



## Calendário 23/24

Mestrado / Doutorado em Neurociências

Horário: As aulas decorrem maioritariamente às 3ª e 5ª feiras das 17:00 às 19:00 horas e às 4ª feiras entre as 09:00 e as 18:00 horas.

| Nome do Módulo/Nome da UC (PT/Eng)  | Carga Horária | Horas de contacto | ECTS | Coordenador(es) do Módulo | Resumo dos Conteúdos Programáticos   | Metodologias de Avaliação   | Calendário de Aulas                           | Dias           | Horários                       | Sala*  | Calendário das Avaliações  |
|---|---------------|-------------------|------|---------------------------|--|---|---|----------------|--------------------------------|--|--|
| Opening Invited Lecture   |               |                   |      |                           |  |   |   |                |                                |  |  |
| Get Together Session  |               |                   |      |                           |  |   |   |                |                                |  |  |
|   |               |                   |      |                           |  |   |   | qui, 14/set/23 | 09:00 - 10:00<br>10:15 - 12:45 | Auditório Almeida Lima<br>(Sala de Aulas da Neurologia,<br>Serviço de Neurologia, Piso 7, HSM) | NA   |
| Neuranatomia e Neuroimagem/ Neuronatomy and Neuroimaging<br><br>UC: Neuroanatomia e Neuropatologia/ Neuronatomy and Neuropathology                              | 112           | 28TP              | 4    | Lia Lucas Neto            | Introduction to Neuroanatomy. Brain: Cerebral Cortex, White Matter, Basal Ganglia, thalamus and hypothalamus, limbic system, emotions and memory, ventricles, meninges and CSF. Cerebellum. Midbrain, pons and medulla oblongata, Cranial Nerves, ascending, descending and association tracts. Spinal cord. Spinal nerves and plexus. Brain arterial and venous vascularization. Autonomous Nervous System. Practical class: human brain dissection and visit to the Anatomy Institute. Human sense organs - Visual, Olfactory, Gustatory, Auditory and Vestibular Systems. Neurological Imaging.   | Teste com questões de escolha múltipla  | ter, 19/set/23<br><br>a<br><br>qui, 28/set/23 | ter, 19/set/23 | 17:00 - 19:00                  | Auditório Prof. David Ferreira (52), piso 0, EEM   | 1ª Época: 02 de outubro (17h00 às 19h00) - Sala: Anfiteatro 58<br><br>2ª Época/Melhoria: a definir |
|   |               |                   |      |                           |  |   |   | qua, 20/set/23 | 17:00 - 19:00                  | Auditório Prof. David Ferreira (52), piso 0, EEM   |  |
|   |               |                   |      |                           |  |   |   | qui, 21/set/23 | 17:00 - 19:00                  | Auditório Prof. David Ferreira (52), piso 0, EEM   |  |
|   |               |                   |      |                           |  |   |   | ter, 26/set/23 | 17:00 - 19:00                  | Anfiteatro 1.10, ERS   |  |
|   |               |                   |      |                           |  |   |   | qua, 27/set/23 | 16:00 - 19:00                  | Auditório Prof. David Ferreira (52), piso 0, EEM   |  |
|   |               |                   |      |                           |  |   |   | qui, 28/set/23 | 17:00 - 19:00                  | Anfiteatro 1.10, ERS   |  |
| Cellular and Molecular Neurobiology / Neurobiologia Celular e Molecular<br><br>UC: Neurobiologia Celular e Molecular  | 112           | 22T; 24TP; 10S    | 4    | Ana M. Sebastião          | Basics of neuronal excitability: electrochemical gradients and equilibrium potential; membrane potential, synaptic potential and action potential. Basics of neuronal communication: inhibitory vs excitatory transmission. Ion channels, ionotropic receptors vs metabotropic receptors. Transducing pathways operated by metabotropic receptors. Glutamatergic and GABAergic transmission – receptors and inactivation mechanisms. Plasticity of glutamatergic and GABAergic synaptic transmission. Cholinergic, noradrenergic and dopaminergic transmission, receptors and inactivation mechanisms; main circuits operated by them. Glial Cells and their ability to control synaptic activity. Concept of neuromodulation and main neuromodulators, concept of co-transmission. Blood-brain barrier: molecular anatomy and interplay within the neurovascular unit. Blood Brain barrier: Models and challenges to develop new therapeutic tools to act in the brain. Imaging and quantifying molecules by immunofluorescence and Western Blot – Applications to neuroscience. Drug-receptor interactions and its relevance for neuroscience research. Evaluation of synaptic activity through electrophysiological recording Techniques. Glutamate receptor traffic, synaptic plasticity and cognitive disorders. New approaches to study the aged synapses. | Journal Club or Lab Visit Report or Extra-Curricular Seminar Report + Avaliação escrita | ter, 03/out/23<br><br>a<br><br>qui, 26/out/23 | ter, 03/out/23 | 17:15 - 19:15                  | Auditório 58, EEM  | 1ª Época: 30 Outubro (14h30 às 16h30) - Sala: Anfiteatro 1.10<br><br>2ª Época/Melhoria: a definir  |
|   |               |                   |      |                           |  |   |   | qua, 04/out/23 | 09:15 - 18:30                  | Aula Magna, EC   |  |
|   |               |                   |      |                           |  |   |   | ter, 10/out/23 | 17:15 - 19:15                  | Anf. 1.10, ERS   |  |
|   |               |                   |      |                           |  |   |   | qua, 11/out/23 | 14:00 - 17:00                  | Sala 52, EEM   |  |
|   |               |                   |      |                           |  |   |   | qui, 12/out/23 | 17:15 - 19:15                  | Anf. 1.10, ERS   |  |
|   |               |                   |      |                           |  |   |   | ter, 17/out/23 | 17:15 - 19:15                  | Auditório 58, EEM  |  |
|   |               |                   |      |                           |  |   |   | qua, 18/out/23 | 09:15 - 18:45                  | Aula Magna, EC   |  |
|   |               |                   |      |                           |  |   |   | qui, 19/out/23 | 17:15 - 19:15                  | Anf. 1.10, ERS   |  |
|   |               |                   |      |                           |  |   |   | ter, 24/out/23 | 17:15 - 19:15                  | Anf. 1.10, ERS   |  |
|   |               |                   |      |                           |  |   |   | qua, 25/out/23 | 15:30 - 17:00                  | Sala 51, EEM   |  |
| qui, 26/out/23  | 17:15 - 19:15 | Anf. 1.10, ERS    |      |                           |  |   |   |                |                                |  |  |
| Master and PhD of Neurosciences ----- Neuronal Degeneration and Regeneration / Degeneração e Regeneração Neuronal<br><br>UC: Degeneração e Regeneração Neuronal | 224           | 22T; 24TP; 10S    | 4    | Ana M. Sebastião          | Neurotrophic factors: key molecules for neuronal survival and plasticity. Cell death in healthy and diseased brain. The role of glial cells in neuroinflammation. Neuronal regeneration. Neural Stem cells and its neuroregenerative potential. Neuroinflammation and microglia: From neuropathological changes to therapeutic implications. Synaptic dysfunction in Rett Syndrome. Infection and transfection approaches at the service of neurosciences. Genetic approaches to fight neurodegenerative diseases. Protein aggregation in Alzheimer's disease. Multiple Sclerosis: new targets for therapeutic intervention. Mitochondrial dysfunction in neurodegenerative diseases. Modulation of neuronal maturation and differentiation by adenosine. Cannabinoid actions upon postnatal and adult neurogenesis. Driving Cell Death Machinery towards Neural Differentiation. Microtubule nucleation during brain development: from mitosis to neuronal morphology augmin takes the lead. Purinergic signaling and brain development. The ubiquitin/proteasome system and control of neuronal death.   | Journal Club or Lab Visit Report or Extra-Curricular Seminar Report + Avaliação escrita | ter, 31/out/23<br><br>a<br><br>qui, 23/nov/23 | ter, 31/out/23 | 17:15 - 19:15                  | Sala 52, EEM   | 1ª Época: 27 Novembro (14h30 às 16h30) - Sala: Anfiteatro 1.10<br><br>2ª Época/Melhoria: a definir |
|   |               |                   |      |                           |  |   |   | qui, 02/nov/23 | 17:15 - 19:15                  | Sala 7-IFA, EEM  |  |
|   |               |                   |      |                           |  |   |   | ter, 07/nov/23 | 17:15 - 19:15                  | Sala 52, EEM   |  |
|   |               |                   |      |                           |  |   |   | qua, 08/nov/23 | 15:30 - 17:00                  | Sala 52, EEM   |  |
|   |               |                   |      |                           |  |   |   | qui, 09/nov/23 | 17:15 - 19:15                  | Sala 52, EEM   |  |
|   |               |                   |      |                           |  |   |   | ter, 14/nov/23 | 17:15 - 19:15                  | Sala 52, EEM<br>(Aula Online - ZOOM)   |  |
|   |               |                   |      |                           |  |   |   | qua, 15/nov/23 | 09:15 - 18:30                  | Sala 51, EEM   |  |
|   |               |                   |      |                           |  |   |   | qui, 16/nov/23 | 17:15 - 19:15                  | Sala 52, EEM   |  |
|   |               |                   |      |                           |  |   |   | ter, 21/nov/23 | 17:15 - 19:15                  | Sala 8-IFA, EEM  |  |
|   |               |                   |      |                           |  |   |   | qua, 22/nov/23 | 15:30 - 17:00                  | Sala 51, EEM   |  |
| qui, 23/nov/23  | 17:15 - 19:15 | Sala 7-IFA, EEM   |      |                           |  |   |   |                |                                |  |  |



## Calendário 23/24

### Mestrado / Doutoramento em Neurociências

Horário: As aulas decorrem maioritariamente às 3ª e 5ª feiras das 17:00 às 19:00 horas e às 4ª feiras entre as 09:00 e as 18:00 horas.

| Nome do Módulo/Nome da UC (PT/Eng)   | Carga Horária  | Horas de contacto | ECTS           | Coordenador(es) do Módulo | Resumo dos Conteúdos Programáticos  | Metodologias de Avaliação   | Calendário de Aulas | Dias           | Horários                       | Sala*  | Calendário das Avaliações  |
|--|----------------|-------------------|----------------|---------------------------|---|---|---------------------|----------------|--------------------------------|--|--|
| Master and PhD in Cognitive Science -----<br>Technologies for Integrative Analysis of the Nervous System | 224            | 22T; 24TP; 10S    | 4              | Ana M. Sebastião          | Nuclear Medicine.<br>Magnetic Resonance.<br>Role of imaging in neurologic diagnosis.<br>Brain Connectivity.<br>Non-invasive magnetic stimulation.<br>BCIs and physiologic computation.  | Avaliação escrita   | ter, 31/out/23      | ter, 31/out/23 | 17:15 - 19:15                  | Sala 2.01, ERS                                   | 1ª Época: 20 Novembro (14h30 às 16h30) - Sala: <b>Anfiteatro 1.10</b><br><br>2ª Época/Melhoria: <i>a definir</i> |
|  |                |                   |                |                           |   |   | qui, 02/nov/23      | qui, 02/nov/23 | 17:15 - 19:15                  | Sala 52, EEM                                     |  |
|  |                |                   |                |                           |   |   | ter, 07/nov/23      | ter, 07/nov/23 | 17:15 - 19:15                  | Sala 2.01, ERS                                   |  |
|  |                |                   |                |                           |   |   | qui, 09/nov/23      | qui, 09/nov/23 | 17:15 - 19:15                  | Sala 2.01, ERS                                   |  |
|  |                |                   |                |                           |   |   | ter, 14/nov/23      | ter, 14/nov/23 | 17:15 - 19:15                  | Sala 2.01, ERS                                   |  |
|  |                |                   |                |                           |   |   | qui, 16/nov/23      | qui, 16/nov/23 | 17:15 - 19:15                  | Sala 50, EEM                                     |  |
|  |                |                   |                |                           |   |   | ter, 21/nov/23      | ter, 21/nov/23 | 17:15 - 19:15                  | Sala 52, EEM                                     |  |
| qui, 23/nov/23   | qui, 23/nov/23 | 14:30 - 16:30     | Sala 52, EEM   |                           |   |   |                     |                |                                |  |  |
| Neuronal Circuits / Circuitos Neurais<br>UC: Neurofisiologia de Sistema                                  | 336            | 34T; 34TP; 16S    | 4              | Ana M. Sebastião          | Mechanisms of drug dependence. Reward and Aversion in the brain: from cells to circuits to behaviour. Neuronal correlates of psychiatric diseases. Brain Maps for Decision-making. Neuroimaging: an overview. Optogenetic manipulation of neuronal circuits. The involvement of astrocytes in cortico-limbic function and behavior. Circuitry dysfunction in absence epilepsy. Animal Behavioral Testing in Theory and Practice: How to Assess Memory, Anxiety and Depression. Animal models of epilepsy. Nociceptive pathways and Mechanisms involved in the genesis of pain.  | Journal Club or Lab Visit Report or Extra-Curricular Seminar Report + Avaliação escrita | ter, 28/nov/23      | ter, 28/nov/23 | 17:15 - 19:15                  | Anf. 1.10, ERS                                   | 1ª Época: 11 Dezembro (14h30 às 16h30) - Sala: <b>Anfiteatro 1.10</b><br><br>2ª Época/Melhoria: <i>a definir</i> |
|  |                |                   |                |                           |   |   | qua, 29/nov/23      | qua, 29/nov/23 | 09:15 - 18:30                  | Auditório 57, EEM                                |  |
|  |                |                   |                |                           |   |   | qui, 30/nov/23      | qui, 30/nov/23 | 17:15 - 19:15                  | Anf. 1.10, ERS                                   |  |
|  |                |                   |                |                           |   |   | ter, 05/dez/23      | ter, 05/dez/23 | 17:15 - 19:15                  | Auditório 58                                     |  |
|  |                |                   |                |                           |   |   | qua, 06/dez/23      | qua, 06/dez/23 | 17:00 - 18:30                  | Anf. 1.10, ERS                                   |  |
| qui, 07/dez/23   | qui, 07/dez/23 | 17:15 - 19:15     | Anf. 1.10, ERS |                           |   |   |                     |                |                                |  |  |
| Neuroethics / Neuroética<br>UC: Neuroética   | 14             | 4T                | 0,5            | Diogo Teles               | Ethics of Neurosciences and Neurosciences of Ethics. Conscious States. Advanced Directives. Chronic disorders of consciousness (doenças crónicas da consciência). The ethics in neurological research. Ethics and legislation in animal research. Role of an Ethics Committee in a University Hospital. Artificial Intelligence: a view on Morality, or artificial agents with qualities. Reciprocal inputs between Neuroscience and Robotics. Neurosciences at CAML.   | Trabalho individual escrito   | ter, 12/dez/23      | ter, 12/dez/23 | 17:15 - 19:15                  | Sala 7   | 1ª Época: <i>a definir</i><br><br>2ª Época/Melhoria: <i>a definir</i>  |
|  |                |                   |                |                           |   |   | qua, 13/dez/23      | qua, 13/dez/23 | 09:30 - 17:10                  | Sala 7   |  |
|  |                |                   |                |                           |   |   | qui, 14/dez/23      | qui, 14/dez/23 | 17:15 - 19:15                  | Sala 7   |  |
|  |                |                   |                |                           |   |   | ter, 19/dez/23      | ter, 19/dez/23 | 17:15 - 19:15                  | Sala 7   |  |
| Autonomic Function / Função Autonómica<br>UC: Neurofisiologia de Sistema                                 | 336            | 34T; 34TP; 16S    | 2              | Vera Geraldes             | Functional organization of the autonomic nervous system: Receptors and autonomic neurotransmission. Sympathetic preganglionic neurons and determinants of sympathetic nerve discharge. Vagal preganglionic neurons. Central autonomic pathways. Sensory innervation of the viscera. Regulation of body homeostasis: Cardiorespiratory control. Autonomic regulation of urinary bladder. Studying the autonomic nervous system: Animal studies and human evaluation: Invasive vs non invasive methodologies. Biological signal processing and the search for an autonomic signature. Maintenance of a steady-state: ANS and hypertension. Sleep and autonomic function. Alterations in autonomic function in spinal cord injury. Autonomic influence on paroxysmal atrial fibrillation. Reflex syncope and autonomic function. | Trabalho individual escrito   | ter, 02/jan/24      | ter, 02/jan/24 | 17:30 - 19:30                  | Auditório Prof. David Ferreira (52), piso 0, EEM | 1ª Época: <i>a definir</i><br><br>2ª Época/Melhoria: <i>a definir</i>  |
|  |                |                   |                |                           |   |   | qua, 03/jan/24      | qua, 03/jan/24 | 17:30 - 19:30                  | Auditório Prof. David Ferreira (52), piso 0, EEM |  |
|  |                |                   |                |                           |   |   | qui, 04/jan/24      | qui, 04/jan/24 | 17:30 - 19:30                  | Anfiteatro 1.10, ERS                             |  |
|  |                |                   |                |                           |   |   | ter, 09/jan/24      | ter, 09/jan/24 | 17:30 - 19:30                  | Anfiteatro 1.10, ERS                             |  |
|  |                |                   |                |                           |   |   | qua, 10/jan/24      | qua, 10/jan/24 | 17:30 - 19:30                  | Anfiteatro 1.10, ERS                             |  |
|  |                |                   |                |                           |   |   | qui, 11/jan/24      | qui, 11/jan/24 | 17:30 - 19:30                  | Anfiteatro 1.10, ERS                             |  |
| Neuropatologia/ Neuropathology<br>UC: Neuroanatomia e Neuropatologia/ Neuroanatomy and Neuropathology    | 112            | 28TP              | 4              | José Pimentel             | Normal CNS I and PNS histopathology. Basic knowledge of the histological techniques. Brain tumors pathology and epileptogenic tumors. Molecular biology of the gliomas. Temporal lobe epilepsies: epileptogenesis and pathology. Pathology of dementias. Familial amyloidosis polyneuropathy. Elemental lesions of CNS and PNS. Pathological aspects of myopathies. Neurocutaneous biopsies.  | Trabalho individual escrito   | ter, 16/jan/24      | ter, 16/jan/24 | 17:00 - 19:00                  | Anfiteatro 1.10, ERS                             | 1ª Época: <i>a definir</i><br><br>2ª Época/Melhoria: <i>a definir</i>  |
|  |                |                   |                |                           |   |   | qua, 17/jan/24      | qua, 17/jan/24 | 09:00 - 12:00<br>14:00 - 17:00 | Laboratório Neuropatologia (Piso 8, HSM)         |  |
|  |                |                   |                |                           |   |   | qui, 18/jan/24      | qui, 18/jan/24 | 17:00 - 19:00                  | Anfiteatro 1.10, ERS                             |  |
|  |                |                   |                |                           |   |   | ter, 23/jan/24      | ter, 23/jan/24 | 17:00 - 19:00                  | Auditório 58 (Piso -1, EEM)                      |  |
|  |                |                   |                |                           |   |   | qua, 24/jan/24      | qua, 24/jan/24 | 09:00 - 12:00<br>14:00 - 17:00 | Laboratório Neuropatologia (Piso 8, HSM)         |  |
|  |                |                   |                |                           |   |   | qui, 25/jan/24      | qui, 25/jan/24 | 17:00 - 19:00                  | Auditório 58 (Piso -1, EEM)                      |  |



## Calendário 23/24

| Mestrado / Doutoramento em Neurociências  |               |                   |      |                           | Horário: As aulas decorrem maioritariamente às 3ª e 5ª feiras das 17:00 às 19:00 horas e às 4ª feiras entre as 09:00 e as 18:00 horas.  |  |   |                |                                 |           |   |
|---|---------------|-------------------|------|---------------------------|---|--|---|----------------|---------------------------------|-----------|---|
| Nome do Módulo/Nome da UC (PT/Eng)  | Carga Horária | Horas de contacto | ECTS | Coordenador(es) do Módulo | Resumo dos Conteúdos Programáticos  | Metodologias de Avaliação                  | Calendário de Aulas                           | Dias           | Horários                        | Sala*     | Calendário das Avaliações                               |
| Clinical Neurophysiology / Neurofisiologia Clínica<br>UC: Neurofisiologia de Sistema                                    | 336           | 34T; 34TP; 16S    | 4,5  | Mamede de Carvalho        | Instrumentation and Technical Notes on Clinical Neurophysiology; Axonal Excitability; Cortical Stimulation and Deep Brain Stimulation; Electroencephalography and Video-EEG Monitoring; Electrocardiography; Electromyography; Evoked Potentials; Magnetic Stimulation; Transcranial and Trans-spinal direct-current stimulation; Sleep Study; Small-Fiber Neuropathy; Spinal cord Physiology; Vestibular Function.   | Teste de escolha múltipla                  | ter, 30/jan/24<br><br>a<br><br>qui, 15/fev/24 | ter, 30/jan/24 | 17:15 - 19:15                   | Sala 7    | 1ª Época: a definir<br><br>2ª Época/Melhoria: a definir |
|   |               |                   |      |                           |   |  |   | qua, 31/jan/24 | 11:30 - 13:00                   | Sala 7    |   |
|   |               |                   |      |                           |   |  |   | 14:00 - 17:00  | Visita a Laboratório (IMM, EEM) |           |   |
|   |               |                   |      |                           |   |  |   | qui, 01/fev/24 | 17:15 - 19:15                   | a definir |   |
|   |               |                   |      |                           |   |  |   | ter, 07/fev/23 | 11:15 - 12:30                   | a definir |   |
|   |               |                   |      |                           |   |  |   | 14:00 - 17:00  | Visita a Laboratório (IMM, EEM) |           |   |
|   |               |                   |      |                           |   |  |   | qui, 08/fev/24 | 17:15 - 19:15                   | a definir |   |
|   |               |                   |      |                           |   |  |   | ter, 13/fev/24 | 17:15 - 19:15                   | a definir |   |
| Biostatistics / Bioestatística<br>UC: Bioestatística  | 98            | 10T; 10TP; 5S     | 3,5  | Paulo Nogueira            | Planning a study and Exploratory Data Analysis; Concept of a Statistical Test; Tests to compare independent samples; Confidence intervals; Survival analysis: Kaplan-Meier, log-rank test.  | Teste de escolha múltipla                  | ter, 20/fev/24<br><br>a<br><br>qui, 07/mar/24 | ter, 20/fev/24 | 17:00 - 19:00                   | a definir | 1ª Época: a definir<br><br>2ª Época/Melhoria: a definir |
|   |               |                   |      |                           |   |  |   | ter, 21/fev/23 | 17:00 - 19:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | qua, 22/fev/23 | 17:00 - 19:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | ter, 27/fev/24 | 17:00 - 19:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | qua, 28/fev/24 | 17:00 - 19:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | qui, 29/fev/24 | 17:00 - 19:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | ter, 05/mar/24 | 17:00 - 19:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | qua, 06/mar/24 | 17:00 - 19:00                   | a definir |   |
| qui, 07/mar/24  | 17:00 - 19:00 | a definir         |      |                           |   |  |   |                |                                 |           |   |
| Research in Clinical Neurosciences / Investigação Clínica em Neurociências<br>UC: Investigação Clínica em Neurociências | 168           | 17T; 17TP; 8S     | 6    | Patrícia Canhão           | Basic tools of clinical research in neurosciences; Type of studies: case reports and case-series, case-control studies, cohort studies, systematic reviews of observational studies; Random and systematic errors; Risk factors and causal association; Prognostic research; Diagnostic Tests; Translational research in neurosciences; Clinical research in neurophysiology; Research in genetic neurological disorders; Critical appraisal of literature. | Trabalho individual escrito + Journal Club | ter, 12/mar/24<br><br>a<br><br>qui, 21/mar/24 | ter, 12/mar/24 | 17:00 - 19:00                   | a definir | 1ª Época: a definir<br><br>2ª Época/Melhoria: a definir |
|   |               |                   |      |                           |   |  |   | qua, 13/mar/24 | 09:00 - 17:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | qui, 14/mar/24 | 17:00 - 19:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | ter, 19/mar/24 | 17:00 - 19:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | qua, 20/mar/24 | 09:00 - 17:00                   | a definir |   |
|   |               |                   |      |                           |   |  |   | qui, 21/mar/24 | 17:00 - 19:00                   | a definir |   |



## Calendário 23/24

| Mestrado / Doutoramento em Neurociências   |               |                   |      |                            | Horário: As aulas decorrem maioritariamente às 3ª e 5ª feiras das 17:00 às 19:00 horas e às 4ª feiras entre as 09:00 e as 18:00 horas.   |                                       |                     |                |               |  |   |
|--|---------------|-------------------|------|----------------------------|--|---------------------------------------|---------------------|----------------|---------------|--|---|
| Nome do Módulo/Nome da UC (PT/Eng)   | Carga Horária | Horas de contacto | ECTS | Coordenador(es) do Módulo  | Resumo dos Conteúdos Programáticos   | Metodologias de Avaliação             | Calendário de Aulas | Dias           | Horários      | Sala*  | Calendário das Avaliações                           |
| Therapeutic Research in Neurosciences / Investigação Terapêutica em Neurociências<br>UC: Investigação Clínica em Neurociências | 168           | 17T; 17TP; 8S     | 3    | Joaquim Ferreira           | Drug discovery and preclinical development; Clinical development of medicinal products; How to design a clinical trial; Clinical outcomes and biomarkers; Safety of medicinal products and medical devices; Research with non-pharmacologic therapeutic interventions; Systematic reviews, meta-analysis and critical appraisal of data; Introduction to pharmacoeconomics.  | Trabalho individual escrito           | ter, 02/abr/24      | ter, 02/abr/24 | 17:15 - 19:15 | a definir  | 1ª Época: a definir<br>2ª Época/Melhoria: a definir |
|  |               |                   |      |                            |  |                                       | qua, 03/abr/24      | qua, 03/abr/24 | 14:00 - 18:00 | a definir  |   |
|  |               |                   |      |                            |  |                                       | qui, 04/abr/24      | qui, 04/abr/24 | 14:00 - 18:00 | a definir  |   |
|  |               |                   |      |                            |  |                                       | ter, 09/abr/24      | ter, 09/abr/24 | 17:15 - 19:15 | a definir  |   |
|  |               |                   |      |                            |  |                                       | qua, 10/abr/24      | qua, 10/abr/24 | 14:00 - 18:00 | a definir  |   |
|  |               |                   |      |                            |  |                                       | qui, 11/abr/24      | qui, 11/abr/24 | 17:15 - 19:15 | a definir  |   |
| Cognitive Functions / Funções Cognitivas<br>UC: Neuropsicologia  | 140           | 14T; 14P; 7S      | 4,5  | Isabel Pavão Martins       | Functional organization of language: The study of focal lesions; Models of learning and decision making; Assessment of memory systems. Right hemisphere syndromes and space delusions; Executive functions and the frontal lobes; Cognitive rehabilitation.  | Journal Club + Teste escolha múltipla | ter, 16/abr/24      | ter, 16/abr/24 | 17:15 - 19:15 | a definir  | 1ª Época: a definir<br>2ª Época/Melhoria: a definir |
|  |               |                   |      |                            |  |                                       | qua, 17/abr/24      | qua, 17/abr/24 | 09:00 - 10:30 | Laboratório Investigação Linguagem, Piso 8 (HSM) |   |
|  |               |                   |      |                            |  |                                       | qui, 18/abr/24      | qui, 18/abr/24 | 17:15 - 19:15 | a definir  |   |
|  |               |                   |      |                            |  |                                       | ter, 23/abr/24      | ter, 23/abr/24 | 17:15 - 19:15 | a definir  |   |
|  |               |                   |      |                            |  |                                       | qua, 24/abr/24      | qua, 24/abr/24 | 09:00 - 10:30 | Laboratório Investigação Linguagem, Piso 8 (HSM) |   |
|  |               |                   |      |                            |  |                                       | qui, 02/mai/24      | qui, 02/mai/24 | 17:15 - 19:15 | a definir  |   |
| Cognitive Deterioration in Ageing and Dementia / Deterioração Cognitiva no Idoso e Demência<br>UC: Neuropsicologia             | 140           | 14T; 14P; 7S      | 0,5  | Alexandre de Mendonça      | Historical notes about cognition and ageing. General theories of ageing of the brain and of the organism. Markers of brain ageing. Brain ageing in different species. Neuronal and synaptic morphologic changes. Electrophysiological changes of ageing, including Long Term Potentiation. Neurochemical changes of cholinergic, dopaminergic, adenosinergic systems. The biological significance of brain ageing. Subjective Memory Complaints. Neuropsychological tests. Genetic factors. Cerebrospinal fluid biomarkers. Magnetic resonance imaging. PETscan biomarkers. Historical perspective, are age related white matter changes relevant or not. Prevalence and risk factors. Cognitive changes associated with age related white matter changes (ARWMC). Behavioral symptoms due to ARWMC. Physical and neurological changes other than cognition due to ARWMC. How to implement a longitudinal study across borders. The "longitudinal design": advantages and limitations. | Trabalho individual escrito           | ter, 07/mai/24      | ter, 07/mai/24 | 17:15 - 19:15 | a definir  | 1ª Época: a definir<br>2ª Época/Melhoria: a definir |
|  |               |                   |      |                            |  |                                       | qua, 08/mai/24      | qua, 08/mai/24 | 16:00 - 19:00 | a definir  |   |
|  |               |                   |      |                            |  |                                       | qui, 09/mai/24      | qui, 09/mai/24 | 17:15 - 19:15 | a definir  |   |
| Introduction to Psychiatric Disorders / Introdução aos Transtornos Psiquiátricos<br>UC: Neuropsicologia                        |               |                   |      | Diogo Teles; Filipa Novais | Programme to be delivered in due time.   | a definir                             | ter, 14/mai/24      | ter, 14/mai/24 | a definir     | a definir  | 1ª Época: a definir<br>2ª Época/Melhoria: a definir |
|  |               |                   |      |                            |  |                                       | qua, 15/mai/24      | qua, 15/mai/24 | a definir     | a definir  |   |
|  |               |                   |      |                            |  |                                       | qui, 16/mai/24      | qui, 16/mai/24 | a definir     | a definir  |   |
| Computational Neuroscience / Neurociência Computacional<br>UC: Neurofisiologia de Sistema                                      | 336           | 34T; 34TP; 16S    | 1,5  | Tiago Maia                 | Computational Cognitive Neuroscience; Computational Psychiatry; Computational Models of Single Neurons and Neuronal Networks; Fitting Computational Models to Behavioral.  | Trabalho individual escrito           | ter, 21/mai/24      | ter, 21/mai/24 | 17:15 - 19:15 | a definir  | 1ª Época: a definir<br>2ª Época/Melhoria: a definir |
|  |               |                   |      |                            |  |                                       | qua, 22/mai/24      | qua, 22/mai/24 | 10:30 - 12:30 | a definir  |   |
|  |               |                   |      |                            |  |                                       | qua, 22/mai/24      | qua, 22/mai/24 | 13:30 - 15:30 | a definir  |   |
|  |               |                   |      |                            |  |                                       | qui, 23/mai/24      | qui, 23/mai/24 | 16:30 - 18:30 | a definir  |   |
|  |               |                   |      |                            |  |                                       | qui, 23/mai/24      | 17:15 - 19:15  | a definir     |  |   |

\* Para o 2º semestre, a informação das salas só será disponibilizada pela Gestão de Espaços a partir de janeiro 2024.

A Comissão Científica do Curso reserva-se o direito de poder alterar os horários agora indicados. Neste caso serão informados atempadamente pelos serviços do IFA.