

MST *Career*

Career skills for internationally competitive scientists

Comprehensive two-week intensive training program at the Faculty for Marine Sciences & Fisheries, Bogor Agricultural University (IPB)

MST*Career* is an intensive career skills training program at the Bogor Agricultural University *complementary* to existing courses that provide scientific knowledge. The course program is targeted to young researchers with potential to become internationally competitive scientists on marine-related topics and aims to enhance skills that are required to succeed on an international level. Through taking part in MST*Career* the participants will be strengthened in

- presenting their research to international audiences in a convincing, self-confident manner
- starting their international networking already at an early phase of their career
- succeeding with job applications and grant proposals
- designing experiments and research projects
- efficiently profiting from tools and resources commonly used by scientists
- efficiently managing their working time
- their overview of international career opportunities
- their knowledge on international standards in science

Target group

MSc Students, PhD Students, and early-career scientists in the broad area of Marine Sciences and related fields from all Indonesian universities who aim to pursue a scientific degree or a research stay abroad.

Language of Instruction: English

Course Dates: Nov 30 - Dec 9, 2015 (full-time; see tentative schedule below)

Contact

Dr. Carsten Thoms, DAAD Longterm Lecturer at IPB-FPIK, carsten.thoms@gmail.com

Dr. Hawis Madduppa, MST Secretary and Head of Marine Biodiversity and Biosystematics Lab at IPB-FPIK, madduppa@yahoo.com

See also www.mstcareer.info and <http://marine.ipb.ac.id/?p=1149> for updates

Please do not hesitate to contact us if you have questions!

How to apply

Participants must have an on-going or successfully completed research project they can present and discuss during the course. A conference poster and an abstract on this project should already exist prior to the course.

Please submit the following documents as email attachment (combined in one PDF or MS WORD file) to carsten.thoms@gmail.com **before October 25, 2015**:

- Your contact data (full name, email address, phone number)
- *Curriculum Vitae* (max. 1 page)
- Motivation letter (max. half page; briefly describing your motivation to participate in the course and your plans for your future career)
- Abstract of your past/current research project (max. 1 page)
- Brief description of your past career experiences (max. half page; e.g. job applications/interviews; applications to universities/scholarships/theses supervisors; participation in conferences)

The course participants will be selected based on the above documents and brief interviews.

Course Fees

Rp 380.000 per person (please note: the course fee can be reduced or waived for highly qualified candidates who cannot afford the costs; please contact the organizers for further information)

Course Schedule

The course will be held from 9:00-17:00 during the first week and from 9:00-16:30 during the second week (for details, see below). Participants are expected to be present during the entire course time in order to be awarded the course certificate.

Additional services

Following the course, the lecturers offer written feedback on application documents and research proposals by the participants. This service is optional and free of charge for all documents produced by the course MSTCareer participants themselves.

In addition, video recordings of the participant performances (poster presentations, job interviews, oral presentations) will be made available individually to each participant.

Tentative Course Schedule

Week 1

	Mo	Tue	Wed	Thur	Fr
09:00	Welcome General Introduction into the course and its aims; Candidate self-introductions; Discussion about expectations and previous experiences	<i>Participants individually revise their abstracts and practice their poster presentations</i>	<i>Practical: Joint analysis of the participants' revised</i> Abstracts	<i>Practical: Participant Job Interview Training (15 min interview + 15 min feedback per candidate)</i>	<i>Theory: Time Management</i>
09:30					
10:00			<i>Theory: Writing & compiling</i> Job Application Documents		<i>Theory: Oral Scientific Presentations</i>
10:30					
11:00					
11:30					
12:00	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
13:30	<i>Theory: Abstract Writing</i>	<i>Practical: Poster presentations by participants (10 min presentation + 10 min feedback per participant)</i>	<i>Theory: Writing & compiling</i> Job Application Documents	<i>Theory: How to Design a Research Project / Experimental Design</i>	<i>Participants individually prepare their oral presentations</i>
14:00					
14:30	<i>Theory: Poster design and presentation</i>		<i>Theory: How to prepare for a Job Interview</i> (participants then individually prepare in the evening)	<i>Theory: Research Proposal Writing</i>	
15:00					
15:30					
16:00					
-16:30					

Week 2

	Mo	Tue	Wed
09:00	Welcome + summary of the previous week		
09:30	Practical: Oral presentations by the participants (on research proposals or past projects] --> 10 min + 25 min discussion each	Theory: Study & Research Abroad	Theory: Good Scientific Conduct
10:00			
10:30			Theory: Tools & Informational resources in science
11:00			
11:30			
12:00	Lunch Break	Lunch Break	Lunch Break
13:30	Practical: Oral presentations by the participants (on research proposals or past projects] --> 10 min + 25 min discussion each	Theory: Study & Research Abroad	Theory: Networking in Science
14:00			
14:30			
15:00			Final discussion (Participant Feedback) Closing & Farewell
15:30-16:30			

- General events & discussions
- Lectures on theoretical backgrounds
- Practical trainings with guidance from the lecturers and feedback from the co-participants

Presentation & Networking Skills

Even if the data is sound, being able to *present* results and experimental methodologies of a research project in an intelligible, comprehensive and convincing manner is prerequisite to winning over an audience and to successfully establishing oneself in the international scientific community. MSTCareer gives the theoretical background for powerful, authentic scientific presentations. Through practical training elements the participants gain experience in applying their presentation skills, receiving direct feedback from their co-participants and the tutor.

Training elements:

- *How to present a scientific poster*
 - theoretical background
 - practical training: designing individual posters; giving an “elevator pitch”; presenting a poster at a conference (with feedback from the lecturers and the co-participants)
- *How to give a conference talk*
 - theoretical background
 - practical training: designing a PowerPoint presentation; the do’s and don’ts in an oral presentation; giving a presentation in front of the other course participants (with feedback from the lecturers and the co-participants)
- *How to use a conference for personal networking*

Job Applications & Grant Proposal Writing

How to convince a potential employer, scientific supervisor or funding organisation that one is the ideal person to conduct a scientific project? MSTCareer gives answers to this by informing about concepts and strategies of writing successful job and grant applications.

Training elements:

- *How to write a Research Abstract (e.g. to apply for a conference participation or a job)*
 - theoretical background
 - joint analysis of the Abstracts by the co-participants and the lecturers
- *How to write a job application*
 - theoretical background (CV, motivation letter, recommendation letters)
 - written feedback on the participants’ application documents (following the course)
- *Job Interview training*
 - strategies for job interviews
 - practical training of an interview situation (with feedback from the lecturers and the co-participants)
- *How to write a grant proposal*
 - theoretical background (general considerations about ideas, content, structure and strategies)
 - discussion of research project ideas of the participants (optional, if available)

Scientific Project Design

Already at the MSc or PhD level, students are expected to participate in the conceptualisation of their thesis projects and the experimental procedures. It is important to plan well in advance in order to not regret non-acquired data, inadequately treated samples or flawed experiment setups when analysing the results at the end of the project. At more advanced career levels, planning projects and experiments for an entire research group or even consortium makes up for a significant part of a scientists' life. MSTCareer provides the basic concepts and strategies.

Training elements:

- How to develop hypotheses and research questions
- How to define parameters to test hypotheses
- How to design an experimental setup
- How to plan the data and sample collection for a successful statistical analysis

Study & Research Abroad

Internationality is fundamental to a successful career in most natural & life science disciplines. A research stay abroad in a country with state-of-the-art research facilities and internationally renowned expertise can, therefore, help to boost the career prospects of a young researcher. MSTCareer gives insights into academic systems outside Indonesia and advice on how to get one's foot in the door of academic institutions abroad.

Training elements

- Germany
 - Introduction to the German Scientific Landscape
 - Research & Research Funding Organizations
 - Graduate Schools and Research Training Groups
 - Universities and non-university research institutions
 - Excellence Initiative
 - How to find a host institute/supervisor in Germany
 - How to get a scholarship/position for studying or a research stay in Germany
- Introduction to the scientific landscapes and scholarship options of other countries

Good Scientific Conduct

Contributing data to the ever growing pool of knowledge created by science entails a great amount of responsibility. A successful scientific career can quickly come to an end if this is ignored and, because of scientific misconduct, the reputation of a researcher is damaged. Therefore, all prospective researchers should be aware of this responsibility. MSTCareer gives an overview over the basic of good scientific conduct.

Training elements:

- Data management
- Publishing results / authorship
- Plagiarism

Tools & Informational Resources in Science

Nowadays, thanks to the internet, a plethora of tools and resources is available to scientists. MSTCareer gives an overview and additionally presents software programmes commonly used by researchers to manage their literature data.

Training elements:

- Literature databases & software
- Social networking in science
- Scientific MailingLists & Blogs
- MOOC – Free Online Lectures from renowned universities and famous professors
- Conference databases

Time Management

Personal time management skills are essential for professional success of a scientist. Those able to successfully implement time management strategies are able to control their workload rather than spend each day in a frenzy of activity reacting to crisis after crisis. MSTCareer will help the participants to learn time management strategies, to focus personal motivation on the task at hand, and to efficiently use organization tools.

About the MSTCareer Course Instructors



Dr. Carsten Thoms is *DAAD Longterm Lecturer* in Marine Sciences at the Bogor Agricultural University (IPB). He is involved in teaching, research and international science networking at IPB as well as in activities of the German Academic Exchange Service (DAAD). The latter include his participation in selection boards for DAAD scholarships.

Dr. Thoms is Marine Biologist by training and has conducted research projects in numerous international contexts (in Europe, USA and Asia). For his postdoctoral research he was awarded with a prestigious Feodor Lynen Fellowship by the Alexander von Humboldt Foundation. Prior to his work in Indonesia, Dr. Thoms was the Scientific Manager of the German Graduate School of Excellence 'Jena School for Microbial Communication – JSMC' (www.jsmc.uni-jena.de) – a multidisciplinary research & research training network based at the University of Jena, Germany. Holding this position, he was responsible for establishing a research and career training program for over 250 young scientists, which developed into a crystallization point also for major German research consortia. Among other accomplishments, he conceptualized and organized the recruitment of candidates for the prestigious JSMC Fellowship Program. In this context, he was involved in the selection of doctoral researchers and junior research group leaders from a total of nearly 10,000 applicants from more than 100 countries.

Dr. Thoms is fascinated by the internationality of science and strives to promote young researchers to advance their career skills in order to become internationally competitive scientists.

Contact: Carsten.Thoms@gmail.com

Visit www.carsten-thoms.net for more information.



Dr. Hawis Madduppa is *Head of the 'Marine Biodiversity & Biosystematics Lab'* at the Faculty of Fisheries & Marine Sciences, Bogor Agricultural University (IPB). In addition, he has responsibilities as the *Secretary of the IPB Department of Marine Science & Technology*. He earned his PhD at the University of Bremen, Germany, funded with a research scholarship by the German Academic Exchange Service (DAAD). His research interests include the ecology and biology of marine fishes, population genetics, and fishes as bioindicator species. He is strongly involved in current approaches to catalog Indonesia's marine biodiversity with molecular phylogenetic techniques (e.g. DNA Barcoding).

Dr. Madduppa has an extensive personal network that includes marine scientists across the Indonesian archipelago as well as researchers abroad. He frequently gets invited as speaker to national and international symposia and to advise Indonesian governmental boards on marine conservation issues. As the Secretary of the Department of Marine Science & Technology he is involved in manifold administrative tasks in the academic context, including the chairing of examination boards and the organization of national and international events (e.g. 'International Conference on Marine Science (ICMS 2013)'; Constituting Workshop of the 'EMBRIO - Enhancing Marine Biodiversity Research in IndOnesia' Initiative 2014).

Dr. Madduppa has already supervised a number of student theses and organizes the international 2-month 'Marine Science & Technology (MST) Course' that is annually held at IPB since 2001. He is eager to share his experiences with Indonesian students to support them in their endeavors to strengthen Marine Biodiversity Research in Indonesia.

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Visit <http://hawis.staff.ipb.ac.id/> for more information.