Personal Information

First name / Surname: Theodoor (**Ted**) Christiaan Joannes / **Turlings**

Addresses

- professional: University of Neuchâtel, Institute of Biology, rue Emile-Argand 11, CH-2000 Neuchâtel, Switzerland
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Henan University, School of Life Sciences, Kaifeng/Zhengzhou, China.
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- email: ted.turlings@unine.ch

Nationality: Dutch (The Netherlands)
Place/Birth: Heemstede, 19 July 1959
Marital Status: Married, two sons
Languages: Fluent: English and Dutch, Very good: German and French, Basic: Spanish

Current position and responsibilities

- Full professor and head of Laboratory of Fundamental and Applied Research in Chemical Ecology (FARCE) at the Institute of Biology, University of Neuchâtel,

- Director of the Centre of Competence in Chemical Ecology

- Co-director of the Masters/Certificate of Advanced Studies - Integrated Crop Management (in collaboration with CABI-Switzerland)

Research topics:
- Chemical Ecology of plant-insect interactions
- Exploitation of induced chemical plant defenses for crop protection
- Evolutionary Ecology of tritrophic interactions

Teaching:
- Chemical Ecology
- Applied Entomology
- Sustainable Agriculture

External committees:
- Executive board member of the Swiss Plant Science Web
- Scientific committee of the Delwart Foundation
- Swiss National Science Foundation committee for Advanced Post-doc Grants
- Governing Council and Executive Board of *icipe* (http://www.icipe.org/about/governing_council)
- Advisory board of the Swiss Chemical Society
- Former President of the International Society of Chemical Ecology

Academic Degrees

1985-1990	Ph.D. (Chemical Ecology/Entomology), University of Florida (USA)
1982-1985	MSc. in Biology, University of Leiden, the Netherlands
1977-1981	B.Sc. in Biology, University of Leiden, the Netherlands

Professional experience

2021-present	Co-Director of an online teaching program in Integrated Crop Management managed by CABI-Switzerland
2014-present	Director of the Centre of Competence in Chemical Ecology (C_3E)
2008-present	Full Professor and head of Laboratory of Fundamental and Applied Research in Chemical Ecology (FARCE), Institute of Biology, University of Neuchâtel
2014-2020	Co-Director of Master's of Advanced Studies (MAS) in Integrated Crop Management managed by CABI-Switzerland
2008-2018	Vice-director of the Institute of Biology (finances)
2008-2016	Head of the Interuniversity Doctoral Program in Organismal Biology
2008-2013	**Director of the National Centre of Competence in Research (NCCR) *Plant Survival***
2003-2008	Director of Research/Associate Professor at the Laboratory of Animal Ecology and Entomology, Institute of Biology, University of Neuchâtel.
2001-2008	Head of the graduate school affiliated with the Swiss National Research Center "Plant Survival in Natural and Agricultural Ecosystems".
2001-2003	Lecturer for the Laboratory of Animal Ecology and Entomology, Institute of Zoology, University of Neuchâtel.
1996-2003	START-fellow (adjunct professor) at the Laboratory of Animal Ecology and Entomology, Institute of Zoology, University of Neuchâtel. Sponsored by the Swiss National Science Foundation.

Teaching and supervising experiences

1996-present	At the University of Neuchâtel (in French & English): Courses in Evolutionary Ecology, Chemical Ecology, Applied Entomology, and Integrated Pest Management Lab-course: Research in Plant-Insect Interactions. Supervise(d): >55 M.Sc. students, 32 Ph.D. students, and 18 postdoctoral associates.
1993-1996	At the Swiss Federal Institute of Technology, Zurich (in German): Lectured an advanced course in Insect Ecology Taught a laboratory practical in Eco-physiology Supervised 4 M.Sc. students, 2 Ph.D. students, and 1 post-doc
1993-1996	*Oberassistent*, Dept. of Applied Entomology, Institute of Plant Sciences, ETH (Swiss Federal Institute of Technology), Zurich, Switzerland.
1990-1992	Postdoctoral Research Associate, Chemistry Section, Insect Attractants, Behavior, and Basic Biology Research Laboratory, USDA-ARS, Gainesville, Florida, USA.
1990-1992	Chemical ecology training of Dr. Philip J. McCall visiting from the Liverpool School of Tropical Medicine, UK.
1987-1991	Supervised and trained six student assistants.
1987	Supervised Dutch graduate student on a 9-month exchange program.
1987-1990	Guest lecturer for Chemical Ecology, Biological Control, and General Entomology courses at the Entomology Department of the University of Florida, USA.
1984-1985	Part-time Computer Programmer for the Organ Transplant Division, Academic Hospital of Leiden. Developed a program to analyze DNA/RNA sequences.
1983-1985	Guest lecturer for ecology courses at the Universities of Leiden and Wageningen, The Netherlands.

1983-1984 Teaching assistant for Animal Ecology course at University of Leiden, The Netherlands

Awards & Honors

- **2024 Changjiang (Yangtze River) Scholar award** (https://en.wikipedia.org/wiki/Changjiang_Scholars_Program)
- **2023 Prix Marcel Benoist** (https://marcel-benoist.ch/en/prize-2023/)
- 2023-2024 President of the International Society of Chemical Ecology
- 2022 International Branch Distinguished Scientist Award from the Entomological Society of America
- **The 2015 *Silverstein-Simeone-Award* from the International Society of Chemical Ecology**
- Bronze medal from the International Society of Chemical Ecology for the organization of their 25th annual meeting in 2009 in Neuchâtel.
- Award the 2008 *Prix Delwart* of the Belgian Royal Academy of Sciences, for research on chemical communication.
- Nominated *par appel* to full professor at the Institute of Biology at the University of Neuchâtel
- Honorary 2008 *Sawicki lecture* at the Rothamsted Research Institute, UK
- **Honorary 2007 *C.V. Riley lecture* at the University of Missouri**
- Member of the College of Reviewers, Canada Research Chairs program
- Councilor for the International Society of Chemical Ecology (1996-2000).
- **1996 Prix Belgacom for Research on Chemical Communication**. *Academie Royale des Sciences, des Lettres & des Beaux-Arts de Belgique*. Shared with Prof. Marcel Dicke from Wageningen University, NL.
- **START-fellowship from the Swiss National Science Foundation (1996)**
- USDA merit award (1992) for outstanding research in the investigation of the response of plants to insect herbivore damage and the attraction of parasitic wasps to damaged plants.
- USDA merit award (1991) for excellence in research on the chemically mediated interactions between plants, caterpillars, and parasitic wasps.
- Florida Entomological Society, 1991 Award for Outstanding Collaborative Research on the Chemically Mediated Host-Searching Behavior of Insect Parasitoids.
- **IFAS 1990 Award of Excellence for best Dissertation presented to the School of Agriculture at the University of Florida.**
- Fulbright Scholarship for Graduate studies at the University of Florida, awarded in 1985 by the U.S. Information Agency.

Review Panels, consulting & Evaluation committees

- Selection Committee for Lecturer in Chemical Ecology, Lund University, Sweden (2023).
- Selection Committee for Senior University Lecturer in Chemical Ecology, Lund University, Sweden (2022).
- Member of the Governing Council of *icipe* (International Centre of Insect Physiology and Ecology, Kenya) (since 2020- ongoing). Since 2022, also member of the *icipe* Executive Board.
- Member of the Advisory board if the Swiss Chemical Society (since 2019-ongoing).
- Committee member: evaluation of advanced post-doc grants of the Swiss National Science Foundation (2005-2020, evaluated 125 applications).
- Neuchâtel representative: CUSO committee for post-graduate courses (IIIème cycle) (2008-2016).
- BENEFRI representative: executive board of the Swiss Plant Science Web
- Panel member: Evaluation of UMR 1272, INRA, Versailles, France (2008)

- Panel member: Review of the Environment-Plant Interaction Programme (2009), Scottish Crop Research Institute, Dundee, Scotland.
- Review panel of Ecogenomics 2009 grant initiative (2009-2010), The Netherlands
- Consultant for agro-industry
- Panel member: Evaluation of projects of Fondation pour la Recherche sur la Biodiversité (FRB), Paris , France, 2009
- Panel member: Evaluation of projects of Programme Interdisciplinaire de Recherche (PIR) of the CNRS, Paris, France, 2010
- Panel member: Evaluation of applications for Biotechnology and Biological Sciences Research Council BBSRC, UK, 2010

PhD supervisor & committee member

Project leader and principal advisor for:

- Kathrin Altermatt, (co-supervision Gregory Röder and Carla Arce) tentative title: Crops under biotic and abiotic threats: what do they tell us, how can we help them (on-going)
- Marine Mamin, tentative title: The consequences of volatile-mediated priming of cotton plants in nature (on-going)
- Patrick Fallet, A novel strategy to control the fall armyworm with entomopathogenic nematodes (2023)
- Audrey Duhin (co-supervisor, direct supervision by Gregory Röder), Early land plants: plentiful but neglected resource for herbivores? (2022)
- Diane Laplanche: Exploiting the chemical ecology of slug-plant interactions for crop protection (terminated)
- Pamela Bruno, Tritrophic interactions: Possible host-plant effects on the resistance of *Diabrotica* pests to natural enemies. (2021)
- Luca Grandi, Interactions between cotton plants mediated by volatile organic compounds: prospects for pest control? (2020)
- Geoffrey Jaffuel: Enhancing the use of entomopathogenic nematodes for biological control of root pests: from field persistence to improved self-life (2017)
- Matteo Lucchetti: Pyrrolizidine Alkaloids: occurrence in bee products and impact on honeybees (*Apis mellifera* L.) (2017) (Direct supervision by Dr. Christophe Praz)
- Daniel Maag (co-supervision), 1,4-Benzoxazin-3-ones at the metabolic interface between plants and insects (2016)
- Nathalie Veyrat, The role of indole in maize-herbivore interactions (2014)
- Elvira de Lange, Tritrophic interactions on cultivated maize and its wild ancestor teosinte (2013)
- Islam Sobhy, Increasing the attractiveness of con plants to parasitoids with the use of plant enhancers (officially a student at the Suez Canal University, Egypt, with co-supervisor Prof. Awad Sarhan) (2012)
- Christelle Robert, The key of success: Host plant adaptations of a root herbivore, *Diabrotica virgifera virgifera* (2012)
- Georg von Mérey, Manipulating Maize Volatiles to Improve the Biological Control of Insect Pests (2010).
- Matthias Erb, Modification of plant resistance and metabolism by above- and belowground herbivores (2009).
- Christelle Péré, Potential ecological impact of the horse-chestnut leafminer, *Cameraria ohridella* Deschka & Dimic (Lep., Gracillariidae) (direct supervision by Marc Kenis, CABI BioSc.). University of Neuchâtel (2009).
- Ivan Hiltpold, Manipulation of tritrophic interactions: a key for belowground biological control? University of Neuchâtel (2009).

- Violaine Jourdie, Parasitoid communities and genetic structure: host plant does not matter. University of Neuchâtel (2008).
- Marco D'Alessandro, Assessing the importance of specific volatile organic compounds for the in multitrophic interactions. University of Neuchâtel (2006).
- Sergio Rasmann, Belowground Tritrophic Interactions. University of Neuchâtel (2006).
- Cristina Tamò, A Compartive Study on the Plant Odor Preference and Learning Ability of Three Solitary Larval Endoparsitoids of *Spodoptera* Species. University of Neuchâtel (2006).
- Cristina Faria, The Nutritional Value of Aphid Honeydew for Parasitoids of Lepidopteran Pests. University of Neuchâtel (2005).
- Anita Savidan, Tritrophic Interactions in Maize Storage Systems. University of Neuchâtel/CIMMYT, Mexico (2002).
- Maria Elena Hobollah (Fritzsche), Benefits, Costs and Exploitation of Caterpillar-Induced Odor Emissions in Maize Plants. University of Neuchâtel (2001).
- Sandrine Gouiguené, Specificity and Variability of Induced Volatile Signals in Maize Plants. University of Neuchâtel (2000).
- Catherine Bertschy, Diversified Cassava Agroecosystems: Chemically Mediated Searching Behaviour of Parasitoids. ETH-Zurich (1998).
- Marco Bernasconi, Herbivore-Induced Volatiles in Maize Repel the Corn Leaf Aphid, but attract Natural Enemies of Herbivores. ETH-Zurich (1998).

Member of the jury for:

- Arthur Muller, University Neuchatel, Switzerland (2024)
- Margot Tixeront, Université de Rennes, Rennes, France (2024)
- Dimitri Orine, University of Neuchatel, Switzerland (2023)
- Wayne Zita, University of Neuchatel, Switzerland (2023)
- Ludovic Jami, Université de Tours, Tours, France (2022)
- Matthias Dreier, University Neuchatel, Switzerland (2021)
- Tobias Löser, ETH-Zürich, Switzerland (2021)
- Diana La Forgia, Université de Liège, Belgique (2020)
- Inoussa Sanane, Sorbonne Université, Paris, France (2020)
- Van Cong Doan, University of Bern, Switzerland (2020)
- Gabriela Caballero-Vidal, Sorbonne Université, France (2020)
- Moe Bakhtiari, University Neuchatel, Switzerland (2019)
- Gael Hauser, University Neuchatel, Switzerland (2019)
- Isha Hashmi, University Neuchatel, Switzerland (2019)
- Kevin Thiévent, University Neuchatel, Switzerland (2018)
- Oriane Lavogez, Université de La Réunion, St Pierre, La Réunion, France (2017)
- Holger Danner, University of Nijmegen, The Netherlands, (2017)
- Christelle Bonnet, University of Lausanne, Switzerland, (2016)
- Veronica Bergottini, University Neuchatel, Switzerland (2014)
- Adeline Chauvin, University of Geneva, Switzerland, (2014)
- Chalie Assefa Fantaye, Friedrich-Schiller Universität, Jena, Germany, (2014)
- Beta Ruffner, ETH Zürich, Switzerland (2013)
- Chantal Planchamp, University Neuchatel, Switzerland (2013)
- Dirk Balmer, University Neuchatel, Switzerland (2013)
- Andrea Bshary, University Neuchatel, Switzerland (2011)
- Jérôme Moreau, HDR evaluation, Université de Bourgogne, Dijon, France (2011)
- Bertrand Schatz, HDR evaluation, Univ. de Montpellier, France (2011)
- Renato de Almeidea Sarmento, University of Amsterdam, the Netherlands (2011)
- Olalekan J. Soyelu, University of Fort Hare, Alice, South Africa (2010)

- Tamarra von Mölken, Nijmegen University, the Netherlands (2009)
- Elia Grata, University of Geneva, Switzerland (2009)
- Nora Lawo, University Neuchatel/Agroscope, Switzerland (2009)
- Petra Hogervorst, University Neuchatel/Agroscope, Switzerland (2006)
- Thibaut Malausa, Univ. Toulouse, France (2006)
- Cédric Tentelier, Univ. de Nice (INRA, Antibes), France (2006)
- Lena Obrist, University Neuchatel/Agroscope, Switzerland (2005)
- Maartje Bleeker, Wageningen University, The Netherlands (2005)
- Hichem Azzouz, Université Paris XIII, France (2004)
- Laurent Pilonel, Univ. de Neuchâtel (Chemistry) (2004)
- Mathilde Dufäy, Univ. de Montpellier, France (2003)
- Stefan Kuske, ETH-Zürich, Switzerland (2002)
- Farid Faraji, Univ. of Amsterdam, The Netherlands (2001)
- Laure Grisson, Univ. de Montpellier, France (2001)
- Eva Pettersson, University of Götenborg, Sweden (2000)
- Laure Kaiser, Université Paris XIII, France (2000) (habilitation)
- Raquel Perez-Maluf, Université Paris XIII, France (1998)
- Roel Potting, University of Wageningen, the Netherlands (1996)

Grants

Awarded:

2024 SOR4D grant SNSF: Biological control of the fall armyworm with entomopathogenic nematodes for enhanced food security in Africa (CHF 999'989) **ongoing**

2023 Horizon 2020: Plant pest prevention through technology-guided monitoring and site-specific control (PurPest) (our share Euro 1'093'315) **ongoing**

2019 Standard SNSF grant: Understanding and exploiting communication between cotton plants (CHF 964'338)

2019 SNF R'equip grant: Ultra High Performance Liquid Chromatography-High Resolution Tandem Mass Spectrometry (UHPLC-HRMS/MS) for metabolomics and identification of bioactive molecules (CHF 310'000)

2018 ERC advanced grant: Scents and sensibility in agriculture: exploiting specificity in herbivore- and pathogen-induced plant volatiles for real-time crop monitoring (AGRISCENTS) (Euros 2'498'086) finished February 2024

2016 Standard SNSF grant: Exploring the Chemical Ecology of Gastropod-Insect-Plant Interactions (CHF 618'159)

2015 Sinergia project (Swiss collaboration) entitled: *Sugar wars: Glucose mediated activation, neutralization and re-activation of defensive metabolites in a soil tritrophic system*. The project was developed by Prof. Matthias Erb (Univ. Bern) and is managed by my research group (total CHF 2'127'646)

2015 Seed-Money Project for Latin America collaborations entitled*: Chemical defences in wild and cultivated cotton plants* (CHF 21'100)

2015 NRP68 2nd phase SNSF soil health project, entitled: *Alginate beads as vehicles for the application of entomopathogenic nematodes and bacteria against economically important soil-dwelling pests*. Collaboration with ETH-Z and Uni Lausanne (total CHF 539'196)

2015 Agora project (science communication) entitled: *The inconspicuous in a conspicuous world: visualizing hidden aspects of butterfly biology and ecology at the Papiliorama* (CHF 49'848).

2014 Participant in the COST Action FA1405 (Proposer Arjen Biere, NL) entitled: *Using three-way interactions between plants, microbes and arthropods to enhance crop protection and production*.

2012 NRP68 grant by the SNSF for the project "*Applications of entomopathogenic nematodes for a sustainable control of soil insect pests*" (CHF 557'204).

2012 Grant for economic stability project "*Hydrocapsules as Trojan horses for the application of biological control agents against root pests*" (CHF 519'000).

2011 Sinergia project entitled: *Benzoxazinoid derivatives at the plant-insect interface: An integrated approach to understand a metabolic network*. (Written by Matthias Erb; CHF 1'600'000).

2011	Eurocore project awarded by the European Science Foundation entitled: *InvaVOL: Consequences of insect invasions for plant-insect interactions mediated by volatile organic compounds*. The Consortium, which involves research groups from Switzerland, The Netherlands, Sweden, The Czech Republic and Italy, receives about 1.5 million Euro, with CHF 501'740 going to T.Turlings, the main coordinator of the project.
2009	A CHF 4'831'000.- grant was awarded by the Rectors' Conference of the Swiss Universities (CRUS) to create the "Swiss Plant Science Web" (SPSW), which links three regional clusters and eight universities to enhance the visibility of plant science and its benefits to society. Representing the BENEFRI universities as part of this web, T. Turlings managed a chemical analytical platform, mobility grants, a mentoring program and a summer school (BENEFRI share CHF 1'324'000).
2009	Grant awarded to R. Neier, A. Vallat and T. Turlings by the Swiss National Science Foundation for the R'equip: LC-MS Triple Quadrupol Mass Spectrometer (CHF 250'000).
2009	Grant awarded to T. Turlings for economic stability project "*Optimizing the control of the Western corn rootworm with entomopathogenic nematodes*" (CHF 630'000).
2009	Grant awarded to M. Erb, T. Turlings and J.-L. Wolfender by The Swiss Initiative in Systems Biology (SystemsX.ch) "*RootoX: A systems approach to understand how herbivores cope with root-produced toxins*" (CHF 79'405).
2008	Swiss National Science Foundation grant: "*Costs and benefits of tritrophic signaling between plants and parasitoids*" (CHF. 468'000).
2007	Grant awarded to Claudia Zwahlen and T. Turlings by the Swiss National Science Foundation (NFP 59). "*Multitrophic interactions of transgenic Bacillus thuringiensis (Bt) maize with the soil ecosystem*" (CHF 435'910).
2007	Research Fellow Partnership Programme (RFPP) from the Zentrum for Internationale Landwirtschaft (ETH-Zurich) awarded to Marco D'Alessandro and T. Turlings. "Exploiting scents of distress: Making maize plants more attractive to beneficial insects" (CHF 170'000).
2005	Grant awarded to T. Turlings by the Swiss National Science Foundation for the project:."Cross-effects between below- and aboveground multitrophic interactions" (CHF 335'000).
2005	Grant in collaboration with FAL, Reckenholz and CABI BioScience, Delémont, awarded by KTI/CTI. "Development of biological products for sustainable control of the Western Corn Rootworm, *Diabrotica v. virgifera*, an invasive maize pest in Europe" (about CHF 900'000).
2003	Two-year *pro rata* extension of grant "Herbivore-Induced Plant Odors: their ecological significance and potential for exploitation in crop protection" (CHF 310,000).
2000	Co-author of a grant awarded to the University of Neuchatel to establish a National Center of Competence in Research entitled "Plant Survival in Natural and Agricultural Ecosystems" (CHF 14 million for 4 years, grant extended *pro rata* for another 4 years in 2005).
2000	Grant awarded to T. Turlings by the Swiss National Science Foundation for the project: "Herbivore-Induced Plant Odors: their ecological significance and potential for exploitation in crop protection" (CHF 460,000).
1999	Extention Swiss National Science Foundation project: "The Chemical Ecology of Tritrophic Level Interactions: Herbivore-Induced Emissions of Maize Volatiles that Attract Beneficial Insects" (CHF 100,000).
1998	Grant awarded to T. Turlings and Dr. Thomas Degen by The Roche Foundation. Project: "Genetic aspects of herbivore-induced volatile emissions by maize plants". Contribution to post-doctoral fellowship for Dr. Degen (CHF. 58,700).
1997	Grant awarded to T. Turlings and Maria-Elena Fritzsche by the Swiss Agency for Development and Cooperation (SDC) administered by the Swiss Centre for International Agriculture for the project: "Exploring Maize Genotypes for Chemical Attributes that Promote the Effectiveness of Biological Control Agents" (CHF. 203,822).
1996	Grant awarded to T. Turlings by the Swiss National Science Foundation for the project:

"The Chemical Ecology of Tritrophic Level Interactions: Herbivore-Induced Emissions of Maize Volatiles that Attract Beneficial Insects" (CHF 450,000).

1996 START-fellowship awarded to T. Turlings by the Swiss National Science Foundation for the advancement of scientific career (full salary for 5+2 years).

1994 Grant awarded to T. Turlings and S. Dorn by ETH Scientific Board (Zurich, Switzerland) for research on "Chemically mediated orientation in leafminer parasitoids". Research conducted by Ph.D. student at ETH, Zurich (CHF 174,000).

1994 Grant awarded to T. Turlings, S. Dorn, M. Wolfe, and P. Stamp by DEH (Swiss Foreign Aid) for project on "Diversified Cassava Agroecosystems: chemically mediated interactions". Research conducted by two Ph.D. students at CIAT, Cali, Colombia (CHF 390,000).

1994 Grant awarded to T. Turlings and S. Dorn by Ciba-Geigy (Integrated Pest Control) for project on "Herbivore-Induced Production of Volatiles in Maize that Attract Parasitoids and Repel Herbivores". Research conducted by Ph.D. student at ETH, Zurich (CHF 200,000).

1994 Grant awarded to T. Turlings by the Swiss National Fund to enhance cooperation with Eastern Europe. For a visit by Dr. Ludovit Cagan, Agricultrual University Nitra, Slovakia research on a tachinid parasitoid of the European corn borer (CHF 8,000).

1990 Grant awarded to T. Turlings and J. Tumlinson by the US Department of Agriculture, Agricultural Research Service. For funding of post-doctoral research by T. Turlings.

1985 Doctoral research funded by the International Research Division of the USDA, OICD.

Collaborations

2019-ongoing Dr. Zhaojiang Guo, Chinese Academy of Agricultural Sciences, Beijing.

2018-ongoing Prof. Yunhe Li, Henan University, Kaifeng, China.

2017-ongoing Dr. Thierry Brévault, CIRAD, Monpellier, France. Exploiting the communication among cotton plants to induce resistance against pest insects.

2016-ongoing Dr. Luis Abdala-Roberts, University of Mèrida, Mexico. Inducible defenses in wild cotton plants.

2015-ongoing Dr. Pengjun Zhang, now at Hangzhou Normal University, Hangzhou, China. Host-plant manipulation by whiteflies and mealybugs.

2014-ongoing: Dr. Chen Li, now at Hebei University, Baoding, China. Chemical ecology of ant-aphid interactions.

2014-ongoing Prof. Matthias Erb, University of Bern. Above and belowground plant defenses against pest insects.

2009-ongoing Prof. Jean-Luc Wolfender, University of Geneva. Metabolomics of maize defense compounds.

2007-ongoing Dr. Bruce Hibbard (University of Missouri/USDA-ARS). Field trials with the Western corn rootworm.

2005-2012 Dr. Jurriaan Ton (Sheffield University). Priming of plant defenses and plant-plant communication.

2005-ongoing Drs. Yonggen Lou (Zhejiang University) and Chenzhu Wang (Chinese Academy of Sciences, Beijing). Field tests on plant-parasitoid signaling.

1998-ongoing Dr. Jonathan Gershenzon (Max-Planck Institute of Chemical Ecology, Jena, Germany). Understanding the molecular genetics of iplant odour emissions.

2005-2008 Prof. Felix Wäckers (University of Lancaster). Below- and aboveground induced plant defenses.

2003-2005 Dr. Joachim Ruther (Freie Universität, Berlin). Plant-plant communication.

2003-2006 Drs. Ulrich Kuhlmann, & Stefan Toepfer (CABI, Delémont, Switzerland). Herbivore-induced root exudates and their role in host location by entomopathogenic nematodes.

2001-2007 Drs. Maria Elena Hoballah, Cris Kuhlemeier (Univ. Bern) & Patrick Guerin (Neuchâtel). Evolutionary genetics of pollination in petunia.

2001-2004 Drs. John Pickett, Lester Wadhams & Sandrine Gouinguené (Rothamsted, UK). Electrophysiological responses of parasitoid antennae.

2000-2008 Dr. Franz Bigler (Agroscope, Reckenholz, Switzerland). Evaluation of the effects of transgenesis of crop plants on beneficial insects.

1997-2002 Drs. Frederique Marion-Poll, Thomas Degen and Cristine Dillman (INRA, Paris). Genetics of herbivore-induced volatile emissions by maize plants

1996-2006	Dr. David Bergvinson (CIMMYT, Mexico) Exploring maize genotypes for chemical attributes that promote the effectiveness of biological control agents.
1994-1998	Dr. T. Bellotti, CIAT (Centro Internacional de Agricultura Tropical), Cali, Colombia. Cassava Agroecosystems: chemically mediated interactions.
1990-2000	Drs. J. H. Tumlinson & Dr. H. T. Alborn (USDA-ARS, Gainesville, Florida). Isolation and identification of elicitors in caterpillar oral secretions.
1990-2000	Dr. P. J. McCall, Liverpool School of Tropical Medicine, Liverpool, UK. Collaborated on the importance of volatiles for host location by parasitoids
1988-1993	Dr. F. L. Petitt, The Land, Epcot Center, Orlando, Florida, USA. Host searching via semiochemicals by leafminer parasitoids.
1985-1992	Drs. J. H. Tumlinson and W. J. Lewis, USDA-ARS, USA. Drs. L. E. M. Vet and J. C. van Lenteren, University of Wageningen, The Netherlands. Semiochemically mediated searching behavior of parasitoids.
1984-1985	Dr. M. B. Sokolowski, York University, Canada. showed that *Drosophila* vary in susceptibility to parasitoids because of variation in movement.

Reviewer for Journals

Advances in Entomology
Advances in Insect Physiology
Acta Oecologia
Agricultural and Forest Entomology
Animal Behaviour
Annals of the Entomological Society of America
Arthropod-Plant Interactions
Basic and Applied Ecology
Biochemical Systematics and Biology
BioControl
Biological Control
Biocontrol Science and Technology
BMC Plant Biology
Bulletin of Entomological Research
Chemical Senses
Chemistry & Biodiversity
Chemical Society Reviews
Chemoecology
Crop Protection
Current Biology
Ecology
Ecological Entomology
Ecology Letters
Entomologia Experimentalis et Applicata
Entomological Research
Environmental Entomology
European Journal of Agronomy
European Journal of Entomology
European Journal of Plant Pathology
Experimental and Applied Acarology
Functional Ecology
Food Security
Frontiers …
Helvetica Chimica Acta
Insects
Insect Science
International Journal of Ecology
Journal of Advanced Research
Journal of Applied Entomology
Journal of Behavioural Ecology
Journal of Chemical Ecology
Journal of Ecology
Journal of Economic Entomology
Journal of Experimental Biology
Journal of Experimental Botany
Journal of Field Ornithology
Journal of Insect Behavior
Journal of Insect Physiology
Journal of Integrative Plant Biology
Journal of Invertebrate Pathology
Journal of Field Ornithology
Journal of Pest Science
Nature Communications
Naturwissenschaften
Microbial Ecology
Molecular Ecology
Molecular Plant Pathology
Molecular Plant-Microbe Interactions
Molecules
Nanomaterials & Molecular Nanotechnology
New Phytologist
Oecologia
Oikos
Pest management Science
Physiological Entomology
Phytochemical Analysis
Phytochemistry
Phytochemistry Lettres
Planta
Plant Biology
Plant Biotechnology Journal
Plant Journal
Plant Physiology
Plant Signaling and Behavior
Plant Science
Plant and Soil
PLoS Biology
PLoS One
PloS Pathogens
Proceedings of the National Academy of Sciences USA
Proceedings of the Royal Society B: Biological Sciences
Science
Science Advances
Scientific Reports
Trends in Plant Science
The American Naturalist
Turkish Journal of Zoology
Transgenic Research
Weed Science

On the editorial board of

Ecology Letters
Journal of Chemical Ecology
BCM Plant Biology
Plant Signaling and Behavior (ended)

Member of

The American Association for the Advancement of Science
Swiss Academy of Science
The Entomological Society of America
The Ecological Society of America
The Royal Entomological Society
The Florida Entomological Society
The International Society of Chemical Ecology (for which I was former councilor, head of the fundraising committee, and currently president)
The Swiss Zoological Society (treasurer from 2003-2014)
The Swiss Chemical Society

Reviewer for funding agencies

Agricultural Research and Development Fund
BARD (United States-Israel, Binational)
BION (Dutch Nation. Science Foundation)
The Biotechnology and Biological Sciences Research Council (BBSRC)
Canada Research Chairs program
Le Centre national de la recherche scientifique (France)
Federal Institute of Technology, ETH- Zurich
International Foundation for Science
Israel Science Foundation
Natural Environment Res. Council (UK)
Swiss National Science Foundation
US National Science Foundation, USA

Contacts with Industries

Firmenich SA, Geneva, Switzerland
MCC, Laboratoire Meiners Sàrl, microencapsulation, Colombier, Switzerland
KWS SAAT AG, Biotechnology Maize/Oilseed Crops, Einbeck, Germany
e-nema GmbH, Kiel, Germany
Syngenta Crop. Protection, Stein, Switzerland
Andermatt Biocontrol AG, Grossdietwil, Switzerland
LANDI Reba AG, Aesch, Switzerland
Delley Semences et Plantes SA, Delley, Switzerland
Grupo HT Nutri, Carnaquã. Brasil & Neuchâtel
Tofwerk, Thun, Switzerland
Ecorobotix, Yverdon, Switzerland
Informal consultancies for several industries and foreign research institutions

Media Interests

Research was profiled by:
Numerous journals and newspapers (e.g. Washington Post, New York Times, The Economist, The Atlantic, Le Monde, Le Figaro, NZZ, L'Express, Beobachter etc).
Chemical and Engineering News
BBC Wildlife Magazine
Encyclopaedia Britannica Year Book
American Scientist
Nature News & Views
BBC Radio
Canadian Radio
Radio Netherlands World Service
Voice of America
CNN's Science and Technology Week
Swiss Television (NZZ Format, TSR)
Radio Télévision Suisse, Lausanne
La cinquième (French TV)
Documentaries for German, French and Canadian television

Meetings organized

Sept 2024	Symposium organizer (with Prof. Yunhe Li, Henan University) "The fall armyworm as a threat to rice production in Asia and beyond" International Congress of Entomology, Kyoto, Japan
July 2024	Scientific committee member, Annual meeting of the International Society of Chemical Ecology, Prague, Czech Republic
July 2023	Scientific committee member, Annual meeting of the International Society of Chemical Ecology, Bengaluru, India
June 2019	Session organizer (with Prof. John Pickett) at the 35th annual meeting of the International Society of Chemical Ecology ISCE. Atlanta, USA. Application and manipulation of plant volatiles for crop protection
May 2015-23	Annual Grad. School workshop: "Visions for a Sustainable Agriculture", Neuchâtel, Switzerland.
August 2014	SIP-15, 15th Symposium on Insect-Plant Interactions, Neuchâtel, Switzerland
August 2012	Symposium organizer for the XXIV International Congress of Entomology ICE 2012, Daegu, South Korea (with Prof. Junji Takabayashi and Yonggen Lou)
August 2009	The 25th annual meeting of the International Society of Chemical Ecology ISCE. Neuchâtel, Switzerland
Sept. 2008	Organized (with Profs. Felix Kessler and Ian Sanders) a graduate course (IIIème cycle) entitled: Plant interactions with their environment. Neuchâtel, Switzerland
Sept. 2006	Organized (with Prof. Redouan Bshary) a graduate course (IIIème cycle) entitled: Conflicts of Interest in Mutualistic Interaction. Neuchâtel, Switzerland
April 2005	Organized (with Prof. Martine Rahier) the NCCR Plant Survival International Conference, Leysin, Switzerland,
Sept. 2004	Organized (with Profs. Martine Rahier and Bruno Betschart) a graduate course (IIIème cycle) entitled: Host recognition by parasites and parasitoids.
Jan. 2003	Organized a graduate course on "Risk assessment of GM crop plants" for the graduate school "Plants and their Environment". Neuchâtel, Switzerland.
Sept. 2001	Organized (with Prof. Martine Rahier) a graduate course (IIIème cycle) entitled: Exploitation of Plant Defense Chemistry by Insects. Neuchâtel, Switzerland.
Sept. 2000	Organized (with Dr. Betty Benrey) a graduate course (IIIème cycle) entitled: Parasitoids: their Biology, Ecology, and Application. Neuchâtel, Switzerland.
July 1999	Organized (with Dr. Moshe Coll) symposium: Breeding crop plants to increase the effectiveness of natural enemies. XIVth Int. Plant Protect. Congress, Jerusalem, Israel.
Dec. 1993	Organized (with Dr. Felix Wäckers) symposium: Do Herbivore-Damaged Plants Actively Recruit Natural Enemies? Ann. meeting Entomol. Soc. of Amer., Indianapolis, USA.
May 1992	Co-organized (with Dr. Patrick Greany) the IX International Entomophagous Insect Workshop, Florida Keys, USA.

Symposia & workshop presentations

Invited speaker at more than 200 meetings, Universities, and Research Institutes since 1990
(list with relevant presentations is available upon request)

Scientific publication output and impact

Among top 3% scientists in the world according to the AD Scientific Index 2023 (ranked #13405)
Research.com: ranked #3 in Plant Science/Agronomy and #12 in Ecology/Evolution in Switzerland
More than 250 peer-reviewed publications
H-index 73 (Scopus), 89 (google scholar), > 30'000 citations
(publication list available here and upon request)