



# Doriane HAZART

25 years old  
Born September 28, 1999

Email : [doriane.hazart@u-paris.fr](mailto:doriane.hazart@u-paris.fr)  
[doriane.hazart@hotmail.com](mailto:doriane.hazart@hotmail.com)



## ACADEMIC BACKGROUND

**Since October 2022: PhD in Neuroscience – Doctoral fellowship from the Doctoral School “Brain, Cognition, Behavior” (ED3C) | Saints-Pères Paris Institute for the Neurosciences (SPPIN) ; Université Paris-Cité**

Three-dimensional morphological characterization of neuronal networks at the cellular level in the enteric nervous system and biomedical applications for early diagnosis and understanding of Parkinson’s disease ; PhD Supervisor: Dr. Martin OHEIM | Co-supervisor: Dr. Clément RICARD

**2020 – 2022: Master’s Degree in Life and Health Sciences – MSc in Cell Signaling and Integrative Neurosciences | Faculty of Life Sciences and Health ; Université Paris-Saclay**

Multidisciplinary program with a major in theoretical and experimental Cell Signaling and Neurobiology.

**2017 – 2020: Bachelor’s Degree in Health Sciences « Sciences pour la Santé » | Faculty of Fundamental and Biomedical Sciences ; Université de Paris**

Multidisciplinary curriculum with a major in Biology, Neurobiology, and Cognitive Sciences

**2017 : French Scientific Baccalauréat | Lycée Louise Weiss (Achères)**

Specialization in Physics and Chemistry, European section in German



## PROFESSIONAL EXPERIENCE

**01/10/2023 - 30/09/2025 : Teaching Assistant in Higher Education | Université Paris Cité, Faculty of Biomedical Sciences**

Assigned to teaching Cell Biology for first-year undergraduate students in Biomedical Sciences

**10/01/2022 - 08/07/2022 : Master’s Research Internship in a Neuroscience Laboratory | Saints-Pères Paris Institute for the Neurosciences (SPPIN, CNRS, UMR 8003, Paris)**

Six-month research internship within the “Brain Biophysics” team, Supervisors: Dr. Martin OHEIM and Dr. Clément RICARD

“Characterization and connectivity of neuronal networks in the enteric nervous system using fast 3D microscopy; Applications to neuropathology”

**19/04/2021 - 20/07/2021 : Master's Research Internship (Year 1) in a Neuroscience Laboratory |  
Saints-Pères Paris Institute for the Neurosciences (SPPIN, CNRS, UMR 8003, Paris)**

Three-month internship within the “Brain Biophysics” team Supervisor: Dr. Clément RICARD

“Fast and three-dimensional autofluorescence imaging of the enteric nervous system using a prototype single-spinning disk two-photon microscope”

**03/06/2019 – 12/07/2019 : Undergraduate Research Internship (Year 2) in a Neuroscience Laboratory| Saints-Pères Paris Institute for the Neurosciences (SPPIN, CNRS, UMR 8003, Paris)**

Six-week internship within the “Biophysics of Neuron-Glia Interactions” team

“Optimization of tissue clearing techniques for imaging thick biological samples; Application to the Auerbach plexus”

**July 2016 : Temporary Employee at the Ministry of the Interior| Bureau of Elections and Political Studies**

Design and integration of data for an intranet site using Joomla



## ADDITIONAL TRAINING

- **Animal Experimentation Certification Level 1 | Faculty of Pharmacy Paris V.** Mar/Apr 2023
- **Specialization in Experimental Surgery on Rodents | Faculty of Pharmacy Paris V.** Apr 2025
- **Three-Minute Thesis Competition Training | Alliance Sorbonne Université.** Dec 2023/Mar 2024
- **Teaching Biology at University: Keys to Improve | Université Paris Cité.** May/June 2023
- **Career Development for PhD Graduates | Université Paris Cité.** Apr 2023
- **Towards “Responsible Research”: Identifying Scientific Integrity and Responsibility Issues | Université Paris Cité.** Apr 2023
- **INSERM Workshop 268: Light Sheet Fluorescence Microscopy – Principles and Systems Overview | May 16 – 18, 2022**



## PRACTICAL SKILLS

❖ **Microscopy:**

- Bright-field microscopy, fluorescence microscopy, confocal microscopy
- Two-photon microscopy (on fixed and cleared tissues)
- Light-sheet microscopy
- Correlative microscopy (slide scanner – confocal microscope)
- Autofluorescence imaging
- Spectral imaging
- 3D imaging of thick samples

- ❖ **Animal Experimentation:**
  - Holder of Level 1 Animal Experimentation Certification with a specialization in experimental surgery on rodents
  - Tissue sampling
  - Anatomical dissection and study
- ❖ **Histology, Immunohistochemistry, Tissue Clearing:**
  - Cryostat sectioning of frozen samples
  - Handling and use of fixed human biological tissues
  - Standard histological staining (H&E, Cresyl violet, etc.)
  - Immunohistochemistry on thin and thick tissue samples
  - Use of tissue clearing techniques
- ❖ **Languages:**
  - French: Native
  - English: Intermediate level
  - German: Intermediate level (First foreign language for Baccalauréat)
- ❖ **Computer Skills:** Microsoft (Word, Excel, Power-Point), LibreOffice, Joomla, Internet, ImageJ, Imaris, Canva, retouche photo
- ❖ **Other:** Driver's license (Category B), Coastal boating license



## TEACHING EXPERIENCE

- **Teaching Assistant in Cell Biology (Year 1, Biomedical Studies)** | Université Paris Cité, (Cell Biology, Developmental Biology, Anatomy), 116h including 32h lab, 75h tutorials, 9h exams – 2023–2025
- **Teaching Assistant in Transdisciplinary Unit (Year 3, Biomedical Studies)** | Université Paris Cité, (biology-physic, 3h), 2025
- **Teaching Assistant in Cell Biology (Year 1, Mathematics & Computer Science)** | Université Paris Cité, 12h tutorials, 2024
- **Supervision of an M1 Neuroscience Internship** | Université Paris Cité, (Feb to Apr 2025)



## ADMINISTRATIVE DUTIES

- **Elected Member of the Doctoral School Council “Brain, Cognition, Behavior” (ED3C)** | Université Paris Cité, Sorbonne Université, Paris Sciences et Lettres (PSL), 2024 - 2025
- **Organizing Committee Member of “Young SPPIN”** | Saints-Pères Paris Institute for the Neurosciences (SPPIN) ; Université Paris-Cité



## ACCEPTED PUBLICATIONS

- #5. Label-free, high-resolution fluorescence imaging of the intestinal wall by image scanning and confocal microscopy : Marwa Moulzir\*, Doriane Hazart\*, Brigitte Delhomme, Martin Oheim & Clément Ricard (\* : co-first authors) | Gasto Hep Advances, 2025
- #4. Fast tissue clearing and volume imaging techniques for anatomy : Clément Ricard\*, Doriane Hazart\*, Brigitte Delhomme\*, Marwa Moulzir, Irina Rakotoson & Martin Oheim (\* : co-first authors) | Wiley MRT – Fundamentals in Microscopy, 2025
- #3. Imaging the enteric nervous system : Doriane Hazart, Marwa Moulzir, Brigitte Delhomme, Martin Oheim & Clément Ricard | Frontiers in neuroanatomy, 2025
- #2. The gut, a whistleblower, in the early stages of Parkinson's disease : Doriane Hazart, Malvyne Rolli-Derkinderen, Brigitte Delhomme, Pascal Derkinderen, Martin Oheim & Clément Ricard | Médecines Sciences, 2024
- #1. Label-free, fast, 2-photon volume imaging of the organization of neurons and glia in the enteric nervous system : Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard | Frontiers in Neuroanatomy, 2023



## MANUSCRIPTS UNDER REVIEW

- Label-free high-resolution volume imaging of cleared testes : Marwa Moulzir, Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard



## MANUSCRIPTS IN PREPARATION

- Autofluorescence imaging as a new and innovative tool for early Parkinson's disease diagnosis on intestinal samples : Doriane Hazart, Marwa Moulzir, Brigitte Delhomme, Pascal Derkinderen, Malvyne Rolli-Derkinderen, François Cossais, Peter Neckel, Martin Oheim & Clément Ricard
- Transparent feathers: A novel approach for whole feather microstructure imaging through tissue clearing and autofluorescence imaging : Marwa Moulzir, Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard Clément



## ORAL PRESENTATION WITH PUBLICATION

- Fast, large-field fluorescence and second-harmonic generation imaging with a single-spinning disk two-photon microscope : Andreas Deeg, Federico Trigo, Doriane Hazart, Brigitte Delhomme, Tchyia Zar, Thomas Naiser, Christian Seebacher, Adi Salomon, Clément Ricard, Rainer Uhl & Martin Oheim



## ORAL PRESENTATIONS

- **L'intestin, lanceur d'alerte, dans les prémices de la maladie de Parkinson ; Imagerie 3D haute résolution du Système Nerveux Entérique, vers un nouvel outil pour la compréhension et le diagnostic de la maladie : Doriane Hazart, Brigitte Delhomme, Pascal Derkinderen, Martin Oheim & Clément Ricard | Les conférences du mardi du comité 75 France Parkinson, Paris, 14th January 2025**
- **"Pitch ta these" Competition: Constipation et tremblements ! Étude des réseaux neuronaux de l'intestin pour un diagnostic précoce de la maladie de Parkinson : Doriane Hazart | La fête de la Science, Université Paris Cité, 9th – 16th October 2024**
- **Imagerie d'Autofluorescence Rapide et Tridimensionnelle du Système Nerveux Entérique à l'Echelle Subcellulaire : un Nouvel Outil pour la Compréhension et le Diagnostic des Neuropathologies : Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard | 5ème édition des journées des neurosciences translationnelles, Pornichet, Mar 2024**
- **"My Thesis in 180 Seconds" Competition: Caractérisation morphologique tridimensionnelle des réseaux neuronaux à l'échelle cellulaire du système nerveux entérique et applications biomédicales au diagnostic précoce et à la compréhension de la maladie de Parkinson : Doriane Hazart | Alliance Sorbonne Paris Cité, Paris, 14<sup>th</sup> March 2024**
- **Label-free, fast, 2-photon volume imaging of the organization of neurons and glia in the Enteric Nervous System : Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard | Neuroscience Graduate school Scientific event, Université Paris Cité, 5th October 2023**
- **Label-free, fast, 2-photon volume imaging of the organization of neurons and glia in the Enteric Nervous System : Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard | ED3C Scientific day, Paris, Apr 2023**
- **Label-free, fast, 2-photon volume imaging of the organization of neurons and glia in the enteric nervous system : Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard | Preclinical Microscopy" Meeting, France Biolimaging, Nantes, 12th December 2022**



## POSTERS

- **Fast, three-dimensional, high-resolution autofluorescence imaging of intestinal biopsies for early Parkinson's disease diagnosis : Doriane Hazart, Marwa Moulzir, Brigitte Delhomme, Martin Oheim & Clément Ricard, Gordon Research Conference : Circuit and Cellular Mechanisms, Waterville Valley, New Hampshire, 7th – 13th June 2025**
- **Autofluorescence imaging as a new and innovative tool for early Parkinson's disease diagnosis on intestinal samples : Doriane Hazart, Moulzir Malwa, Delhomme Brigitte, Pascal Derkinderen, Malvyne Rolli-Derkinderen, François Cossais, Peter Neckel, Oheim Martin & Ricard Clément, SPPIN laboratory retreat, Dourdan, 29th – 30th April 2025**
- **Autofluorescence imaging as a new and innovative tool for early Parkinson's disease diagnosis on intestinal samples : Doriane Hazart, Moulzir Malwa, Delhomme Brigitte, Pascal Derkinderen, Malvyne Rolli-Derkinderen, François Cossais, Peter Neckel, Oheim Martin & Ricard Clément, ED3C Scientifics Days, Roscoff, 19th – 21th March 2025**
- **Imagerie d'Autofluorescence Rapide et Tridimensionnelle du Système Nerveux Entérique à l'Echelle Subcellulaire : un Nouvel Outil pour la Compréhension et le Diagnostic des Neuropathologies : Doriane Hazart, Brigitte Delhomme, Marwa Moulzir, Pascal Derkinderen, Malvyne Rolli-Derkinderen, Martin Oheim & Clément Ricard, 37ème congrès de l'Association Française d'Histotechnologie, Saint-Malo, June 2024**
- **Comparaison des techniques histologiques 2D et de l'imagerie 3D en autofluorescence grâce à la technique de transparisation su-r coupe épaisse de testicule de souris : Marwa Moulzir\*, Brigitte Delhomme, Doriane Hazart, Martin Oheim & Clément Ricard, 37ème congrès de l'Association Française d'Histotechnologie, Saint-Malo, June 2024 (\* : speaker)**
- **Imagerie d'Autofluorescence Rapide et Tridimensionnelle du Système Nerveux Entérique à l'Echelle Subcellulaire : un Nouvel Outil pour la Compréhension et le Diagnostic des Neuropathologies : Doriane Hazart, Brigitte Delhomme, Marwa Moulzir, Pascal Derkinderen, Malvyne Rolli-Derkinderen, Martin Oheim & Clément Ricard, 5ème édition des journées des neurosciences translationnelles, Pornichet, May 2024**
- **3-D autofluorescence imaging of the enteric nervous system for neuropathological diagnosis : Doriane Hazart, Brigitte Delhomme, Pascal Derkinderen, Malvyne Rolli-Derkinderen, Martin Oheim & Clément Ricard, 50th Focus on Microscopy Congress (FOM2024), Genova, March 2024**
- **Fast 3D autofluorescence imaging of the Enteric Nervous System : Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard, 35ème congrès de l'Association Française d'Histotechnologie, Marseille, 16th – 17th June 2022**
- **Fast 3D autofluorescence imaging of the Enteric Nervous System : Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard, INSERM Workshop 268 : Light Sheet Fluorescence Microscopy: Principles and Systems Overview, Bordeaux, 16th – 18th May 2022**
- **Fast 3D autofluorescence imaging of the Enteric Nervous System : Doriane Hazart, Brigitte Delhomme, Martin Oheim & Clément Ricard, Congrès Nanoscale, Paris, April 2022**



## CONGRES

- Gordon Research Conference : Circuit and Cellular Mechanisms, Waterville Valley, New Hampshire, 7th – 13th June 2025
- ED3C Scientifis Days, Roscoff, 19th – 21th March 2025
- 37ème congrès de l'Association Française d'Histotechnologie, Saint-Malo, June 2024
- 5ème édition des journées des neurosciences translationnelles, Pornichet, May 2024
- 50th Focus on Microscopy Congress (FOM2024), Genova, March 2024
- 6th World Parkinson Congress, Barcelona, July 2023
- ED3C Scientific day, Paris, April 2023
- Preclinical Microscopy” Meeting, France Biolimaging, Nantes, 12th December 2022
- 35ème congrès de l'Association Française d'Histotechnologie, Marseille, 16th – 17th June 2022
- Congrès Nanoscale, Paris, April 2022
- Workshop sur l'axe cerveau-microbiote “Atelier Cerveau – Microbiote”, Paris, 12th October 2021



## COLLABORATIONS

- Prof. Pascal Derkinderen, Neurologue, CHU of Nantes, France
- Jun. Prof. Dr. François Cossais, Biologiste, Department of Anatomy, Christian-Albrechts-Universität zu Kiel, Allemagne
- Dr. rer. nat. Peter Neckel, Biologiste, Institut für Klinische Anatomie und Zellanalytik, Universitätklinikum Tübingen, Allemagne



## FUNDING AND AWARDS

- Travel Grant (4,000 €) from the France Parkinson Association to attend the 5th Gordon Research Conference on Parkinson's Disease, held June 8–13, 2025, in Waterville Valley, New Hampshire, USA
- Doctoral Fellowship from the Doctoral School “Brain, Cognition, Behavior” (ED3C), Paris – October 1, 2022 – September 30, 2025
- Best Poster Award, SPPIN Laboratory Retreat – Dourdan, April 29–30, 2025
- Special Jury Prize – “Jury's Favorite Award”, Science Communication Competition “My Thesis in 180 Seconds”, Alliance Sorbonne Paris Cité – Paris, March 14, 2024



## OTHERS

### ❖ Athletics:

- **March 2018 : Second selection for the French national team:** International Hammer Throw Match (France-Germany-Italy) – Under 20 and Under 23 categories
- **July – August 2015 : First selection for the French Olympic Team:** European Youth Olympic Festival (EYOF), Tbilisi, Georgia – Hammer Throw
- **2015 – 2018 : Listed on the French Ministry of Sports' register of high-level hopeful athletes (Espoir de haut niveau)**
- **2015 – 2019 : 7 podium finishes at the French National Hammer Throw Championships**
- **2006 – 2019 : Track and field athlete with a specialization in hammer throw**

### ❖ Commitment to National Service:

- **2015 – 2016 : Naval Military Preparation (PMM Richelieu).** Awarded the Naval Military Preparation Certificate; ranked 8th out of 64 with Honours
- **2014 – Present: Young flag bearer** for the National Union of Combatants. Member of the executive board of the National Association of OPEX-OPINT Veterans, France

### ❖ Awards and Distinctions:

- **2019 : Commendation Letter from the French Ministry of Youth and Sports**
- **2017 : Medal of the City of Maisons-Laffitte** for civic and military engagement and athletic achievements

### ❖ Community and Volunteering Activities:

- **2010 – 2015 : Volunteer for the "Aide aux Félinis" (Feline Aid Association), Maisons-Laffitte**
- **2024 – Present: Member of the "Mission Bretonne" cultural association, Paris**