

**Education**

<b>09/2022 – 11/2025</b> Pessac, France	<b>University of Bordeaux</b> Ph.D. in Biophysics and Biochemistry in Institute of Chemistry & Biology of Membranes & Nano-objects (CBMN)
<b>09/2018 – 09/2021</b> Pessac, France	<b>ENSMAC – Bordeaux INP</b> Graduate degree in Physics and Chemistry, specialization in formulation and polymers
<b>09/2015 – 06/2018</b> Saint-Germain-en-Laye, France	<b>Classes Préparatoires aux Grandes Écoles (CPGE) – Jeanne d'Albret</b> Intensive undergraduate-level training in Physics, Chemistry and Mathematics

**Research Experiences**

<b>09/2022 – 11/2025</b> Pessac, France	<b>University of Bordeaux</b> Thesis: Mechanisms of membrane-induced Tau aggregation Under supervision of Dr. Yann Fichou
<b>03/2021-12/2021</b> Pessac, France	<b>L'Oréal Research &amp; Innovation – Internship</b> Main project: Physicochemical characterization of hair fibers to establish structure–property relationships Under supervision of Dr. Nawel Baghdadli
<b>08/2020-10/2020</b> Châtenay-Malabry, France	<b>Institut Galien Paris-Sud (UMR CNRS 8612) - Internship</b> Main project: Formulation of thermosensitive and biodegradable polymer nanoparticles for controlled drug release Under supervision of Dr Nicolas Tsapis
<b>07/2019-08/2019</b> Montpellier, France	<b>Histalim- Cerba HealthCare Group – Internship</b> Main project: carried out experiments on decalcification of bones samples and coloration of glass slides.

**Publications**

- 1) **Piersson C**, Lublin V, Duttine M, Khemtemourian L, Loquet A, Mathelié-Guinlet M, Fichou Y. Local organization of biological membranes modulates Tau-lipid interactions and fibril formation. *JACS Au*. **2026**. <https://doi.org/10.1021/jacsau.6c00374>.
- 2) **Piersson C**, Prakash S, Lublin V, Rossotti M, Fischer B, Srivastava M, Fichou Y. Development of an EPR-Based Methodology to Study Protein-Lipid Interaction ». *Biophysical Chemistry*. **2025**. <https://doi.org/10.1016/j.bpc.2025.107550>.
- 3) Broc J\*, **Piersson C**\*, Fichou Y. Making Tau Amyloid Models in Vitro: A Crucial and Underestimated Challenge. *FEBS Letters*. **2025**. <https://doi.org/10.1002/1873-3468.70022>.
- 4) Pounot K, **Piersson C**, Goring A.K, Rosu F, Gabelica V, Weik M, Songi H, Fichou Y. Mutations in Tau Protein Promote Aggregation by Favoring Extended Conformations . *JACS Au*. **2024**. <https://doi.org/10.1021/jacsau.3c00550>.

**Distinctions**

<b>02/2026</b>	<b>PhD thesis award</b> for an experienced user, French EPR Society, Paris France
<b>04/2024</b>	<b>Price of best post presentation</b> , Bordeaux Neuroscience Chemistry Interface Day, Bordeaux France
<b>05/2021</b>	<b>Innovation Game Finalist</b> – L'Oréal

## Oral communication

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**A-RPE**, French Association for Electron Paramagnetic Resonance, Paris, France, March 19 2026. Mechanisms of Membrane-Induced Tau Aggregation **PhD thesis award**

**7th International Symposium on Pathomechanisms of Amyloid Diseases**, Bordeaux, France, November 3–6, 2025 Mechanisms of Membrane-Induced Tau Aggregation  
**Chemistry Meets Biology**, Bordeaux, France, May 22, 2025. Mechanisms of Membrane-Induced Tau Aggregation

**A-RPE**, French Association for Electron Paramagnetic Resonance, Bordeaux, France, March 17–18, 2025 Mechanisms of Membrane-Induced Tau Aggregation

**CBMN Day**, Bordeaux, France, June 30, 2025. Mechanisms of Membrane-Induced Tau Aggregation

**YSS**, 13<sup>th</sup> Young Scientist Symposium, Bordeaux, France, May 16, 2025 Mechanisms of Membrane-Induced Tau Aggregation

**GdR Médyna**, French Research Network on Protein and Peptide Assemblies Mechanisms and Dynamics Arzon, France, October 3–6, 2023. Mechanisms of Membrane-Induced Tau Aggregation

## Poster presentation

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**Leuven Protein Aggregation Meeting (2nd Edition)**, Louvain, Belgium, September 2024  
*Mechanisms of Membrane-Induced Tau Aggregation*

**CBMN Day**, Bordeaux, France, June 2024 Mechanisms of Membrane-Induced Tau Aggregation

**EDSC Day**, Doctoral School of Chemical Sciences, Bordeaux, France, April 2024  
Mechanisms of Membrane-Induced Tau Aggregation

**STS department Day**, Science and Technology for Health, Bordeaux, France, November 2024  
Amyloid Aggregation of the Tau Protein with Membrane Models

**Bordeaux Neuroscience Chemistry Interface Day**, Bordeaux France, April 2024, Mechanisms of Membrane-Induced Tau Aggregation – poster prize

**A-RPE**, French Association for Electron Paramagnetic Resonance, Bordeaux, France, March 18–19, 2024 Mechanisms of Membrane-Induced Tau Aggregation

**5th International Symposium on Pathomechanisms of Amyloid Diseases**, Bordeaux, France, September 5–7, 2023. *Amyloid Aggregation of the Tau Protein with Membrane Models*

**CBMN Day**, Bordeaux, France, June 2023 Amyloid Aggregation of the Tau Protein with Membrane Models

**RéNaFoBIS**, National Training Network in Integrative Structural Biology, Oléron, France, June 1–9, 2023 Amyloid Aggregation of the Tau Protein with Membrane Models

## Relevant activities

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### Volunteer

<b>01/2024-06/2025</b>	Member of IECB animation committee, role of representative of PhD students and post-docs.
<b>06/2024-05/2025</b>	Organizing committee member of the 14 <sup>th</sup> Young Scientist Symposium (YSS, IECB)
<b>01/2024-10/2024</b>	Organizing committee member of the 3 <sup>rd</sup> workshop on Structural Biophysics (IECB)

### Mentoring

**01/2026-03/2026** Mentoring one master student on cw-EPR

**04/2024-05/2024** Mentoring one master student on protein labelling and microscale thermophoresis technique

**Training****01/2024-06/2024****Women and Science Program**

Career development workshops and exchanges between female researchers and PhD students

**06/2023****10th RéNaFoBiS National School – Integrative Structural Biology**

Intensive training in integrative structural biology.

**11/2022****Research Ethics and Scientific Integrity (MOOC)**

Online course covering research ethics, scientific integrity, plagiarism prevention, data management, and responsible research practices.

**09/2022****Python training**

Training focused on Python programming applied to scientific data analysis and data processing.

**Experimental skills****Biochemistry**

Bacteria culture

Protein purification

Fast protein liquid chromatography (FPLC)

Gel electrophoresis

Lipid formulation (extrusion, phosphate assay)

**Biophysics**

Electron Paramagnetic resonance spectroscopy (cw-EPR, DEER)

Transmission Electron Microscopy (TEM)

Cryo-Electron microscopy (cryo-EM)

Grid preparation for cryo-EM

Fluorescence spectroscopy

Dynamic light scattering (DLS)

**References****Dr. Yann Fichou**

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Orsay

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