CENTER FOR MACROECOLOGY, EVOLUTION AND CLIMATE

UNIVERSITY OF COPENHAGEN



To whom it may concern,

I hereby certify, as the organizer of the International PhD course **Modelling species distributions under climate change** that Professor Miguel Bastos Araújo was teaching in the course from August 20th to August 24th during the 2012 edition of the Phd course. In total he had XX contact hours with students including 7 hours of theoretical lectures and 8 hours of practical and tutorial sessions.

Down below I provide the timetables with the specific teaching tasks carried out by Professor Miguel Bastos Araújo

Yours sincerely,

20. JUNI 2013

CENTER FOR MACROECOLOGY, EVOLUTION AND CLIMATE

SECTION FOR ECOLOGY AND EVOLUTION

UNIVERSITETSPARKEN 15 2100 KØBENHAVN Ø DENMARK

www.macroecology.ku.dk

David Nogués-Bravo Associate Professor University of Copenhagen

Full programme of the PhD course:

Day 1

10-11h – Introduction to the course: Nogués-Bravo

11-13h – Ecological and evolutionary theory on species niches and distributions (lecture): Miguel B Araújo

Lunch

14h-16h – Species Distribution Models, SDM, statistical theory and methods (lecture):

Nogués-Bravo

 $16{:}00-18{:}00$ - Phylogenetics, evolutionary biology and SDMs I (lecture/seminar): Catherine Graham

18:15 – 20:00 Icebreaking reception

Day 2

09-11h – Introduction to BIOMOD (Raquel García)

11-13 – Challenges with model validation and model projection (lecture/seminar): Miguel B. Araújo

Lunch

14-16h – Phylogenetics, evolutionary biology and SDMs II (lecture/seminar): Catherine Graham

16-18h - Brief introduction to BIOMOD: Raquel García

Day 3

09-11h – Species distribution models applications to phylogeographic research (lecture/seminar): Marske

11-12h – Predicting species distribution under climate change: future challenges (seminar): Miguel B. Araújo

Lunch

13-16 - Modelling species distributions (BioMod practical): Raquel García

16-19- Discussion of PhD students own projects I. Miguel B. Araújo and David Nogués-Bravo

Day 4

09-11h – SDM applications to Global Change (seminar): Miguel B. Araújo.

11-13h - Modelling species distributions (BioMod practical): Raquel García

Lunch

15-17h - Modelling species distributions with ModEco: Nogués-Bravo

Day 5

09-13h-Modelling species distributions (Biomod practical): Raquel García and Nogués-Bravo

Lunch

14-19h – Workshop: reporting and discussion of the practical (evaluation). All the teachers

19:30 - Dinner and party for the students