

FACULTY INNOVATION GRANT (FIG) 2023-2024

The Faculty Innovation Grant Program is a college-wide program that awards grants to full-time and adjunct faculty. The amount of available funding and types of work supported remains unchanged, but applicants can now focus on the development, implementation, and sharing of their instructional innovation rather than managing multiple grant applications in a single academic year. The FIG will be used to provide support for faculty to design and implement new tools, resources, or techniques in their classroom (or virtual classroom) to enhance instruction and increase student learning outcomes.

Eastern Campus Committee Members

Christopher Kinsella, Assistant Professor, History (co-chair)
Shamuire Spivey, Assistant Dean, Learning & Engagement (co-chair)
Manjula Chandirasekaran, Assistant Professor, Information Technology
Sonja Elekhtaby, Manager, Adjunct Services
Cory Molner, Supervisor, Learning Commons
Samantha Posey, Assistant Professor, Counseling
Stacey Souther, Professor, Psychology
Scott Spiker, Adjunct Faculty, Geography
Jacqueline Zkiab, Instructional Technologist, Instructional Design & Learning Excellence

Metropolitan Campus Committee Members

Kyla Weeks, Assistant Professor, English (co-chair)
Sara Williams, Interim Assistant Dean, Learning & Engagement (co-chair)
Katherine Coleman, Adjunct Faculty, Nursing
Karen Cross-Hatten, Manager, Adjunct Services
Jessica Krowka, Associate Professor, Nursing
Aimee Pearce, Senior Instructional Designer, Instructional Design & Learning Excellence
Emma Weitzner, Adjunct Faculty, Biology
Shaun Willis, Instructional Services Representative, Learning Commons

Western Campus Committee Members

Kevin Kondick, Assistant Professor, Philosophy (co-chair)
Angela Baker, Interim, Director, Learning Commons and Manager, Adjunct Services (co-chair)
Elaine Brunschwig, Professor, Biology
Lois Hansen-Polcar, Professor, Chemistry
Brittany Centorbi, Instructional Technologist
Rob Gala, Adjunct Faculty, Philosophy
Raymond Anderson, Supervisor, Media Services
Kellianne Starr, Coordinator, Learning & Engagement

Westshore Campus Committee Members

Bridget Kriner, Associate Professor, English (co-chair) Robin Williams, Assistant Dean, Learning & Engagement (co-chair) Dennis Joyce, Manager, Adjunct Services Ashlee Brand, Associate Professor, English
Tomasz Kowalczyk, Associate Professor, Biology
Eleanor Becker, Adjunct Faculty, English
Jonathan Tarnai, Director, Learning Commons
Kyle Malmberg, Director, Instructional Design & Learning Excellence
Alana Gordon, Coordinator, Learning & Engagement

2023 - 2024 Faculty Innovation Grant (FIG) Awardees

Metropolitan Campus

Brian Hall – Associate Professor, English

Alan Gerding – Assistant Professor, Psychology

Sharon Stefanovic – Associate Professor, Physics

Beth Torres – Assistant Professor, Medical Laboratory Technology

Rocklend James Davis – Assistant Professor, Physical Therapy Assisting

Western Campus

Lina Agha – Adjunct Faculty, Nuclear Medicine

Austin Gatt – Assistant Professor, Automotive Technology

Meg McCreight – Assistant Professor, Radiologic Technology

Desiree Sanders – Associate Professor, Nursing

Westshore Campus

Lisa Friel – Assistant Professor, English as a Second Language **Michael Piero** – Professor, English **Elizabeth Vaidya** – Professor, Biology

Metropolitan Campus Faculty Innovation Grant (FIG) Awardees

Sharon Stefanovic

"Lab Equipment Supporting Physics Expansion"

This project will provide the physics department at Tri-C's Metropolitan Campus with Vernier LabQuest 3 interfaces, sensors, accessories, and site licenses for prewritten, adaptable experiential procedures. We anticipate offering calculus-based physics for the first time in more than ten years, beginning in Spring 2024. These resources will provide a source of calculus-based physics lab experiments that incorporate new data collection techniques. The new technology interfaces, sensors, and accessors will be used, together with existing equipment and sensors, both by algebra- and calculus-based physics students to provide an updated laboratory experience.

Rocklend James Davis

"Engaging Student Physical Therapist Assistant Clinical Reasoning with ClassPoint"

The Federation State Board of Physical Therapy has indicated examination design changes that include patient scenarios. The rationale behind the design changes is that it will allow for testing more medically complex issues. Additionally, the scenario question items will better replicate how the information will be presented in

clinical practice. Therefore, to improve PTA students' ability to perform clinical problem-solving, the purpose of this proposal is to seek support to provide faculty of the PTA program to design intentional learning experiences that will facilitate student opportunities in utilizing clinical problem-solving with ClassPoint. All healthcare practitioners use clinical reasoning daily patient interaction to make treatment decisions. Integrating ClassPoint as an interactive classroom response system will improve student-instructor interaction and greater engagement during class. ClassPoint will create a more inclusive learning environment to promote student curiosity and generate intrinsic interest in the subject area.

Alan Gerding & Brian Hall

"VR in the Classroom"

Virtual Reality (VR) learning environments provide innovative opportunities to engage students in and out of the classroom. By designing immersive experiences that align with course outcomes, faculty can give students new ways to view and interact with class content that could lead to more memorable experiences and could increase student recall of course material. Additionally, by providing opportunities for students to use the VR equipment during open lab hours in Metro's Studio 101, students can be even more engaged in student-oriented VR activities that can lead to positive experiences at the college and could increase retention. In using VR in the classroom, students will not only be able to learn about the content from their textbook or lecture, but they can also experience it in an immersive environment, creating a complex learning experience that can increase understanding in course material and enjoyment in a course. As we incorporate VR in the classroom, this project will demonstrate how we are meeting the vision of Tri-C by being a leader in academic quality and innovation.

Rocklend James Davis

"Student Tablets for Enhanced Learning in Medical Laboratory Technology Labs"

Having student tablets for use in the Medical Laboratory Technology labs will serve the students in various areas to enhance their learning experience. As our manual cell counters continue to break, we are left without enough cell counters for all our Hematology students to practice cell differentiation during lab. Tablets are more affordable than new manual cell counters, and by using the digital format, this will better replicate what the students will be experiencing while in their clinical setting. In addition, instructors can create digital atlases for use during lab time across all courses in the program. MLT students are not able to bring their own devices into our laboratory, as we are testing patient samples, and this could lead to the spread of pathogens. All students would have access to the same digital images during lab. With the student tablets remaining in lab, this would eliminate any risk of accidentally spreading pathogens on devices or textbooks outside of the college lab.

Western Campus Faculty Innovation Grant (FIG) Awardees

Lina Agha "Cali Check"

Linearity QC must be done to ensure dose safety and calibrator passing, and the students need to learn and perform this QC test. Students are going to be able to do this test in a much shorter time, allowing all students to participate and complete the assigned lab competency. This kit cuts back the decay range of several days and/or hours to minutes. This will permit students to have hands-on lab testing QC training done. The kit

performs linearity test in a short time, accurately measures and simulates decay down to 10micro-curies and meets NRC standards.

Austin Gatt

"Understanding Electromagnetism"

Understanding electromagnetism is becoming increasingly important as hybrid electric vehicles become more prevalent on the road. These vehicles rely on the principles of electromagnetism to operate efficiently and effectively.

Students would use an electromagnetism training system to physically demonstrate, test, measure, and experience electromagnetism using a "hands-on" approach to learning. This training system enhances student success through a series of self-paced exercises and experiments while they practice and demonstrate basic principles of electromagnetism.

Meg McCreight

"Quality Control (QC) Equipment for Radiology Lab"

There are multiple factors that control radiograph quality. In RADT 1300 and RADT 1351, numerous experiments are set up to demonstrate how altering techniques one at a time, will ultimately affect the final image by one of those factors. Having this project fulfilled will allow for a real-time demonstration of how these factors also affects radiation quality and patient dose. These are crucial elements in radiation safety and are best demonstrated with quantifiable numbers rather than theory.

We would like to enhance the RADT 1300, RADT 1351 and PHYS 2250 labs to include more quality control and quality assurance experiments. This will not only help the students understand the importance of these weekly to annual tests performed at their hospitals, but it can also expose them to possible future career options as quality assurance technologists.

Desiree Sanders

"Community Health Project Video Initiative"

In NURS 1210 community health nursing course, students are required to complete a community health project in the last week of class. The presentations are delivered to the class and graded as an assignment. The FIG will be used to record the presentations to provide to community organizations. The Community Health Project Video Initiative aims to bridge the gap between academic research and practical community education. By recording and sharing students presentations, we aspire to create a dynamic, ongoing resource that benefits both our students and community organizations. This initiative aligns with our commitment to community engagement, education, and the continuous improvement of healthcare practices.

Westshore Campus Faculty Innovation Grant (FIG) Awardees

Lisa Friel

"Webcams for ESL Flip Recordings"

The Westshore ESL department uses Flip.com to make recordings of both impromptu and planned student speaking. We also utilize recordings for pronunciation evaluation. The Flip website requires that recording

devices have a web camera. None of the computers in our Westshore computer classrooms have web cameras built into them. Our department wants to install web cameras to cover all in-person classes.

Students will create recordings of their speech. Instructors and students will be able to analyze and evaluate recorded speech for characteristics relevant to the focus of the lesson in question. Recordings also allow students to apply what they have learned and show that they remember and understand lesson content.

Michael Piero

"VR for the Humanities: Using the Meta Quest 3 in the Classroom"

This project proposes the purchase of one new Meta Quest 3 VR headset, gift cards for the Meta Store for software purchase, and a WIFI hotspot device (and prepaid data cards) to support the latest VR experience in humanities classrooms. Furthermore, this project would provide release time for researching best practices of incorporating VR into the classroom, a catalogue of specific VR apps/experiences dedicated to the humanities, the creation of a webpage to share this research/resources with faculty inside and beyond Tri-C, and investigation into how to actually get this to work technologically in the classroom (i.e. projecting VR headset experiences to classroom monitors for the whole class to see). While this technology would be tested in the context of my Spring 102H Honors College Composition II course, this project's research and resources would be of benefit to all humanities disciplines across the college, with additional interest potentially beyond that to other faculty, stakeholders, and community members working outside the humanities. Many current VR apps at the College are dedicated, understandably so, to the sciences and health careers. This project would hopefully spark more interest among humanities instructors.

Elizabeth Vaidya

"Creation and Implementation of Physiology Lab Exercises in Anatomy and Physiology 1"

The purpose of this project is to increase hypothesis-driven physiology experiments in A&P 1 courses at the college. Currently, AP 1 labs are almost completely observational in nature. Adding experimental labs will increase engagement, relevancy, and learning for students. It will also aid in getting the course OT36 qualified, which requires experimental labs. The funds received from this grant will be used to purchase and test equipment, write laboratory activities, and develop faculty training to help implement the new labs at the college. Course-level outcome assessments will be analyzed to determine the effectiveness of the labs on student learning and surveys will be designed to explore the perceptions of lab activities from both student and faculty involved in the project.