From: Oliver Hooker
Subject: "STATS COURSE - Advancing in R - last few places stll available"

"Advancing in Statistical Modelling using R"

Delivered by Dr. Luc Bussiere and Dr. Tom Houslay

https://urldefense.proofpoint.com/v2/url?u=http-3A__www.prstatistics.com_course_advancing-2Dstatistical-2Dmodelling-2Dusing-2Dr-2D&d=CwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=w1cZmSsXv_4B6PFPCEaFc-G5DvbWXPXwqoImdTFNNwE&s=T7WzvE5KO8auzSh_ZRukCZzco_uRpkgX87Q3QbLrB94&e=
advr05/

This course will run from 5th – 9th December 2016 at Juniper Hall Field Station, Dorking, Surrey, just south of London, England

This is an introduction to model selection and simplification, generalised linear models, mixed effects models and non-linear models.

The course is aimed at biologists with a basic to moderate knowledge in R. The course content is designed to bridge the gap between basic R coding and more advanced statistical modelling. This five day course will consist of series of modules, each lasting roughly half a day and comprised of lectures and practicals designed to either build required skills for future modules or to perform a family of analyses that is frequently encountered in the biological literature.

Course content is as follows
Day 1 Course introduction
- Techniques for data manipulation, aggregation, and visualisation; introduction to linear regression. Packages: {tidyr}, {dplyr}, {ggplot2}

Day 2 Linear models
- Diagnostics, collinearity, scaling, plotting fitted values); fitting and interpreting interaction terms; model selection and simplification; general linear models and ANCOVA.
- Packages: {stats}, {car}

Day 3 Generalized linear models
- Logistic and Poisson regression; predicting using model objects and visualizing model fits.
- Packages: {broom}, {visreg}, {ggplot2}

Day 4 Mixed effects models
- Theory and practice of mixed effect models; visualising fixed and random effects.
- Packages: {lme4}, {broom}, {ggplot2}, {sjPlot}

Day 5 Fitting nonlinear functions
- Polynomial & Mechanistic models; brief introduction to more advanced topics & combining methods (e.g., generalised linear mixed effects, nonlinear mixed effects, and zero-inflated and zero-altered models).
- Packages: {nlsTools}.
- Afternoon to discuss own data if time permits

Please email any inquiries to oliverhooker@prstatistics.com or visit our website www.prstatistics.com

Please feel free to distribute this material anywhere you feel is suitable

Our other courses
1. ADVANCING IN STATISTICAL MODELLING USING R (December 2016, April 2017, December 2017
https://urldefense.proofpoint.com/v2/url?u=http-3A__www.prstatistics.com_course_advancing-2Dstatistical-2Dmodelling-2Dusing-2Dr-2D&d=CwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=w1cZmSsXv_4B6PFPCEaFc-G5DvbWXPXwqoImdTFNNwE&s=T7WzvE5KO8auzSh_ZRukCZzco_uRpkgX87Q3QbLrB94&e=
advr05/
2. SPATIAL ANALYSIS OF ECOLOGICAL DATA USING R (November 2016, July 2017)
https://urldefense.proofpoint.com/v2/url?u=http-3A__www.prstatistics.com_course_spatial-2Danalysis-2Decological-2Ddata-2Dusing-2Dr-2D&d=CwIF-g&c=Ngd-

ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=w1cZmSsXv_4B6PFPCEaFc-G5DvbWXPXwqoImdTFNNwE&s=1x7UQMM9YAimx6FUlxXVkUAo-bMzRrnYs_HkKTjrsoM&e=
spae04/

3. STABLE ISOTOPE MIXING MODELS USING SIAR, SIBER AND MIXSIAR USING R (February 2017)
https://urldefense.proofpoint.com/v2/url?u=http-3A__www.prstatistics.com_course_stable-2Disotope-2Dmixing-2Dmodels-2Dusing-2Dr-2D&d=CwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=w1cZmSsXv_4B6PFPCEaFc-G5DvbWXPXwqoImdTFNNwE&s=T_WlrIGzl-5jNfIBnHzkfBgEye9gj1DEUTX1GZv7qcc&e=
simm03/
4. GENETIC DATA ANALYSIS USING R (TBC)
5. BIOINFORMAITCS FOR GENETICISTS AND BIOLOGISTS (July 2017)
6. APPLIED BAYESIAN MODELLING FOR ECOLOGISTS AND EPIDEMIOLOGISTS (November 2017)
7. INTRODUCTION TO R AND STATISTICS FOR BIOLOGISTS (April 2017)
8. INTRODUCTION TO PYTHON FOR BIOLOGISTS (TBC)
9. TIME SERIES MODELS FOR ECOLOGISTS AND CLIMATOLOGISTS (TBC)
10. ADVANCES IN MULTIVAIRAITE ANALYSIS OF SPATIAL ECOLOGICAL DATA (April 2017)
11. ADVANCES IN DNA TAXONOMY (TBC)
12. INTRODUCTION TO BIOINFORMATICS USING LINUX (TBC)
13. INTRODUCTION TO BAYESIAN HIERARCHICAL MODELLING
https://urldefense.proofpoint.com/v2/url?u=http-3A__www.prstatistics.com_course_introduction-2Dto-2Dbayesian-2Dhierarchical-2D&d=CwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=w1cZmSsXv_4B6PFPCEaFc-G5DvbWXPXwqoImdTFNNwE&s=sEZvGttBFPs9Sa1CV-3Y9ieIV9tMAQF9u0UXqMNNIfM&e=
modelling-using-r-ibhm02/
14. LANDSCAPE (POPULATION) GENETIC DATA ANALYSIS USING R (TBC)
15. PHYLOGENETIC DATA ANALYSIS USING R (TBC)
16. MODEL BASED MULTIVARIATE ANALYSIS OF ECOLOGICAL DATA USING R (January 2017)
17. ADVANCED PYTHON FOR BIOLOGISTS (February 2017)
18. NETWORK ANAYLSIS FOR ECOLOGISTS USING R (March)
https://urldefense.proofpoint.com/v2/url?u=http-3A__www.prstatistics.com_course_network-2Danalysis-2Decologists-2Dntwa01_&d=CwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=w1cZmSsXv_4B6PFPCEaFc-G5DvbWXPXwqoImdTFNNwE&s=QHcqHUWhNosCHpGe0KW2_mKEoMT4Ggq-mIIddDbuXgI&e=
19. GEOMETRIC MORPHOMETRICS USING R (June)
https://urldefense.proofpoint.com/v2/url?u=http-3A__www.prstatistics.com_course_geometric-2Dmorphometrics-2Dusing-2Dr-2Dgmmr01_&d=CwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=w1cZmSsXv_4B6PFPCEaFc-G5DvbWXPXwqoImdTFNNwE&s=vUsyTd2OxbBtXoS0PHyhWMlKh8HUM4wZkta2nButY5E&e=
20. INTRODUCTION TO METHODS FOR REMOTE SENSING (TBC)
21. ECOLOGICAL NICHE MODELLING (TBC)
22. ANIMAL MOVEMENT ECOLOGY (TBC)

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