

EDITORIAL

Calling all pharmacologists with time to spare! We need you! Build the drug discovery knowledge base, GuidetoPharmacology.org

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Summary

The contraction of the pharmaceutical industry has resulted in the underuse of a great deal of human capital and brain-power. This editorial appeals to pharmacologists who may be currently underemployed to volunteer their skills by contributing to the British Pharmacological Society's (BPS) Guide to Receptors and Channels (GRAC), and the NC-IUPHAR database (IUPHAR-DB). NC-IUPHAR has 60 subcommittees on specialized pharmacological areas where scientists freely give their time for articles on receptors or channels, and to populate IUPHAR-DB. These are freely available to all on the Web via a new resource: <http://www.guidetopharmacology.org>. The site features articles on all aspects of pharmacology, particularly new areas: microRNAs, epigenetics and transporters. One aspect that would be covered, alongside nomenclature and key pharmacology, is the drug discovery challenges in each area. Here the knowledge base from the pharmaceutical industry would be particularly valuable.

In a separate editorial, Anne Hayes and Jackie Hunter discuss the scientific fallout from the recent contraction of the pharmaceutical industry, intended to stimulate further discussion concerning the best way to achieve the publication of negative data in drug discovery research: <http://dx.doi.org/10.1111/j.1476-5381.2012.02215.x>.

Background

The pharmaceutical industry has been one of the main value-added industries in Europe and a major driver in world drug

discovery. The pharmacological know-how and skill of British Pharmacology is a major national resource. Unfortunately, the pharmaceutical industry has had a very difficult time recently. The loss of revenue due to key compounds becoming generic, with insufficient replacement by new therapeutic agents, is incompatible with a continuing high research spend by industry.

The UK has been particularly hard-hit in the last 2 years, which is a major problem for the sector (which generated £8 billion, with 78 000 high-value jobs in 2009), and even more so for the innumerable drug discovery and development scientists who have been made redundant.

This project has been produced specifically for these scientists: people who have been made redundant and are looking for new employment, or have decided either to take time out, retire early, or simply want to return to their scientific roots, with the prospect of creating a unique knowledge base for pharmacology.

Why your input is valuable

You represent the most highly skilled, and specialized, workforce in the world, which is also necessary for many service industries and is highly embedded in academic research. This is a major national resource which must not be allowed to dissipate. At last, and we hope not too late, this is becoming a national priority. Furthermore, these difficulties arrive at a time when there are many more molecular targets identified, and there is a major requirement to define their physiological and potential pathological or therapeutic roles.

What is BPS doing about the situation?

The BPS, and NC-IUPHAR, is very concerned about this situation for both pharmacologists and chemists and is lobbying actively through initiatives in aiding drug discovery and translational research, and in joint academic/industry partnerships. It is also important that:

- the knowledge base of UK drug discovery and development is preserved and passed on
- scientists may be helped in finding new positions, perhaps in academia
- they may also continue to publish, a criterion for academic success
- the reasons for failure of some pharmaceutical projects can be disclosed so that future efforts can be more fruitful.
- the 'New Model' of drug discovery for the 21st century is a success

How can you help?

One way in which you might consider lending your support is by contributing to the BPS's GRAC, and the NC-IUPHAR

database (IUPHAR-DB). NC-IUPHAR has 60 subcommittees on specialized pharmacological areas where scientists freely give their time for articles on receptors or channels, and to populate IUPHAR-DB.

Recently, the BPS and IUPHAR have collaborated to integrate GRAC and IUPHAR-DB on the Web, via a new resource: <http://www.guidetopharmacology.org>. The site features articles on all aspects of pharmacology, particularly new areas: microRNAs, epigenetics and transporters. One aspect that would be covered, alongside nomenclature and key pharmacology, would be also be the drug discovery challenges in each area.

We would much appreciate if you have some time to help us populate <http://www.guidetopharmacology.org> and our databases with articles that would count as publication credits (NC-IUPHAR has an H-index of >60, with many citation classics) on areas where you have expertise.

The key requirement is enthusiasm, access to the Web and mutual support. The outcome would be the further development of a major knowledge resource, maintenance and development of skills and of drug discovery platforms in the UK, and your work would be vital. For more information or to express an interest, please contact enquiries@guidetopharmacology.org.