

Newsletter

NEUROMOD INSTITUTE

◆
September 2025



A powerful restart bringing exciting new projects.

After a well-deserved break, the NeuroMod Institute is back in full swing with new projects, new hires, and new students!

Our calls for projects are bearing fruit: the first awardee of our international call for projects is Emanuele Natale, with his project "Algorithmic Brain Principles", which we present in this edition.

The call was also extended for a second round, until September 15.

In this issue, we also introduce our two new NeuroMod Ph.D. students and their research topics.

Finally, we take a look back at the institute's annual meeting, held on July 8-9.

As we say in French: *Bonne rentrée* everyone!

That's new: NeuroMod Hal Collection

The NeuroMod Institute created its own HAL Collection, as we are not considered as a proper research structure (such as a laboratory or university).

If you wish to add your publications to the NeuroMod collection, **go to HAL and fill in the "Project / Collaboration" field in the "Other Information" tab.** Find more info at our website under the "publications" section.

Newsletter topics

International call for projects laureate: Algorithmic Brain Principles

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Welcome to...



Call For International Projects 2025: presentation of the first laureate.

Our "International Projects Seeding" call for proposals 2025 has a first laureate: Emanuele Natale (I3S/Inria Coati Team) with his project "Algorithmic Brain Principles".

The NeuroMod Institute and the University Foundation awarded 10.000€ to the project that aims to lay the foundations for a Marie Skłodowska-Curie Doctoral Network in 2026, uniting expertise in computational neuroscience, machine learning and theoretical computer science.

Under the coordination of Emanuele Natale (CNRS/Coati EP), the core team includes Bianca Silva (IPMC, neural circuits in mice), Frederik Mallmann-Trenn (KCL, distributed processes), and Petra Mutzel (University of Bonn, algorithmic collaborations).

As a starting point to bootstrap initial collaborations, the project focuses on computational models of brain evolution, by proposing the investigation and validation of a framework which not only promises rigorous mathematical insight into nervous-systems but also suggests applications in machine learning.



To catalyze a European network, the project will organize a Dagstuhl Seminar on algorithmic neuroscience, leverage the ELECTRON INRIA-KCL associated team for institutional support, and fund alignment visits—particularly with Bonn's neuroscience community—to recruit a balanced cohort of partner institutions. The Neuromod funding will allow these visits and seminar sponsorship, positioning the consortium to submit a robust MSCA Doctoral Network proposal in 2026.

Congratulations to Laura Piovano and Lou Ruffino, NeuroMod Ph.D. laureates 2025!

Two brilliant students from UniCA have been awarded their Ph.D. grants by the NeuroMod Institute. We congratulate both of them and wish them insightful and exciting 3 years as Ph.D students!



Laura Piovano graduated with very high honours from our MSc "Modeling for Neuronal and Cognitive Systems". She will be working at Inria, under the supervision of Bruno Cessac (Biovision Team) and study "The roles of inhibition and adaptation in retinal motion processing". She has been awarded the 100% NeuroMod grant.



Lou Ruffino is the laureate of the joint call between the EUR Life, Academy 4 and NeuroMod. She graduated with very high honours from the Cellular and Integrated Neurosciences Master in Nice. Her thesis entitled "EXPOSURE : EXPOsome Signatures of Ultra-processed food pollutants: outcomes on brain Regulation" will be carried out at IPMC, under the supervision of Carole Rovère (INSERM).



Throwback to this year's NeuroMod Meeting.

The institute held its annual meeting on July 8-9 at the beautiful Thalazur Hotel in Antibes. The 2025 Meeting in numbers:

- 85 participants,
- 14 talks,
- 22 posters,
- 4 keynotes.

We also hosted a special **symposium about Ageing** this year, organized by Paula Pousinha (IPMC) in **partnership with the Ulysseus network**. We herewith warmly thank them for their help and great energy, as well as all organizers and participants. We hope to welcome you again next year!



A simple thank you.

To our jury presidents: Renaud David and Ingrid Bethus (PhD grants), Fanny Meunier (International Call), Ingrid Bethus (again) and Patricia Reynaud-Bouret (Junior Professor Chair) and to all jury members: your help is invaluable and NeuroMod would not work without your investment.

Current Calls (reminder).

The following calls are currently open:

- The **permanent call for projects** (small interdisciplinary projects): no deadline.
- **Call for interdisciplinary experimentation** (open only to NeuroMod Members): deadline is September 30, 2025. More info about the member status or the call, please write to: aap.experimentation@listes.univ-cotedazur.fr.

Help is always welcome.

The Institute is already looking for its next helpers for following tasks and missions. *Note that we try to have members from all disciplines represented (biology, cognition, modeling, health):*

- Ph.D. Grants Jury (president and members);
- Call for international projects jury (president and members);
- NeuroMod Meeting organization (program and invites): as always, the meeting will be held in June or July at Thalazur in Antibes.

You have time to get involved? Write us at neuromod.dir@univ-cotedazur.fr.



Get involved in the next Newsletter Edition!

We are planning to add a **“Scientific Highlights”** section to our newsletter, and for this we would need your contributions! The idea is to share articles, publications, or events on scientific topics that may be of interest to our community. To do so, please feel free to send us the information by email (chloe.bourgeois@univ-cotedazur.fr), and we will include it in the next edition (scheduled for December).

Welcome to...

11 new students in the M.Sc.
ModNeuroCog and 5 new students in
Cognitive Science.

The 2 Master degrees of the Institute welcomed their new first year students on August 29 and September 2. The M.Sc recruited students from 8 different nationalities: Pakistan, India, Vietnam, China, Sri Lanka, Kazakhztan, Poland and Mexico.

We hope they will thrive in their new environment and we wish them a good semester start.



Jerome Emonet: the new NeuroMod research engineer in interdisciplinary experimentation.

Holder of a Master's degree and a Ph.D. in Neuroscience and Computer Science (Bioinformatics), he focused his thesis on modeling the retino-cortical pathway and visual processing. His strong interdisciplinary background and broad research interests make him an excellent fit for this position. His one-year contract began on July 1st, and he will soon start contributing to projects developed by the NeuroMod members, submitted on our call.
