

From the Portland Press journals – Spring 2021!

Portland Press is the wholly owned publisher of the Biochemical Society, publishing seven journals across the life sciences in support of the Society's aim to disseminate molecular bioscience. Find out what's going in across the portfolio, the latest news and content in this update.

New collections

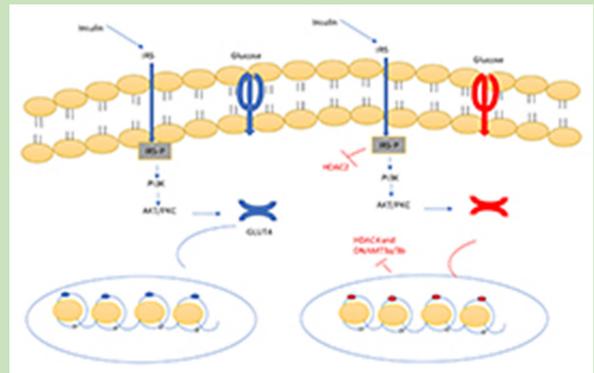
Celebrating 100 years of insulin research

April 2021 marks 100 years since the discovery of insulin, a peptide hormone produced in the pancreas and responsible for promoting the absorption of glucose from the circulating blood into the liver and other tissues. Insulin has been shown to be a key signalling regulator. Decreased or absent insulin activity is the cause of diabetes – type 1 diabetes is an autoimmune disease leading to the destruction of the cells which produce insulin, while type 2 diabetes is generally related to a rise in insulin resistance or a loss of insulin sensitivity. Such is its importance to human health. Insulin was the first protein to be fully sequenced by Frederick Sanger in 1951 and the first protein to be produced by DNA recombinant technology in 1978, and research has so far yielded two Nobel Prizes.

If you're new to metabolism (or you need a refresh) check out our *Understanding Biochemistry* article on metabolism; we've included it here as a primer for you. This collection includes some of the research, reviews and commentaries published in the field of diabetes, metabolic disease and insulin signalling across the Portland Press portfolio.

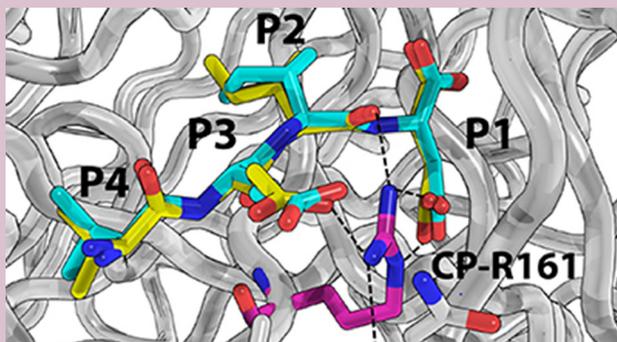
If you didn't see the April issue of *The Biochemist*, which explores insulin signalling and diabetes, be sure to check it out – all available online here FREE <https://portlandpress.com/biochemist/issue/43/2>

We hope that you find this collection interesting, you can check it out online here <http://bit.ly/Insulin100PPL>



Protein structure and function

Proteins are complex molecules, with critical roles for all living organisms, but what do we know about the structure and function of proteins themselves? This collection from the Biochemical Society and Portland Press brings you the best research and reviews from across the molecular life sciences, including the following:



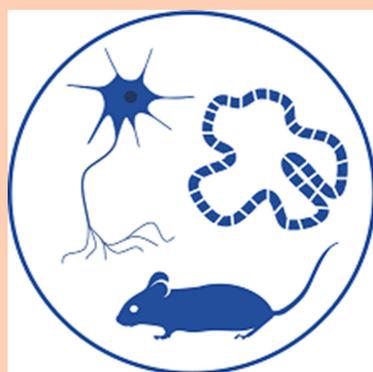
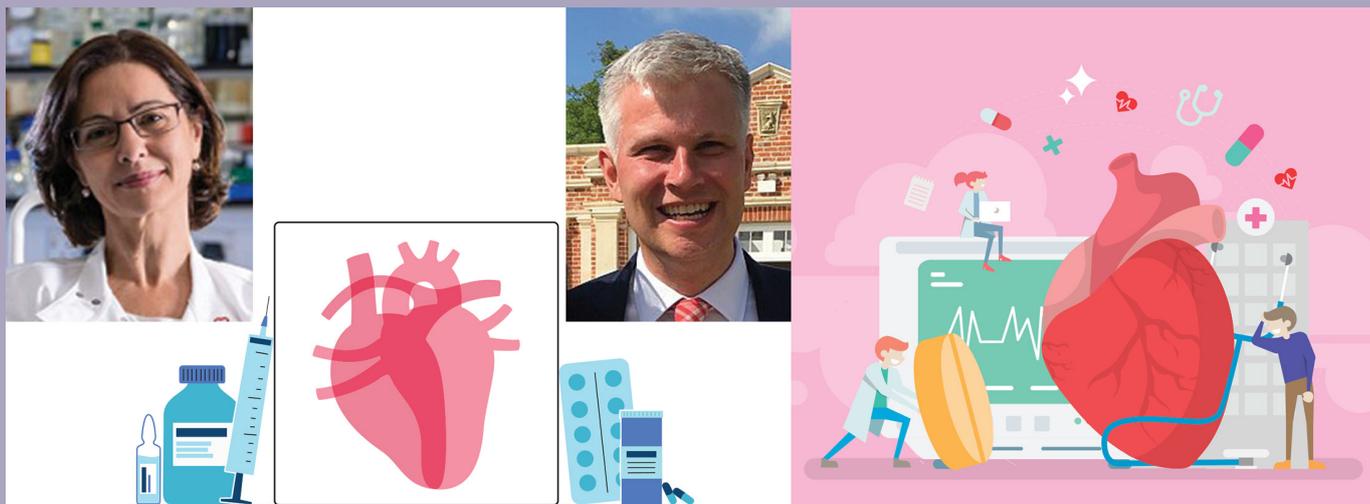
- Those wanting a comprehensive introduction to the topic should read 'Uncovering protein structure' from our *Understanding Biochemistry* series, aimed at those 16+.
- Digestible mini-reviews explore niche protein functions and tools to study proteins, while in-depth reviews offer new insights into proteins in plants, the central nervous system and COVID-19.
- Original papers investigating proteins in Parkinson's disease, *Escherichia coli* virulence, DNA binding and more.

We hope this collection will have something of interest to everyone and encourage you to check it out here <https://portlandpress.com/collection/7543/Protein-structure-and-function>.

Clinical Science collection on cardiovascular oncology now open for research submissions

With Guest Editors Professor Rhian Touyz and Dr Ninian Lang (University of Glasgow), *Clinical Science* is pleased to call for submissions in the theme of cardiovascular oncology. The last few years have seen dramatic improvements in cancer survival, in large part because of the rapid development of an expanding range of novel anti-cancer therapies. However, a number of these modern anti-cancer drugs have unwanted cardiovascular effects and the potential for the cardiovascular toxicity associated with these drugs often reflects overlap between pathogenic cancer mechanisms and physiological pathways required for normal cardiovascular function.

Clinical Science is compiling a collection to reflect the growing relevance of **cardiovascular oncology** as a specialty that aims to refine our understanding and management of these competing risks. This collection will bring together reviews and original research articles examining the intersection between cancer treatments and their potentially harmful cardiovascular effects as well as addressing the cardiovascular effects of malignancy *per se*. Submissions are encouraged online or you can contact Editorial@Portlandpress.com if you have any queries.



Emerging technologies for research models of human neuronal disorders *in vivo* and *in vitro*: open for submissions!

In vitro and *in vivo* models are essential to our understanding of human disease. **But how well can a rodent model really capture a human disease?** This has been a major challenge for complex disorders that involve the nervous system.

Recent advances in stem cell technology have enabled the culture of human, patient-specific neurons and also tissue-based brain models termed '**organoids**'. But to what extent can these fully capture the complexity of the human brain and so provide insight into the causes and treatment of neuronal disorders?

Along with Editor-in-Chief Professor Clare Stanford and Guest Editor Dr Tom Cunningham, *Neuronal Signaling* hopes to explore this question in a forthcoming collection, and the community is invited to submit research and reviews on this topic to the journal.

Find out more, including how to submit here http://bit.ly/NS_Models