

Development of Interactive Computer Based Educational Models

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This rotation is designed to provide interested students the opportunity to develop interactive computer-based models to enhance pharmaceutical education. The models are developed using STELLA[®] software and the target audience could potentially be pharmacy students, other students (eg., the alcohol model) or the general public.

All models to-date have been built on a pharmacokinetic model but it is possible that other models could be developed. Some recent examples of the software are:

1. Development of model to teach about the relationship between alcohol intake and blood alcohol levels. The program also provides other relevant information about alcohol
2. Development of a comprehensive model to teach about the clinical pharmacokinetics of digoxin
3. Development of virtual patients for digoxin therapy
4. Development of a computer game to teach dosing and the clinical relevance of drug-interactions
5. Develop comprehensive model for drug action for demonstration to P1 students

ACTIVITIES

The projects require a diverse group of skills and activities and it is possible to tailor a project around the interest and skills of individual students. Projects could involve any or all of the following activities:

1. Development Of Pharmacokinetic And/Or Pharmacodynamic Models For Specific Drugs.
2. Computer Graphics And Design
3. Development Of Virtual Patients Including Appropriate Language
4. Preparation And Editing Of Digital Video
5. Design Of Computer Games To Enhance Pharmacy Curriculum
6. Design Of Patient Education Materials- Electronic Package Insert