

# Anis Senoussi

## Postdoctoral researcher



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## EDUCATION

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

## RESEARCH

### CURRENT POSITION:

<b>Oct. 2020 -</b>	Postdoctoral researcher @ <b>Lab. Jean Perrin, IBPS, Sorbonne Université</b>	PARIS, FRANCE
	<i>Coupling between an active gel and programmable reaction-diffusion structures</i> Advisors: André Estevez-Torres & Jean-Christophe Galas	

### PHD THESIS:

<b>2016 - 2020</b>	PhD student @ <b>Lab. Jean Perrin, IBPS, Sorbonne Université</b>	PARIS, FRANCE
	<i>Design of molecular systems for artificial pattern formation and gene regulation</i> [.pdf, HAL] Advisors: André Estevez-Torres & Jean-Christophe Galas	
<b>Oct. 2019</b>	[School] Arnold Sommerfeld School on the Physics of Life, <b>LMU</b>	MUNICH, GERMANY
<b>Sept. 2018</b>	[School] EMBO Physics of Integrated Biological Systems, <b>IESC</b>	CARGÈSE, FRANCE
<b>Jun. 2017</b>	[Stay] Purification of protein motors, <b>Francis Crick Institute, Surrey's Lab</b>	LONDON, UK
<b>Dec. 2016</b>	[Stay] High-throughput microfluidic, <b>LIMMS/University of Tokyo, Fujii's Lab</b>	TOKYO, JAPAN

### PREVIOUS RESEARCH EXPERIENCES:

<b>2016 (5 mos.)</b>	Intern @ <b>Lab. Jean Perrin, IBPS, Sorbonne Université</b>	PARIS, FRANCE
	<i>Cell-free characterization of RNA translational regulators.</i> Supervisor: André Estevez-Torres	
<b>2014 (4 mos.)</b>	Intern @ <b>FOM Institute AMOLF</b>	AMSTERDAM, THE NETHERLANDS
	<i>Actomyosin networks cross-linked by alpha-actinin.</i> Supervisors: Gijssje Koenderink & Nicholas Kurniawan	
<b>2013 (2 mos.)</b>	Intern @ <b>Physico-Chimie Curie Lab., Institut Curie</b>	PARIS, FRANCE
	<i>Perturbations of bacterial concentration waves.</i> Supervisor: Axel Buguin	
<b>2009 (1 mo.)</b>	Intern @ <b>Plants &amp; Cropping Systems in Horticulture Lab., INRA</b>	AVIGNON, FRANCE
	<i>Differentiating moth species using infrared spectroscopy.</i> 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. & Estevez-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. & Estevez-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. & Estevez-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, <b>Sorbonne Université</b>	PARIS, FRANCE
Nov. 2018	[Talk] Internal Seminar, <b>Lab. Jean Perrin</b>	PARIS, FRANCE
Sept. 2018	[Poster] EMBO Physics of Integrated Biological Systems, <b>IESC</b>	CARGESE, FRANCE
Jun. 2018	[Poster] Doctoral School Scientific Day, <b>Sorbonne Université</b>	PARIS, FRANCE
Nov. 2017	[Poster] Rencontres des Jeunes Physiciens, <b>Collège de France</b>	PARIS, FRANCE
Sept. 2017	[Talk] Joint meeting with Robin's Lab (Cell Dynamic Lab), <b>IBPS</b>	PARIS, FRANCE
Mar. 2017	[Poster] Physical Biology Circle Meeting, <b>EMBL</b>	HEIDELBERG, GERMANY
Dec. 2016	[Talk] Lab meeting at Fujii's Lab, <b>LIMMS/University of Tokyo</b>	TOKYO, JAPAN
Nov. 2016	[Poster] Rencontres des Jeunes Physiciens, <b>Collège de France</b>	PARIS, FRANCE
Sept. 2016	[Poster] DNA Computing and Molecular Programming, <b>LMU</b>	MUNICH, GERMANY

## TEACHING

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

## FELLOWSHIPS

<b>2019 – 2020</b>	1-year funding from ERC (André Estevez-Torres, <b>CNRS</b> )
<b>2016 – 2019</b>	Teaching assistant fellowship from <b>Sorbonne Université</b>
<b>2016 – 2019</b>	Full Ph.D. scholarship from <b>ENS de Lyon</b>
<b>2012 – 2016</b>	Full bachelor and master scholarship from <b>ENS de Lyon</b> (civil servant status)

## MISCELLANEOUS

### PROGRAMMING SKILLS:

#### Languages:

[Advanced] Python (*including notions in machine learning using Scikit-learn & Keras*)  
 [Intermediate] Matlab, Mathematica  
 [Novice] HTML, CSS, Dart

**Edition & design:** LaTeX, MS Office, Inkscape

**Other:** ImageJ, Micro-manager, Arduino

**LANGUAGES:** French, English

### RECENT COURSES:

<b>2019</b>	Introduction to machine learning (24h) <b>@Sorbonne Université &amp; ENS Paris</b>	PARIS, FRANCE
<b>2019 – 2020</b>	First year of law school (distance learning) <b>@Université Panthéon-Sorbonne</b>	PARIS, FRANCE
<b>2018 – 2019</b>	T. Lecuit's lectures <i>The Mechanics of Morphogenesis</i> <b>@Collège de France</b>	PARIS, FRANCE

### OTHER ACTIVITIES:

<b>Oct. 2018</b>	Popularization of sciences: Science Fair 2018, <b>Sorbonne Université</b>	PARIS, FRANCE
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