IUPHAR Pharmacology Education Project – Development, Structure and Future www.pharmacologyeducation.org

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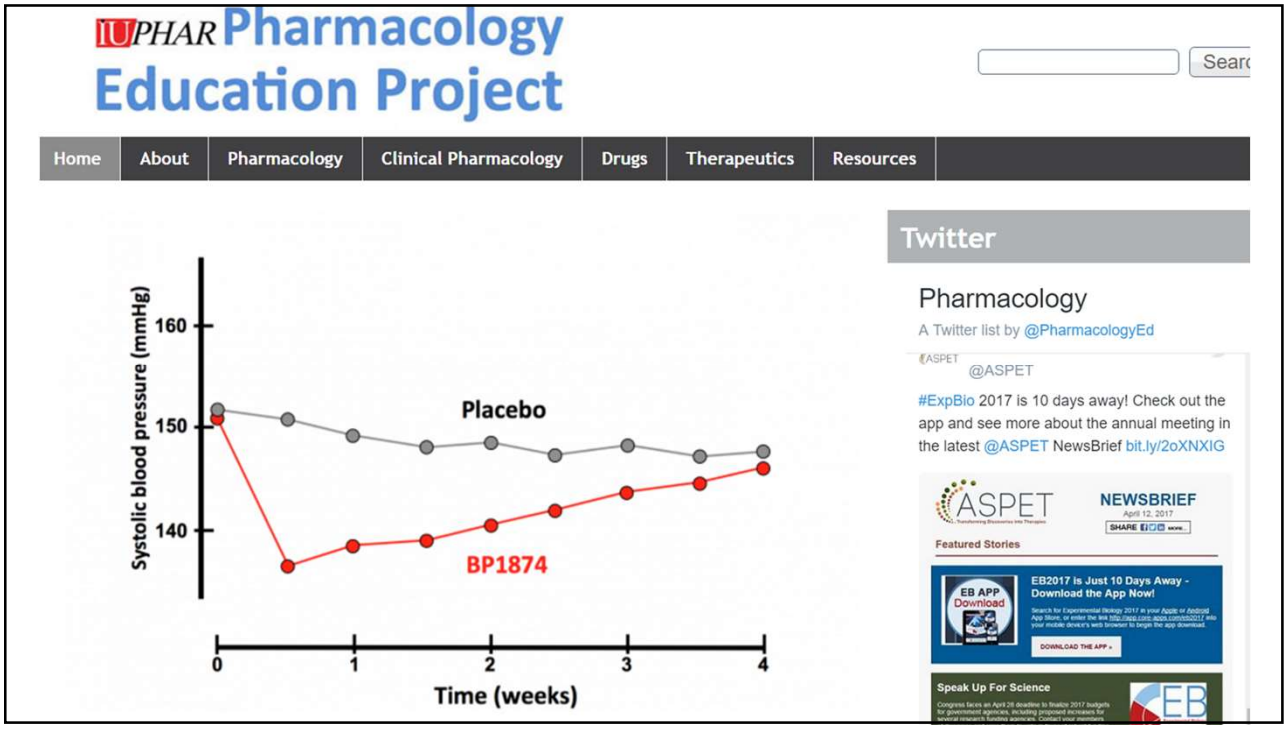
Objectives

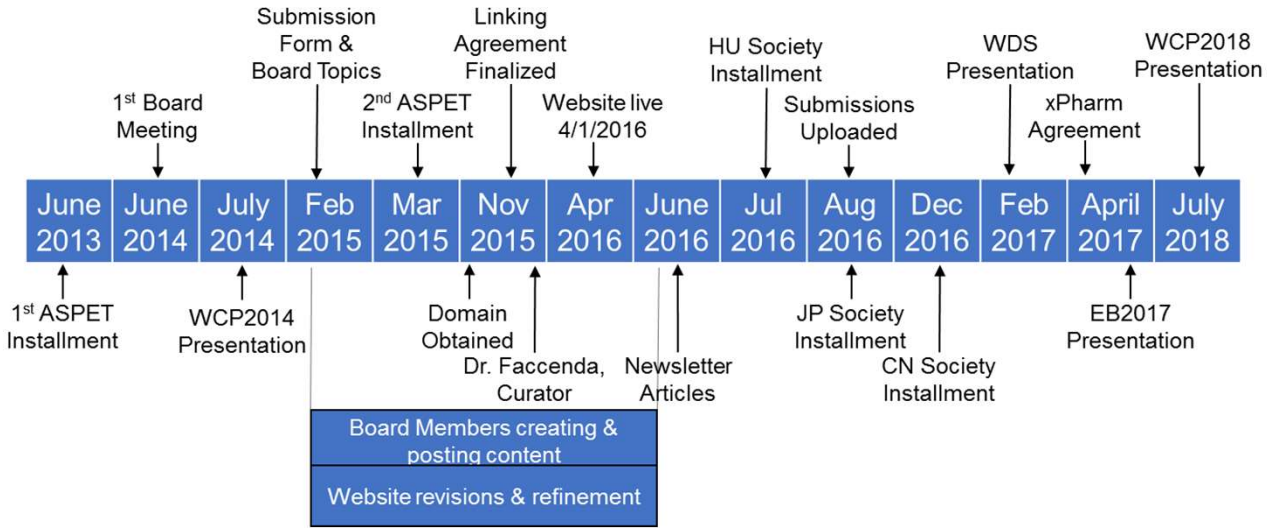
- Describe the development and organization of the IUPHAR Pharmacology Education Project (PEP)
- Outline the hierarchical structure of the PEP website
- Recognize the potential for use of PEP
- Compare and contrast PEP with other resources
- Explore how you can implement PEP
- Collaborate with colleagues to grow PEP

Conception

- IUPHAR
  - *Guide To Pharmacology*, a database of receptors and ligands
  - An authoritative resource for pharmacological information of value in drug discovery
  - Recognized need for bringing pharmacological sciences education to a broader audience
  - PEP was created as a companion website for the *Guide to Pharmacology*



Timeline



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Sponsorship/Donations

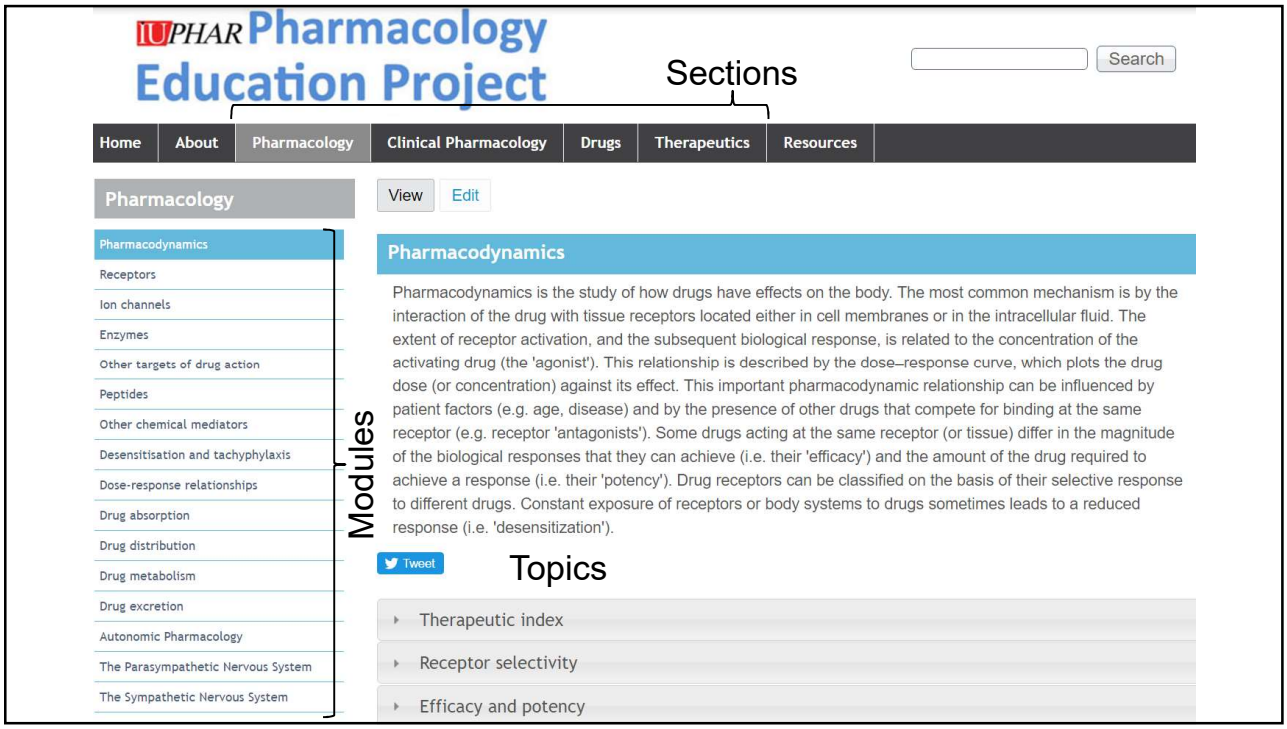
IUPHAR International Union of Basic and Clinical Pharmacology

ASPET Transforming Discoveries into Therapies

THE UNIVERSITY OF EDINBURGH

JPS since1927 The Japanese Pharmacological Society

MAGYAR KÍSÉRLETES ÉS KLINIKAI FARMAKOLÓGIAI TÁRSASÁG



PEP Website Organization – Drupal

Topics ▾ Therapeutic index

When drugs are used in clinical practice, the prescriber is unable to construct a careful dose–response curve for each individual patient. Therefore, most drugs are licensed for use within a recommended dose range that is expected to be close to the top of the dose–response curve for most patients. This ensures that most patients will achieve a good clinical response without the need for frequent review and dose increases. However, this means that it is sometimes possible to achieve the desired therapeutic response at doses towards the lower end of the recommended range (or below).

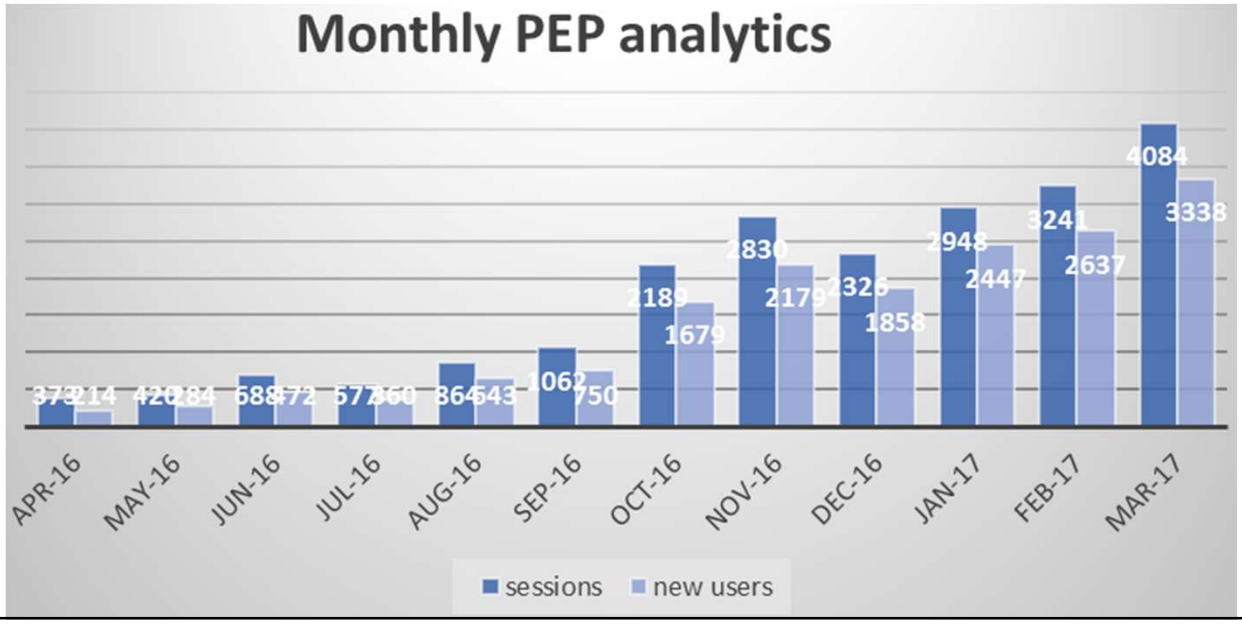
The adverse effects of drugs are often dose-related in a similar way to the beneficial effects. It is possible to construct a dose-response curve for these adverse effects in the same way as shown for the beneficial effects, with higher doses usually required to

Links

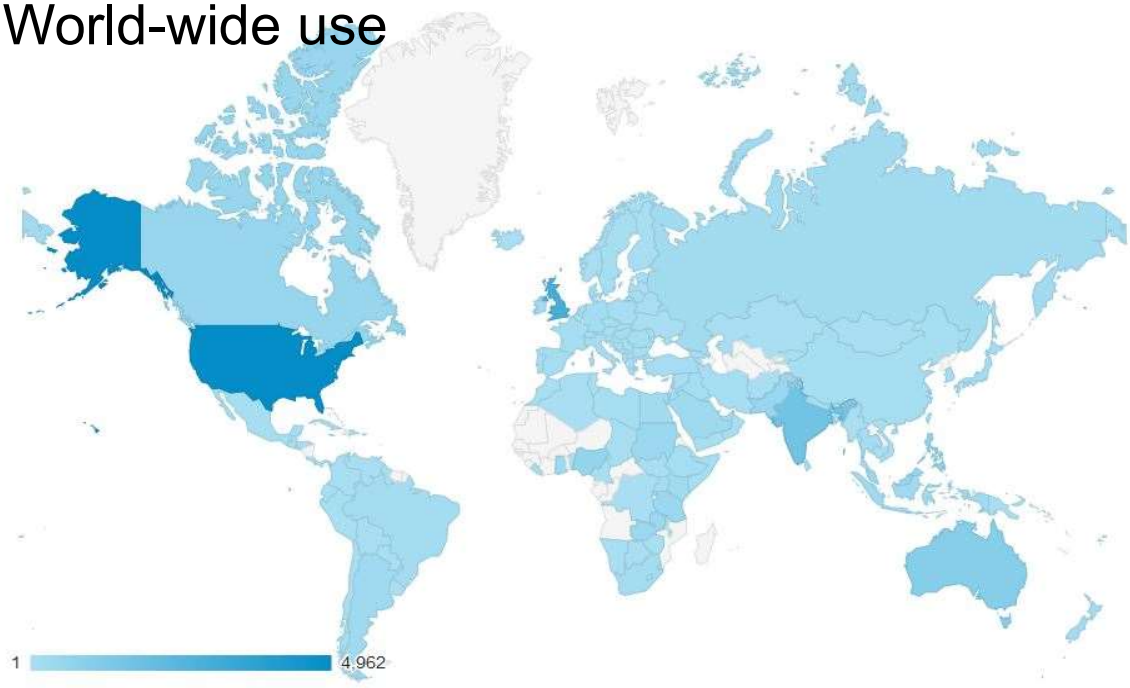
Therapeutic index simulation

This is the fourth in a series of 4 simulations related to dose-response relationships. This simulation focuses on therapeutic index. In this simulation the learner can vary the therapeutic index by the use of a slider and observe the effects on the relative positions of the dose-response curves for the desired and adverse effects. This is a more kinesthetic approach to illustrating these concepts in that it allows the learner to experiment. Although targeted for early learners in pharmacology, students should have a basic understanding of the concepts before using the simulation.

Usage



World-wide use



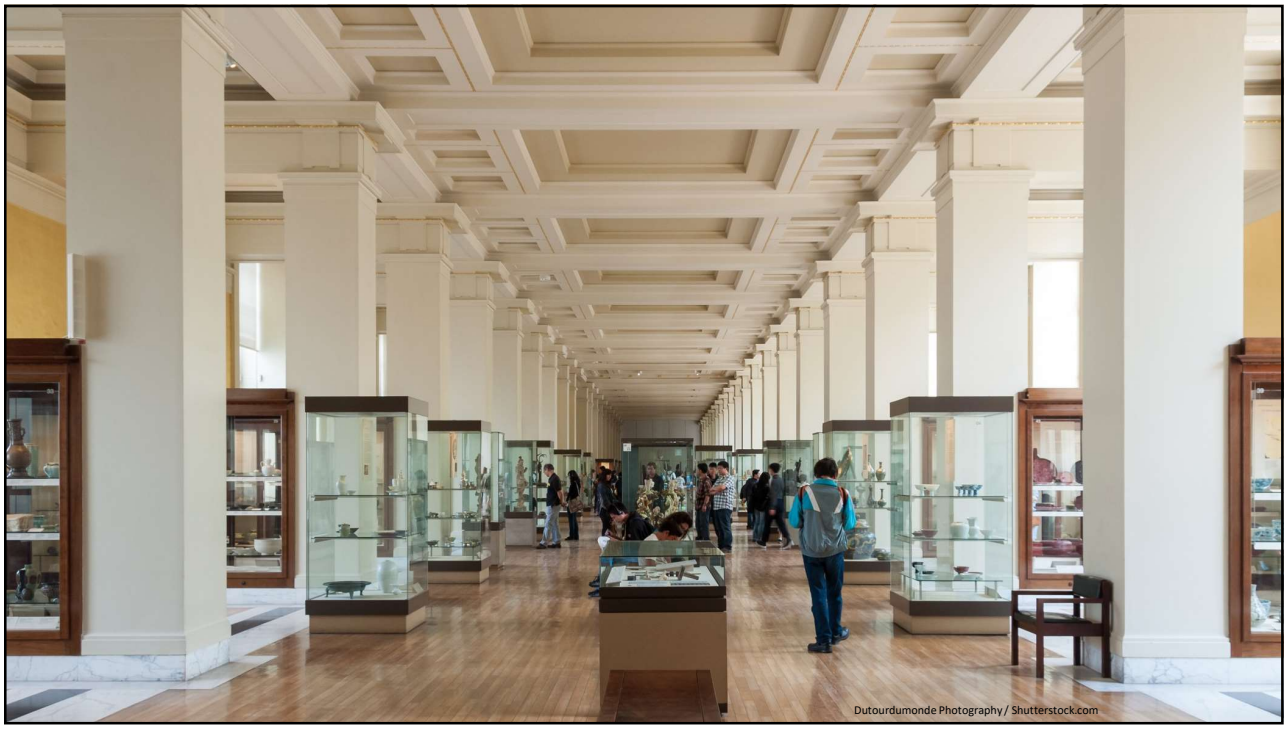
Differences

Competitor Profile					
	PEP	Books	Google/ Wikipedia	Pharm Societies	Online courses
Free	Yes	No	Yes	Yes*	No
Peer-reviewed	Yes	Yes	No	No	No
Accepts content	Yes	No	Yes	Yes	No
Commentary§	Yes	No	No	No	No
Content can be used in teaching	Yes	Yes†	In Some Cases	Yes	No
Easily searchable	Yes	No	No	No	No
Readily accessible	Yes	No	Yes	Yes	No

Implementation

Secondary source for basic pharmacology courses
Student formulate submission
Pre-work for flipped classroom
Not reinventing the wheel

Add assessment
Evidence based medicine



Curators of Content

"Anyone can now learn anything from anyone at anytime"

(Bonk 2009, The World is Open, p 7)

"Of course, there are constraints related to the relevance and accuracy of the information found online…."

(Bonk 2009, The World is Open, p 35)

Get Involved!

- Use the site & encourage others to use it
  www.pharmacologyeducation.org
- Contribute content to the site
  http://www.pharmacologyeducation.org/contribute-project
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