# PROGRAMME

| Wednesday, 26 February 2020 |  |  |  |  |
|-----------------------------|--|--|--|--|
| 8:15 - 11:30                | Registration and poster setting  |  |  |  |
| 9:00-09:10                  | Welcome  |  |  |  |
| 09:10 - 09:15               | Introduction of Susan Gasser by Dimitris Xirodimas (CNRS-CRBM)   |  |  |  |
| 09:15 – 10:00               | <b>Opening Lecture by Susan Gasser (FMI, UbiCODE)</b><br>Chromatin proteomics reveals mechanisms of histone degradation by the Ubiquitin-<br>proteasome system under control of DDR kinases      |  |  |  |
|                             | Session 1   Writing the ubiquitin code: Ligases and Proteases (Part I)   |  |  |  |
|                             | Chair: Germana Meroni (University of Trieste, TRIM-NET)  |  |  |  |
| 10:00 - 10:05               | Session sponsored by VectorBuilder Europe<br>A revolutionary platform for custom cloning, virus, libraries and cell lines<br>production  |  |  |  |
| 10:05 - 10:35               | <b>Keynote lecture by Brenda Schulman (MPG)</b><br>Interconversion between anticipatory and active GID E3 ubiquitin ligase<br>conformations via metabolically-driven substrate receptor assembly |  |  |  |
| 10:35 – 10:55               | <b>Sylvie Urbé (University of Liverpool, UbiCODE)</b><br>Cell physiology of Deubiquitylase function in health and disease  |  |  |  |
| 10:55 - 11:25               | Coffee break   POSTER SESSION  |  |  |  |
| 11:25 - 11:45               | <b>Ugo Mayor (UPV/EHU, Ikerbasque, UbiCODE)</b><br>Using the bioUb strategy to elucidate the molecular mechanisms of Angelman<br>Syndrome  |  |  |  |
| 11:45 - 12:00               | <b>Kay Hofmann (University of Cologne)</b><br>An evolutionary approach to systematical discovery of new DUBs and UBL protease<br>classes   |  |  |  |
| 12:00 - 12:15               | <b>Dimitris Xirodimas (CNRS-CRBM, UbiCODE)</b><br>The HSP70 chaperone is a sensor of the NEDD8 cycle upon DNA damage   |  |  |  |
| 12:15 – 12:30               | Michael Glickman (Technion-IIT)<br>From Ubiquitin-dependent degradation, to Ubiquitin-degradation  |  |  |  |
| 12:30 - 12:40               | <b>Antonio Galarreta (CNIO)</b><br>Deciphering the mechanism of action of USP7 inhibitors as anticancer agents   |  |  |  |

| 12:40 - 12:50   | <ul> <li>Speed poster presentations         <ul> <li>Nagore Elu (UPV/EHU)</li> </ul> </li> <li>Quantitative proteomics reveal novel UBE3A-mediated ubiquitination sites on DDI1 and new insights into its ubiquitin chain type formation.</li> </ul> |
|-----------------|--|
|                 | • <b>Teresa Martín-Mateos (CIC bioGUNE)</b><br>USP11 regulation of HIF1A mRNA is essential for proper hypoxic adaptation   |
| 12:50 - 15:00   | Lunch break   POSTER SESSION   |
|                 |  |
|                 | Session 2   Writing the ubiquitin code: Ligases and Proteases (Part II)  |
|                 | Chair: Izabela Sumara (IGBMC)  |
| 15 :00 - 15 :05 | Session sponsored by Biotechne<br>Tools and Technologies for Degrader Development  |
| 15:05 - 15:25   | <b>Katrin Rittinger (Francis Crick Institute)</b><br>The ins and outs of TRIM ubiquitin ligase function and mechanism  |
| 15:25 - 15:45   | Germana Meroni (University of Trieste, TRIM-NET)<br>TRIM E3 ligases in rare genetic diseases   |
| 15:45 - 16:00   | Konstanze Winklhofer (Ruhr University Bochum)<br>The linear ubiquitin chain assembly complex LUBAC is implicated in protein quality<br>control   |
| 16:00 - 16:15   | <b>Gemma Marfany (Universitat De Barcelona)</b><br>Expression of deubiquitinating enzymes in the developing retina: new candidates to<br>regulate ciliogenesis?  |
| 16:15 – 16:25   | <b>Francisco Martínez-Jiménez (IRB Barcelona)</b><br>Systematic analysis of alterations in the ubiquitin proteolysis system reveals its<br>contribution to driver mutations in cancer  |
| 16:25 – 17:00   | Coffee break   POSTER SESSION  |

| Session 3   Ubiquitin and Signaling (Part I) |   |  |  |
|--|---|--|--|
|  | Chair: Emilio Lecona (CBMSO, UBIRed)  |  |  |
| 17:00 - 17:30                                | <b>Keynote lecture by Ivan Dikic (IBCII-GUF, UbiCODE)</b><br>Serine Ubiquitination: ligases, deubiquitinases and substrates   |  |  |
| 17:30 - 17:50                                | <b>Jordi Torres Rosell (IRB Lleida)</b><br>Smc5/6, an atypical Structural Maintenance of Chromosomes (SMC) complex with<br>two RING-type subunits                   |  |  |
| 17:50 - 18:10                                | <b>Christine Blattner (Karlsruhe Institute of Technology, TRIM-NET)</b><br>Screening of a cDNA library from the teleost O. latipes and mammalian gene<br>regulation |  |  |
| 10.10 10.25                                  | Sargia D. Acabrán (Haidalbarg University)   |  |  |

18:10 - 18:25Sergio P Acebrón (Heidelberg University)<br/>Control of Wnt signalling by deubiquitination

#### 18:25 – 18:40 Alfred Vertegaal (LUMC, UbiCODE)

*Transcription-Coupled Nucleotide Excision Repair is Coordinated by Ubiquitin and SUMO in Response to Ultraviolet Irradiation* 

#### 18:40 – 18:50 Anna Segarra Fas (University of Dundee – MRC-PPU) Regulation and function of USP26 in the RNF12-REX1 pathway that is disrupted in Tonne-Kalscheuer Syndrome

18:50 – 19:10 Speed poster presentationsGrégoire Quinet (CNRS-ITAV)

Elucidating the proteaphagy mechanism in bortezomib resistant mantle cell lymphoma

#### • Santiago Vidal Freire (CiMUS-CSIC)

*SUMO proteins play a critical role in the ability of the Ebola virus VP24 to counteract host innate immune responses* 

#### • Ana García Casas (Universidad Complutense De Madrid)

Targeting RAC1 SUMOylation through an specific peptide reduces cancer cell migration

#### Pascual Sanz (CSIC Valencia)

Regulation of the autophagic PI3KC3 complex by laforin and malin, two proteins involved in Lafora disease

20:30

Gala Dinner (Carlton Hotel)

## Thursday, 27 February 2020

|               | Session 4   Ubiquitin and Signaling (Part II)   |
|---------------|---|
|               | Chair: Gemma Marjany (Universitat De Barcelona)   |
| 09:00 – 09:05 | Session sponsored by Conda/Signal Chem<br>Empowering Research on Ubiquitin and Ubiquitin-like Signaling Using Recombinant<br>Enzyme Systems   |
| 09:05 - 09:35 | Keynote lecture by Thomas Sommer (MDC Berlin, UbiCODE) Ubiquitin Chain Exercises  |
| 09:35 – 09:55 | Carmen Rivas (CiMUS-CSIC, UBIRed)<br>Ubiquitin-like proteins in the innate immune response  |
| 09:55 - 10:15 | <b>Nicolas Bidere (CNRS, University of Nantes)</b><br>CYLD regulates Centriolar Satellites Proteostasis by counteracting the E3 ligase MIB1   |
| 10:15 - 10:30 | <b>Izabela Sumara (IGBMC)</b><br>Spatial control of the nucleoporin condensation by Fragile X-related proteins and ubiquitin signalling   |
| 10:30 - 10:40 | Emilio Lecona (CBMSO, UBIRed)<br>Regulation of DNA Replication by VCP   |
|               | Session 5   New technologies to analyse the ubiquitin code  |
|               | Chair : Huib Ovaa (LUMC, UbiCODE, TRIM-NET)   |
| 10:40 - 10:45 | Session sponsored by Promega<br>Luminescent technology to approach protein degradation studies at endogenous<br>levels: a PROTAC story  |
| 10:45 - 11:05 | Alessio Ciulli (University of Dundee)<br>Protein degradation with small molecules: How PROTACs work   |
| 11:05 - 11:50 | Coffee break   POSTER SESSION   Txalaparta hands-on workshop (cf. p14)  |
| 11:50 - 12:10 | Manuel S. Rodriguez (CNRS-ITAV, UbiCODE, TRIM-NET)<br>UPS-ALS crosstalk under proteasome inhibition in Mantle Cell Lymphoma cells   |
| 12:10 - 12:25 | Jean-Christophe Rain (Hybrigenics Services, UbiCODE)<br>Anti-Ub K48 and K63 Nanobodies, new tools to read the UbiCODE   |
| 12:25 – 12:35 | <b>Georg Petzold (FMI)</b><br>Defining the human C2H2 zinc finger degrome targeted by thalidomide analogs<br>through CRBN   |
| 12:35 – 12:50 | <ul> <li>Speed poster presentations</li> <li>Christian Renz (IMB)</li> <li>Ubiquiton - a substrate- and linkage-selective ubiquitylation tool</li> <li>Vanesa Fernandez (Technical University Of Munich)</li> <li>Characterization of the cell surface ubiquitinome in lung cancer</li> </ul> |

#### • Fredrik Trulsson (LUMC, UbiCODE)

Signalling Dynamics of Ubiquitin

- 12:50 12:55 Introduction of Maria Masucci by Manuel S. Rodriguez (CNRS-ITAV)
- 12:55 13:40 Closing lecture by Maria Masucci (Karolinska Institute, UbiCODE) Viral Deubiquitinases – Swiss Army Knives For Infection
- 13:40 14:00 Concluding remarks | Prizes | Farewell

| 1/1.00       | <u> </u> |  |
|--------------|----------|--|
| <b>TT.OO</b> | TD.00    |  |

Lunch | POSTER SESSION

### TXALAPARTA HANDS-ON WORKSHOP





Txalaparta is an ancient device originally used for communication in rural areas of the Basque Country. It suffered a heavy decline during the first half of the XX century, but a strong revival followed after the 1960s. The use of txalaparta as a musical instrument during the last few decades has indeed ensured the survival of this unique device, which has no obvious links to any other instruments of neighbouring countries or cultures; like Euskera, the language of the Basque Country, its origins are unclear.

Physically, the txalaparta is made from very simple parts. The main part is one or more large boards or planks of wood, traditionally of native woods such as chestnut, ash or alder. These are placed horizontally, usually at waist-height, and are supported by two trestles which support either end of the boards. Cushioning material (as sheepskin) is placed between the trestles and the boards.

In txalaparta playing, two people improvise, alternating their beats, through a call-and-response pattern that usually becomes increasingly complex as the performance progresses. Anyone willing to give this instrument a go will therefore have the opportunity to learn its basic rules and tricks during this hands-on workshop.