

USING FLASH SOFTWARE TO DESIGN YEAR I-II SELF-STUDY PATHOLOGY LABORATORY MODULES

**Karen Tsoulas and Wolfgang Beumer
Keck School of Medicine
University of Southern California**

Demonstration of a prototype pathology laboratory module using Flash software may generate new ideas for improving laboratory instruction in basic science curricula. Educational modules so designed allow greater student interaction than many traditional laboratory formats, while animation capability may serve as a potent educational tool for reinforcing challenging concepts. Platform flexibility permits laboratory instructional design intended for use as instructor-led sessions or as self-study modules.

Novel laboratory design addressed two pathology teaching program concerns: 1) Increasing difficulty in securing adequate faculty coverage for small group laboratory instruction due to competing clinical service demands; and 2) a perceived weakness in the School's new curriculum in which pathology was no longer taught subsequent to, but rather concurrent with, histology instruction.

Created as a joint faculty and student project, key features of the prototype laboratory include: 1) Extensive rollovers with highlighted labels and explanation of various morphologies; 2) pairing of normal histology with pathology images; 3) large number of higher quality images; 4) detailed corresponding conceptual background information; and 5) quiz upon completion of the module.

Piloted as a Year I self-study tutorial, 55% of students offered feedback, and most found the tutorial to be more helpful than the corresponding instructor-led lab. Positive feedback included: use of labels; pairing of normal and abnormal images; self-pacing ability; and clarity of explanations. Suggested areas for improvement included: navigation/technical design and increased use of clinical cases.

Plans for expanded use of pathology self-study laboratory modules in combination with weekly review sessions is currently under consideration.