



**UCD Systems Biology  
IrelandInstitute**

UCD Systems Biology Ireland  
University College Dublin,  
Belfield, Dublin 4, Ireland

T +353 1 716 6831

## PhD position

A PhD position is now available in Systems Biology Ireland UCD under the supervision of Dr David Gómez Matallanas to investigate the molecular bases of colorectal cancer (CRC). The student will work in close collaboration with the groups of Prof Walter Kolch and Dr Dirk Fey.

**Brief Description:** The PhD project is funded as part of the Horizon 2020 EU project COLOSSUS (*Advancing a Precision Medicine Paradigm in metastatic Colorectal Cancer: Systems based patient stratification solutions*). COLOSSUS aims to provide new and more effective ways to classify patients with a specific type of colorectal cancer (microsatellite stable RAS mutant metastatic colorectal cancer or MSS RAS mt mCRC) and to develop better treatments for them. Our ultimate goal is to deliver a personalised medicine approach for patients with MSS RAS mt mCRC that is currently not available. The student will learn molecular biology of cancer and get advance knowledge of systems biology and be part of the PhD programme of the UCD School of Medicine.

**Person Specification:** We are looking for a highly motivated, passionate PhD candidate with the ability to independently plan and conduct the research project while integrating into an interdisciplinary research environment and interested in working with patient advocates. This position will primarily involve lab work and the student will perform high throughput proteomics analysis and molecular characterisation CRC tumours. Our group is composed by a multidisciplinary team involving wet and dry researchers. The PhD student will work in close collaboration with mathematical modellers and computational scientist to develop and validate mathematical models. The applicant should have a strong background in biological sciences. Experience in molecular biology is a must and experience in mass-spectrometry based proteomics is highly valued. Familiarity with systems biology approaches (bioinformatics, mechanistic mathematical modelling), is **not** a requirement but applicants with no background in these areas should be keen to learn. Excellent analytical and communication skills are preferable.

**The Institute:** Systems Biology Ireland (SBI; <http://www.ucd.ie/sbi/>) focuses on principles of the design and function of biological signal transduction networks and applying this knowledge to important questions in biology and systems medicine. To accomplish these goals, SBI uses mathematical and computational modelling approaches in combination with cutting edge experimental technologies in proteomics, genomics, imaging and flow cytometry, as well as biochemical, cell biology and molecular biology methods.

**Stipend and fees:** Funding is available for four years. The successful candidate will receive a tax-free stipend of €18,500 per annum. In addition, €6,810 will be made available towards registration fees per annum. Additional funds are available for computer equipment and conference travel.

**Closing date:** Applications will be reviewed as they are received, with interviews carried out once suitable candidates are identified. The intention is for the candidate to start in September 2018.

**Application:** Please send a CV, brief cover letter, and contact details of two referees to Dr David Gómez Matallanas ([david.gomez@ucd.ie](mailto:david.gomez@ucd.ie)). Informal inquiries to the same address are more than welcome.

Further information can be found at: <http://www.ucd.ie/sbi/research/researchgroups/gomezgroup/> and <https://www.colossusproject.eu/>