



**Mechanobiology in vivo**  
**Bone healing: models and**  
**monitoring in rodents**

Practical Course

Berlin

1<sup>st</sup> – 2<sup>nd</sup> of April 2019

Julius Wolff Institute | Charité - Universitätsmedizin Berlin | RISystem



**JULIUS WOLFF INSTITUT**



## Accreditation applied for (in the past: 13 ATF points for veterinarians and 17 CME points for clinicians)

### Topics

- Rat/mouse models to study bone and bone defect healing
- Bone fixation techniques - including surgical approaches of both, intra- and extramedullary implants
- Video demonstrations and “hands on” training
- Evaluation and monitoring methods of the bone healing progress
- Tips, tricks & pitfalls of surgical procedure
- Discussion of study design
- Discussion of future developments

### Participants

This practical course is designed for researchers who intend to use small animal models to study bone healing. **Each participant may choose whether to learn about rat or mouse models.**

In this course participants will receive hands-on experience and are offered the unique possibility to learn and train the surgical procedures necessary for different fixation techniques in mice and rats, including both intra- and extramedullary implants under the guidance of scientific experts from the Julius Wolff Institute who have long-standing professional experience in small animal surgery. We offer to share 15 years of experience in animal studies.

Participants will also learn about the analytical methods used at the Julius Wolff Institute, one of the major research institutions focused on bone healing in Germany and worldwide.

# Program

## Monday, 1<sup>st</sup> of April 2019

12.00 Welcome

12.10 Bone healing models at the JWU

12.30 Introduction to RISystem

### **RatNail/ MouseNail/ MouseScrew**

13.00 Introduction

Video demonstration

In vivo demonstration and hands-on training

15.25 Coffee break

### **RatFix/ MouseFix**

15.50 Introduction

Video demonstration

In vivo demonstration and hands-on training

17.45 Discussion

18.30 End

19.00 Dinner

## Tuesday, 2<sup>nd</sup> of April 2019

08.45 Welcome

09.00 Biomechanical testing

10.00 Histological monitoring of bone healing

11.00  $\mu$ CT evaluation of bone formation

12.00 Lunch break

### **RatExFix/ MouseExFix**

13.30 Introduction

Video demonstration

In vivo demonstration and hands-on training

15.25 Coffee break

### **RatDis**

15.50 Introduction

Video demonstration

In vivo demonstration and hands-on training

17.45 Study design: Tips & Tricks

18.30 End

# Berlin

1<sup>st</sup> – 2<sup>nd</sup> of April 2019

Mechanobiology in  
vivo  
Bone healing: models  
and monitoring in  
rodents  
Practical Course

## Information

Dr. Agnes Ellinghaus  
Fachtierarzt für Versuchstierkunde  
Julius Wolff Institute  
Charité - Universitätsmedizin Berlin  
Augustenburger Platz 1  
D-13353 Berlin  
Phone: +49 30 450659027  
Fax: +49 30 450559969  
E-Mail: [agnes.ellinghaus@charite.de](mailto:agnes.ellinghaus@charite.de)

## Location

Julius Wolff Institute  
Charité - Universitätsmedizin Berlin  
Föhrerstr. 15  
D-13353 Berlin  
Seminar Room 0.0043

## Organisers

Georg Duda - *Julius Wolff Institute*  
Katharina Schmidt Bleek - *Julius Wolff Institute*  
Agnes Ellinghaus - *Julius Wolff Institute*  
Romano Matthys - *RISystem AG*

## Registration & Registration Fee

€ 930 including tax, course book, dinner, meals & drinks

[Click here for Registration](#)

*Kindly supported by the "Verein der Freunde und Förderer der Berliner Charité e.V."*