

QuaesitUM

The Undergraduate Research Journal of The University of Memphis

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QuaesitUM is a peer-reviewed annual publication that provides an academic forum where University of Memphis undergraduate students can showcase research from all disciplines.

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Dr. Sage Graham

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To Our Readers

Last year, we embarked on a mission to create a forum where undergraduate students across campus could publish their research and make it available to the campus community. The result was the inaugural issue of Quasitum (Kwáh-see-tum), a multi-disciplinary endeavor showcasing research by students from a wide array of departments, including Chemistry, English, Engineering, History, Philosophy, and Political Science. The breadth of research represented in those papers reflects the exploration taking place across the University and aims to foster awareness of the type of research being done within the University community at large rather than focusing on only one department or college.

This second volume continues that endeavor, encapsulating the mission outlined in our name: Quaesitum (v. to think; to ask). The papers contained here represent the quality scholarly work that emerges from asking new questions and exploring new perspectives.

As we finalize this second volume, there are many people whose contributions have been instrumental in its completion. First, I would like to offer my sincerest thanks to the Director of the Helen Hardin Honors Program, Dr. Melinda Jones and the Technical Editor, Mr. Baxter Buck. Their hard work and commitment to the project was pivotal in bringing it to fruition.

The three of us would also like to extend thanks to the Provost, Dr. Karen Weddle-West for continuing the administrative support that makes Quaesitum possible.

We are also extremely grateful to the faculty volunteers who served as reviewers and consultants: Dr. Angela Antipova, Ms. Cathy Dice, Dr. David Dwiggins, Dr. Ron Fuentes, Dr. Mihalis Golias, Dr. Matthias Kaelberer, Dr. Mark Kaplowitz, Dr. Chris Mueller, Dr. Ryan Parish, Ms. Rhonda Powers, Dr. Meredith Ray, and Dr. Kevin Smith. Their enthusiasm and commitment to the growth of our students is a large part of what makes this journal possible.

Thanks also go to Dr. Gary Golightly for the cover design and layout, and to the FedEx Institute of Technology and Jasbir Dhaliwal for funding the prizes for the best paper in each submission category.

We would also like to express our gratitude to the faculty sponsors who encouraged their students to submit their work. Without their encouragement, the students would not have begun the projects that are represented in this volume.

Finally, we would like to express our appreciation to the students themselves. It is difficult to submit your work for inspection and risk the possible criticism that that may bring. The students whose work appears in this volume, however, overcame that fear in order to allow their work to become part of the scholarly conversation that is the foundation of the academy. For that we offer our congratulations and thanks.

Dr. Sage Lambert Graham
Editor-in-Chief