Postdoctoral Research Associate position available!

We are looking for a passionate, intellectually curious, and creative postdoctoral research associate with a strong interest in stem cells and tissue regeneration to join our lab.

The **Patel lab** at the School of Cellular and Molecular Medicine, **University of Bristol** studies how tissues regenerate themselves after damage.

To better understand this process, we use the adult *Drosophila* intestine (or midgut), which has many similarities to our own intestine. Upon injury, the adult fly midgut regenerates itself by replacing damaged and lost cells via rapid intestinal stem cell (ISC) proliferation. One potential mechanism that may govern how midguts sense and respond to tissue damage is the production of reactive oxygen species (ROS), which have been shown to play an essential role in whole body, appendage, and tissue regeneration in various organisms. Likewise, in adult fly midguts, ROS production also promotes ISC-mediated regeneration. Downstream effectors of this process include ROS-mediated Ask1-p38 stress signalling activation in damaged enterocytes, which in turn stimulates production of an ISC mitogen (Patel et al., 2019; *Nat. Commun.*, PMID: 31554796). This mechanism, however, only partially accounts for the role of ROS production in midgut regeneration.

We are now using genetic, proteomic and transcriptomic approaches to determine how damaged midguts respond to ROS and how ROS promote adult fly midgut regeneration. Over the last two years, we have established several exciting projects making it an excellent time to join our lab. Our work will have far-reaching impact on our understanding of regeneration in many contexts and may help develop therapies for tissue regeneration, inflammatory diseases and cancer.

Our lab is generously funded by the Wellcome Trust, and you will have access to top-notch core facilities (*e.g.,* proteomics, transcriptomics, flow cytometry and imaging) for your work, travel funds to attend conferences and access to staff development courses.

Applicants should have an undergraduate degree and PhD (awarded or soon to be awarded) in cell or developmental biology or in a related subject. Expertise with *Drosophila* genetics, molecular biology, microscopy, transcriptomics, flow cytometry or bioinformatics is a plus but not essential.

To apply, please send your CV and cover letter (2 pages max) to Dr Parthive Patel at **p.patel@bristol.ac.uk**. Your cover letter should include a) a description of your most important research contributions, why your research is important and what impact it has had, b) a statement of your research interests and career aspirations and c) an explanation of why you think our lab is the best environment for your postdoctoral training.

The full-time appointment is available **immediately** (flexible start) and will be initially for 3 years with the possibility of an extension for 1 more year.

Non-UK candidates will be supported to obtain endorsement for a fast track Global Talent Visa. Information about reimbursement of immigration and relocation costs can be found at: http://www.bristol.ac.uk/jobs/relocation-support. The grant will cover the Immigration Health Surcharge associated with applying for a visa.

We welcome applications from around the world and from under-represented individuals in science.

Starting salary will be commensurate with experience (£34,304-38,587, approx. £2249-2492 (2660-2947€) take home/month). We also offer a generous pension scheme: https://www.bristol.ac.uk/directory/finance/pensions/uss/.

For more information, please visit www.gutstresslab.org. Find us on Twitter @gutstresslab.

The city of Bristol offers a high quality of life and is often ranked the best place to live in the UK.