



2015

Training in research methodology can make all the difference.

## OSTEOLOGY RESEARCH ACADEMY

### CORE MODULE

Good Research Practice and Essentials of  
Research Methodology

14-18 SEPTEMBER  
LUCERNE, SWITZERLAND

### EXPERT MODULE

Hard Tissue Research

2-4 NOVEMBER  
KIEL, GERMANY

## TRAINING IN RESEARCH METHODOLOGY CAN MAKE ALL THE DIFFERENCE

Research methodology is of great significance for scientists. Nevertheless, many young researchers have so far acquired their knowledge on research methodology and research management painstakingly through a “trial and error” approach. Only a few obtained a structured course in research methodology. Therefore, the Osteology Research Academy emerged as a development from the Osteology Foundation in close cooperation with leading scientists.

In 2015 the Osteology Research Academy enters its 4<sup>th</sup> year. More than 90 young researchers from all over the world were already successfully educated in this program, and went home eager to implement the newly gained knowledge in their research projects. Some participants even told us that the courses were “life-changing” or “a milestone” in their professional career. We are very happy and proud to receive such a feedback.

In the Core Module the participants of the Osteology Research Academy get a comprehensive view on most of the aspects of preclinical and clinical studies required by young researchers for their daily work.

In addition, the Expert Module represents an opportunity for those interested in histological techniques to go into more detail and learn the most important techniques from experienced scientists.

The Osteology Research Academy brings together leading scientists to share their expertise. Only few such opportunities are provided in the area of dental and craniofacial research. Don't miss the chance to join the next course!



Handwritten signature of Reinhard Gruber in black ink.

Reinhard Gruber  
Chairman

Handwritten signature of Niklaus P. Lang in black ink.

Niklaus P. Lang  
Chairman

Handwritten signature of Hendrik Terheyden in black ink.

Hendrik Terheyden  
Chairman

“I had the possibility to discover a lot of new things and I'm happy to have attended both courses. It was a milestone in my professional career.”

Gian Paolo Gennari, Italy, participant ORA Lucerne and Kiel 2014

## THE COURSE CONCEPT: CORE MODULE AND EXPERT MODULE

Research drives advances in science. Which is why the Osteology Foundation is committed to running an intensive course on good scientific practice and research methodology: the Osteology Research Academy. Two kinds of courses are offered: a Core Module and an Expert Module.

### **Core Module**

The Core Module, a one-week intensive course, gives an overview of the planning and running of a study project from A to Z. The programme utilises a motivating mix of educational formats to maximise the learning experience: for example classroom sessions with leading experts or case studies and exercises in teams. Within a casual atmosphere attendees will have the chance for intensive exchange with trainers and other participants. E-learning lessons help the participants to prepare for the course.

### **Expert Module**

The Expert Module, a two-and-a-half-day course, provides deeper insights into bone anatomy, histology, physiology and pathophysiology in the context of pre-clinical and clinical studies in oral bone regeneration. Moreover, MircoCT, histomorphometry and digital image analysis are highlighted.

The course participants gain in-depth knowledge in hands-on courses and workshops supported by experienced researchers.

In groups up to three, attendees train the preparation of hard tissue specimens as well as histomorphometrical analyses on the microscope. Two additional workshops provide knowledge and training in bone histology and data presentation.

Attendance of the Core Module is not a prerequisite for participation in the Expert Module.

“Firework display of research  
in Osteology.”

Reinhard Gruber, Chairman / Instructor ORA Lucerne and Kiel 2014



## CORE MODULE

14–18 September 2015, Lucerne, Switzerland

Good Research Practice and Essentials of Research Methodology

### Who can benefit from the Research Academy Core Module?

- **Young postgraduates** from dentistry or natural sciences aiming for an academic career in dental medicine
- **Experienced postgraduates** who want to refresh and extend their knowledge
- **Academically interested dentists** who want to improve their understanding of research or become actively involved
- **Scientific affiliates** from the dental industry, who are actively involved in designing and managing research projects

### Course design

- Classroom sessions with leading experts
- Case studies and exercises in teams
- Chance for intensive exchange with instructors
- Room for discussion
- Highly interactive
- Casual atmosphere
- Course preparation with e-learning

### Course objectives

- Fundamentals of research in dental medicine
- The process from posing of a scientific question to generating the answer
- Selection of the suitable in-vitro, pre-clinical or clinical research approach
- Selection of the appropriate analytical tools for data acquisition
- Planning of a pre-clinical or clinical study within a research group using international networks
- Analysis and critical interpretation of acquired data
- Effective communication of findings and knowledge

## CORE MODULE LUCERNE

### CHAIRMEN

- **Reinhard Gruber**, Vienna, Austria
- **Niklaus P. Lang**, Bern, Switzerland

### CURRICULUM COMMITTEE

- **Dieter Bosshardt**, Bern, Switzerland
- **Reinhard Gruber**, Bern, Switzerland
- **Ronald E. Jung**, Zurich, Switzerland
- **Frank Schwarz**, Dusseldorf, Germany

### INSTRUCTORS

- **Bilal Al-Nawas**, Mainz, Germany
- **Michael Bornstein**, Bern, Switzerland
- **Dieter Bosshardt**, Bern, Switzerland
- **Philippe Bugnon**, Zurich, Switzerland
- **Reinhard Gruber**, Vienna, Austria
- **Jürg Hüsler**, Bern, Switzerland
- **Ronald E. Jung**, Zurich, Switzerland
- **Frank Krummenauer**, Witten/Herdecke, Germany
- **Niklaus P. Lang**, Bern, Switzerland
- **Andrea Mombelli**, Geneva, Switzerland
- **Gisela Müller**, Zurich, Switzerland
- **Karl Andreas Schlegel**, Erlangen-Nuremberg, Germany
- **Frank Schwarz**, Dusseldorf, Germany
- **Anton Sculean**, Bern, Switzerland
- **Hendrik Terheyden**, Kassel, Germany
- **Kristian Tersar**, Lucerne, Switzerland
- **Daniel Thoma**, Zurich, Switzerland

## CORE MODULE – COURSE OVERVIEW AND ORGANISATIONAL DETAILS

MONDAY 14 September 2015	TUESDAY 15 September 2015	WEDNESDAY 16 September 2015	THURSDAY 17 September 2015	FRIDAY 18 September 2015
<b>Research strategy</b>	<b>Research analytics</b>	<b>Clinical research</b>	<b>Pre-clinical research</b>	<b>Research practice</b>
Opening Publication strategy Good research practice	Histology Biochemistry Microbiology Radiology Clinical measurements	Study management Regulatory requirements Study design and protocols (e.g. hard tissue regeneration, soft tissue regeneration, periodontal regeneration, endpoint selection)	Ethics and GLP Study design and protocols (e.g. ridge augmentation, sinus lift, soft tissue regeneration, implant research, periodontal regeneration, tissue engineering)	Workshop: Research protocol development
<b>Research statistics</b>				Workshop: Research communication
Workshop: Statistics				
<b>Research strategy</b>				
Workshop: Strategy to obtain research funding	Workshop: Analytical methods		Workshop: Pre-clinical research	
Workshop: Oral presentations				
<b>TEAM DINNER</b>		<b>CAREER SEMINAR</b>		
		<b>TEAM EVENING</b>		

### Venue

Hochschule Luzern – Wirtschaft  
Rösslimatte 48 , CH-6002 Lucerne, Switzerland  
[www.hslu.ch](http://www.hslu.ch)

### Course fees Core Module

- Postgraduate student\* CHF 2'100 (+8% VAT)
- All other participants CHF 3'350 (+8% VAT)

\*only valid with confirmation by the university

### Course fee for the Core Module includes

- All courses of the Core Module
- Course material
- Food and beverages during the day (small lunch and coffee breaks)
- Team dinner on Monday
- Team evening on Wednesday
- Career seminar on Wednesday
- Course certificate

A discount of CHF 200 is offered if both Core Module and Expert Module are booked or if an Expert Module is booked and a Core Module has already been attended.



## EXPERT MODULE

2–4 November 2015, Kiel, Germany

Hard Tissue Research

### Who can benefit from the Research Academy Expert Module?

- **Young postgraduates** from dentistry or natural sciences whose study projects include histological work or who are planning a histological study
- **Experienced postgraduates** who want to extend their knowledge towards histology
- **Academically interested dentists** who want to improve their understanding of histological techniques
- **Scientific affiliates** from the dental industry, who are actively involved in projects that include histological analyses

### Course design

- Extensive hands-on training
- In-depth background information
- Classroom sessions with leading experts
- Casual atmosphere

### Course objectives

- Fundamentals of bone anatomy, histology, physiology and pathophysiology
- Principles of MicroCT, histomorphometry and digital image analysis
- Tissue processing to prepare hard tissue specimens for qualitative and quantitative analysis
- Appropriate histomorphometrical analyses for data acquisition
- Use of microscopes and microscopic techniques
- Analysis and critical interpretation of acquired data and data presentation

## EXPERT MODULE KIEL

### CHAIRMEN

- **Reinhard Gruber**, Vienna, Austria
- **Hendrik Terheyden**, Kassel, Germany

### INSTRUCTORS

- **Yahya Açı́l**, Kiel, Germany
- **Kathrin Becker**, Dusseldorf, Germany
- **Reinhard Gruber**, Vienna, Austria
- **Volker Hagen**, Hamburg, Germany
- **Stefan Tangl**, Vienna, Austria
- **Hendrik Terheyden**, Kassel, Germany
- **Jörg Wiltfang**, Kiel, Germany

### LOCAL ORGANISATION

- University Hospital Schleswig-Holstein/  
Campus Kiel, Germany
- **Eleonore Behrens**, Kiel, Germany

## EXPERT MODULE – COURSE OVERVIEW AND ORGANISATIONAL DETAILS

MONDAY 2 November 2015	TUESDAY 3 November 2015	WEDNESDAY 4 November 2015
Pre-clinical and clinical studies in bone regeneration Fluorescent labeling techniques MicroCT and histomorphometry	Bone anatomy and histology Bone physiology Bone pathology	Current research topics in bone regeneration
Hands-on and Workshops: Sample preparation Datapresentation Histomorphometry Histology	Hands-on and Workshops: Sample preparation Datapresentation Histomorphometry Histology	Workshop: Staining techniques
TEAM DINNER	TEAM DINNER	Course wrap-up and exam

### Venue

Dept. of Oral and Maxillofacial Surgery University  
Hospital Schleswig-Holstein Campus Kiel, Germany

### Course fees Expert Module

- Postgraduate student\* CHF 1'700 (no VAT charge)
- All other participants CHF 2'200 (no VAT charge)

\*only valid with confirmation by the university

### Course fee for the Expert Module includes

- All courses of the Expert Module
- Course material
- Food and beverages during the day (small lunch and coffee breaks)
- Team dinner (Monday and Tuesday)
- Course certificate

A discount of CHF 200 is offered if both Core Module and Expert Module are booked or if an Expert Module is booked and a Core Module has already been attended.



“The Research Academy was a life-changing experience. It was a great environment to learn and exchange knowledge with different people from all around the world.”

Fausto Frizzera, Brazil, participant ORA Lucerne 2014



## ORGANISER

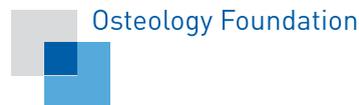
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fax +41 41 492 67 39  
info@osteology.org  
www.osteology.org

COURSE LANGUAGE  
English

FURTHER INFORMATION AND REGISTRATION  
www.osteology.org

# 2015

## REGISTRATION FORM



Osteology Foundation

### Participant Details

Prof.  Dr.  Mr.  Mrs.  Ms.

Family Name \_\_\_\_\_

First Name \_\_\_\_\_

Institution/Company/Practice \_\_\_\_\_

Postal Address \_\_\_\_\_

Invoicing Address\* \_\_\_\_\_

Postal Code \_\_\_\_\_

City \_\_\_\_\_

Country \_\_\_\_\_

Phone \_\_\_\_\_

E-Mail \_\_\_\_\_

\*if different from postal address

Please submit the form  
by e-mail or fax to:

Osteology Foundation  
Nathalie Huber  
Landenbergstrasse 35  
CH-6002 Lucerne

phone +41 41 368 44 46

fax +41 41 492 67 39

nathalie.huber@osteology.org

### Registration

	<input type="checkbox"/> Core Module (+ 8% VAT)	<input type="checkbox"/> Expert Module (no VAT charge)	<input type="checkbox"/> Combi*
<input type="checkbox"/> Postgraduate Student (Please provide written confirmation by the University)	CHF 2'100.-	CHF 1'700.-	CHF 3'600.-
<input type="checkbox"/> All other participants	CHF 3'350.-	CHF 2'200.-	CHF 5'350.-

\* + 8% VAT on Core Module and no VAT charge on Expert Module.

Place, Date \_\_\_\_\_

Signature \_\_\_\_\_

**Accommodation and dinners not designated in the programme are not included in the course fee.**

### Payment conditions

Once your registration has been processed, the Osteology Foundation will send you an invoice and further details. The course fee is to be paid via bank transfer. **Payments must be received by the Osteology Foundation within 14 days from the date of the invoice, but latest one day prior to the start of the course.**

### Cancellations

For cancellations received prior to 1 August 2015, 50% of the course fee will be refunded. For cancellations between 1 August 2015 and 1 September 2015, 20% of the course fee will be refunded. Regrettably, no refunds can be made for cancellations received after 1 September 2015. Contents and instructors are subject to change.