

# PE&RC Messages

May 2016

## HIGHLIGHTS

### [Call for proposals for remaining strategic PE&RC funds 2016](#) (Deadline: 20 June 2016)

PE&RC has a remaining 2016 budget of approximately k€ 200 to be spent on salary costs of WU PhD and postdoc projects. Based on the successful call of last year, PE&RC will use these funds to support groups with respect to activities that a) have an added value to PE&RC; b) involve more than one research group, where the leading research group has to come from PE&RC while other involved groups can also belong to another Graduate School in the Netherlands; and c) involve 1-6 months of activities in 2016 by a postdoc / PhD candidate already employed or to be employed by a PE&RC group at Wageningen University.

### [Workshop: Plant-Soil-Microbe Interactions for Crop and Pest Management](#) (30 June 2016)

In this workshop, we assembled a group of leading international scientists to discuss plant-soil-microbe relationships in the context of sustainable agriculture. The workshop consists of a morning session that primarily focuses on the impact of rhizosphere microbes on crop plants in general, and an afternoon session that considers how changes in the soil microbiome cascade up to impact aboveground interactions with agricultural pests.

### [European Forest Resources and the Bio-economy](#) (5-10 June 2016 27 November – 2 December 2016)

This postgraduate course addresses the role of European forests in the bio-economy and the changes that are taking place in management and forest industry such as: European forest resources, management and governance challenges, new demands in bioenergy & bio-economy, changes in demand from industry, criteria for Sustainable Forest Management and for solid biomass production, and trade-off issues with biodiversity. To address the elements above, we bring together experts on European forest ecology, but also experts from industry, economics, and policy. At the same time, we will make excursions to field sites as well as organisations dealing with forest products.

#### PE&RC Postgraduate courses

- [Linear Models](#) (13-15 June 2016)

*In this module we continue with Regression, ANOVA, and ANCOVA, set in the general framework of Linear Models. We see this module as the central module, and advise all participants to partake as it forms the basis of other advanced modules such as "Generalized Linear Models" and "Mixed Linear Models". We look at topics like parameter estimation and interpretation, checking model assumptions,*

regression diagnostics, analysis of unbalanced designs and multiple comparisons. The main statistical software used in this course is R.

- **Generalized Linear Models (20-21 June 2016)**

*In this module we study how to analyse data that are not normally distributed. We look at fractions (logistic regression), counts (Poisson regression, log-linear models), ordinal data (threshold models), and overdispersion. We discuss (quasi-) maximum likelihood estimation and the deviance. In computer practicals participants can familiarize themselves with models and methods. The main statistical software used in this course is R.*

- **Mixed Linear Models (27-28 June 2016)**

*In this module we discuss how to analyse dependent data, that is, data for which the assumption of independence needed in Linear Models is violated. So: Do you have a nested experimental set-up? Do you have repeated measurements? Or weight of the same animal over time? Do you have pseudo-replication? In this module, you will learn about mixed linear models (which you will need to overcome these problems), about the way to fit them to your data using software, and about the output produced by the software. In computer sessions participants can practice fitting models of this type, and gain an understanding of the output created by the software. The main statistical software used in this course is R.*

- **Modelling Plant Form and Function using GroIMP (27-30 June 2016)**

*In plant and crop science many research questions are related to one or more aspects of plant architecture (the three-dimensional (3D) organisation of the plant body), such as plant competition, crop management, resource acquisition, photomorphogenesis, intraspecific interactions, etc. Therefore, to better understand how plants with a specific genetic basis grow and develop in specific environmental conditions, it is essential to take plant architecture into account. To help address such questions simulation models have been developed that take into account plant architecture and its development as an integral component, called Functional-Structural Plant (FSP) models. FSP modelling has been applied in a range of research questions in the domain of plant and crop science, ecology, physiology, agronomy, forestry and horticulture.*

- **Meta-analysis (30 June – 1 July 2016)**

*Researchers trying to summarize the constantly growing body of published research are increasingly using meta-analysis. The focus of this 2-day course will be on concepts of linear models and mixed linear models in meta-analysis. The statistical software R will be used.*

- **Climate-Smart Agriculture: from fundamentals to application (21-26 August 2016)**

*This course addresses the interlinked challenges of agriculture and climate change in a holistic manner approaching Climate-Smart Agriculture (CSA) from various perspectives including animal & plant sciences, politics & governance, and business & finance in an interdisciplinary manner. It will provide participants with an overview of the up-to-date knowledge about CSA, demonstrate the opportunities, challenges and trade-offs. It will provide ample opportunities to network with experts and fellow candidates from around the world in the field of CSA.*

- **Soil-Landscape Modelling (3-7 October 2016)**

As we are reaching the limits of human use of our lands, there is an increasing need to design climate-smart, sustainable land use and land management solutions. To provide this it is crucial to have a mechanistic understanding of processes and interactions between soils and landscapes. This is the topic of the very active research field of soil-landscape modelling. Following a recent review and the development of novel models, the community now organises a soil-landscape modelling course for all interested PhD candidates, postdocs and other academics. Learning objectives include gaining an understanding of concepts and modelling approaches, and working on the participant's own case studies with some of the available models.

- **Multivariate Analysis (18, 19, 20, 25, and 26 October 2016)**

The multidimensional data on community composition, properties of individual populations, or properties of environment are the bread and butter of an ecologist's life. They need to be analysed with taking their multidimensionality into account. A reductionist approach of looking at the properties of each variable separately does not work in most cases. The methods for statistical analysis of such data sets fit under the umbrella of 'multivariate statistical methods'. In this course, our intention is to provide the participant with both the basic understanding of principles of multivariate methods and the skills needed to use those methods in his/her own work.

- **Uncertainty Propagation in Spatial Environmental Modelling (5-9 December 2016)**

The purpose of this course is to familiarize participants with statistical methods to analyse uncertainty propagation in spatial modelling, such that they can apply these methods to their own models and data. Both attribute and positional errors are considered. Attention is also given to the effects of spatial auto- and cross-correlations on the results of an uncertainty propagation analysis. Computer practicals make use of the R language for statistical computing.

*Coming up soon: Bayesian Statistics (17-18 October 2016), Introduction to R for statistical analysis (October 2016), Basic Statistics (12,13,14,23,24 December 2016), and i-GIS (December 2016). Keep an eye out for the announcements!*

#### **PE&RC Discussion group meetings**

- **B-Wise: Bioinformatics@Wageningen Seminar Series (7 June 2016, 12:30-13:30 hrs, Room C0214, Forum Building, Wageningen University Campus)**
- **Ecological Theory and Application Discussion Group (8 June 2016, 15:00-17:00 hrs, Room Lumen 2, Lumen Building, Wageningen University Campus)**
- **Sustainable Intensification of Agricultural Systems (SIAS) Discussion Group Excursion: explore the urban farming sites in Rotterdam and Den Hague (9 June 2016, 08:00-17:00 hrs, register at [sustainableintensification@gmail.com](mailto:sustainableintensification@gmail.com))**
- **Agriculture – Climate – Forests – Food Discussion Group (13 June 2016, 12:00-13:30 hrs, Room W0.3 (W0.Be.071), Radix Building, Wageningen University Campus)**
- **For a complete overview of all PE&RC discussion groups, please click [here](#).**

**Career development, skills and competences courses by Wageningen Graduate Schools**

- [Imaging Science: Video in Scientific Communication and Education](#) (2, 3, 9, 10, 16, 17, and 24 June 2016)
- For a complete overview of all Wageningen Graduate Schools courses, please click [here](#).

#### Other courses

- [Summer Institute in Food Safety and Security](#) @ Tel Aviv University, Israel (3-22 July 2016)
- [Sustainable food production](#) @ Utrecht University (City campus), Netherlands (4-8 July 2016 )
- [The Farming Systems Design course 2016](#) @ Montpellier, France (12-16 July 2016)

#### Symposia, Lectures, Workshops, Seminars and other activities

- [A Global One Health symposium](#) @ Wageningen University, Wageningen, Netherlands (26 May 2016)
- [Colloquium Alfried Vogler: Metagenomics in taxonomy and biodiversity research](#) @ Pesthuis, Naturalis Biodiversity Center, Leiden, Netherlands (31 May 2016 - 16:00-17:00 hrs)
- [Talent Scheme Information Meeting \(Veni, Vidi, Vici\)](#) @ NWO Java building, The Hague, Netherlands (1 July 2016)
- [Conference: Unifying Ecology across Scales](#) @ Biddeford, Maine, USA (24-29 July 2016)
- [Water Initiative for the Future \(WatIF\) Graduate Student Conference](#) @ Queen's University, Kingston, Ontario, Canada (27-29 July 2016)
- [International BioBased Economy Student SymbioSUM \(IBBESS\)](#) @ Wageningen University, Wageningen, Netherlands (28-31 August 2016)
- [5<sup>th</sup> International EcoSummit congress on Ecological Sustainability: Engineering Change](#) @ Montpellier, France (29 August – 1 September 2016)
- [The 10<sup>th</sup> INTECOL International Wetlands Conference](#) @ Changshu, China (19-24 September 2016)
- [European Ecosystem Services Conference](#) @ Antwerp, Belgium (19-23 September 2016)
- [Sfécologie2016, the 2016 International Conference of the French Ecological Society](#) @ Marseille, France (24-28 October 2016)
- [International Conference on Functional-Structural Plant Modelling](#) @ Qingdao Holiday Inn Expo, Qingdao, China (7-11 November 2016)

#### Position Announcements

- For job vacancies, check out [our website](#).

#### Others

- [The MIDORI Prize for Biodiversity \(\\$ 100,000\)](#) (deadline: 30 June 2016)
- [Call for INREF seed money project proposals](#) (deadline: 8 July 2016)
- [Scholarships for Teacher's degrees on MSc level \(\(bio-\)informatics, geography, chemistry, mathematics, physics\) \(ONLY IN DUTCH\)](#) (deadline: 31st of October 2016 for starting in September

2016)

- [NWO Visitor's Travel Grants](#). Researchers in the Netherlands can apply for a visitor's grant for highly qualified senior researchers from abroad who hold a PhD. With this grant these researchers can stay in the Netherlands for a maximum of four months.
- [Van Gogh Programme](#). Dutch and French researchers who wish to start or continue research cooperation under the Van Gogh Programme can now submit their application for a travel grant for 2016-2017.
- [New guidelines on teaching duties for PhD candidates of Wageningen University](#)

If you have information that you would like to have included in PE&RC messages, please send this information to [Claudius.vandeVijver@wur.nl](mailto:Claudius.vandeVijver@wur.nl).

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