Anis Senoussi

Postdoctoral researcher

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Laboratoire Jean Perrin Institut de Biologie Paris-Seine Sorbonne Université

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EDUCATION

2016 – 2020	PhD in physics @Sorbonne Université	Paris, France
2015 – 2016	Master's degree in biophysics @Université Paris Diderot	Paris, France
2015	Agrégation* of physical sciences @ENS de Lyon [*Competitive exam to teach at the postgraduate level]	Lyon, France
2012 – 2016	Bachelor's & master's degree in physics & chemistry @ENS de Lyon & UCBL	Lyon, France
2009 – 2012	Classes préparatoires* in physics, maths & chemistry @Lycée Thiers [*University-level preparation for the competitive exams to "grandes écoles"]	Marseille, France
2009	Baccalauréat* @Lycée René Char [*High school diploma]	AVIGNON, FRANCE

RESEARCH

CURRENT POSITION:

Sept. 2020 - Postdoctoral researcher @Lab. Jean Perrin, IBPS, Sorbonne Université

PARIS, FRANCE

Coupling between an active gel and programmable reaction-diffusion structures

Advisors: André Estévez-Torres & Jean-Christophe Galas

PHD THESIS:

2016 - 2020 PhD student @Lab. Jean Perrin, IBPS, Sorbonne Université

PARIS, FRANCE

Design of molecular systems for artificial pattern formation and gene regulation [.pdf, HAL]

Advisors: André Estévez-Torres & Jean-Christophe Galas

Oct. 2019 [School] Arnold Sommerfeld School on the Physics of Life, LMU MUNICH, GERMANY Sept. 2018 [School] EMBO Physics of Integrated Biological Systems, IESC CARGÈSE, FRANCE Jun. 2017 [Stay] Purification of protein motors, Francis Crick Institute, Surrey's Lab LONDON, UK Dec. 2016 [Stay] High-throughput microfluidic, LIMMS/University of Tokyo, Fujii's Lab TOKYO, JAPAN

PREVIOUS RESEARCH EXPERIENCES:

2016 (5 mos.)	Intern @Lab. Jean Perrin, IBPS, Sorbonne Université
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PARIS, FRANCE

Cell-free characterization of RNA translational regulators. Supervisor: André Estévez-Torres

2014 (4 mos.) Intern @FOM Institute AMOLF

AMSTERDAM, THE NETHERLANDS

Actomyosin networks cross-linked by alpha-actinin. Supervisors: Gijsje Koenderink & Nicholas Kurniawan

2013 (2 mos.) Intern @Physico-Chimie Curie Lab., Institut Curie

PARIS, FRANCE

Perturbations of bacterial concentration waves. Supervisor: Axel Buguin

2009 (1 mo.) Intern @Plants & cropping Systems in Horticulture Lab., INRA AVIGNON, FRANCE

Differentiating moth species using infrared spectroscopy. Supervisor: Myriam Siegwart

PUBLICATIONS

[3] Book chapter: "Learning from embryo development to engineer self-organizing materials"

Senoussi A., Vyborna Y., Berthoumieux H., Galas J.-C. & Estévez-Torres A.

2021, in Out-of-equilibrium supramolecular systems and materials, Giuseppone N. & Walther A., Wiley-VCH

[2] Tunable corrugated patterns in an active nematic sheet

Senoussi A., Kashida S., Voituriez R., Galas J.-C., Maitra A. & Estévez-Torres A.

2019, Proceedings of the National Academy of Sciences, 116(45), 22464-22470. [article, arXiv]

[1] Quantitative characterization of translational riboregulators using an in vitro transcription-translation system Senoussi A., Lee Tin Wah J., Shimizu Y., Robert J., Jaramillo A., Findeiss S., Axmann I. M. & Estévez-Torres A. 2018, ACS Synthetic Biology, 7(5), 1269-1278. [article, bioRxiv]

COMMUNICATIONS

Nov. 2019	[Talk] GDR CellTiss	Hyeres, France
Oct. 2019	[Talk] DNA Nanotechnology Workshop, Sorbonne Université	Paris, France
Nov. 2018	[Talk] Internal Seminar, Lab. Jean Perrin	Paris, France
Sept. 2018	[Poster] EMBO Physics of Integrated Biological Systems, IESC	CARGESE, FRANCE
Jun. 2018	[Poster] Doctoral School Scientific Day, Sorbonne Université	Paris, France
Nov. 2017	[Poster] Rencontres des Jeunes Physicien·ne·s, Collège de France	Paris, France
Sept. 2017	[Talk] Joint meeting with Robin's Lab (Cell Dynamic Lab), IBPS	Paris, France
Mar. 2017	[Poster] Physical Biology Circle Meeting, EMBL	HEIDELBERG, GERMANY
Dec. 2016	[Talk] Lab meeting at Fujii's Lab, LIMMS/University of Tokyo	Tokyo, Japan
Nov. 2016	[Poster] Rencontres des Jeunes Physicien·ne·s, Collège de France	Paris, France
Sept. 2016	[Poster] DNA Computing and Molecular Programming, LMU	Munich, Germany

TEACHING

2016 - 2019	Teaching assistant @Sorbonne Université	PARIS, FRANCE
	Classical mechanics & physics of waves (64h/year)	
2015 - 2016	Tutorials @Lycée Saint-Louis	PARIS, FRANCE
	Physics for undergraduate students attending classes préparatoires® (25h/year)	
2012 - 2014	Tutorials in maths, physics, chemistry & biology for high school students (20h/year)	LYON, FRANCE

FELLOWSHIPS

2019 - 2020	1-year funding from ERC (André Estévez-Torres, CNRS)
2016 - 2019	Teaching assistant fellowship from Sorbonne Université
2016 - 2019	Full Ph.D. scholarship from ENS de Lyon
2012 - 2016	Full bachelor and master scholarship from ENS de Lyon

MISCELLANEOUS

PROGRAMMING SKILLS:

Languages: Edition & design: LaTeX, Microsoft Office, [Advanced] Python (with notions in machine learning using Scikit-learn & Keras) Inkscape Other: ImageJ, Micro-manager, Arduino

[Intermediate] Matlab, Mathematica

[Novice] HTML, CSS, Dart

RECENT FORMATIONS:

2019 – 2020	First year of law school (distance learning) @Université Panthéon-Sorbonne	Paris, France
May. 2019	Introduction to machine learning (24h) @Sorbonne Université & ENS Paris	Paris, France

OTHER ACTIVITIES:

Popularization of sciences: Science Fair 2018, Sorbonne Université Oct. 2018 PARIS, FRANCE