This post offers an opportunity to work within the Computational Systems Biology group at the University of Sheffield under the supervision of Dr Dawn Walker. The post-holder will work on a Wellcome Trust funded project **"A combined in vitro and in virtuo multi-scale approach to understanding calcium signalling as a signature and integrator of cellular response"** . This interdisciplinary project aims to improve our understanding of how biological cells transmit and respond to biochemical signals and will involve the development of computational models. Applicants should have a PhD (or equivalent experience) in an engineering or physical science subject, with solid experience in numerical simulation. Excellent programming skills are essential as is an ability to work in an interdisciplinary group.

Your main role will be to develop and implement numerical-based models of calcium-based cellular communication and downstream signalling processes generated in response to particular stimuli, and agent-based models of cellular response to the cues received. The ability to work closely with laboratory-based biologists in order to inform and validate these models will be essential. You will also be required to write scientific papers and present your work at interdisciplinary meetings and conferences.

You can view the supporting documentation by clicking here and entering the job reference number UOS001437.