



# FONDAZIONE GUIDO BERNARDINI

## BETTER EDUCATION FOR BETTER SCIENCE

### INTERNATIONAL SEMINAR

  credits: 9 points - 21 CPD credits by the Society of Biology - 1,5 day continuing education Credits by Swiss Veterinarian Association

# Revisiting Refinement in Care and Use of Laboratory Rodents

*Refinement is one of the Three Rs that Russell and Burch published in 1959. Since then the sensitivity and consciousness of the need to respect and enhance the welfare of laboratory animals have progressively spread and have been consolidated through the scientific community and public opinion.*

*The definition itself of refinement has evolved since Russell and Burch's version. Today the commonly accepted definition refers more comprehensively to any approach which avoids or minimises the actual or potential adverse effects experienced at any time during the life of the animals, and which enhances their wellbeing. Refinement encompasses not only the direct harms associated with animal use, but the indirect, or contingent harms associated with breeding, transportation, housing and husbandry. Though Replacement and Reduction are equally crucial for the animals, Refinement affects most directly the life of the majority of animals used in scientific research. It also involves all persons working with animals, from animal care staff to the scientists.*



*Refinement also requires a creative attitude in that it stimulates to think beyond and, sometimes in contrast to the traditionalist and conservative approach.*

*This international seminar will address refinement issues in husbandry and in the procedure context providing examples of refinement programmes from different situations and organizations. Our objective is to offer participants the opportunity to receive useful suggestions for their work and to share and discuss their own experiences and achievements in this field.*

**25-26 June 2015 - Fondazione Guido Bernardini Conference Centre • Varese, Italy**

# Thursday 25th of June

Registration .....09:00 - 09:30

**Welcome and opening addresses**.....09:15 - 09:30

## **Refinement in husbandry practice**

Behavioral management and enrichment: core concepts,  
and a little on mice.....09:30 - 10:00

Joseph Garner

Don't be afraid of environmental enrichment.....10:00 - 10:30

Hanno Würbel

Nesting material: An environmental enrichment success story.....10:30 - 11:00

Brianna Gaskill

Coffee Break.....11:00 - 11:30

Impact of running wheels used as environmental enrichment tool.....11:30 - 12:00

Yuri Robbers

Managing breeding problems in mice.....12:00 - 12:30

Joseph Garner

Managing laboratory mouse aggression.....12:30 - 13:00

Brianna Gaskill

Lunch.....13:00 - 14:00

## **Refinement of procedures**

Refinement of invasive procedures.....14:00 - 14:30

René Remie

Assessing pain in laboratory animals using behaviour  
and facial expressions.....14:30 - 15:00

Matthew Leach

Implementation of severity classification of procedures.....15:00 - 15:30

Ann-Dominique Degryse

Coffee Break.....15:30 - 16:00

Improvement of pain therapy in laboratory mice.....16:00 - 16:30

Matthew Leach & Paul Flecknell

Impact of identification techniques on welfare.....16:30 - 17:00

Marcello Raspa

Improving rodent welfare during euthanasia.....17:00 - 17:30

Huw Golledge

Refinement by experimental design.....17:30 - 18:00

Hanno Würbel

# Friday 26th of June

## Implementation of refinement programmes

Promotion of refinement in industry.....09:30 - 10:00

Violeta Solis Soto

Refinement in models for human disease.....10:00 - 10:30

André Bleich

Refinement in Imaging Techniques of small rodent models.....10:30 - 11:00

Marc Janier

Coffee Break.....11:00 - 11:30

Refining housing, husbandry and care for animals used  
in studies involving biotelemetry.....11:30 - 12:00

Penny Hawkins

The relevance of Refinement in relation to Reduction  
and Replacement.....12:00 - 12:30

Penny Hawkins

Lunch.....12:30 - 14:00

## Seminar Venue

Detailed venue information will be provided in your registration confirmation

## Hotel Information

Recommended hotels are located near the conference center; information will be available contacting FGB secretary. All requests will be honoured based upon availability at the chosen hotel and upon receipt of registration. There will be a complimentary shuttle bus from/to the hotels and the Conference Centre.

### Scientific Committee

Marcel Gyger - Ecole Polytechnique Fédérale de Lausanne SV CPG, Switzerland

Caroline Johner - University of Basel, Switzerland

Gemma Perretta - Fondazione Guido Bernardini, Italy

Jan-Bas Prins - Leiden University Medical Centre, the Netherlands

### Faculty

Ann-Dominique Degryse - Institut de Recherche Pierre Fabre, France

André Bleich - Hannover Medical School, Germany

Paul Flecknell - Newcastle University, UK

Joseph Garner - Stanford University, US

Brianna Gaskill - Purdue University, US

Huw Golledge - Universities Federation for Animal Welfare, UK

Penny Hawkins - Royal Society for the Prevention of Cruelty to Animals, UK

Marc Janier - University of Lyon, France

Matthew Leach - Newcastle University, UK

Marcello Raspa - CNR-EMMA, Italy

René Remie - René Remie Surgical Skills Centre, UK

Yuri Robbers - Leiden University Medical Center, the Netherlands

Violeta Solis Soto - GlaxoSmithKline, Spain

Hanno Würbel - University of Bern, Switzerland

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### We thank for the support

**SagiCofim**  
Ecoefficienza per la qualità dell'aria



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Fondazione Guido Bernardini

tel +39 02 45 07 67 87 - fax: +39 02 45 07 02 12

[secretary@fondazioneguidobernardini.org](mailto:secretary@fondazioneguidobernardini.org)

[www.fondazioneguidobernardini.org](http://www.fondazioneguidobernardini.org)