Undergraduate Research Opportunities

1. Working Groups of Undergraduates and Faculty

Undergraduate students can engage in research activities by participating in one of the *Working Groups*. These Working Groups are small groups of faculty and students who are interested in a common research venture. Undergraduate students work directly with professors on interesting, open-ended problems, and they will be mentored individually by a faculty member. By exploring their projects together with other students and faculty, students will not only delve into an active research area but also learn how to work and communicate with others. Opportunities exist for students to present research papers at various conferences around the country. One working groups meets in the summer to study Knot and Graph Theory. Visit the undergraduate research page at http://math.osu.edu/research/undergraduate.

2. Young Mathematicians Conference

The Young Mathematicians Conference (YMC) is a series of national annual conferences for undergraduate student researchers in mathematics. Presentations in the form of talks or posters are made by students of their results and discoveries from activities listed above. Peer discussion of research ideas and experiences are at the center of conference program. See the website for more information: <u>http://www.ymc.osu.edu/</u>.

3. Research Opportunities in Mathematics for Underrepresented Students (ROMUS)

The Department of Mathematics at the Ohio State University invites undergraduate students, primarily from traditionally underrepresented groups, to pursue research under the tutelage of experienced faculty members. Students work with a faculty member on a project of mutual interest for 8-10 weeks during the summer. In addition to the research projects, all accepted students will participate in various cohort activities. These experiences will be virtual/remote for the summer of 2022. The projects will be in the areas of topological and geometric data analysis; probability; infectious disease modeling; dynamics; applied math; algebraic geometry; operator algebras; quantum theory; computational number theory; computational math; combinatorics and model theory.

Applications are welcome from all students from all schools. REU participants are paid a stipend during the summer. Please note, REUs are intended primarily for US citizens and Permanent Residents. Because of funding limitations, international students will be considered on an ad-hoc basis.

Applications will begin being evaluated in early March, and accepted until all slots are filled. All applications will be submitted to mathprograms.org through **this link:** https://www.mathprograms.org/db/programs/1259

4. Research Experience for Undergraduates (REUs)

There are also many mathematics-specific REUs available across the country supported by the National Science Foundation: <u>http://www.nsf.gov/crssprgm/reu/reu_search.cfm</u>.