

EDITOR'S NOTE

"Celebrating Rivier's Heritage"

Dear Readers,



The stained-glass window, "Blessed Anne Marie Rivier" in the Regina Library (Courtesy Photograph)

The Fall-2022 edition of the *InSight: Rivier Academic Journal* is dedicated to celebrating life of Saint Marie Rivier and Her canonization at Saint Peter's Basilica in Rome, Italy, on May 15, 2022. Following Rivier Heritage traditions, students, alumni, faculty, and staff continue participating actively in building tomorrow's workforce (nurses, educators, business leaders, IT/CS specialists, cybersecurity professionals, and many others), expanding research opportunities and partnerships with hospitals and high-tech companies, and promoting creative work and innovations in the modern sciences. The main theme of this edition is introduced by a group of faculty and students from the Rivier's Biology Department, who join a biomedical research collaboration and enhance faculty-mentored research. As the result of these efforts, Rivier became the newest member of the state's IDeA Network of Biomedical Research Excellence (NH-INBRE) this year. Information about three research projects and the first results summarized in the article "*Macrophage-Derived Extracellular Ribonucleic Acid Influences Inflammatory Profile of Macrophages in Dose-Dependent Manner*" (authors: Allison Alton '22, Dr. Brian Patenaude, and Dr. Tatiana Jones) are presented in this Journal Edition.

In the "*Message Queuing Telemetry Transport Protocol - How it Works*" article, Rebecca S. Goodrich, a student in M.S./Computer Information Systems program (guided by Prof. Peter Macdonald), overviews a nontraditional telecommunication protocol that has become widely used in various modern Internet-of-Things applications. Dr. Vladimir Riabov reviewed two advanced case studies ("*Modeling the Lorenz System's Chaotic Behavior*" and "*Numerical Simulation of Gas Injection*") offered to students in his Computer Science courses. In the article "*Welcoming International Students Back Through a Learner-Centered Approach*", Dr. Rita L. Naughton shares her experience in introducing new pedagogical methods for teaching various English courses for ESL students and future English teachers at Southern New Hampshire University.

Sr. Lucille C. Thibodeau, Ph.D., pm, shares her thoughts on the role of ecological crises in history in the essay "*'Dominion' and Our Ecological Crisis*." Sister Lucille concluded the essay with a powerful message: "... the fact that our time is running out does not have to shatter our hope or diminish our ability to change. Optimism is finite, but hope is infinite".

In the *Art* section, readers can find information about six art exhibits organized by Sr. Theresa Couture, pm, Director of Rivier's Art Gallery, from March 2021 to December 2022.

The *Chronicle* section covers profiles of faculty members, students, and alumni; Faculty Speakers Series; grants, and various distinction awards.

This 27th edition of the *InSight: Rivier Academic Journal* could not have been published without the active support of many members of the Rivier community to whom I am most grateful. In particular, I wish to thank the contributors for their submissions, the Editorial Board members for their guidelines, and all reviewers for their rigorous reviews and recommendations. Special thanks to the Office of Marketing & Communications (*Sky Croswell* and *Michelle Marrone*) — for providing information updates; the Office of Vice President for Academic Affairs and IT Support Group — for production support, and faculty from the departments of Biology, Business, Education, English, Nursing & Health Professions, Mathematics & Computer Science, Philosophy, and Religious Studies — for encouraging students and colleagues in publishing research articles, project papers, and essays.

We look forward to your contributions to the *InSight: Rivier Academic Journal* in the future.

Sincerely yours,

Vladimir Riabov

Vladimir V. Riabov, Ph.D., Editor-in-Chief