

Marc Expòsit Goy

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Barcelona, Spain

RESEARCH EXPERIENCE

Translational Synthetic Biology lab, Spain

09/2019 – Current

Research assistant combining wet lab and computational approaches. Ongoing projects are: (1) cell-free biosynthetic pathway engineering for the identification of novel antibiotic derivatives, (2) multiplexed automated genome engineering (MAGE) of lentiviral vectors for gene therapy applications, and (3) *in silico* prediction of CRISPR-Cas9 *in vivo* genome editing efficiency and specificity using machine learning. *Advisor*: Marc Güell, PhD.

Gehrke lab, Massachusetts Institute of Technology (MIT)

09/2018 – 09/2019

Health Sciences and Technology (HST) department

Master Thesis: “Rapid identification of Nanobody Reagents for Emerging Viruses using Yeast Surface Display”. *Advisors*: Lee Gehrke, Ph.D. and Magda Faijes, Ph.D.

Applied synthetic biology tools to reduce the development time of paper-based diagnostic tests for emerging viruses from 8 months to about one month.

Excellent with distinctions (100/100), awarded with the Pare Salvador Gil prize in recognition to the best thesis of the MSc in Bioengineering from Ramon Llull University.

Leader of the BioIQS iGEM team, Spain

02/2018 – 09/2018

Developed a gluten sensor for celiac patients based on synthetic biology. Started and formed a team of 12 multidisciplinary students and 3 faculty members to participate in the iGEM competition. Raised 7,150€ from companies to finance the project. Created and engaged in multiple science outreach activities. On the 2018 Giant Jamboree, the iGEM committee awarded the project with the bronze medal.

Chemical and Environmental Engineering lab, Spain

06/2016 – 09/2017

Bachelor Thesis: “Ethanol production from carbon dioxide by an enriched culture of the isolate I19 using microbial electrochemical technologies”.

Co-advisors: Jesús Colprim, Ph.D. and Sebastià Puig, Ph.D.

Excellent (98/100), received the PTECO2 prize to the best BSc thesis in carbon capture in Spain.

EDUCATION

M.S. Bioinformatics and Biostatistics, University of Barcelona, Spain

2019 - Current

Learning bioinformatics using **R**, **Python** and command line tools (UNIX) for the analysis of large-scale biological data. Strong focus on **machine learning**, statistical inference, regression and lineal models.

M.S. Bioengineering, Ramon Llull University, Spain

2017-2019

Awarded with Salvador Gil Academic Excellence Master's Scholarship

Overall percentage: 95/100 – top of the class

B.S. Biotechnology, University of Girona, Spain

2013 – 2017

Awarded with a Honorary Prize to the student with higher grades of the class

Overall percentage: 86/100 – top of the class

FELLOWSHIPS AND AWARDS

La Caixa Fellowship:	2019
- Full tuition and stipend for PhD programs in the US for 2 years	
- Awarded to 45 students in Spain from 342 applications	
Master's Extraordinary Award to the top student in the class	2019
Pare Salvador Gil award to the best MSc thesis in bioengineering	2019
MOBINT fellowship from the Catalan Government	2018
Accepted in the IQS-MIT exchange program	2018
Salvador Gil Academic Excellence Master's Scholarship	2017
PTECO2 prize to the best BSc thesis in Spain about carbon capture	2017
Bachelor's Extraordinary Award to the top student in the class	2017

PRESENTATIONS

Harvard Microbiology Department Retreat – Poster session	07/2019
M. Expòsit Goy, A. Mondini, M. Roberts, A. Roffler, A. Schmidt, L. Gehrke. "Selection and characterization of Nanobody Reagents for Emerging Viruses".	
iGEM Giant Jamboree – Oral presentation and poster session	10/2018
M. Expòsit Goy, Xavier Carol, Jordi Chi, Marta Clariana, Roger Compte, Coral García, Mireia Jordà, Eduard Martínez, Victor Maull, Júlia Quintanas, Mireia Solà, Aitor Vega, BioIQS iGEM team. "Personalized diagnostic kit for celiac disease".	

VOLUNTEERING AND OTHER ACTIVITIES

Organizer of the <i>Genomic Engineering symposium</i> , Catalan Society of Biology	2019 – Current
Prepared a series of talks by the most influent Spanish scientists working on synthetic biology	
Responsible for writing a report on the benefits and risks of modern genomic editing technologies	
Responsible for science outreach at the <i>Catalan Biotechnology Association</i>	2017 – Current
Implemented a mentoring program between biotechnology professionals and students	
Invited speaker at "ConCienciaTè"	11/2019
Gave a public lecture on the potential medical applications of synthetic biology	
Grand Hack - <i>MIT Hacking Medicine</i> participant	05/2019
Collaborated in an interdisciplinary team to design a mobile app to assist patients' recovery	
Harvard Square <i>Homeless Shelter</i> substitute volunteer	02/2019 – 04/2019
Outreach activities to promote synthetic biology on the iGEM competition	02/2019 – 04/2019

LANGUAGES

English: fluent (TOEFL iBT 111/120, October 2019)

Spanish and Catalan: Native