

Office of Academic Excellence and Assessment Faculty Development Grant - Spring 2010

Patched Up Drug Exercise

The Patched Up Drug Exercise will be a novel online method for the campus and distance students to work on case based Structure Activity Relationship (SAR) problems. The application will be a Graphic User Interface (GUI) where the students are presented with a case-based SAR question, a drug's structural backbone called a pharmacophore, and a palette of chemical groups. By utilizing a palette of chemical groups that can be added to the pharmacophore the students will construct a drug that would be an appropriate therapeutic choice for treating the patient's condition described in the case based question. Since a question may have multiple potential answers there will be a built in function for the students to e-mail an image file of the structure they proposed to the professor or other study partners. The application will be employed as a delivery medium for active learning pre-exam assessments of the student's ability to recognize chemical moieties critical the drug's action. The web based application will give campus and distance students an equal opportunity to use the tool to prepare for exams.

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