

ANAÏS LE NABEC

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RESEARCH EXPERIENCE

- **Since 01/03/2025:** Post-doctoral researcher, Collège de France, Paris, France. Laboratory of Prof. Denis Duboule.

Founding by ANR (“Régulation transcriptionnelle de Cyp26a1 pendant l'extension de l'axe chez des gastruloïdes mammifères – Transcriptional regulation of Cyp26a1 during axial elongation in mammalian gastruloids - GastruCyp”)

- **01/11/2022-28/02/2025:** Post-doctoral researcher, Ecole Polytechnique de Lausanne, Switzerland. Laboratory of Prof. Denis Duboule.

- Understand how the *Cyp26a1* gene, implicated in the retinoic pathway, is regulated during embryogenesis
- Highlighted regulatory sequences at the precise stages by using an **alternative model (gastruloids)**
- Technics used: Capture-HiC, ATAC-seq, Gene reporter cell line, scRNA-seq & Bulk RNA-seq, ISH, HCR, mouse embryonic stem cell culture, gastruloid culture, CRISPR technics, Galaxy & R skills

PUBLICATIONS

- ✓ **Le Nabec A**, Delisle-Lopez L, Mayran A, Cosy AC, Duboule D. Transcriptional regulation of Cyp26a1 during axial elongation in mammalian gastruloids. *Nature*. **2026, in reaction**
- ✓ Blotas C, **Le Nabec A**, Collobert M, Bulcaen M, Carlon MS, Férec C, Moisan S. Cis-Regulation of the *CFTR* Gene in Pancreatic Cells. *Int. J. Mol. Sci.* **2025**, 26(8), 3788.
- ✓ **Le Nabec A**, Blotas C, Briset A, Collobert M, Férec C, Moisan S. 3D Chromatin Organization Involving MEIS1 Factor in the *cis*-Regulatory Landscape of *GJB2*. *Int. J. Mol. Sci.* 2022, 23(13): 6964.
- ✓ Collobert M, Bocher O, **Le Nabec A**, Génin E, Férec C, Moisan S. *CFTR* Cooperative Cis-Regulatory Elements in Intestinal Cells. *Int. J. Mol. Sci.* 2021, Volume 22, Issue 5, 259.
- ✓ Moisan S*, **Le Nabec A***, Quillévéré A, Le Maréchal C, Férec C. Characterization of *GJB2* cis-regulatory elements in the *DFNB1* locus. *Human Genetics*. 2019 Dec;138(11-12):1275-1286. *Co-first authors

FUNDING & PRIZES

- 2021 Travel grant «Enhanceropathies», EMBO (300€).
- 2021 Research grant - Fondation pour l'Audition (25,5k€).
Participant - Grant allocated to my PI supervisor for my last year of PhD
- 2018-2021 Research grant - Fondation pour l'Audition (78k€).
Participant - Grant allocated to my PI supervisor for my PhD project

CONFERENCES

- EMBO (European Molecular Biology Organisation) - Enhancer mechanics and enhanceropathies 2025 – Middelfart, Denmark (Poster)
- TriRhena Gene Regulation Club 2024 – Basel, Switzerland, **Oral presentation**
Talk on my postdoctoral project, around 80 people
- SY-STEM (Symposium on Stem Cell Research) 2024 – Vienna, Austria (Poster)
- EMBO Workshop – Enhanceropathies 2023 - Marseille, France (Poster)
- FEBS (Federation of European Biochemical Societies) Nuclear receptors & Epigenetics 2023 – Septes, Greece (Poster)
- Assises de génétique humaine et médicale 2022 – Rennes, France (Poster)
- ASHG (American Society of Human Genetics) 2021 – Virtual (Poster)
- EMBO Workshop – Enhanceropathies 2021 - Santander, Spain (Poster)
- ESHG (European Society of Human Genetics) 2021– Virtual (Poster)
- EMBL (European Molecular Biology Laboratory) Chromatin and epigenetics 2021 – Virtual (Poster)
- ASHG 2020 – Virtual (Poster)
- EMBL Transcription and chromatin 2020 – Virtual (Poster)
- ESHG 2020 – Virtual (Poster)
- Assises de génétique humaine et médicale 2021 – Tours, France (Poster)
- ASHG – Houston, USA (Poster)
- IBSAM (Institut Brestois Santé Agro Matière) – Brest, France, **Oral presentation**
Multidisciplinary conference, summarise my PhD project, around 100 people
- ESHG – Gothenburg, Sweden, **Oral presentation**
Talk on my PhD project, around 200 people

OTHER ACTIVITIES

- **Supervising:** 2 Bachelor students, 2 Master students

- **Teaching (2019-2021):** Around 50 hours for bachelor students in Cellular biology and physiology: practical work and tutorials (~20 students per lesson)

- **Popularizing science:**

- **Scientastic**, 2024, EPFL, Suisse

Propose activities and games around embryonic development. ~8000 people.

- **Ma Thèse en 180 secondes**, 2020, Brest, France

- **Science en Theizh**, 2021, Brest, France. **Co-organizer of the first edition**

Funding, sponsoring, invite speakers, budget. On remote and on-site, ~80 people.

- **Nuits des Chercheurs**, 2017 - 2019, Brest, France

- **Fête de la science**, 2017- 2019, Brest, France

Animate activities on DNA 'What is DNA? What is DNA role?' (DNA extraction and visualization)

EDUCATION

- **01/10/2018 to 31/07/2022: PhD in Biology-Health**, “Long-range regulation of the *DFNB1* locus implicated in the non-syndromic deafness” defended the 11 of July 2022 at Université Bretagne Occidentale – Brest, France. Supervised by Prof. Claude Férec.

- **01/09/2016 to 30/06/2018: Master’s degree in Genetic, Genomic and Biotechnologies**
- Université Bretagne Occidentale - Brest, France.
Master – 2nd year internship, 01/01/2018 to 30/06/2018: “Long-range regulation of the *DFNB1* locus implicated in the non-syndromic deafness” in the Inserm UMR1078 team in Brest, France. Supervised by Prof. Claude Férec.

Master – 1st year internship, 01/01/2017 to 28/02/2017: « Importance of cellular sort of spermatozooids for infertile men » au in the Inserm UMR1078 team –Laboratory of histology, embryology and cytogenetic, Brest, France. Supervised by Prof. Frederic Morel.

- **01/09/2013 to 30/06/2016: Bachelor Degree in Biology: Cellular biology and physiology**
- Université Bretagne Occidentale - Faculté des Sciences et Techniques de Brest
Volunteer internship « Role of UPR in cystic fibrosis » in the Inserm UMR1078 team in Brest, France. Supervised by Dr. Mathieu Kerbiriou.
Volunteer internship « Study of bacteria species living in sea biofilm » in the LBCM laboratory, Lorient, France. Supervised by Dr. Alexis Bazire.