

ADVANCED TRAINING COURSE

“Neural Circuits of behavior: from synapses to action”

Academic Year 2025/26

Art. 1

The Scuola Normale Superiore is organising for the academic year 2025/2026 - within the **MERITA Project, the network for talent**, with funding of the Piano Nazionale di Ripresa e Resilienza (PNRR) (NRRP, the National Recovery and Resilience Plan), Mission 4 – Education and Research, Component 1, Investment 3.4 "Advanced university training and skills" – "Reinforcement of the Scuole universitarie superiori (the university institutes of higher education)", Public notice pursuant to Director's Decree No. 594/2024 - an advanced training course denominated: **“Neural Circuits of behavior: from synapses to action”**.

The course will be held in person from 5 February to 6 February 6 2026 at the site of the Scuola, Palazzo della Carovana in Piazza dei Cavalieri, for a total of 13 hours.

The official language of the course is English.

The course will have a maximum of 45 participants.

Art. 2

Educational objectives

The course “Neural Circuits of behavior: from synapses to action” has the aim to strengthen knowledge related to the brain mechanisms underlying behavior in health and disease by examining the foundational aspects of learning, memory and social behavior. In particular, it will explore:

- the physiological and molecular processes that underpin memory formation and recall and how these processes are influenced by various internal and external factors
- the impact of neuroplasticity on learning and memory, emphasizing how experiences and learning continuously reshape the brain's structure and function throughout life
- the foundational aspects of the social brain, focusing on how neural circuits facilitate social interactions and behaviors
- the neural mechanisms that support social cognition, empathy, and the interpretation of social cues, which are crucial for navigating complex social environments
- innovative approaches for studying neural circuits using Allen Institute resources.

By bringing together leading research in these areas, this course aims to provide a comprehensive overview of how neural circuits govern behavior, offering insights into both the social brain and the mechanisms of learning and memory.

Art. 3

Those qualifying and admission requirements

The above-described activities are suitable for students of Italian and non-Italian universities enrolled in Undergraduate, Master's or PhD programs and for young researchers.

Admissions requirements: Attendance of Undergraduate/Graduate/PhD programs or being a young researcher in the biological, medical, pharmaceutical, biotechnological, neuroscience or related fields.

The selection of participants will be based on the Curriculum Vitae.

Art. 4

Organisation of the Course

The first day consists of 9 hours of lessons (schedule 8:00 a.m.–1:00 p.m.; 2:00-6:30 p.m., with a 1-hour lunch break). The second day consists of 4 hours (9:00 a.m.–1:00 p.m.).

No final test is envisaged.

Art. 5

Admission applications

Those intending to compete for admission to the course must submit an application with the following [link](#) no later than 15 January 2026.

The following documentation must be attached to the application, on pain of non-admittance to the course:

- an up-to-date CV;
- a valid identity document.

In addition to the mandatory attachments, a poster-style presentation may be attached (the abstract form is available for download at this [link](#)).

The four best poster presentations will be selected to be inserted in the course program as short talks.

All applications arriving late or in a form different from that stated in the article herein, for whatever reason, will not be taken into consideration.

False or mendacious declarations are punishable pursuant to the Penal Code and to the specific Laws, Arts. 75 and 76 of D.PR. 445/2000.

At any moment of the procedure, including after the start of the Course, the Scuola may carry out checks as to the veracity of the declarations submitted and the documents produced and may request to see the documents in the original. In the case of false declarations, the Scuola may invoke a special Rector's Decree for the exclusion of the applicant, except for any ensuing penal responsibilities.

Art. 6

Enrolment fees and benefits

Participation in the course does not entail enrolment fees.

Admission to the course includes participation in the lectures, the educational material and lunch on the first day of the course only.

Based on the ranking, 18 scholarships will be awarded, providing a maximum reimbursement of €250,00 for travel and accommodation expenses. As an additional criterion, with respect to what is set out in art. 3, the distance between the applicant's home institution and the city of Pisa will be considered. No expense reimbursement is provided for candidates affiliated with institutions based in Pisa.

Art. 7

Acceptance procedure

Applicants admitted to the course who intend to take part must confirm their participation, on pain of exclusion, by the deadline and with the procedure indicated in the notice of admission.

Art. 8

Certification issued

On termination of the course, those having attended at least 80% of the lectures, will be awarded by the Scuola Normale Superiore a certificate of participation valid within the limits permitted by law.

Art. 9

Processing of personal data and manager of the procedure

EU Regulation 2016/679, the General Data Protection Regulation, is applicable to the candidates' personal data processing.

The Data Controller of the personal data provided by the interested parties is the Scuola Normale Superiore, a public university institute, located in Piazza dei Cavalieri, 7 Pisa - 56126, in the person of its Director and pro tempore legal representative.

Applicants' personal data will be collected by the Scuola for the purposes of the selection/admission procedure and will be processed for the fulfilment of the same, and, for successful applicants, for the subsequent career management of the PhD students and all connected activities.

Personal data are thus provided to the SNS for the performance of tasks of public interest or at any rate connected to the exercising of its public powers, including the purposes of archiving, historical research and analysis for statistical purposes. Personal data will be processed, also with automated tools (software and databases administered by the SNS and hosted by any contracting entities), in compliance with the principles of accountability, lawfulness, correctness, minimization, transparency, integrity, accuracy, confidentiality and proportionality.

The personal data collected will be communicated or transferred to third parties (public and / or private parties) in the context of institutional relations, for the fulfilment of legal obligations or regulations or of contracts, within the services required by the SNS (access to facilities, etc.).

The personal data collected may be communicated or transferred to parties established in third countries, but only if suitable data protection guarantees and conditions have been ascertained.

The personal data collected will be published on the official online register and on the SNS's institutional website if specified by the law and other regulations of the SNS.

The personal data collected will be processed and stored for the time strictly necessary to achieve the purposes for which they have been collected, with the application of the regulations concerning documentation storage by public institutions.

The data subject may at all times exercise the following rights:

- a) access to personal data, under the terms and conditions of Art. 15 of the Regulations;
- b) the rectification, erasure or restriction of the processing of personal data, under the terms and conditions of Articles 16-18 of the Regulations; erasure is not permitted for data included in any documents that the SNS is required to keep;
- c) the portability of data, under the terms and conditions of Art. 20 of the Regulations;
- d) objection to the processing of his or her data, under Article 21 of the Regulations;
- e) the right to submit a complaint to the Data Protection Authority, by sending a request to the e-mail address privacy@sns.it or via PEC (certified e-mail) to the e-mail address protocollo@pec.sns.it.

For any further information, please contact the Data Protection Officer (DPO), at the e-mail address dpo@sns.it

Art. 10.

Final provisions and referrals, information

The head of the Teaching Activities Service, Dr. Silvia Marcacci, is the administrative manager of the procedure.