

## Speakers

**Francisco Campos.** Clinical Neuroscience Research Laboratory. Instituto de Investigación Santiago de Compostela (IDIS), Santiago de Compostela

**Luke Diekhorst.** Neuroscience and Cerebrovascular Research Laboratory. Instituto de Investigación del Hospital Universitario La Paz (IdiPAZ), Madrid

**Exuperio Díez Tejedor.** Neurology Department. Hospital Universitario La Paz, UAM, Madrid

**Iván García Suárez.** Emergencies Department. Hospital Universitario San Agustín, Asturias

**María del Carmen Gómez de Frutos.** Neuroscience and Cerebrovascular Research Laboratory. Instituto de Investigación del Hospital Universitario La Paz (IdiPAZ), Madrid

**María Gutiérrez Fernández.** Neuroscience and Cerebrovascular Research Laboratory. Instituto de Investigación del Hospital Universitario La Paz (IdiPAZ), Madrid

**Carlota Largo Aramburu.** Experimental Surgery Department. Instituto de Investigación del Hospital Universitario La Paz (IdiPAZ), Madrid

**Fernando Laso García.** Neuroscience and Cerebrovascular Research Laboratory. Instituto de Investigación del Hospital Universitario La Paz (IdiPAZ), Madrid

**Laura Otero Ortega.** Neuroscience and Cerebrovascular Research Laboratory. Instituto de Investigación del Hospital Universitario La Paz (IdiPAZ), Madrid

### The price includes

Surgical microscope, ultrasound and microsurgery box during practice

Microsurgical sutures and clamps

Computer-based training material

Coffee and lunch

### Credits

Accreditation of the course has been requested to the Commission of Continuous Training of the Health Professions of the Community of Madrid - National Health System

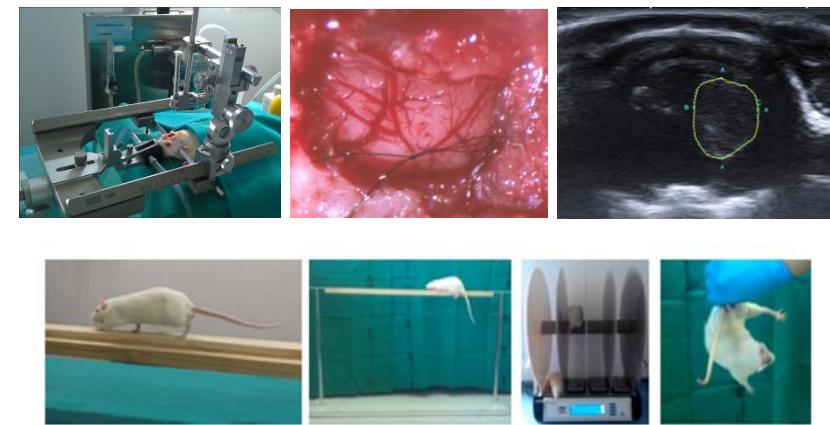


Hospital Universitario La Paz  
Fundación para la Investigación Biomédica  
Comunidad de Madrid

IdiPAZ  
Instituto de Investigación  
Hospital Universitario La Paz

UAM  
Universidad Autónoma de Madrid  
Escuela UAM  
Neurociencias Clínicas

# Course of EXPERIMENTAL ANIMAL MODELS FOR STROKE RESEARCH



**Days:** March 23<sup>th</sup> and 24<sup>th</sup>, 2020

**Place:** IdiPAZ Conference Room and Experimental Surgery Service, floor -1, Research Building, IdiPAZ

**Director:** Dr. María Gutiérrez Fernández

**Organization:** Dr. María Gutiérrez Fernández/ Dr. Laura Otero Ortega

**Director of the UAM School of Clinical Neurosciences. Chair of Neurology :** Prof. Exuperio Díez-Tejedor.

**Inscription to the Fundación para la Investigación Biomédica del Hospital Universitario La Paz:** Contact person: Nathalia García o Francisco Gil

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**Registration fee :** 450 euros

**Places available:** 16 persons

**Deadline inscription:** March 13<sup>th</sup>



## **Monday March 23<sup>th</sup>, 2020**

**09:30- 09:45 Introduction**

**09:45- 10:15 Training in the use of experimental animals**

Carlota Largo Aramburu

**10:15- 10:45 Handling the rat as an experimental animal**

Carlota Largo Aramburu

**10:45- 11:15 Microsurgical set. Equipment. Sutures. Surgical microscope.**

**Ergonomics in microsurgery**

Laura Otero Ortega

**11:15- 11:45 How to evaluate motor and sensory deficits. Evaluation scales**

María del Carmen Gómez de Frutos

**11:45-12:00 Coffee break**

**12:00-14:00 Practice neurological scales in rats**

María del Carmen Gómez de Frutos, Fernando Laso, Luke Diekhorst

**14:00- 15:00 Lunch**

**15:00- 15:30 Experimental animal models of stroke**

María Gutiérrez Fernández

**15:30- 16:00 Ultrasound in experimental animal model of stroke**

Iván García Suárez

**16:00- 18:00 Practice by surgical stations in stroke (middle cerebral artery occlusion (MCAO) model, intraluminal filament, endothelin, collagenase) and ultrasound (brain structures and peripheral organs) in rats**

Francisco Campos, Luke Diekhorst, Iván García Suárez, María del Carmen Gómez de Frutos, María Gutiérrez Fernández, Fernando Laso, Laura Otero

## **Tuesday March 24<sup>th</sup>, 2020**

**09:00- 11:00 Practice by surgical stations in stroke (MCAO model, intraluminal filament, endothelin, collagenase) and ultrasound (brain structures and peripheral organs) in rats**

Francisco Campos, Luke Diekhorst, Iván García Suárez, María del Carmen Gómez de Frutos, María Gutiérrez Fernández, Fernando Laso, Laura Otero

**11:00- 11:30 Translational research in stroke**

Exuperio Díez Tejedor

**11:30-12:00 Coffee break**

**12:00- 13:30 Practice by stations: embolism model; femoral vessels approach; caudal vein canalization; intrathecal approach**

Luke Diekhorst, María del Carmen Gómez de Frutos, María Gutiérrez Fernández, Fernando Laso, Laura Otero

**13:30- 15:00 Lunch**

**15:00- 18:00 Practice by stations: embolism models; femoral vessels approach; caudal vein canalization; intrathecal approach**

Luke Diekhorst, María del Carmen Gómez de Frutos, María Gutiérrez Fernández, Fernando Laso, Laura Otero

*Animal experimentation in stroke is essential to test different therapeutic strategies as a previous step before translation to the patient. Animal models should mimic as much as possible the situation suffered by the patient. Adequate management of these models as well as their harmonization in different laboratories is important to move in the same direction and minimize failures in translational research.*

*The present course is oriented to the acquisition of knowledge and skills that favor the development of translational research in stroke. To this end, it has both theoretical and practical content that provides the methodological and ethical bases necessary to carry out research in this disease.*