Mika Zagrobelny

Forsker

Molecular Aging Program

Postaddresse:

Blegdamsvei 3

2200

København N.

E-mail: mikaza@sund.ku.dk Telefon: +4535320815



Education

2016: 1 day course in Pedagogic supervision

6 day course in Project Management ofResearch Projects (Rambøll) 2016:

2015: ½ day course in Responsible conduct of Research (RCR)

2015: 3 day course in supervision of Ph.D.students

2012: 1 day course in "Protein Structure Analysis" in Gent, Belgium. 2010: Talent development course at University of Copenhagen.

2009-2010: Higher education teaching course from University of Copenhagen.

2007: Ph.D. from Faculty of Life Science, University of Copenhagen. Cyanogenesis in Arthropods. 2002: M.Sc. in biology from University of Copenhagen. Survey of afamily of non-LTR retrotransposons in

Caenorhabditis elegans and Caenorhabditis briggsae.

"Matematisk studentereksamen"(High school) graduation from Espergærde Gymnasium. "Folkeskolen" 9th grade graduation fromBorupgårdskolen, Snekkersten. 1996:

1993:

Employment

2014-: Associate Professor at Faculty of Science, University of Copenhagen.

2007-2013: Post Doctoral Fellow at Faculty of Life Science (Now Faculty of Science), University of Copenhagen.

Research assistant at KVL, Copenhagen. (Later Faculty of Life Science, now Faculty of Science, University of 2003: Copenhagen)until awarded Ph.D. stipend.

Supervision

2016: Main supervisor of bachelor-student (Rojan Demirtas): How does toxicity vary within Heliconius? 2016: Supervision of colleague (IriniPateraki) taking the Higher education teaching course from University of Copenhagen

2015: Main supervisor of 5project students (9 weeks)

2014-2017: Co-supervisor of two PhD students (Mikael Kryger Jensen and Érika Cristina Pinheiro de Castro). Co-supervisor of bachelor-student (Ditte Bøgeskov Hansen): Cyanogenic glucosides in sugarcane. 2013: 2010-2014: Co-supervisor of two PhD students, Stefan Pentzold: Insect counter-adaptations to plant cyanogenic glucosides, and Joel Fürstenberg-Hägg: Interplay between de novo biosynthesis and sequestration of cyanogenic glucosides in Arthropods.

2010: Co-supervisorof project-student (15ECTS) Geziel Barbosa Aguilar: CYP405A2:Characterization of three intronic regions in the Zygaena burnet moth.

Co-supervisor of project-student (15ECTS) Laura Martín Mitjana: Optimizationof DNA extraction and cloning of cytochromes P450 in Zygaenidae.

2007: Co-supervisor for master-student Linea Rigét Alsing: Cyanogenic glucosides in Zygaena filipendulae.

2002: Supervisor for a team of students on the project: Transcriptional activity of Sam, Frodo & Merry

retrotransposons in response to heat shock(6 weeks).

Teaching

Copenhagen Summer University, Bioinformatik -forstå de hyppigst anvendte værktøjer (Highschool teachers): 2016: Lectures and exercises in database searches, sequence analysis, construction and modification of phylogenetictrees, 3 days. Course responsible and performing all teaching.

Cool climate viticulture and enology (M.Sc. level): 1 lecture: Grapepest management 2016:

2013+2016:Humanbenefits from Insects (M.Sc. level): 1 lecture: Insects as producers of specialized chemical compounds 2013-2015: Copenhagen Summer University, Biotechnology and Bioinformatics (Highschool teachers): Lectures and exercises in database searches, sequence analysis, construction and modification of phylogenetic trees, 5 days. Responsible for bioinformatics teaching, both lectures and exercises. Course responsible in 2014+2015.

2010-2016: Bioinformatics 1 (B.Sc. level):Exercises in sequence analysis, construction and modification of phylogenetic trees (planning (incl. exam), computer exercises, 1 lecture, oral exams, 4weeks a year).

2003-2013: Biochemistry 2 (B.Sc. level):Biosynthesis, function and degradation of cyanogenic glycosides (Planning, laboratory exercises and correction of reports, 1 week a year).

Dissemination

2016: Invited oral presentation at the Sixth National Moth Recorders' Meeting in Birmingham, UK: Burnets, cyanide bombs and colonisation

Invited oral presentation at the Entomological Society Denmark: En kemisk-økologisk historie om co-2015: evolutionmellem køllesværmere og deres værtsplanter

2014: Filmed talk aimed at high school students and teachers: Sommerfugleæder gift til forsvar -Køllesværmerenog kællingetand. http://video.ku.dk/video/9974871/sommerfugle-aeder-gift-til-forsvar

Talk at high school: Naturstoffer, kemisk krigsførelse og genteknologi. 2013:

2007-2014: Provided Zygaena larvae, boxes, food-plants and information about rearing to the kindergarden "Vandfaldet" and the primary school "Lærkeskolen" in Stenløse.

Visited Max Planck institute for Chemical Ecology in Jena, Germany and gave an oral presentation (2 days).

2003-2010: Culture Night Copenhagen: Plants that fight back - picky insects (Laboratory exercises and planning, 1 day a

2003-2016: High school visits: Biotechnology, detection of genes with PCR (Oral presentations and laboratory exercises, 2weeks a year) Course responsible since 2009.

Conferences

2016: "15th international symposium on Zygaenidae" in Mals, Italy (2 invited oral presentations).

2015: conference of the InternationalSociety of Chemical Ecology) in Stockholm, Sweden (oral presentation and poster).

Plant-Insect-Microbe Interactions Symposium in Denmark. 2015:

2014: "5th Danish Symposium on Metabolomics" in Denmark.

"14th international symposium on Zygaenidae" on Mull, Scotland (3 invited oral presentations). 2014:

2013: Gordon Research Conference "Plant-Herbivoreinteractions" in California, USA (poster).

2012: "13th international symposium on Zygaenidae" in Innsbruck, Austria (2 invited oral presentations).

2012: "Copenhagenomics 2012" in Denmark.

2011: "Sixth International Symposium on Molecular Insect Science" in Amsterdam, Holland (Invited oral presentation and poster).

"12th international symposium on Zygaenidae" in Hatay, Turkey (Invited oral presentation). 2010:

2010: Gordon Research Conference "Plant-Herbivore interactions" in Texas, USA (poster).

2010-2016: Yearly conference "Plant Biotech Denmark meeting" in Denmark (poster each year, chair of a session in 2016).

2009: "VI-TH International Conference on Arthropods: Chemical, Physiological, Biotechnological and Environmental Aspects"in Ochotnica Dolna, Poland (Invited oral presentation and chair of a session).

"10th international symposium on Zygaenidae" in Lyon, France (Invited oral presentation). 2006:

2006: "22rd Annual Meeting of the International Society of Chemical Ecology ISCE" inBarcelona, Spain (poster).

2004: Gordon Research Conference "Plant-Herbivore interactions" in California, USA (poster).

2001: European Society of Evolutionary Biology (ESEB) conference in Arhus, Denmark.

Funding

2013: Co-application application to the Villum foundation (Denmark) (30 mill. kr.), Title: Bioactive Plants II: Plant plasticity

2013: Co-applicant on application for alarge project to FNU (The Danish Council for Independent Research, Natural Sciences)(6.5 mill. Kr.), title: Evolution of Chemical Defence in Butterflies and Moths

2007: Co-applicant on application to the Carlsberg foundation (150.000 Kr.), title: Which genes are active in the chemical defense of the six-spotted burnet moth?

Main Collaborations

Feyereisen R.: Evolutionof chemical defence in insects. Affiliated professor from Institut National de la 2016-: Recherche Agronomique (INRA), France.

Jensen, AB.: The importance of ingested cyanogenic glucosides for bee health. University of Copenhagen, 2015-: DK.

2014-: Briolat E., Stevens M.: Warning coloration in different life stages of Zygaenid moths, and its role in malefemale communication. University of Exeter, UK.

Cryle M.: Crystallization of P450 enzymes from plants and insects involved in the biosynthesis of cyanogenic 2014-: glucosides. Max Planck Institute, Heidelberg, Germany.

2013-: Cardoso MZ.: Occurrence and biosynthesis of cyanogenic glucosides in Heliconius butterflies and their foodplants. Botanica, Ecologia eZoologia, Centro de Biociencias, Universidade Federal do Rio Grande do Norte, Natal, Brazil.

2011-2013: FeyereisenR.: de novo biosynthesis and sequestration of cyanogenic glucosides in Z. filipendulae. Visiting

professor from Institut National de la Recherche Agronomique (INRA),France.

2009-: Nakonieczny M. ¹, Kedziorski A. ¹,Debinsky DM. ², Matter S. ³; Occurrence and biosynthesis of hydroxynitrile glucosides in Parnassius (Papilionidae) butterflies and their food plants. ¹Department of Animal Physiology & Ecotoxicology, University of Silesia, Poland. ²Ecology, Evolution, and Organismal Biology, Iowa State University. USA. ³ Department of Biological Sciences, University of Cincinnati, USA

2006-2009: DreonAL., Gomiero T., Paoletti MG.: Cyanogenic glucosides in edible insects. Laboratory of Agroecology and Ethnobiology, Padova University, Italy.

Career breaks

2007-2008: Maternity leave (26-10-2007 until 1-09-2008) 2004-2005: Maternity leave (1-06-2004 until 09-05-2005)

Other achievements

2016-: Member of the departmental Ph.D.Committee, University of Copenhagen, Denmark 2014-: Member of the section Coordination Group, University of Copenhagen, Denmark

2012: 1 day first aid course.

2011: Coursefor members of liaison committees. 2010-2012: Deputy member of the local liaison committee.

2007-2009: Board member in the kindergarden "Blåmejsen" in Stenløse.

2003: 12 hour first aid course.

1996: Six weeks of voluntary unpaid work for the Australian Trust for Conservation Volunteers (ATCV) in NorthernTerritory, Australia.