

## EDITORIAL

by Clémence Coutelle-Rebut | Project manager

Facing a new professional environment this past year has led me to question notions such as critical self-reflection and self-improvement, which I think are tightly linked to leadership and humility. There Marie Skłodowska-Curie reminds us that no one can change the world on their own. Not only should we aim at reaching out to others with knowledge and scientific advances, but also at constantly improving ourselves.

This quest for self-improvement implies being lifelong learners and critical self-reflectors. Both these characteristics are part of the definition of cultural humility, which was initially set out to address health disparities and inequities in medicine (Tervalon and Murray-Garcia, 1998). Being culturally humble also implies recognising and challenging power imbalances. Can humility then translate as a value in the field of research? Do researchers have the space to be critically self-reflective and overcome the influence of biases? Does research serve the interest of all or some sort of establishment? Finally, are life sciences superior to other approaches to understanding the world? I am myself not a scientist. With a background in politics, I have however come to understand the main scientific challenges of our programme by listening to didactic researchers. I have sometimes been dismissed, and sometimes been in a position to explain. This experience has taught me that no one holds the absolute truth, and that we should value collaboration and diversity.

With the rise of fake news and public distrust, intellectual humility is essential to put forward progressive ideas and defend research against budget cuts. Debates in which only experts may claim to know often escalate to an arrogant tone. They only foster tensions, suspicion or even conspiracy theories. Driving change and progress requires broad visions and brave strategies, may it be through science, politics or any social engagement. In this respect, humble leaders may better defend science from ignorant positions by nurturing dialogue and mutual trust. These questions remain open, and a lot of other open questions remain in this area. I certainly do not claim to have any definitive answer, but I hope this short article will spark discussions.

### References

- Tervalon and Murray-Garcia (1998). "Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education". *Journal of Health Care for the Poor and Underserved*. Vol. 9, 2. 117-125.
- Jasanoff (2003). "Technologies of Humility: Citizen Participation in Governing Science". *Minerva*, 41. 223-244.
- Bandelli and Gajewski. (2018). "Lowering the tone: intellectual humility in science communication". *Spokes*, 40. Available [here](#).



*In photo: UbiCODE PhD fellows - Lisbon, February 2019.*

## ZOOM IN

### Supervisory Board meeting | LISBON 25-26 FEB. 2019

Our 13 PhD fellows were officially welcomed to our research programme last February in Lisbon. They had the opportunity to meet UbiCODE research groups and members of the Scientific Advisory Board, in a setting and atmosphere aimed at fostering collegiality and collaboration. This Supervisory Board meeting allowed the coordination team to carry out the Midterm Check with the Research Executive Agency, which ensures the project is on the right track.

As a European network, UbiCODE aims at enhancing cultural openness to foster intercultural dialogue and comprehensive leadership. Participants were given some time to explore Lisbon, and attended a *Fado* show.

We would like to thank again the CEDOC for hosting us, and Rune Matthiesen and Ana Sofia Carvalho for the local organisation.



*In photo: view of Lisbon.*

### Annual symposium | LISBON 27 FEB. 2019

#### Druggability of the Ubiquitin system: which road to take ?

Post-translational modifications (PTM) by members of the Ubiquitin (Ub) family represent an efficient way to regulate almost every biological process. Defects in this homeostatic equilibrium result in pathologies such as cancer, neurodegeneration, inflammation or multiple infections. For this reason, this research area has become very attractive for fundamental scientists as well as for the pharmaceutical industry aiming to identify potential targets for therapeutic intervention.

Our one-day symposium therefore focused on the potential developments with regards to the druggability of the ubiquitin system. Discussions covered a wide range of topics, from genome instability and cancer to neurodegeneration, metabolic and infectious diseases. We are glad that local researchers and students enjoyed the discussions and exchanges with UbiCODE members.



*In photo: Nova Medical School, Lisbon.*

[Click for more information](#) 

## Training course | CNRS-CIPF | VALENCIA

### *Crosstalk between Ub family members under stress conditions*

11-15 MARCH 2019

Six UbiCODE and six UBIRed fellows were trained on techniques for detection of total and individual proteins simultaneously modified by UbLs. The detection of proteins modified by distinct members of the Ub family is still a challenge. Different methods were used to analyse Ub chain composition including detection of Ub-NEDD8 and Ub-SUMO hybrid chains and their recognition by distinct receptors (Western-blot analysis, microscale thermophoresis, nano bodies).

This collaborative learning scheme allowed students to work in pairs or larger groups and to interact with the members of another network. Participants also had the chance to join the celebrations of *Las Fallas de Valencia*. The *Fallas* festival was added to UNESCO's intangible cultural heritage of humanity list in 2016.



*In photo: CIPF, Valencia.*



*In photo: UbiCODE and UBIRed students and instructors - Valencia, March 2019.*

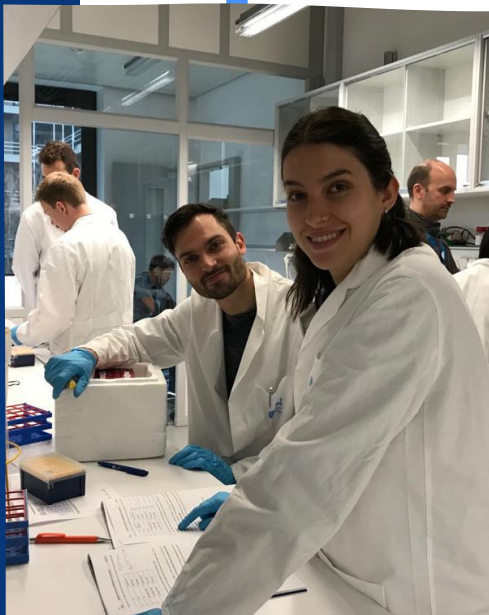
## Training course | IMB | MAINZ

### *SUMOylation and ubiquitylation*

25-29 MARCH 2019

This course provided a theoretical and practical introduction to the principles of SUMO and Ub conjugation, chain formation and recognition in vitro and in vivo. It covered the relevance of chains for Ub and SUMO signalling and the significance of linkage specificity in the synthesis and recognition of Ub chains. Students learned how to conduct ubiquitylation and SUMOylation reactions, activity and interaction assays, design appropriate controls and avoid common pitfalls.

This course was coordinated by Helle Ulrich from the Institute of Molecular Biology (IMB Mainz) in collaboration with the Goethe University (Ivan Dikic), the University of Liverpool (Sylvie Urbé), the University of Dundee (Yogesh Kulathu) and the Max Planck Institute (Andrea Pichler, Marilyn Tirard). UbiCODE fellows had the opportunity to work and interact with PhD students from IMB.



*In photo: lab session at IMB - Mainz, March 2019.*



*In photo: Institute of Molecular Biology, Mainz, Germany.*

# EUROPEAN OUTLOOKS

## Launch of new partnerships

UbiCODE aims at sharing knowledge and training capacities as widely as possible. That is why we have established partnerships with the Spanish network of excellence **UBiRed** and the European training network **TRIM-NET**. This European cooperation opens up new outlooks with regard to training opportunities, scientific collaboration, and dissemination.



UBiRed is a network committed to improve the quality, productivity and impact of the research groups in Spain specialised in the study of ubiquitin and UBL proteins and their roles in cell proliferation, differentiation and cancer.

See more at [www.ubired.eu](http://www.ubired.eu)

TRIM-NET is a training programme for Early-Stage Researchers to identify novel therapeutic targets by studying the Tripartite motif (TRIM) family of Ubiquitin E3 ligases.

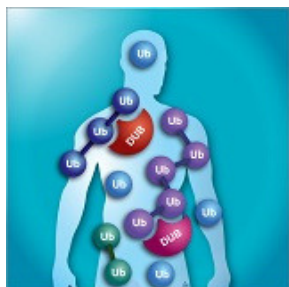


See more at [www.trimnet.eu](http://www.trimnet.eu)

## SAVE THE DATES !

### Deubiquitylases: from mechanism to physiology

Biochemical Society | Edinburgh | 17-19 June 2019



This conference is the second international meeting on DUBs and is unique in its focus on this class of enzymes. It will bring together researchers in this exciting field of research to discuss molecular mechanisms, cellular functions and physiological roles of DUBs. Emerging new concepts in DUB regulation and translation will be a particular focus of this meeting.

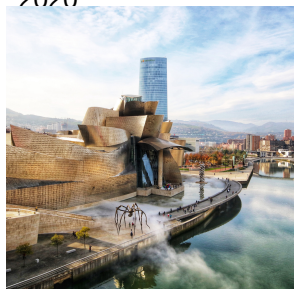
Click to register [▶](#)

#### Conference Programme Coordinators:

- Dr Sylvie Urbé | University of Liverpool | UbiCODE
- Dr Yogesh Kulathu | University of Dundee | UbiCODE

### Writing and editing the Ubiquitin code

UPV-EHU, CIC bioGUNE, UbiCODE | Bilbao | 26-27 February 2020



"This one-and-a-half day symposium will focus on how the code is written and edited through ligases and proteases, how the different modifications affect cell signaling, and how new technologies can be applied to analyze these modifications. Presentations will cover a wide range of topics, from genome instability and metabolic regulation, to cancer, neurodegeneration and infectious diseases.

Click for more information [▶](#)

## UBICODE AT A GLANCE

### Last activities

Supervisory Board meeting

25-26 Feb. 2019 - Lisbon, PT

Our PhD fellows met the members of the consortium and introduced their work to our Scientific Advisory Board.

Symposium  
Druggability of the Ubiquitin system

27 Feb. 2019 - Lisbon, PT

Discussions covered a wide range of topics, from genome instability and cancer to neurodegeneration, metabolic and infectious diseases.

Training session (03)  
Crosstalk between Ub family members under stress conditions

11-15 Mar. 2019 - Valencia, ES

In collaboration with CIPF, UBiRed and Nanotemper.

Training session (01)  
SUMOylation and Ubiquitylation

25-29 Mar. 2019 - Mainz, DE

Introduction to the enzymology of the Ub and SUMO systems, the principles of Ub and SUMO chain synthesis, biochemistry and recognition

### Upcoming events

Training session (05)  
Peptide and protein synthesis

20-24 May 2019 - Leiden, NL

Training session (06)  
Mass spectrometry (Quantitative proteomics)

20-24 May 2019 - Leiden, NL

Supervisory Board meeting

24-25 Feb. 2020 - Bilbao, ES

Symposium  
Writing and Editing the Ubiquitin code

26-27 Feb. 2020 - Bilbao, ES

