Preparedness of Pre-clinical Medical Students to Plan and Conduct a Scholarly Project.

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Background

Scholarly Projects is an essential component of the new competency-based undergraduate curriculum at Oregon Health & Science University involving student-led, inquiry-based investigations aiming to create informed critical thinkers and users of medical/scientific research. Working with project mentors, students plan projects that expand beyond the established curriculum to investigate topics and problems in more depth, and identify, define, and answer important questions relevant to clinical practice and healthcare delivery.

Research Question: The goal of this study was to determine pre-clinical baseline preparedness of medical students for Scholarly Projects and their eventual choices of project topics. We also aimed at identifying potential challenges for large but diverse cohorts of students to finding appropriate faculty mentors for their projects.

Approach: An interactive classroom response system was used to poll 120 students at baseline, and project proposals provided data regarding students’ topics 7 months later. Descriptive analyses were used to describe the students’ previous research experience and their preparedness to select a project within one of the five specific concentration areas.

Organizational Structure

Project Concentration Areas: From Initial Planning to Final Proposal

Emerging Challenges During Project Planning

Summary and Conclusions

- Pre-clinical medical students have a wide range of research interests and many have had undergraduate research experiences.
- The vast majority of students are interested in applied rather than basic science projects, particularly in clinical areas.
- There is significant interest in projects outside of traditional research.
- Selecting a concentration area takes time, but once a specific topic is selected, most students stay within that area.
- Mapping out time to conduct the project and designing methods are considered top challenges.
- Students find identification of mentors difficult and often change mentors during project development.
- Recurring faculty may need to be provided to allow enrolling sufficient numbers of mentors in each concentration area.