IUPHAR Pharmacology Education Project

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The International Union of Basic and Clinical Pharmacology (IUPHAR) *Pharmacology Education Project* (PEP) (https://www.pharmacologyeducation.org/) has been developed as a freely-accessible online learning resource intended to support education and training in pharmacological sciences worldwide. A major objective has been to harness the power of online digital education to deliver access to high quality educational materials to learners and educators in resource-poor nations. The project complements the IUPHAR/British Pharmacological Society (BPS) *Guide to Pharmacology* (GToPdb) (http://www.guidetopharmacology.org/) which delivers cutting-edge information about ligands, receptors and other targets.

With these objectives in mind the aim of PEP was to curate links to educational content that is freely accessible to users. The content is made available within a logical architecture of sections (Pharmacology, Clinical Pharmacology, Drugs, Therapeutics), modules and topics that will be familiar to most educators working with students of medicine, nursing and pharmacy.

Since going live in April 2016, there has been a sustained year-on-year growth in visitors to the PEP with almost 12,000 visits in August 2018 (Figure 1). In an addition, the PEP has a dedicated *YouTube* channel and *SlideShare* account which contain videos and presentations created especially for the Project (https://www.pharmacologyeducation.org/social-media).

Day-to-day management of PEP rests with the co-directors Dr. John Szarek (Geisinger Commonwealth School of Medicine, Scranton PA) and Professor Simon Maxwell (University of Edinburgh, UK), and the curator, Dr. Elena Faccenda (University of Edinburgh, UK). The co-directors oversee an international Editorial Board consisting of pharmacologists and clinical pharmacologists with recognised commitment, expertise and enthusiasm for education including Elizabeth Davis (Monash University, AU); Fenghua Fu (School of Pharmacy, Yantai University, CN); Kuniaki Ishii (Yamagata University School of Medicine, JP); Kelly Karpa (Penn State College of Medicine, US); László Köles (Semmelweis University, HU); John Peters (University of Dundee, UK); and Chay-Hoon Tan (National University of Singapore, SG).

We were delighted to host a successful symposium as part of the World Congress of Basic and Clinical Pharmacology in Kyoto in July (Figure 2). This was followed by a social event that allowed pharmacology educators to meet the PEP team and discuss our future objectives.

The PEP team welcomes the input and suggestions for improvement from any members of the worldwide community. Please encourage your students, and colleagues to use the site and

become involved as an author and/or reviewer. We are particularly keen to hear about accessible learning resources that you know of so that we can for a link with them. We are particularly interested in submission of brief synopses of key areas of pharmacology corresponding to our modular structure and any presentations that you feel able to share with others as slide sets or videos. Its easy to submit content – just follow the links on the PEP website. You might also like to follow us on Twitter at @PharmacologyEd.

Figure 1. Growth in visitors to the PEP site (Google analytics).

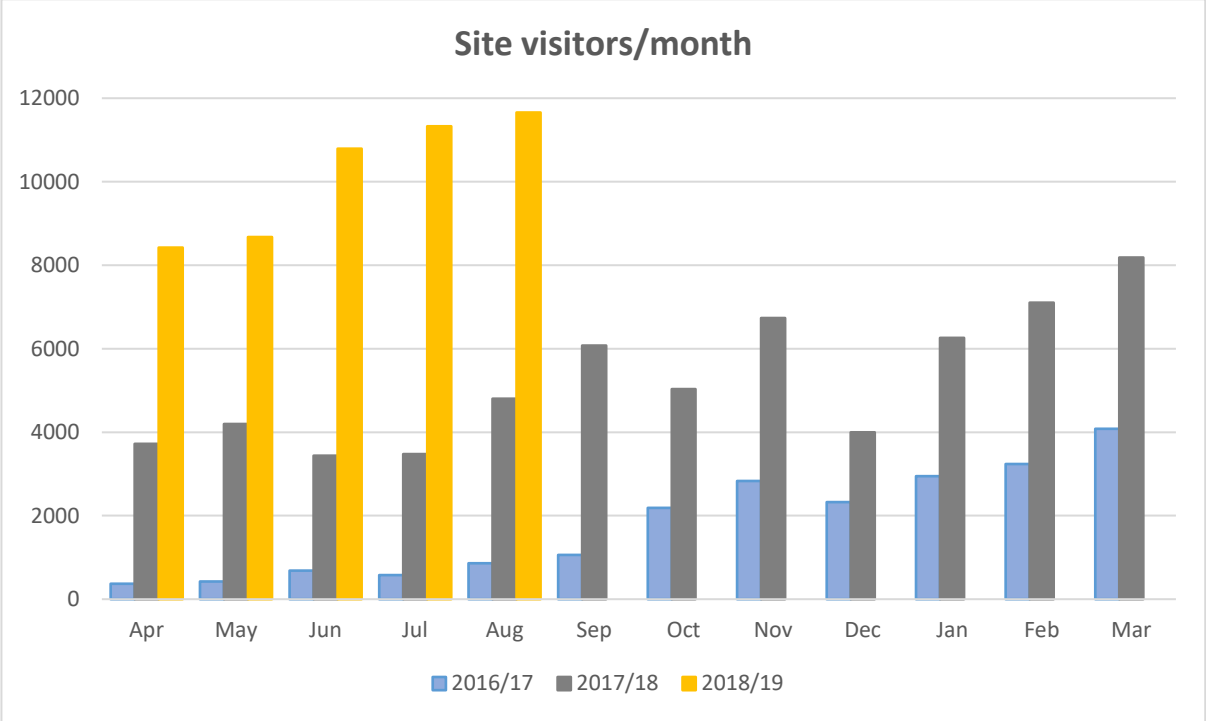

Figure 2. The PEP symposium at the World Congress of Basic and Clinical Pharmacology, Kyoto, July 2018 (Leszek Wojnowski, Chay-Hoon Tan, Elizabeth Davis, Simon Maxwell and John L Szarek).

