Blended Learning in Pharmaceutical Sciences at the University of Basel

Alexander Vögtli
Institute of Molecular Pharmacy
University of Basel
Switzerland

Outline

How do we teach molecular mechanisms of drugs and drug discovery to our students?

- pharmsquare - Blended Learning Concept
- Online Demo
pharmasquare: about the project

- project of the **Swiss Virtual Campus**
- project start in **2001**
- leading house: Institute of Molecular Pharmacy, University of Basel: **Prof. Beat Ernst**
- cooperations: Zürich (Prof. Gerd Folkers), Lausanne-Genève, Frankfurt, Novartis, Roche, Skan
- URL: [www.pharmasquare.org](http://www.pharmasquare.org)
Award Winners

Basels «Pharmasquare» ist Spitze

Lecture | Seminar | Practical Course | ViLab | PharmAsk You | E-learning | Face-to-Face

Pharm Modules | Pharm Modules | Pharm Modules | Pharm Modules | Pharm Modules | Pharm Modules | Face-to-Face
Lecture

➢ Teaching theoretical basics

Practical Course

➢ Practical application of theoretical knowledge

1. Modeling
2. Synthesis
3. BioAssay
Seminar

- Interactive problem solving

PharmModules

- Online courses for preparation and repetition
in detail: *Pharm Modules*

- Interactive multimedia courses
- **Multimedia**: Hypertext, pictures, flash animations, movies, molecules, protein structures, questions and feedback
- about *30-80 pages* per module
- 60 *Pharm Modules* are online
- web-/form-based editor

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➤ *Pharm Ask You*

Online test system for assessments and exams
PharmAskYou

in detail: PharmAskYou

- Online test system to perform self-assessments, exams, question of the week
- 10 question types: multiple choice, single choice, matching pictures / text, fill in the blanks, essays, chemical structures
- detailed statistics for tutors
- print or email reports
- based on the same technology as PharmModules

ViLab

- Online laboratory simulation
in detail: ViLab

- Video-based interactive Labs
- allows students to simulate lab methods without using personal or lab resources
- 3 ViLabs: SDS PAGE, Western Blot & Laminar Flow
- mandatory preparations for lab courses

Combination: Blended learning example (Flu)

1. PharmModule: Flu
2. Lecture: Neuraminidase Inhibitors
3. Seminar: Discussion
4. PharmAskYou: Online Assessment
Blended learning example II: SDS-PAGE

1. **PharmModule**: SDS-PAGE
2. **ViLab**: SDS-PAGE
3. Discussion: Seminar
4. Practical Course: Lab

DEMO

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