



Expert UK-based CRO offering customised bioassay development, pharmacological profiling and compound screening

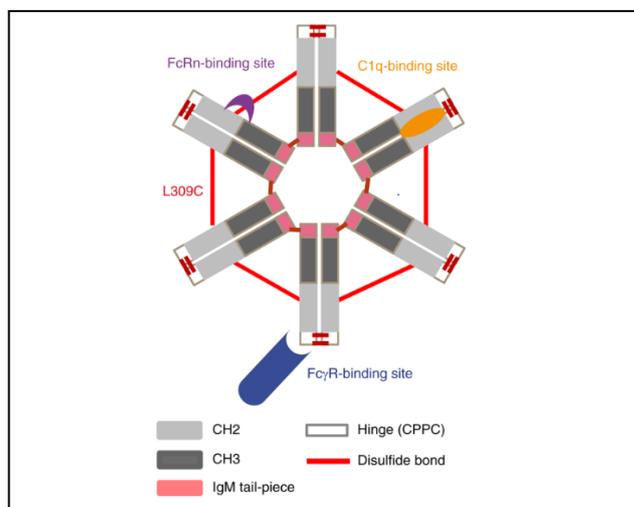
## Welcome to the latest edition of our newsletter

Apart from all the exciting client and in-house R&D projects that our scientists have been working on, Aurelia Bioscience has been busy participating in exhibitions, conferences, writing articles, etc over the last quarter. Below are some of our latest news and scientific updates that we are delighted to share with you!

## New publication: Engineered hexavalent Fc proteins with enhanced Fc-gamma receptor avidity provide insights into immune-complex interactions

An interesting paper on hexavalent Fc proteins co-authored by our Senior Scientist, Louise Healy has recently been published in 'Communications Biology'.

Diseases that are driven by pathogenic auto-antibodies are treated in the clinic by intravenous administration of immunoglobulin (IVIg). One of the mechanisms of action of IVIg is to bind and block Fc gamma receptors, thereby inhibiting the effector function of circulating auto-antibodies and consequent pathology. As described in the paper, the aim of the study was to generate a potential alternate treatment to IVIg. For this purpose, human Fc hexamers were engineered and their therapeutic and safety profiles assessed. The recombinant molecules with enhanced Fc receptor avidity were more potent than IVIg *in vitro* and *in vivo*. Due to the potential safety issues associated with the use of such Fc hexamers, multiple assays to assess safety were performed. Through a mutagenesis approach coupled with a whole blood cytokine release assay performed by Louise, the dependence of cytokine release was shown to be dependent on neutrophil FcγRIIIb interactions with L234 and A327 in the Fc. Fc hexamers, thus provide unique insights into Fc receptor biology. [Follow the link to read the full paper: https://go.nature.com/2JU7UD](https://go.nature.com/2JU7UD)

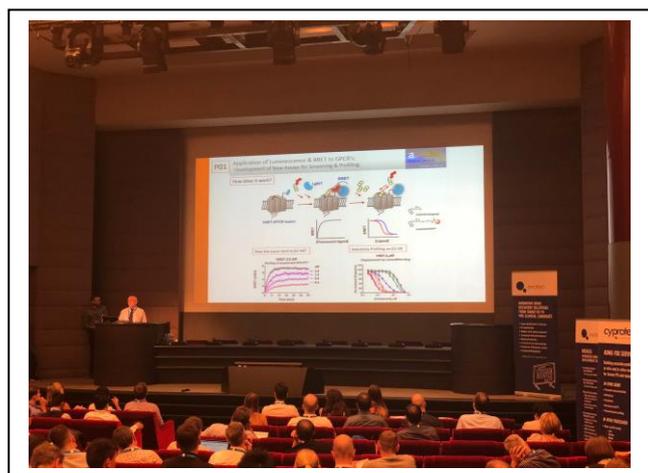
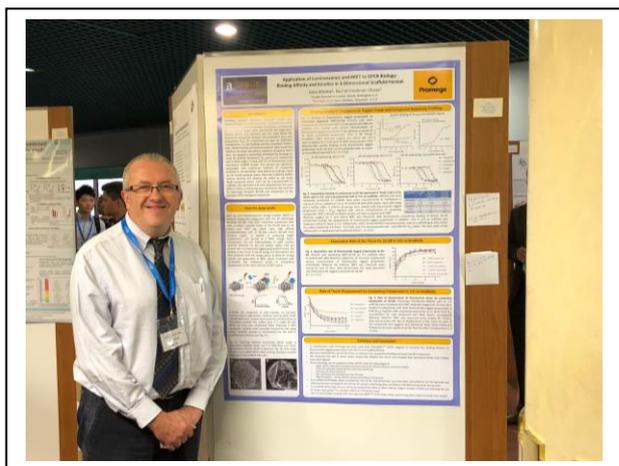


## GPCR Symposium, Verona

Our Chief Scientific Officer, Gary Allenby and Marketing Manager, Payash Bahuguna represented Aurelia Bioscience at the '7th RSC / SCI Symposium on GPCRs in Medicinal Chemistry' in Verona, Italy from 10th-12th September. We had a great response at our exhibition booth as well as our poster on 'Application of Luminescence and BRET to GPCR Biology: Binding Affinity and Kinetics in 3-Dimensional Scaffold Format' which was also selected for an oral presentation.



Are you working on GPCRs and require help with your research? *Why not get in touch with Gary and discuss your project? [allenby@areliabio.com](mailto:allenby@areliabio.com)*



### Upcoming events:

Catch us at the following events this quarter if you are attending as well!

#### ELRIG's Drug Discovery 2018

London, UK • October 9-10

#### Pharmaceutical Flow Cytometry & Imaging 2018

Stevenage, UK • November 14-15

#### Advances in Cell and Tissue Culture conference

Cambridge, UK • December 4-5

### Have you read our blogs?

Here are few of our recently published blogs on a wide range of topics, representing some of the biological areas covered by Aurelia Bioscience:

- Kinases in Drug Discovery: <http://bit.ly/2JK71I2>
- Protein-Protein Interactions: Facilitating Biological Processes: <http://bit.ly/2JLiRLz>
- 3D Cell Culture: Transforming Cell-Based Screening: <http://bit.ly/2JkOrV>
- Dysregulation in Autophagy: <http://bit.ly/2JICx2K>
- Hypoxia and its Significance in Oncology: <http://bit.ly/2JOLesA>
- Cardiomyocytes: Building Blocks of Heart Muscle: <http://bit.ly/2JK1JpN>
- Epigenetics: Untangling the Clues: <http://bit.ly/2JKb2G1>

### Contact Information:

Aurelia Bioscience  
BioCity Nottingham,  
Pennyfoot Street  
Nottingham NG1 1GF  
United Kingdom

Phone: +44 (0)115 837 0503

Email: [info@areliabio.com](mailto:info@areliabio.com)

Web: [www.aureliabio.com](http://www.aureliabio.com)