

## Tuesday April 18, 2023

**5:00-8:00 am**

VIRTUAL Tutorial

**Dr. Ruud J.G. van Sloun & Dr. Yonina C. Eldar** *Artificial Intelligence in Ultrasound Imaging*

**8:00-18:00**

Registration  
(FOYER)

|                    |   |  |  |   |   |   |   |
|--------------------|---|--|--|---|---|---|---|
| <b>Rooms</b>       | (SALÓN BARAHONA 3- 401 ppl)                         | (SALÓN BARAHONA 4- 360 ppl)  | (SALÓN BARAHONA 2- 285 ppl)  | (SALÓN BARAHONA 1- 269 ppl)   | (SECRETARIA GENERAL- 130 ppl)   | (SALÓN ARSENAL- 130)  | (PEGASUS- 200 ppl)  |
| <b>9:00-10:30</b>  | <b>Industrial Day</b><br><br>(SALÓN BARAHONA 3)     | <b>Challenge 1 pt I</b><br><br>Out-of-Domain Synapse Detection for Microwasp Brain Connectomes<br><br>(SALÓN BARAHONA 4) | <b>Challenge 2 pt I</b><br><br>Edited Magnetic Resonance Spectroscopy Reconstruction<br><br>(SALÓN BARAHONA 2) | <b>Challenge 3 pt I</b><br><br>Robust Non-rigid Registration for Expansion Microscopy<br><br>(SALÓN BARAHONA 1)   | <b>Challenge 4 pt I</b><br><br>Image Analysis for CTA Endovascular Stroke Therapy<br><br>(SECRETARIA GENERAL) | <b>Tutorial 1 pt I</b><br><br>Vision-Language Multi-modal Learning for Biomedical Images<br><br>(SALÓN ARSENAL)               | <b>Tutorial 2 pt I</b><br><br>Computational MRI in the Deep Learning Era: The two facets of acquisition and image reconstruction<br><br>(PEGASUS)                 |
| <b>10:30-11:00</b> | Coffee Break  |  |  |   |   |   |   |
| <b>11:00-12:30</b> | <b>Industrial Day</b><br><br>(SALÓN BARAHONA 3)     | <b>Challenge 1 pt II</b><br><br>(SALÓN BARAHONA 4)   | <b>Challenge 2 pt II</b><br><br>(SALÓN BARAHONA 2)   | <b>Challenge 3 pt II</b><br><br>(SALÓN BARAHONA 1)  | <b>Challenge 4 pt II</b><br><br>(SECRETARIA GENERAL)  | <b>Tutorial 1 pt II</b><br><br>(SALÓN ARSENAL)  | <b>Tutorial 2 pt II</b><br><br>(PEGASUS)  |
| <b>12:30-14:00</b> | Industrial Day Matchmaking Lunch                    |  |  |   |   |   |   |
| <b>14:00-15:30</b> | <b>Industrial Day</b><br><br>(SALÓN BARAHONA 3)     | <b>Challenge 5 AND 6 pt I</b><br><br>SMILE-UHURA (5) & SHINY-ICARUS (6)<br><br>(SALÓN BARAHONA 4)                        | <b>Challenge 7 pt I</b><br><br>CEPHA29: Automatic Cephalometric Landmark Detection<br><br>(SALÓN BARAHONA 2)   | <b>Challenge 8 pt I</b><br><br>A Paired CT-MRI Dataset for Ischemic Stroke Segmentation<br><br>(SALÓN BARAHONA 1) | <b>Challenge 9 pt I</b><br><br>XPRESS: Xray Projectomic Reconstruction<br><br>(SECRETARIA GENERAL)            | <b>Challenge 10 pt I</b><br><br>PAIP 2023: Tumor Cellularity Prediction in Pancreatic and Colon Cancer<br><br>(SALÓN ARSENAL) | <b>Tutorial 3 pt I</b><br><br>Mapping neural correlations of cognitive processes through task based functional Magnetic Resonance Imaging (fMRI)<br><br>(PEGASUS) |
| <b>15:30-16:00</b> | Coffee Break  |  |  |   |   |   |   |
| <b>16:00-17:30</b> | <b>Industrial Day</b><br><br>(SALÓN BARAHONA 3)     | <b>Challenge 5 AND 6 pt II</b><br><br>(SALÓN BARAHONA 4)   | <b>Challenge 7 pt II</b><br><br>(SALÓN BARAHONA 2)   | <b>Challenge 8 pt II</b><br><br>(SALÓN BARAHONA 1)  | <b>Challenge 9 pt II</b><br><br>(SECRETARIA GENERAL)  | <b>Challenge 10 pt I</b><br><br>(SALÓN ARSENAL)   | <b>Tutorial 3 pt II</b><br><br>(PEGASUS)  |
| <b>17:30-18:30</b> | Keynote 1<br><b>Marcel Van Herk</b><br>(AUDITORIUM) |  |  |   |   |   |   |
| <b>18:30</b>       | Welcome Reception<br>(TERRAZA DEL CLAUSTRO)         |  |  |   |   |   |   |

## Wednesday April 19, 2023

**6:30-8:00am**

VIRTUAL Special Session

**Dr. Camille Maumet** *10 Years of Reproducibility in Biomedical Research: How Can We Achieve Generalizability and Fairness?*

|                    |   |  |   |  |                              |   |   |              |
|--------------------|---|--|---|--|------------------------------|---|---|--------------|
| <b>8:00-18:00</b>  | Registration<br>(FOYER)   |  |   |  |                              |   |   |              |
| <b>8:30-9:00</b>   | Opening Remarks<br>(AUDITORIUM)   |  |   |  |                              |   |   |              |
| <b>9:00-10:00</b>  | Keynote 2<br><b>Dr. Sanmi Koyejo</b> <i>Trustworthy Machine Learning</i><br>(AUDITORIUM)  |  |   |  |                              |   |   |              |
| <b>10:00-10:30</b> | Coffee Break  |  |   |  |                              |   |   |              |
| <b>10:30-11:30</b> | Poster Session 1<br>(FOYER DE AUDITORIUM, HALL DE EXPOSITIONS, LOBBY DE BARAHONA)   |  |   |  |                              |   |   |              |
| <b>Rooms</b>       | (SALÓN BARAHONA 3-401 ppl)  | (SALÓN BARAHONA 4-360 ppl)   | (SALÓN BARAHONA 2-285 ppl)  | (SALÓN BARAHONA 1-269 ppl)   | (SECRETARIA GENERAL-130 ppl) | (SALÓN ARSENAL-130 ppl)   | (PEGASUS-200 ppl)   | (AUDITORIUM) |
| <b>11:30-13:00</b> | <b>Special Session 1</b><br><br>Developing open, standard-based, interoperable Cancer Imaging Repositories and advancing AI in health imaging<br>(SALÓN BARAHONA 3) | <b>Tutorial 4 pt I</b><br><br>Diffusion models: foundations & applications in biomedical imaging<br><br>(SALÓN BARAHONA 4) | <b>Oral 1</b><br><br>(SALÓN BARAHONA 2)   | <b>Oral 2</b><br><br>(SALÓN BARAHONA 1)  |                              | <b>Oral 3</b><br><br>(SALÓN ARSENAL)  | <b>Tutorial 5 pt I</b><br><br>Recent Advances in Machine Learning for Image Reconstruction<br><br>(PEGASUS) |              |
| <b>13:00-14:30</b> | Lunch with Leaders<br>(CLAUSTRO DE LAS ANIMAS)  |  |   |  |                              |   |   |              |
| <b>14:30-16:00</b> | <b>Special Session 2</b><br><br>How image computing can make a real impact in the radiotherapy workflow<br>(SALÓN BARAHONA 3)                                       | <b>Tutorial 4 pt II</b><br><br>(SALÓN BARAHONA 4)  | <b>Special Session 3</b><br><br>Bimodal functional neuroimaging data fusion<br><br>(SALÓN BARAHONA 2) | <b>Special Session 4</b><br>Geometric Deep Learning in Medical Imaging<br><br>(SALÓN BARAHONA 1) |                              | <b>Special Session 5</b><br><br>Advanced Photoacoustic Imaging<br><br>(SALÓN ARSENAL) | <b>Tutorial 5 pt II</b><br><br>(PEGASUS)  |              |
| <b>16:00-16:30</b> | Coffee Break  |  |   |  |                              |   |   |              |
| <b>16:30-17:30</b> | <b>Oral 4</b><br><br>(SALÓN BARAHONA 3)   | <b>Oral 5</b><br><br>(SALÓN BARAHONA 4)  | <b>Oral 6</b><br><br>(SALÓN BARAHONA 2)   | <b>Oral 7</b><br><br>(SALÓN BARAHONA 1)  |                              | <b>Oral 8</b><br><br>(SALÓN ARSENAL)  | <b>Oral 9</b><br><br>(PEGASUS)  |              |
| <b>Evening</b>     | Cultural/Social Activity  |  |   |  |                              |   |   |              |

## Thursday April 20, 2023

**6:00-7:00am**

VIRTUAL Keynote 1

**Dr. Islem Rekik A Multidimensional Prediction of Brain Roadmaps from Images to Graphs**

**7:00-8:00am**

VIRTUAL Poster Session 1

**8:00-18:00**

Registration  
(FOYER)

**8:00-8:45**

All 521 Authors must be online to answer questions virtually/ check questions on virtual platform

**9:00-10:00**

Keynote 3  
**Dr. Yakeel T. Quiroz Neuroimaging**  
(AUDITORIUM)

**10:00-10:30**

Coffee Break

**10:30-11:30**

Poster Session 2 -- Abstracts  
(CLAUSTRO DE LAS ANIMAS)

**Rooms**

(SALÓN BARAHONA 3-401 ppl)

(SALÓN BARAHONA 4- 360 ppl)

(SALÓN BARAHONA 2-285 ppl)

(SALÓN BARAHONA 1-269 ppl)

(SECRETARIA GENERAL-130 ppl)

(SALÓN ARSENAL- 130)

(PEGASUS-200 ppl)

(AUDITORIUM)

**11:30-13:00**

Oral 10

Oral 11

Tutorial 6 pt I

Tutorial 7 pt I

Oral 12

Oral 13

(SALÓN BARAHONA 3)

(SALÓN BARAHONA 4)

Topological Data Analysis for Biomedical Imaging Data

Bayesian Inference for Inverse Problems

(SALÓN ARSENAL)

(PEGASUS)

(SALÓN BARAHONA 2)

(SALÓN BARAHONA 1)

**13:00-14:30**

Technical Committee Lunches  
Conference attendees – lunch on your own

**14:30-15:30**

Keynote 4  
**Dr. Lena Maier-Hein Challenging Common Practice in Medical Imaging**  
(AUDITORIUM)

**15:30-16:00**

Coffee Break

**16:00-17:30**

Oral 14

**NIH Session**  
“Funding Opportunities and Grant Writing Tips for New Investigators”  
(SALÓN BARAHONA 4)

Tutorial 6 pt II

Tutorial 7 pt II

Oral 15

Oral 16

(SALÓN BARAHONA 3)

(SALÓN BARAHONA 2)

(SALÓN BARAHONA 1)

(SALÓN ARSENAL)

(PEGASUS)

**Evening**

Pirate ship (organizers & VIP), Paseo en Chiva (2 hrs) and evening activity (students & attendees)

## Friday April 21, 2023

**6:00-7:00am**

VIRTUAL Keynote 2  
**Dr. Qi Dou** *Image-Based Robotic Surgery Intelligence*

**7:00-8:00am**

VIRTUAL Poster Session 2

|                    |   |   |   |  |                                     |   |                          |              |
|--------------------|---|---|---|--|-------------------------------------|---|--------------------------|--------------|
|                    |   |   |   |  |                                     |   |                          |              |
| <b>8:00-18:00</b>  | Registration<br>(FOYER)   |   |   |  |                                     |   |                          |              |
| <b>7:30-9:00</b>   | Clinical Day<br>(SALÓN BARAHONA 3)  |   |   |  |                                     |   |                          |              |
| <b>9:00-10:00</b>  | Keynote 5<br><b>Dr. Vasilis Ntziachristos</b> <i>Listening to Light: Advances in Optoacoustic Imaging</i><br>(AUDITORIUM) |   |   |  |                                     |   |                          |              |
| <b>10:00-10:30</b> | Coffee Break  |   |   |  |                                     |   |                          |              |
| <b>10:30-11:30</b> | Clinical Day<br>(SALÓN BARAHONA 3)  | Poster Session 3<br>(FOYER DE AUDITORIUM, HALL DE EXPOSITIONS, LOBBY DE BARAHONA)             |   |  |                                     |   |                          |              |
|                    | (SALÓN BARAHONA 3- 401 ppl)   | (SALÓN BARAHONA 4- 360 ppl)   | (SALÓN BARAHONA 2- 285 ppl)   | (SALÓN BARAHONA 1- 269 ppl)  | (SECRETARIA GENERAL- 130 ppl)       | (SALÓN ARSENAL- 130)  | (PEGASUS- 200 ppl)       | (AUDITORIUM) |
| <b>11:30-13:00</b> | Clinical day<br><br>(SALÓN BARAHONA 3)  | Oral 17<br><br>(SALÓN BARAHONA 4)   | Oral 18<br><br>(SALÓN BARAHONA 2)                                   | Oral 29<br><br>(SALÓN BARAHONA 1)  | Oral 20<br><br>(SECRETARIA GENERAL) | Oral 21<br><br>(SALÓN ARSENAL)  |                          |              |
| <b>13:00-14:30</b> | Women in Science Lunch<br>(CLAUSTRO DE LAS ANIMAS)  |   |   |  |                                     |   |                          |              |
| <b>14:30-15:45</b> | Clinical day<br><br>(SALÓN BARAHONA 3)  | Oral 22<br><br>(SALÓN BARAHONA 4)   | Oral 23<br><br>(SALÓN BARAHONA 2)                                   | Oral 24<br><br>(SALÓN BARAHONA 1)  | Oral 25<br><br>(SECRETARIA GENERAL) | Oral 26<br><br>(SALÓN ARSENAL)  | Oral 27<br><br>(PEGASUS) |              |
| <b>15:45-16:00</b> | Coffee Break  |   |   |  |                                     |   |                          |              |
| <b>16:00-17:30</b> | Clinical day<br><br>(SALÓN BARAHONA 3)  | Special Session 6<br><br>Wasserstein Distance in Biomedical Imaging<br><br>(SALÓN BARAHONA 4) | Special Session 7<br><br>Machine Learning<br><br>(SALÓN BARAHONA 2) | Digital Transformation in Healthcare: a Patient Centric Approach<br><br>(SALÓN BARAHONA 1) |                                     | Special Session 8<br><br>Study of superficial white matter fibers based on diffusion MRI<br><br>(SALÓN ARSENAL) |                          |              |
| <b>17:30-18:30</b> | Awards Ceremony (Auditorium)  |   |   |  |                                     |   |                          |              |