

## PhD student Fellowship

The IBMC/i3S has an open position for a **Ph.D. student**, within the scope of the project NCBio: UNLOCKING EXCELLENCE IN RESEARCH AND INNOVATION IN NEUROBIOLOGY AND NEUROLOGICAL DISORDERS AT IBMC/i3S, funded by the European Commission under the topic WIDESPREAD-06-2020 - ERA Chairs

**Scientific Area:** Neurosciences (cell biology of synaptic transmission)

**Internal Reference:** PhD\_student/ERACHAIR\_NCBIO\_/IBMC/3011/2021

**Title:** “NCBio: UNLOCKING EXCELLENCE IN RESEARCH AND INNOVATION IN NEUROBIOLOGY AND NEUROLOGICAL DISORDERS AT IBMC/i3S”

### Work Plan:

Astrocytes are the major non-neuronal cell type in the mammalian brain and are known to interact with neurons and control synaptic transmission – a concept known as the ‘tripartite synapse’. Recent work from our lab (Batiuk et al., Nat Commun, 2020; Bayraktar et al., Nat Neurosci, 2020) suggests that excitatory and inhibitory tripartite synapse formation and function are differentially regulated. Understanding differences in synapse assembly and function are crucial to our understanding of information flow in the CNS and the causes of human diseases associated with hyperexcitability, such as epilepsy, schizophrenia and fragile X.

We are looking to recruit a world-class team to study aspects of inhibitory synapse formation and function, using a variety of cutting-edge techniques, ranging from proteomics through advanced genetics to electrophysiology. Work will be conducted at i3S, one of Portugal’s top science institutes, in the newly created ERANET Chair group headed by Dr. Matthew Holt.

### Requirements:

- Must have obtained a recent M.Sc. in neuroscience. Applicants with a M.Sc. in molecular biology, biochemistry or cell biology with a knowledge of synapse biology will also be considered.
- Must be within the top 10% of year group and committed to a career in top-class science: you are highly motivated and goal-directed.
- Hands-on lab experience (M.Sc. thesis, summer internships etc) is an advantage.
- Capable of working independently and as part of a team.
- Fluent in written and spoken English.

**Legislation:** The fellowship is governed by current legislation (Law 40/2004 amended by DL 123/2019), implemented through specific IBMC regulations covering Research Studentships.

**Length:** 12 months - annually renewable up to 4 years (total)

**Starting date:** during 2022

**Work Place:** Instituto de Biologia Molecular e Celular IBMC / Instituto de Investigação e Inovação em Saúde – i3S, Supervisor: Matthew Holt

**Monthly allowance:** monthly allowance is € 1104,64 (net and tax free), plus social security and university fees (<http://alfa.fct.mctes.pt/apoios/bolsas/valores>).

**Selection Criteria:**

Significant academic achievements up to and including M.Sc. level (40%)

Previous lab experience in the field of neuroscience (30%)

Letter of motivation (20%)

**Jury:** Matthew Holt, Mónica Sousa and João Relvas

**Results:** Final results will be published at [www.ibmc.up.pt](http://www.ibmc.up.pt) and candidates will have 10 working days to comment by email to: [rh@ibmc.up.pt](mailto:rh@ibmc.up.pt)

**Application deadline and submission forms:** from 1st December 2021 until 28th February 2022. Candidates should submit a CV, copy of their M.Sc. certificate and motivation letter (all in PDF format) through the link:

[https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/PhD\\_studentERACHAIR\\_NCBIO\\_IBMC30112021](https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/PhD_studentERACHAIR_NCBIO_IBMC30112021)