

### **Immersive Learning**

# ITIF 2016-2019 INSTRUCTIONAL TECHNOLOGY INNOVATION FUND Collaborative Learning Apended Machine Learning



Projects funded over 16 years 2003 - 2018 (ITCDF 2003 - 2009)

Online Courses

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ITIF TEAM

# BACKGROUND **[]**

ITIF funds support the innovative use and/or development of technology to enhance teaching and learning across our institution.

### **EDUCATION THEMES**

**Assessment & Evaluation** 

**Universal Instructional Design** 

**Curriculum Renewal** 

### INSTRUCTIONAL APPROACHES SUPPORTED BY ITIF FUNDED INITIATIVES

**Experiential Learning Immersive Learning Collaborative Learning Machine Learning Serious Gaming** Simulation **Didactic F2F Problem Based Learning Active Learning** ...... ที่<del>หยี่ยื่นก็หมุ</del>บบหมุบบหมุบบบก

### PRODUCTS **D**

Learning objects

e-Modules

**Educational Games** 

**AR/VR** Assets

**Mobile apps** 

OERs

Virtual Labs

LORs

Hybrid and Fully online courses

**Physical objects** 

**Educational Software** 



# **RECIPIENTS 8**

**Tri-Campus** 

**Arts and Science** 

Engineering

Medicine

OISE

Library/Information

VILSO SCHOOL

**HEARING CONTRACTOR** 

101260

SGS

esaration

**Public Health** 

# TESTIMONIALS 66

#### ARCHEMY - INTEGRATION OF TECHNOLOGY IN EDUCATION; AR TEXTBOOK & CHEMICAL EDUCATION RESEARCH



A collaboration with graduate students to developing new 3D animations and using Augmtented Reality (AR) and Virtual Reality (VR) technology to teach complex organic chemistry concepts. Through the expertise of MADLab at UofT, we have been able to create an iOS version of our ARchemy app, and we are working towards a VR app to be launched in the near future. We have received several Centre for Teaching and Learning and ITIF grants for the development of this technology for novel applications into chemical education and we are in the process of publishing our findings on integrating this technology into chemical education in the Journal of Chemical Education.

### Dr. Shadi Dalili, PhD

Associate Professor, Teaching Stream Department of Physical and Environmental Sciences

"Our partnership with the ITIF team through the support stream has allowed us to carry this very important pedagogical project to the next level, such that the innovative ARchemy app is now available to both Android and iOS users, targeting a wider student body. Additionally, with the help of the ITIF support stream, we have been able to add many new modules and interactive features to the app, allowing for meaningful"learning opportunities for students in the chemistry field, and expanding their understanding of 3D visualization and manipulation of molecular structures."

# TESTIMONIALS 66

#### **CLINICAL INSTRUCTOR MODULES**

Enhance the preparation and development of clinical nursing faculty, who directly facilitate small groups of undergraduate nursing student learning in clinical settings, by moving to a hybrid delivery model that includes the creation of three selfdirected, interactive, media rich e-learning modules.



### Manjit Dhanoa-Yasi RN,MN

The Lawrence S. Bloomberg Faculty of Nursing

The goal of our project is to re-vision how we develop and support our Clinical Instructors for their teaching work in the clinical setting with our students. Implementing a blended learning approach included the development of 3 e-learning modules. The ITIF support stream provided us with Instructional design expertise that made it possible to ensure that our e-modules followed best practices while providing foundational learning through engaging interactivity.utet

### SUPPORT STREAM (2016-2019)

The Support stream fund was added as fund option to build capacity and continuity for technology assisted teaching and learning

#### **CURRENT SUPPORT STREAM FUNDED PROJECTS**

#### **2016 RECIPIENTS - EXPECTED END DECEMBER 2020**



### SUPPORT STREAM (2016-2019)

#### **2017 RECIPIENTS - EXPECTED END DECEMBER 2020**



### SUPPORT STREAM (2016-2019)

#### **2018/19 RECIPIENTS - JANUARY 2021**



### **LEAF SUPPORT**



### **VIRTUAL FIELD TRIP**

Georgian Bay exposes 1 billion years-old highly deformed and folded rocks (called gneisses) of the Grenville Province of the Canadian Shield formed when South America collided with eastern North America during the formation of a large supercontinent called Rodinia. The drone is an excellent tool for bringing this and other environments and landscapes into the classroom. We simply couldn't do it otherwise.



#### Prof. Nick Eyles, PhD,

#### **Professor of Geology, UTSC**



### NOTABLE PROJECTS & IMPACT !



#### **KINUNDRUM**

is a multimedia tool that presents anatomy case studies and interactive exercises accompanied by virtual critical thinking skills.

**IMPACT:** Kinundrum is a collaboration between students and Faculty allowing for Biomedical Communications students to gain real world experience while studying!



#### **QUIZZICAL** (ACTIVE 2012 – 2019)

Quizzical is a teaching and learning tool that enables student-authoring of multiple choice question writing The tool will assists in building a question bank that students can access and use for self-testing. A key feature is the statistical interface that allows students and faculty to measure engagement and progress.

#### **IMPACT:**

Quizzical engages students in higher order thinking skills. ...

### NOTABLE PROJECTS & IMPACT !





#### **PGCORED** (ACTIVE 2008 – 2019) -ITCDF SEED FUND 2008,

ducating Resident Physicians in the non-medical competencies. A mandatory standardised curriculum developed out of the need to teach humanistic competencies to residents in vastly diverse contexts, specialties, and limited time to attend traditional F2F teaching sessions. PGCored was seed funded by ITCDF and match funded subsequently.

**IMPACT:** The self-directed, mandatory online modules (one of the first fully only courses in medicine at UofT– if not the first) has seen 5000 residents complete the program.

### 2016-2019 STATS







#### DR. AVI HYMAN

Director Academic and Collaborative Technologies

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Manager Application Development

#### **MIKE SPEARS**

Manager MADLab

#### **SCOTT HOLLOWS**

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