

Anis Senoussi

Postdoctoral researcher



anis-senoussi.github.io



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Laboratoire Jean Perrin
Institut de Biologie Paris-Seine
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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 | <i>Agrégation*</i> 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 | <i>Classes préparatoires*</i> in physics, maths & chemistry @ Lycée Thiers [*University-level preparation for the competitive exams to "grandes écoles"] | MARSEILLE, FRANCE |
| 2009 | <i>Baccalauréat*</i> @ Lycée René Char [*High school diploma] | AVIGNON, FRANCE |

RESEARCH

CURRENT POSITION:

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

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| 2016 - 2020 | PhD student @ Lab. Jean Perrin, IBPS, Sorbonne Université <i>Design of molecular systems for artificial pattern formation and gene regulation</i> [.pdf, HAL] Advisors: André Estévez-Torres & Jean-Christophe Galas | PARIS, FRANCE |
| 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:

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| 2016 (5 mos.) | Intern @ Lab. Jean Perrin, IBPS, Sorbonne Université <i>Cell-free characterization of RNA translational regulators</i> . Supervisor: André Estévez-Torres | PARIS, FRANCE |
| 2014 (4 mos.) | Intern @ FOM Institute AMOLF <i>Actomyosin networks cross-linked by alpha-actinin</i> . Supervisors: Gijsje Koenderink & Nicholas Kurniawan | AMSTERDAM, THE NETHERLANDS |
| 2013 (2 mos.) | Intern @ Physico-Chimie Curie Lab., Institut Curie <i>Perturbations of bacterial concentration waves</i> . Supervisor: Axel Buguin | PARIS, FRANCE |
| 2009 (1 mo.) | Intern @ Plants & Cropping Systems in Horticulture Lab., INRA <i>Differentiating moth species using infrared spectroscopy</i> . Supervisor: Myriam Siegwart | AVIGNON, FRANCE |

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

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|------------|---|---------------------|
| 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

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

FELLOWSHIPS

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| 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:

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| Languages: | Edition & design: LaTeX, Microsoft Office, Inkscape |
| [Advanced] Python (with notions in machine learning using Scikit-learn & Keras) | |
| [Intermediate] Matlab, Mathematica | Other: ImageJ, Micro-manager, Arduino |
| [Novice] HTML, CSS, Dart | |

RECENT COURSES:

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| 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:

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