Beyond Borders: Partnering with Medical Therapeutic Devices & Apps Innovations

Tallie Casucci*, MLIS; Jean P. Shipman*, MLIS, AHIP, FMLA; John T. Langell**, MD, PhD, MPh, MBA; and Roger Altizer**, PhD

**Objective**
Eccles Health Sciences Library* hosts and the Center for Medical Innovation** sponsors students that develop medical therapeutic devices (MTD—gaming and products) and health applications. MTDs are a fairly new, yet vital, source of financial income. Librarians guide the inclusion of evidence-based knowledge into these devices.

**Results**
- All stakeholders have benefited from this new and unique partnership.
- The university located a receptive home for The GApp Lab (Therapeutic Games and Apps Lab).
- Transforming a previously public space into a public/private combination required creative space designs, enhanced signage, and changed building hours, security, and egress.
- Industry can connect with fresh ideas and student ingenuity.
- Students are able to access the expertise of industry mentors, faculty advisors, fellow students, and librarians.
- The health system benefits financially from the deliverables.
- A monthly Appy Hour event showcases created MTD and health applications.
- A student competition, Games4Health, was started.

**Conclusions**
Librarians can expand their scope of influence through supporting innovation and by inviting unique partners into transformed library space. Economic gains were realized with the library being an integral part of this new business model for health systems.

**Methods**
- Meetings with various stakeholders (students, faculty, industry representatives, librarians, physical plant staff, and architects) identified desired space, equipment, and furniture.
- Partnering with Development, monetary support and industry interest was fostered.
- A librarian was hired to work with MTD students and faculty.

**MTD Examples**
- EHR is an app created for patients to store their complete health records on their phones and allow doctors to update and track their health.
- Nanotubes is a game that reinforces chemistry students’ knowledge about nanotubes. The game uses real chemistry principles to allow the players to manipulate nanotubes to solve puzzles.
- Oppy is a character based on an ophthalmosaurus, a dinosaur with the largest eye-to-body ratio. This game is designed to reduce patient anxiety caused by visiting optometrists.
- Reflex Speed is a game for athletes and coaches to enhance and track reflex abilities and performance.
- UCEER (Utah Center of Excellence in ELSI Research) is an app for viewing and ethically evaluating (via a survey) prenatal screening videos.