

Rodica Alis Olea  
**ESR7 Fellow**

*Institution: Institute for Bioengineering of  
Catalonya (IBEC)*

*Group: Nanoscopy for nanomedicine*

*Supervisor: Lorenzo Albertazzi*

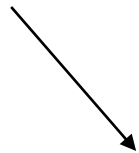
*E-mail: aolea@ibecbarcelona.eu*

Meeting 1

Eindhoven, 26<sup>th</sup> March 2019

**BSc:** Biochemistry, in Faculty of Biology, University of Bucharest

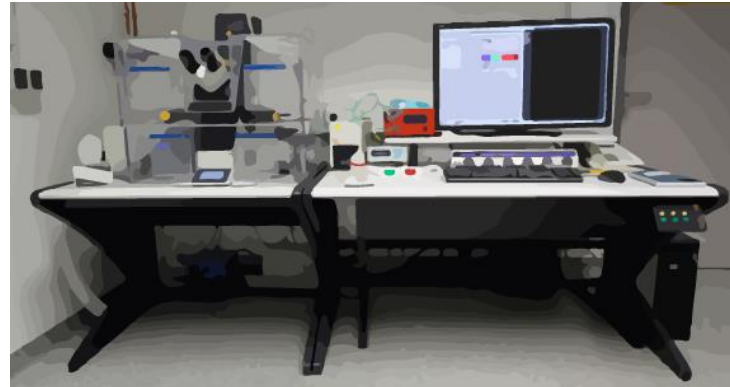
**MSc:** Molecular Mechanisms of Disease, Radboud University, Nijmegen



2 internships: Nijmegen & Barcelona

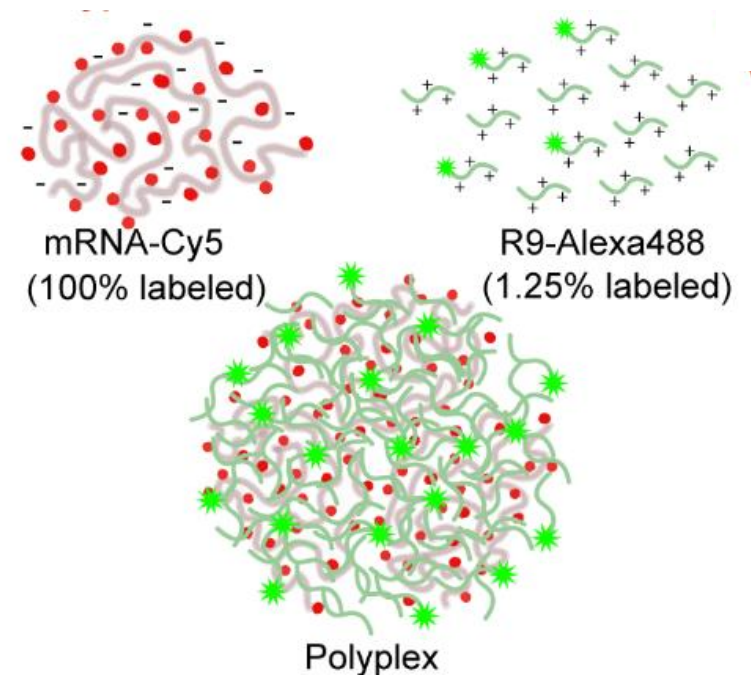
# 1<sup>st</sup> internship in Nijmegen

- Prof. Roland Brock, Dept. of Biochemistry of Integrated Systems, Radboud umc, Nijmegen
- Acid sphingomyelinase involvement in the uptake of cell penetrating peptides
- Confocal microscopy



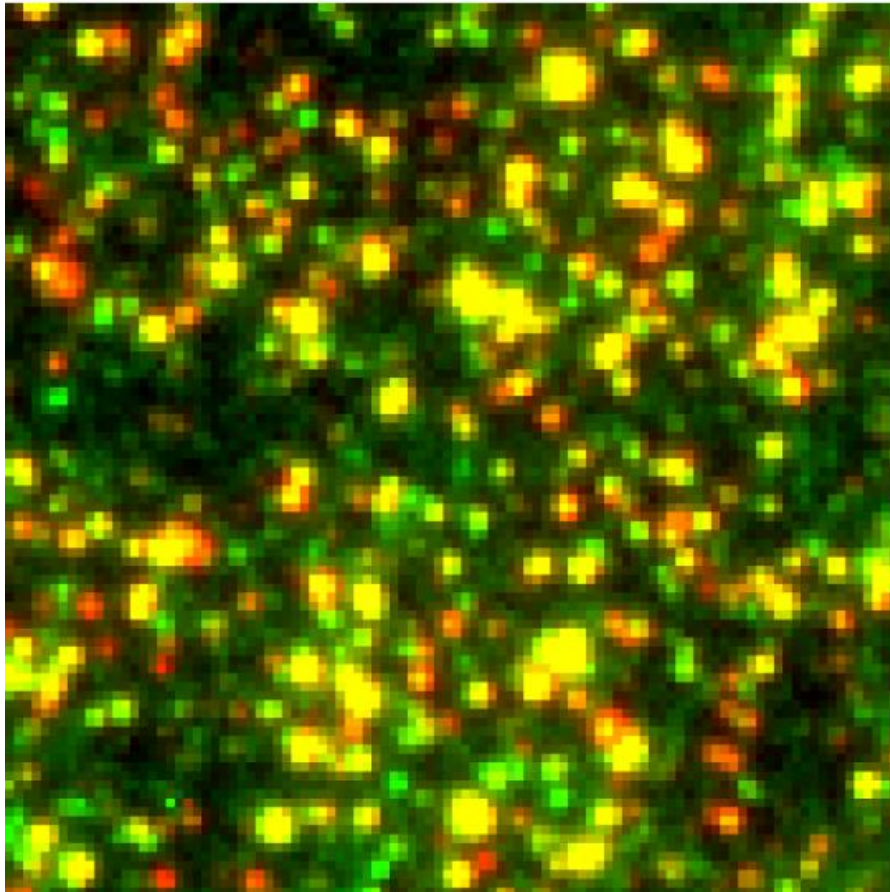
## 2<sup>nd</sup> internship in Barcelona

- Lorenzo Albertazzi, Nanoscopy for nanomedicine
- Super-resolution insights into the structure and stoichiometry of drug delivery nanoplateforms
- Super-resolution microscopy: dSTORM

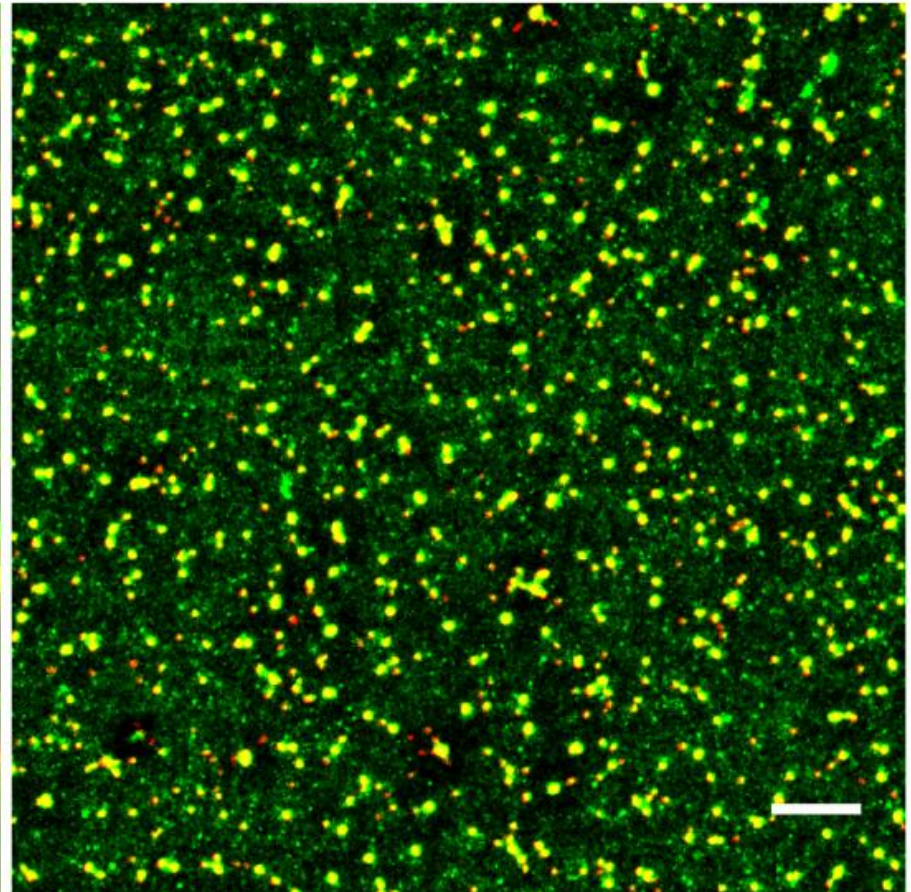


## 2<sup>nd</sup> internship in Barcelona

Low-resolution



High-resolution



## ESR7 goals

- Develop a method for STORM nanocatalyst imaging
- Image (and quantify) the localization of nanocatalyst in 2D/3D cancer models
- Assess on-site catalytic activity on different models