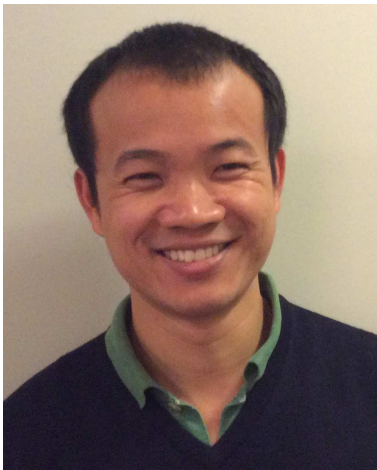


Award Winner

Xu Zhong

French National Institute for Agronomic Research (INRA), UMR CARRETEL, Thonon-les-Bains, France



Xu Zhong held his M.Sc degree in Microbiology from University Claude Bernard Lyon 1 (France). On 17 January 2014, he completed and defended his Ph.D work entitled "*Freshwater dsDNA viral diversity: A special emphasis on viruses infecting phytoplankton (cyanophages and phycodnaviruses) and T4-like myophages in peri-alpine lakes*" from University of Savoie Mont-Blanc (pole Grenoble) under the supervision of Stéphan Jacquet (senior scientist at INRA). During three and half years, he conducted research to investigate and highlight the diversity, distribution, dynamic, and community structure of phytoplankton viruses and their functional roles in three large and deep European peri-alpine lakes: Lakes Annecy, Bourget and Geneva. This Ph.D work increased and enriched our knowledge in freshwater viral ecology and was published as articles in nine high rank peer-reviewed journals: *Applied Environmental Microbiology*, *Environmental Microbiology*, *Freshwater Biology*, *FEMS Microbiology Ecology*, *Hydrology and Earth System Sciences*, *Microbial Ecology*, etc. With such volume of excellent work, Xu Zhong obtained in 2014 the "*Chinese Government Award for Outstanding PhD Students Abroad*" by China Scholarship Council, and in 2015 the "*EFFS Award for the best European PhD Dissertation in Freshwater Sciences during year 2013-2014*".

Being interested in everything either big or small, Xu Zhong has started his research adventure in microbiology and molecular biology by working as a student research assistant in 2008 in the *Laboratory of Microbiology, Adaptation and Pathogenesis* (Lyon, France) under the supervision of Marie-A. Mandrand. There, he began to study nickel and cobalt resistant genes. Then, he entered the *Ampere Laboratory - Environmental Microbial Genomic Group* and worked under the supervision of Elizabeth Navarro and Marina Henry on metal and antibiotic resistance study in mining soils. After his Ph.D supervised by Stéphan Jacquet at the *Alpine Research Center on Food Webs and Limnetic Ecosystems* (Thonon-les-bains), he has been a postdoctoral research fellow since February 2014 at the University of British Columbia in Canada, under the supervision of Curtis Suttle to continue research in environmental virology.

Subsidiary Prizes

Paula Arribas

Department of Ecology and Hydrology – University of Murcia, Spain. Current position: Natural History Museum/Imperial College London (UK)



Paula Arribas conducted her PhD in the Department of Ecology and Hydrology (University of Murcia, Spain) focused on the evolutionary studies developed during her PhD she applied multiple disciplines (e.g. phylogenetic and phylogeographical analyses, ecological modelling or thermal tolerance experiments) to disentangle the main evolutionary processes behind the diversification and distribution of these aquatic insects in the stressful saline waters. Further to the ecological and evolutionary discussion of the results, the PhD was developed with a view towards conservation, and offered general guides for biodiversity conservation, such as species vulnerability estimations and integrated predictions of climate change impact on these species. Paula has been recognized for her PhD thesis and productivity with the 2012-2013 award for the best thesis in limnological research from the Iberian Association of Limnology (AIL). Currently she is a post-doctoral researcher at the Natural History Museum/Imperial College London (UK) using the huge potential offered by the *Next Generation Sequencing* techniques to unveil the diversity of the hidden communities of arthropods living in the soil, and to understand the processes shaping them.

Arunava Pradhan

University of Minho, Portugal



Arunava Pradhan completed his Bachelor of Science in Microbiology from University of Pune, India (2005) and Master of Science in Molecular Biology from West Bengal University of Technology (WBUT), India (2007). He was involved in several research projects during 2006-2008, and had been awarded various fellowships including University Meritorious Student Fellowship by WBUT, India (2005-2007), Junior Research Fellowship (JRF) by Department of Biotechnology, Ministry of Science and Technology, India (2007-2008), and JRF from University Grant Commission, India for meritorious students (2008). He received Doctoral Research Grant (2009-2013) from Portuguese Foundation of Science and Technology (FCT), Ministry of Education and Science, Portugal. In 2013, Arunava was awarded Doctor in Science, specializing in Biology from University of Minho, Portugal. The Doctoral research, "Impacts of nanoparticles to microbes and invertebrates: from community responses to cellular targets", was conducted at Centre of Molecular and Environmental Biology (CBMA), University of Minho, Portugal. Currently, he is a Research Grantee (since 2013) under the FCT-funded project NANOECOTOX (2012-2015) and working at CBMA, University of Minho, Portugal as Young Researcher and Integrated Member under the research group "Sustaining Life - Biodiversity and Functional Ecology". Also, he is member of Iberian Association of Limnology (AIL) and reviewer of the journal *Limnetica*. He is also the member of Nanotechnology Advisory Group of Society of Environmental Toxicology and Chemistry. Since 2009, he has been involved as team member in many projects with many national and transnational (FCT-DAAD) collaborations (*e.g.* Helmholtz Centre for Environmental Research (UFZ), Martin Luther University, Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany) leading to several scientific communications including several ISI publications in Q1 journals. His thesis received subsidiary prize with "Special Mention" in the Best Doctoral Theses Award 2014 in Limnology by AIL. His Doctoral research involved the investigation of the impacts of metallic and non-metallic engineered nanomaterials (ENMs) on freshwater biota (microbes and invertebrates) associated with stream detritus ecosystem. Various structural and functional response patterns to ENMs were studied at different levels of biological organization (from cells, to populations and communities). Understanding the behaviour and potential interactions of such ENMs with biota, and impacts on the ecosystem processes under environmentally realistic conditions are the priorities of current research. The physicochemical properties including size, stability, dispersity, speciation, surface and chemical modifications, and partial dissolution *etc.* of ENMs are also investigated at varying environmental conditions to understand the abiotic and/or biotic transformation, fate and underlying mode of action of these nanomaterials.
