



## **ICFO becomes a new LEICA NANOSCOPY IMAGING REFERENCE SITE in Europe**

Leica Microsystems and ICFO sign an R&D collaboration agreement

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October 6th marked the kick-off of a new partnership between ICFO and Leica Microsystems. A new collaboration agreement with this leading microscopy company aims to promote and establish ICFO as a new European Nanoscopy Imaging Reference Site, allowing ICFO's experts in super-resolution to partner with Leica Microsystems to conceptualize and implement technological improvements to the new Leica 3 colour, 3D gated STED (TCS SP8 STED 3X) state-of-the-art system. Through this agreement, ICFO and Leica Microsystems formalize a R&D collaboration to foster the exchange of ideas and know-how, the mutual pursuit of new challenges and research lines within the fields of microscopy and nanoscopy, as well as the search for novel applications in biomedicine and biophysics.

Far from offering standard services to researchers, the new Leica system will form part of ICFO's current state-of-the-art Super-resolution Light Microscopy and Nanoscopy (SLN) facility. This facility offers a large collection of advanced microscopes for the use of advanced researchers from qualifying institution across Europe, including members of the Euro-Biolmaging, Corbel European or LaserLab research infrastructure programs. These high level users come to the SLN facility with very specific requirements that may be impossible to meet with current technologies elsewhere. They are offered the unique opportunity to work together with the SLN researchers and technicians in tailor-made solutions that adapt to their specific needs. Leica Microsystems and ICFO will work together in the forthcoming years to adapt and advance the 3D gated STED system's features and capabilities, incorporating new hardware and software to offer front-end microscopy techniques that are able to operate a step beyond commercial state-of-the-art instruments currently available.

The system will be used to study neurodegenerative diseases, retinal genetic disorders or bacterial virulence, amongst others. Collaborations with Bellvitge Hospital and the University of Barcelona for the study retinal degeneration, with Sant Pau Hospital in Barcelona to study beta-amyloid plaques and their effects on Alzheimer's disease, and with the Josep Carreras Foundation for research to better understand and eventually treat Leukemia, are already starting to benefit from the unique services of this facility.



Leica Microsystems representatives together with ICFO's director, members of the SLN Facility, and the Knowledge and Technology Transfer team celebrate the new collaboration agreement



Lluís Torner, ICFO Director, Christoph Thumser, Sales Director for Life Science Research EMEA, Pablo Loza-Alvarez, SLN coordinator, and Jordi Andilla, postdoctoral research in the SLN Facility.