

## **Study Neuroscience at the University of Southampton through our BSc Hons Biomedical Sciences or Pharmacology Degree Programmes.**

Our degree programmes in Biological Sciences provide an initial broad training in core principles of biosciences encapsulating cell physiology, biochemistry, pharmacology and genetics ([www.southampton.ac.uk/biosci/undergraduate/index.page](http://www.southampton.ac.uk/biosci/undergraduate/index.page)). This provides students with the broad platform of understanding that is needed to build towards increasing specialization down a **neuroscience stream**. This specialization can be selected by our students and achieved as they progress into years two and three of the Biomedical Science Program. In year two there are specialist Neuroscience and Pharmacology courses which cement a fundamental understanding of brain function and neuropharmacology. This allows students to take advantage of a range of third year courses in which brain function and brain diseases form the central focus. Taught courses in Molecular and Cellular Neuroscience, Systems Neuroscience, Neuropharmacology of CNS disorders, Neurodegeneration and Molecular Pharmacology are taken. This is supplemented with a two semester in depth research project which can be taken in of our Southampton Neuroscience Group research laboratories ([www.southampton.ac.uk/song](http://www.southampton.ac.uk/song)). SoNG's research expertise spans a broad range of neuroscience related topics from the structural basis of ion channel function through to pathology and treatments of major brain diseases (e.g. Alzheimer's). The basic science education that focuses on Neuroscience also makes use of the wider engineering expertise at the University, which are fundamental to many technologies used in modern neuroscience. In a similar way the clinical relevance of neuroscience are supported by input into our courses from members of SoNG working in Medicine and Psychology. Thus, our program provides our undergraduate intake with the opportunity to mature their interest in Neuroscience in an environment that trains them to understand and practically investigate experimental principles that underpin brain function.

Other opportunities incorporated in our programme include the opportunity to take a year out in industry and over several years we have successfully placed undergraduates in the neuroscience sector of the pharmaceutical industry e.g. at Eli Lilly. Furthermore, we actively encourage our undergraduates to participate in neuroscience outreach and to benefit from the experience this gives them in understanding the broader context and importance of neuroscience and having a dialogue with the public on issues concerning research. We are committed to providing our undergraduates with a degree programme that is enriched with practical laboratory experience, exposure to internationally leading research in a friendly, engaging and vibrant environment. This enables our students to graduate with a deep understanding of the discipline of neuroscience combined with well-developed analytical and critical skills and to perform as excellent communicators. This provides a firm basis for varied career paths ([www.southampton.ac.uk/biosci/alumni/our\\_alumni.page](http://www.southampton.ac.uk/biosci/alumni/our_alumni.page)) and for more specialist future postgraduate study in neuroscience.