



## Welcome to the Workshop











### The team





Universidad
Carlos III
de Madrid

#### **Organizers**



**Dr. Javier Pascau**Full Professor



**Dr. Alicia Pose Díez de la Lastra**Postdoctoral researcher



#### **Instructors**



**Dr. Mónica Sevilla García**Assistant Professor



**Dr. Lucía Cubero Gutiérrez**Postdoctoral researcher



Mr. Sergio Carreras Salinas
PhD. Student





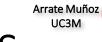
- Treatment Planning for Intraoperative Radiation Therapy
- Image Guided Treatments
  - Registration, navigation, Surface scanning...
  - UPM, Queens Univ. (Canada), Children's National (Washington DC), SPL (Boston)...
- 3D Printing
  - UPAM3D HGUGM (R. Pérez-Mañanes y J.A. Calvo)
- Medical Image Processing
  - Deep Learning segmentation in RT, Enphisema detection, Digital Pathology...
  - Toxicity prediction in RT
  - BWH (Boston), Arrate Muñoz (UC3M), Univ. Rennes I...
- Clinical translation of our results
  - Oncologic surgery, maxilofacial, obstetrics, sacral neurostimulation...
  - Several hospitals in Madrid: HGUGM, FJD, CUN, HULaPaz

























Rubén Pérez-Mañanes. HGUGM



Jose A. Calvo. HGUGM



Juan de León. HGUGM



Oscar Riquelme. HGUGM



Santiago Ochandiano.



Santiago Lizarraga. HGUGM



Enrique Ramón. HGUGM



Felipe Calvo. CUN



Inés Rubio. HLaPaz



Damián Gª Olmo. FJD



Esperanza Naredo. FJD



Javier Serrano. FJD



María Jesús Ledesma. UPM



Juan Ruiz Alzola. ULPGC



Raúl San José. BWH **Boston** 



Gabor Fichtinger. Queens



Tina Kapur. BWH Boston



Marius Linguraru. Children's H. DC



Henar Miguelez. UC3M





Tiziana Rancati. INT Milan.



Laura Cella. CNR.



Claudio Fiorino. H. San Rafaelle



Renaud de Crevoisier. C. E. Marquis

### Invited speakers





**Dr. Erik Pernod**CEO InfinyTech3D,
France



Dr. Rafael Palomar Senior Research Scientist Oslo University Hospital (OUH), Norway



**Dr. Antonio Porras**Assistant Professor
Colorado School of
Public Health, USA



**Dr. Miguel Marco**Associate Professor
Universidad Carlos III
de Madrid, Spain





- 3-day intensive workshop
- 3D Slicer and SOFA framework
- Aimed at
  - Undergraduate students
  - Master's students
  - Early-career researchers
- No prior experience is required



### What's on the agenda?

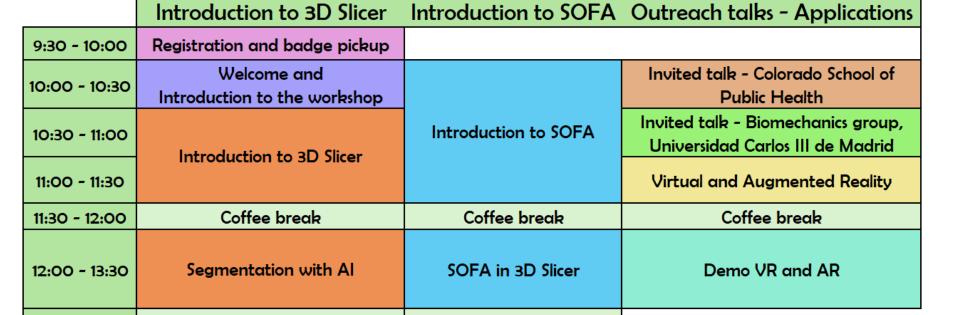
- Introduction to 3D Slicer and Al-based segmentation
- Fundamentals of biomechanical simulation with SOFA
- Hands-on hackathon and AR/VR integration
- Demos with immersive technology and flash talks from guest institutions

### Workshop: 3D Slicer - SOFA

Dates: 18-20th June 2025

Location: Campus Puerta de Toledo, UC3M - Room 1.A.03

DAY 1 DAY 2 DAY 3



Lunch

SOFA hackathon

13:30 - 15:00

15:00 - 17:00

Lunch

Design your own module

in 3D Slicer



### Schedule





• All materials and information related to the workshop are publicly available at:

https://github.com/BSEL-UC3M/Workshop 3DSlicer-SOFA

- You will find:
  - The workshop schedule
  - 🗐 A detailed description of the program
  - Biographical information of the speakers, instructors, and organizers
  - All presentations given during the event
  - Data for the practical sessions





# What about you?

Let's start with a quick round of introductions.