



Curriculum Vitae Professor Dr Ian Thomas Baldwin

Name: Ian Thomas Baldwin

Born: 27 June 1958



Image: Markus Scholz | Leopoldina

Research Priorities: Ecology, nature observation, molecular genetics, environmental and agricultural research, pest infestation, predators, herbivores

Ian Thomas Baldwin is a US American ecologist. His particular scientific achievement is connecting nature observation and molecular genetics. In this new research approach, he combines ecology, the studies of organisms and their survival in a specific environment, and the identification and study of individual gene functions. His work results form the basis for modern environmental and agricultural research.

Academic and Professional Career

since 2020	Scientific Member, Max Planck Society, Munich, Germany
2002	Founder, International Max Planck Research School, Max Planck Institute for Chemical Ecology, Jena, Germany
since 1999	Adjunct Professor, Friedrich Schiller University, Jena, Germany
1996 - 2020	Director, Department of Molecular Ecology, Max Planck Institute for Chemical Ecology, Jena, Germany
1996	Founding Director, Max Planck Institute for Chemical Ecology, Jena, Germany
1996	Professor, Biology Department, State University of New York (SUNY), Buffalo, USA
1993	Associate Professor, Biology Department, SUNY, Buffalo, USA
1989	Assistant Professor, Biology Department, SUNY, Buffalo, USA
1989	PhD in Chemical Ecology, Department of Neurobiology and Behavior, Cornell University, Ithaca, USA
1981	BA in Biology
	Studies in Biological Sciences and Chemistry, Dartmouth College, Hanover, USA

Project Coordination, Membership in Collaborative Research Projects

since 2014	Project Head, Subproject "Are Plant Defences Chemicals Commonly Sequestered and Metabolized by their Herbivores to Function as Infochemicals in Higher Trophic Level Interactions in Nature?", Collaborative Research Centre (SFB) 1127, German Research Foundation (DFG)
since 2007	Graduate School (GSC) 214 "Jena School for Microbial Communication", DFG
2002 - 2005	Project „The effects of ecosystem complexity and biodiversity on the expression of ecologically relevant genes in a model plant, <i>Solanum nigrum</i> ", Research Group (FOR) 456, DFG

Honours and Awarded Memberships

since 2016	Fellow, American Association for the Advancement of Science, USA
2015 - 2019	Highly Cited Researcher, Web of Science, Clarivate, USA
2014	Jean-Marie Delwart Award, Jean-Marie Delwart Foundation, Waterloo, Belgium
since 2014	Member, European Molecular Biology Organization (EMBO), Heidelberg, Germany
since 2013	Member, German National Academy of Sciences Leopoldina, Germany
since 2013	Member, National Academy of Sciences, USA
2011	Advanced Grant, European Research Council (ERC)
2009	Tansley Lecture, British Ecological Society, UK
since 2001	Extraordinary Member, Berlin-Brandenburg Academy of Sciences and Humanities, Berlin, Germany
1998	Silverstein-Simeone Award, International Society of Chemical Ecology
1991	Presidential Young Investigator Award, National Science Foundation (NSF), USA

Research Priorities

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In his research approach, Ian Baldwin combines field experiments with molecular biology, thus bringing together the research branch of molecular and cell biology with that of ecology and evolutionary biology. Against this background, he formulates hypotheses on how and why plants in

nature survive despite pest infestation. He wants to find out which genetic characteristics play a role here. Furthermore, he investigates how chemicals control the interaction between living organisms and their environment. In his studies, he focuses on the interaction between plants and their predators (herbivores).

Baldwin has developed a molecular and analytical “toolbox”, which his team use in a natural habitat in the Great Basin Desert in the USA for studying a wild tobacco species as well as genetically modified plants with the aim of discovering the plants’ natural resistance to pests. This extensive programme allowed the scientists to discover genetic and biochemical mechanisms that make the plants resistant to predators. They also uncovered the ideal conditions for the formation of seeds.

Ian Thomas Baldwin advocates the idea of promoting a “feeling for the organism” when training biologists and supports initiatives for open access to scientific publications. He is Senior Editor of the open-access journal “eLife”. From 2015 to 2019, he was a Highly Cited Researcher (HCR).