

TREE-ALLIANCE workshop *Radiation effects studies conducted in the Chernobyl Exclusion Zone*

Royal Maritime Club (<https://www.royalmaritimeclub.co.uk>), Portsmouth, UK.

4th-6th March 2019

Monday 4th March		
13:30	Welcome – objectives & format of workshop	Nick Beresford
13:45	Overview of COMET-project: studying the impact of long term exposure to nuclear accident related radionuclides in different organisms in lab and field conditions	Nele Horemans
13:55	The TREE (Transfer – Exposure – Effects) project	Nick Beresford
<i>Session 1 Chair: Christelle Adam-Guillermin</i>		
14:05	Radiation effects on fish and aquatic invertebrates in lakes affected by Chernobyl	Jim Smith
14:50	Effects of chronic radiation exposure on Daphnia: from individuals to populations	Jess Goodman
15:10	<i>Coffee</i>	
15:30	Fish experiments in Chernobyl exclusion zone	Hans Christian Teien
16:00	Responses to chronic exposure to ionising radiation in Chernobyl tree frogs	Germán Orizaola
16:30	The effects of ionising radiation in Fukushima on the acoustic and visual sexual signals in Japanese tree frogs	Jean-Marc Bonzom
16:45	Genetic and epigenetic responses in animals exposed to ionising radiation in the laboratory and field	Christelle Adam-Guillermin
17:00	Discussion	Lead: Christelle Adam-Guillermin
17:45	Chernobyl environmental and biodiversity studies: searching for the most valuable natural complexes worthy of protection	Sergey Gaschak
18:30	<i>Close</i>	
19:00	<i>Evening meal</i>	
Tuesday 5th March		
<i>Session 2 Chair: Neil Willey</i>		
09:00	Effects of radionuclide contamination on leaf litter decomposition in the Chernobyl exclusion zone	Jean-Marc Bonzom
09:30	Soil biological activity in the CEZ: bait lamina studies spring 2016	Nick Beresford
09:50	Genetic, epigenetic and microbiome responses in field site exposures	Dave Spurgeon
10:20	Growth and DNAmethylation levels of Arabidopsis thaliana plants sampled alongside a radiation gradient in the Chernobyl Exclusion zone	Nele Horemans
10:50	<i>Coffee</i>	
11:10	Tree ring evidence for growth effects of acute irradiation on Scots Pine in the Chernobyl Exclusion Zone	George Shaw

11:30	The combined effects of exposure to low dose chronic radiation and parasite <i>Crithidia bombi</i> on bumblebee fitness	Kat Raines
12:00	RED FIRE – studies in the Red Forest following July 2016 fire	Nick Beresford & Mike Wood
12:45	<i>Lunch</i>	
Session 3	<i>Chair: Nick Beresford</i>	
13:45	Forest fire and radiation impacts on the soil microbiome at the Chernobyl Exclusion Zone	Alex de Menezes
14:15	Parasites, microbiomes and immune system expression in Chernobyl voles	Joe Jackson
14:45	Field and laboratory studies into the effects of radiation on birds	Tom Scullion
15:15	Decreased abundance of mammals in the Chernobyl Exclusion Zone confirmed by dose reconstruction	Karine Beaugelin-Seiller
15:45	<i>Coffee</i>	
15:30	Long term census data reveal abundant wildlife populations at Chernobyl	Jim Smith
16:00	Discussion – at what dose rates do we see meaningful effects?	Lead: Jim Smith & David Copplestone
17:30	<i>Close</i>	
19:00	<i>Evening meal</i>	
Wednesday 6th March		
Session 4	<i>Chair: David Copplestone</i>	
08:30	Motion-activated camera studies to determine medium/large mammal abundance	Mike Wood
09:00	Using faecal DNA to determine diets of animals in the CEZ	Renaud Scheifler & Francis Raoul
09:30	Birds in the Chernobyl soundscapes	Helen Whitehead
09:40	Studying genetic variation and population dynamics using <i>Arabidopsis thaliana</i> and <i>Taraxacum officinale</i> in the CEZ	Pol Laanen
09:50	Bumblebees elevate nectar consumption in response to low dose radiation exposure	Jess Burrows
10:00	A meta-analysis examining the contribution of the TREE project to the understanding of low dose radiation effects on invertebrates	Kat Raines
10:30	<i>Coffee</i>	
11:00	ADAPT ive responses to radiation in humans and wildlife: from single cells to ecosystems	Nele Horemans
11:15	Discussion – the way forward?	Lead: Nele Horemans & Nick Beresford
12:45	Concluding comments and close	Nick Beresford
13:00	<i>Lunch</i>	