

GOMULSKI Ludvik Marcus – Curriculum Vitae

PLACE AND DATE OF BIRTH:

London (Great Britain), 5th May 1961

NARRATIVE BIOSKETCH:

He is Associate Professor in Zoology (BIO/05) in the Department of Biology and Biotechnology, University of Pavia, where he studies the functional genomics of insects of economic and sanitary importance. He has acquired extensive experience in the analysis of genomic and transcriptomic data for the agricultural pest insect, medfly, and subsequently for the Asian Tiger mosquito, *Aedes albopictus*, as a tool for pest insect control. He also has experience in the development and application of microarray technology to analyse the medfly transcriptome. He was involved in gene annotation in several genome projects including that of the Tsetse fly, *Glossina morsitans morsitans*, the Asian Tiger mosquito, *Aedes albopictus* and the Mediterranean fruit fly, *Ceratitidis capitata*. In the latter two genome projects he was involved in the annotation of the olfactory gene repertoire. He has also conducted behavioural studies and gene characterization studies on numerous other insects of medical and economic importance, such as: *Nephotettix virescens* (rice hopper), *Anopheles* spp., *Aedes* spp., *Culex* spp., *Simulium* sp., *Glossina* spp., and *Culicoides* spp). He is author of a numerous papers published in international journals (59 refereed papers and 4 book chapters).

EDUCATION:

1982: First Degree, Bachelor of Sciences (BSc Joint Honours, Upper Second Class, Ili) in Zoology and Genetics. University College Cardiff, University of Wales.

1988: PhD at the London School of Hygiene and Tropical Medicine, University of London, financed by the Medical Research Council (MRC). Thesis title: "Aspects of Mosquito Mating Behaviour". Tutors: Drs. CF Curtis, GB White.

POSITIONS AND RESEARCH EXPERIENCE:

1986-1987: Medical Laboratory Scientific Officer, Ross Institute, London School of Hygiene and Tropical Medicine, London, UK.

1989: Post-doctoral position in the laboratory of Dr RJ Post, Liverpool School of Tropical Medicine, Liverpool, UK, on application of multivariate morphometrics for the identification of species of the complex *Simulium damnosum* in Sierra Leone, West Africa, funded by MRC.

1990-1992: Post-doctoral position in the laboratory of Drs. CA Malcolm and R Nichols, Queen Mary and Westfield College, University of London, UK, on the population biology of *Culex pipiens* and *Culex molestus* in Britain, funded by MRC.

1993-1995: Post-doctoral position in the laboratory of Prof. G Gasperi, Department of Animal Biology, University of Pavia, initially with a European Community grant (Human Capital & Mobility Programme) on "Linkage analysis and population genetics of *Ceratitidis capitata*"

1995: Visiting Research Fellow in the laboratory of Prof. AR Malacrida, Department of Animal Biology, University of Pavia with a CNR – RAISA grant, on the development of genetic methods for early sexing systems in *Ceratitidis capitata*.

1996: Visiting Research Fellow in the laboratory of Drs. C Malva and F Graziani, at the Istituto Internazionale di Genetica e Biofisica, CNR, Naples, on "Genetic and molecular analysis of sexual

differentiation in *Drosophila* and *Musca*".

1996-2002: Post-doctoral Researcher in the laboratory of Profs G Gasperi and AR Malacrida, Department of Animal Biology, University of Pavia, on the molecular and population genetics of *Ceratitis capitata* and other insect species.

2002-2015: Assistant Professor in Zoology (BIO/05), Department of Animal Biology/Department of Biology and Biotechnology, on molecular and population genetics of insects.

2015-present: Associate Professor in Zoology (BIO/05), Department of Biology and Biotechnology.

TEACHING CAREER:

2004-2011

Module (3 CFU) on "Genetic and Biochemical Methods for the Study of Natural Populations" within the Population Biology Course for the third year students of Biological Sciences Programme.

2007-2011

Module (3 CFU) on "Biodiversity and Animal Evolution" for 1st graduate students within the Specialist Curriculum on Natural History Communication and Training within the Natural Sciences Programme.

2009-present

Module 2 (3 CFU) on "Molecular Techniques for the Conservation of Biodiversity" for 1st year graduate students within the Specialist Curriculum on Experimental and Applied Biology within the Biological Sciences Programme.

2010-present

Module 2 (3 CFU) on "Evolutionary Biology" for 2nd year graduate students within the Specialist Curriculum on Experimental and Applied Biology within the Biological Sciences Programme.

2015-present

Applied Zoology (6 CFU) for 3rd year students within the Curriculum on Environmental Biology and Biodiversity within the Biological Sciences Programme.

2007-present

Proponent (2007-2014) and then faculty member of the PhD programme in Genetics, Molecular and Cellular Biology.

ONGOING RESEARCH SUPPORT:

2015-2020: Development of Attractants for Male Trapping and the Evaluation of Male Quality and Sexual Capacity in *Aedes albopictus*. FAO/IAEA, Vienna, Austria (Research agreement) Role: Principal investigator

2013-2018: Exploring genetic, molecular, mechanical and behavioural methods of sex separation in mosquitoes. FAO/IAEA, Vienna, Austria (Research agreement). Role: Component