1126/sciadv.aaz0381](https://doi.org/10.1126/sciadv.aaz0381)
- 5 Li, S., Joo, Y., Cao, D., Li, R., Lee, G., Halitschke, R., Baldwin, G., Baldwin, I. T., Wang, M. (2020). Strigolactone signaling regulates specialized metabolism in tobacco stems and interactions with stem-feeding herbivores. **PLoS Biology**, 18(8): e3000830. doi:[10.1371/journal.pbio.3000830](https://doi.org/10.1371/journal.pbio.3000830)
- 6 McGale, E., Valim, H., Mittal, D., Morales Jimenez, J., Halitschke, R., Schuman, M. C., Baldwin, I. T. (2020). Determining the scale at which variation in a single gene changes population yields. **eLife**, 9: e53517. doi:[10.7554/eLife.53517](https://doi.org/10.7554/eLife.53517).
- 7 Pradhan, M., Pandey, P., Baldwin, I. T., Pandey, S. P. (2020). Argonaute4 modulates resistance to *Fusarium brachygibbosum* infection by regulating jasmonic acid signaling. **Plant Physiology**, 184, 1128-1152. doi:[10.1104/pp.20.00171](https://doi.org/10.1104/pp.20.00171).
- 8 Shen, G., Liua, N., Zhang, J., Xu, Y., Baldwin, I. T., Wu, J. (2020). *Cuscuta australis* (dodder) parasite eavesdrops on the host plants' FT signals to flower. *Proceedings of the National Academy of Sciences of the United States of America*, 15(37), 23125-23130. doi:[10.1073/pnas.2009445117](https://doi.org/10.1073/pnas.2009445117)
- 9 Valim, H., Dalton, H., Joo, Y., McGale, E., Halitschke, R., Gaquerel, E., Baldwin, I. T., Schuman, M. C. (2020). TOC1 in *Nicotiana attenuata* regulates efficient allocation of nitrogen to defense metabolites under herbivory stress. **New Phytologist**, 228(4), 1227-1242.
- 10 Xu, S., Kreitzer, C., McGale, E., Lackus, N., Guo, H., Köllner, T. G., Schuman, M. C., Baldwin, I. T., Zhou, W. (2020). Allelic differences of clustered terpene synthases contribute to correlated intraspecific variation of floral and herbivory-induced volatiles in a wild tobacco. **New Phytologist**, 228(3), 1083-1096. doi:[10.1111/nph.16739](https://doi.org/10.1111/nph.16739).
- 11 Zou, Y., Li, R., Baldwin, I. T. (2020). ZEITLUPE is required for shade avoidance in the wild tobacco *Nicotiana attenuata*. **Journal of Integrative Plant Biology**, 62(9), 1341-11351. doi:[10.1111/jipb.12880](https://doi.org/10.1111/jipb.12880).
- 12 Figon, F., Baldwin, I. T., Gaquerel, E. (in press). Ethylene is a local modulator of jasmonate-dependent phenolamide accumulation during *Manduca sexta* herbivory in

*Nicotiana attenuata*. **Plant, Cell and Environment**. doi:[10.1111/pce.13955](https://doi.org/10.1111/pce.13955).

- 14 S. Heiling, M. C. Schuman, M. Schöttner, P. Mukerjee, B. Berger, B. Schneider, A. R. Jassbi, I. T. Baldwin, Jasmonate and ppHsystemin regulate key malonylation steps in the biosynthesis of 17-Hydroxygeranylinalool diterpene glycosides, an abundant and effective direct defense against herbivores in *Nicotiana attenuata*. **Plant Cell** 22, 273-292 (2010).
- 15 Li, R., Jin, J., Xu, J., Wang, L. L., Li, J., Lou, Y., Baldwin, I. T. (in press). Long non-coding RNAs associate with jasmonate-mediated plant defense against herbivores. **Plant, Cell and Environment**.
- 16 J. Li, R. Halitschke, D. Li, C. Paetz, H. Su, S. Heiling, S. Xu, I. T. Baldwin (in press) Controlled hydroxylations of diterpenoids allow for plant chemical defense without autotoxicity. **Science**.

## 201914

- 1 Backmann, P., Grimm, V., Jetschke, G., Lin, Y., Vos, M., Baldwin, I. T., van Dam, N. M. (2019). Delayed chemical defense: Timely expulsion of herbivores can reduce competition with neighboring plants. **The American Naturalist**, 193(1), 125-139. doi:10.1086/700577.
- 2 Baldwin, I. T. (2019). What five insects told us about how a native plant copes with real-world problems. **Comptes Rendus Biologies**, 342(7-8), 263-265. doi:10.1016/j.crvi.2019.09.018
- 3 Guo, H., Halitschke, R., Wielsch, N., Gase, K., Baldwin, I. T. (2019). Mate selection in self-compatible wild tobacco results from coordinated variation in homologous self-incompatibility genes. **Current Biology**, 27(12), 2020-2030. doi:10.1016/j.cub.2019.05.042.
- 4 Haverkamp, A., Li, X., Hansson, B. S., Baldwin, I. T., Knaden, M., Yon, F. (2019). Flower movement balances pollinator needs and pollen protection. **Ecology**, 100(1): e02553. doi:10.1002/ecy.2553.
- 5 He, J., Fandino, R. A., Halitschke, R., Luck, K., Köllner, T. G., Murdock, M. H., Ray, R., Gase, K., Knaden, M., Baldwin, I. T., Schuman, M. C. (2019). An unbiased approach elucidates variation in (S)-(+)-linalool, a context-specific mediator of a tri-trophic interaction in wild tobacco. **Proceedings of the National Academy of Sciences of the United States of America**. 116(29), 14651-14660. doi:10.1073/pnas.1818585116.
- 6 Joo, Y., Goldberg, J. K., Chretien, L., Kim, S.-G., Baldwin, I. T., Schuman, M. C. (2019). The circadian clock contributes to diurnal patterns of plant indirect defense in nature. **Journal of Integrative Plant Biology**, 61(8), 924-928. doi:10.1111/jipb.12725.
- 7 Joo, Y., Schuman, M. C., Goldberg, J. K., Wissgott, A., Kim, S.-G., Baldwin, I. T. (2019). Herbivory elicits changes in green leaf volatile production via jasmonate signaling and the circadian clock. **Plant, Cell and Environment**, 42(3), 972-982. doi:10.1111/pce.13474.
- 8 Kessler, D., Bing, J., Haverkamp, A., Baldwin, I. T. (2019). The defensive function of a pollinator-attracting floral volatile. **Functional Ecology**. 33(7), 1223-1232. doi:10.1111/1365-2435.13332.
- 9 Ling, Z., Brockmüller, T., Baldwin, I. T., Xu, S. (2019). Evolution of alternative splicing in eudicots. **Frontiers in Plant Science**. 10: 707. doi:10.3389/fpls.2019.00707.

- 10 Mindt, E., Wang, M., Schäfer, M., Halitschke, R., Baldwin, I. T. (2019). Quantification of blumenol derivatives as leaf biomarkers for plant-AMF association. **Bio-protocol**, 9(14): e3301. doi:10.21769/BioProtoc.3301.
- 11 Ray, R., Li, D., Halitschke, R., Baldwin, I. T. (2019). Using natural variation to achieve a whole-plant functional understanding of the responses mediated by jasmonate signaling. **The Plant Journal**. doi:10.1111/tpj.14331.
- 12 Santhanam, R., Menezes, R. C., Grabe, V., Li, D., Baldwin, I. T., Groten, K. (2019). A suite of complementary biocontrol traits allows a native consortium of root-associated bacteria to protect their host plant from a fungal sudden-wilt disease. **Molecular Ecology**, 28(5), 1154-1169. doi:10.1111/mec.15012.
- 13 Song, N., Ma, L., Wang, W., Sun, H., Wang, L., Baldwin, I. T., Wu, J. (2019). An ERF2-like transcription factor regulates production of the defense sesquiterpene capsidiol upon *Alternaria alternata* infection. **Journal of Experimental Botany**, 70(20), 5895-5908. doi:10.1093/jxb/erz327.
- 14 Song, Y., Wang, M., Zeng, R., Groten, K., Baldwin, I. T. (2019). Priming and filtering of antiherbivore defences among *Nicotiana attenuata* plants connected by mycorrhizal networks. **Plant, Cell and Environment**, 42(11), 2945-2961. doi:10.1111/pce.13626.
- 15 Valim, H., McGale, E., Yon, F., Halitschke, R., Fragoso, V., Schuman, M. C., Baldwin, I. T. (2019). The clock gene *TOC1* in shoots, not roots, determines fitness of *Nicotiana attenuata* under drought. **Plant Physiology**, 181(1), 305-318. doi:10.1104/pp.19.00286.
- 16 Zou, Y., Li, R., Baldwin, I. T. (2019). *ZEITLUPE* is required for shade avoidance in the wild tobacco *Nicotiana attenuata*. **Journal of Integrative Plant Biology**. doi:10.1111/jipb.12880.

## 2018

- 1 Adam, N., Kallenbach, M., Meldau, S., Veit, D., van Dam, N., Baldwin, I. T., Schuman, M. C. (2018). Functional variation in a key defense gene structures herbivore communities and alters plant performance. **PLoS One**, 13(6): e0197221. doi:10.1371/journal.pone.0197221.
- 2 Brütting, C., Crava, M. C., Schäfer, M., Schuman, M. C., Meldau, S., Adam, N., Baldwin, I. T. (2018). Cytokinin transfer by a free-living mirid to *Nicotiana attenuata* recapitulates a strategy of endophytic insects. **eLife**, 7: e36268. doi:10.7554/eLife.36268.
- 3 Ha, J., Kim, J., Kim, S., Sim, H., Lee, G., Halitschke, R., Baldwin, I. T., Kim, J., Park, C. (2018). Shoot phytochrome B modulates reactive oxygen species homeostasis in roots via abscisic acid signaling in *Arabidopsis*. **The Plant Journal**, 94(5), 790-798. doi:10.1111/tpj.13902.
- 4 Haverkamp, A., Hansson, B. S., Baldwin, I. T., Knaden, M., Yon, F. (2018). Floral trait variations among wild tobacco populations influence the foraging behavior of hawkmoth pollinators. **Frontiers in Ecology and Evolution**, 6:19. doi:10.3389/fevo.2018.00019.
- 5 Joo, Y., Schuman, M. C., Goldberg, J. K., Kim, S.-G., Yon, F., Brütting, C., Baldwin, I. T. (2018). Herbivore-induced volatile blends with both "fast" and "slow" components provide robust indirect defence in nature. **Functional Ecology**, 32(1), 136-149. doi:10.1111/1365-2435.12947.



- 6 Li, J., Schuman, M. C., Halitschke, R., Li, X., Guo, H., Grabe, V., Hammer, A., [Baldwin, I. T.](#) (2018). The decoration of specialized metabolites influences stylar development. **eLife**, 7: e38611. doi:10.7554/eLife.38611.
- 7 Li, R., Cortés Llorca, L., Schuman, M. C., Wang, Y., Wang, L. L., Joo, Y., Wang, M., Giddings Vassão, D., [Baldwin, I. T.](#) (2018). ZEITLUPE in the roots of wild tobacco regulates jasmonate-mediated nicotine biosynthesis and resistance to a generalist herbivore. **Plant Physiology**, 177(2), 833-846. doi:10.1104/pp.18.00315.
- 8 Li, R., Schuman, M. C., Wang, Y., Cortés Llorca, L., Bing, J., Bennion, A., Halitschke, R., [Baldwin, I. T.](#) (2018). Jasmonate signaling makes flowers attractive to pollinators and repellent to florivores in nature. **Journal of Integrative Plant Biology**, 60(3), 190-194. doi:10.1111/jipb.12607.
- 9 Machado, R. A. R., Arce, C. C. M., McClure, M. A., [Baldwin, I. T.](#), Erb, M. (2018). Aboveground herbivory induced jasmonates disproportionately reduce plant reproductive potential by facilitating root nematode infestation. **Plant, Cell and Environment**, 41(4), 797-808. doi:10.1111/pce.13143.
- 10 McGale, E., Diezel, C., Schuman, M. C., [Baldwin, I. T.](#) (2018). Cry1Ac production is costly for native plants attacked by non-Cry1Ac-targeted herbivores in the field. **New Phytologist**, 219(2), 714-727. doi:10.1111/nph.15207
- 11 Oh, Y., Fragoso, V., Guzzonato, F., Kim, S.-G., Park, C., [Baldwin, I. T.](#) (2018). Root-expressed phytochromes B1 and B2, but not PhyA and Cry2, regulate shoot growth in nature. **Plant, Cell and Environment**, 41(11), 2577-2588. doi:10.1111/pce.13341.
- 12 Pandey, P., Wang, M., [Baldwin, I. T.](#), Pandey, S. P., Groten, K. (2018). Complex regulation of microRNAs in roots of competitively-grown isogenic *Nicotiana attenuata* plants with different capacities to interact with arbuscular mycorrhizal fungi. **BMC Genomics**, 19: 937. doi:10.1186/s12864-018-5338-x.
- 13 Schuman, M. C., [Baldwin, I. T.](#) (2018). Field studies reveal functions of chemical mediators in plant interactions. **Chemical Society Reviews**, 47(14), 5338-5353. doi:10.1039/C7CS00749C.
- 14 Schuman, M. C., Meldau, S., Gaquerel, E., Diezel, C., McGale, E., Greenfield, S., [Baldwin, I. T.](#) (2018). The active jasmonate JA-Ile regulates a specific subset of plant jasmonate-mediated resistance to herbivores in nature. **Frontiers in Plant Science**, 9: 789. doi:10.3389/fpls.2018.00787.
- 15 Sun, G., Xu, V. Y., Liu, H., Sun, T., Zhang, J., Hettenhausen, C., Shen, G., Qi, J., Qin, Y., Li, J., Wang, L., Chang, W., Guo, Z., [Baldwin, I. T.](#), Wu, J. (2018). Large-scale gene losses underlie the genome evolution of parasitic plant *Cuscuta australis*. **Nature Communications**, 9: 2683. doi:10.1038/s41467-018-04721-8.
- 16 Wang, M., Schäfer, M., Li, D., Halitschke, R., Dong, C.-F., McGale, E., Paetz, C., Song, Y., Li, S., Dong, J., Heiling, S., Groten, K., Franken, P., Bitterlich, M., Harrison, M., Paszkowski, U., [Baldwin, I. T.](#) (2018). Blumenols as shoot markers for root symbiosis with arbuscular mycorrhizal fungi. **eLife**, 7: e37093. doi:10.7554/eLife.37093.
- 17 Wang, M., Wilde, J., [Baldwin, I. T.](#), Groten, K. (2018). *Nicotiana attenuata*'s capacity to interact with arbuscular mycorrhiza alters its competitive ability and elicits major changes in the leaf transcriptome. **Journal of Integrative Plant Biology**, 60(3), 242-261. doi:10.1111/jipb.12609.
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- 2 Schultz, J. C., Nothnagle, P. J., Baldwin, I. T. (1982). Seasonal and individual variation in leaf quality of two northern hardwoods tree species. **American Journal of Botany**, 69(5), 753-759.

- 1 Schultz, J. C., Baldwin, I. T., Nothnagle, P. J. (1981). Hemoglobin as a binding substrate in the quantitative analysis of plant tannins. **Journal of Agricultural and Food Chemistry**, 29(4), 823-826.

## Books

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

## On-line lectures

- 1 iBioSeminar: **A Short Biased History of an Interdisciplinary Field**, August 2016 <https://www.ibiology.org/plant-biology/studying-plants-ecological-interactions-genomics-era-story-nicotiana-attenuata/#part-1>
- 2 iBioSeminar: **Nicotiana attenuata's Responses to Attack from a Nicotine-tolerant Herbivore**, August 2016 <https://www.ibiology.org/plant-biology/studying-plants-ecological-interactions-genomics-era-story-nicotiana-attenuata/#part-2>
- 3 iBioSeminar: **Plant's Perspective on Seeds, Sex and Microbes**, December 2016 <https://www.ibiology.org/plant-biology/studying-plants-ecological-interactions-genomics-era-story-nicotiana-attenuata/#part-3>
- 4 iBioMagazine: **Making Scientific Writing Painless**, August 2016 <https://www.ibiology.org/professional-development/making-scientific-writing-painless/>
- 5 New Phytologist Next Gen Symposium (2017): **On becoming (and remaining) a plant scientist in the genomics era**: <https://youtu.be/dH1V-rmYDxQ>

## Invited lectures (total 239, listed are since 2014)

- 2019 Regulatory Oxylipins – International Meeting, Ghent, BE  
Max-Planck-Institute for Ornithology, Seewiesen, DE  
IBMCP, Valencia, SP  
CAS-70th anniversary Beijing, CN

- APACE, Hangzhou, CN  
 SOL19, Jerusalem, IL  
 Grande conférence de l'Académie des sciences, Paris, FR  
 KWS, Einbeck, DE
- 2018** Jena Microbial Communication Colloquium. JSMC, Jena DE  
 Ciências da Universidade de Lisboa, Lisbon PT  
 Friedrich-Schiller-Universität, 'Plant Performance under Stress', Jena, DE  
 University of Saskatchewan, Saskatchewan CA  
 Harvard University, Cambridge, MA, USA  
 Carnegie Institute for Plant Biology, Stanford, CA, USA  
 Gregor Mendel Institute of Molecular Plant Biology, Vienna, AT  
 Institut de Biologie de l'École Normale Supérieure, Paris, FR  
 International Max Planck Research School, Jena DE  
 Plants & People Conference, Golm, DE
- 2017** Korean Association of Biological Science Conference, Seoul, KR  
 John Innes Center, New Phytologists Next Generation Scientists, Norwich, UK  
 Dartmouth College, Ecology, Evolution, Ecosystems & Society Program, NH, USA  
 8th Federation of the Israel Societies for Experimental Ecology, Eilat, IL
- 2016** Frontiers in Bioscience Conference, Buenos Aires, AR  
 New York University, Centre for Genomics and Systems Biology, USA  
 National University of Mexico, Mexico City, MX  
 The Evolution of Host-Microbe Interactions Cell symposium, Chicago, USA  
 Nanyang Technological University, School of Biological Sciences, SG  
 ASPB Conference 2016, Austin, TX, USA  
 Michigan State University, East Lansing, MI, USA  
 University of Cambridge, Cambridge, UK  
 IndiaBioScience Young Investigators Meeting, Gurgaon, IN  
 Delwart Symposium, Brussels, BE
- 2015** University of Florida, Gainesville, FL, USA  
 Plant Communication, Brussels, BE  
 European Molecular Biology Organisation (EMBO), Heidelberg, DE  
 University of Copenhagen, Copenhagen, DK  
 University of California, Davis, CA, USA  
 K S Krishnan School for Chemical Ecology, Bangalore, IN  
 Institute of Science Education and Research, Kolkata, IN  
 'Biology and Integrative Genomics' Seminar, Lausanne, CH  
 University of Lausanne, Lausanne, CH  
 Vienna Biocenter, Vienna, AT  
 Weizmann Institute of Science, Tel Aviv, IL
- 2014** Biozentrum der Ludwigs-Maximilian-Universität, Keystone Seminar Series, München, DE  
 Plant Science Center, Zürich, CH  
 Kunming Institute of Botany, CAS, Kunming, CN  
 Biotechnology Institute Thurgau, Konstanz, DE  
 Human Frontiers Science Program, Lugano CH  
 Leopoldina National Academy of Sciences, Halle, DE  
 Freie Universität, Haberlandt Lecture, Berlin, DE  
 18th Computational Molecular Biology conference, Pittsburgh, PA, USA  
 University of Utah, Salt Lake City, UT, USA  
 RECOMB Conference, Pittsburgh, PA, USA  
 Keystone Symposium, Breckenridge, CO, USA  
 Max-Planck-Institute for Infection Biology, Berlin, DE



What Plants Talk  
About: Smarty Plants

What Plants Talk About (CBC The Nature of things):  
<https://www.youtube.com/watch?v=CrrSAc-vjG4>

Kluge Pflanzen

Kluge Pflanzen - Blattgeflüster 1v4 Doku EP02 - (Part 1)  
<https://www.youtube.com/watch?v=Qg5byTFb7-E>

Kluge Pflanzen - Blattgeflüster 2v4 Doku EP02 (Part 2)  
<https://www.youtube.com/watch?v=lugWSW7QCHo>

Kluge Pflanzen - Blattgeflüster 3v4 Doku EP02 (Part 3)  
<https://www.youtube.com/watch?v=pdQe8mgQ3KU>

Kluge Pflanzen - Blattgeflüster 4v4 Doku EP02 (Part 4)  
<https://www.youtube.com/watch?v=Umd4RhmjDNw>