What is Undergraduate Research/Scholarly Activity?

An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline (as defined by the Council on Undergraduate Research).

Not limited to science and engineering majors, but rather encompasses all disciplines, including the arts, humanities, social sciences, behavioral sciences, health sciences, and STEM (science, technology, engineering, and mathematics).
Office of Undergraduate Research (UGR)

✓ Open to all undergraduate students, all majors

✓ Connect students with on-campus/off-campus research & scholarly opportunities.

✓ Students are exposed to and prepare for future opportunities and careers.

✓ Explore UGR:  http://undergraduateresearch.wvu.edu
✓ Visit UGR:  305/306 Student Services Center
✓ Contact UGR:  undergradresearch@mail.wvu.edu; (304)293-9354

✓ Dr. Michelle Richards-Babb (Director), Dr. Kimberly Quedado (Asst. Director), and Kevin Walden (Program Specialist)
Undergraduate Research Examples

✓ Kayla Tokar (Major: Music; Mentor: Travis Stimeling)

✓ Kailee Gokey (Major: Geology; Mentor: Ken Brown)
  Urban Legacies: Linking Glass Manufacturing to Soil Pollution in Morgantown, WV

✓ Brian Kotson (Major: Psychology; Mentor: Steven Kinsey)
  The Cannabinoid Drug ZCZ011 Does not Alter Anxiety or Reward in Mice

✓ Nolan Holley (Major: Biochemistry; Mentor: Laura Gibson)
  Identification of a Sulfonamide Analog that Reduces Cell Viability in B-cell Acute Lymphoblastic Leukemia

✓ Cornell Brown (Major: Marketing; Mentor: Olga Bruyaka Collignon)
  Airline Dissolution
How Students Begin

Begin by volunteering/shadowing faculty members/grad students as they carry out research/scholarly activities. If thrived in that environment, continue via:

✓ **Volunteer/Shadow**: Continue the activity as academic schedule permits.

✓ **Course Credit**: Enroll in an undergraduate research course. Many WVU majors offer a 497-level UG research course (e.g., CHEM, ACE, HONR, OTH) or capstone experience (e.g., BIOL 386) to earn credit.

✓ **Research Program**: Continue research through a summer UG research experience program (e.g., SURE) or an academic year program (e.g., RAP).

✓ **Faculty Supported**: Some faculty members have grant funding to support UG researchers. Typically this funding is reserved for advanced UGs with documented experience in research with the faculty member.
Finding a Faculty Mentor for Research/Scholarly Activity

✓ We encourage students to think about their background, interests, and professional goals.

✓ Example: Majoring in chemistry with an interest in toxicology & a desire to work in the pharmaceutical industry?
  ✓ Then, do not limit search to chemistry department faculty.
  ✓ Also consider faculty members from the School of Pharmacy & Biomedical Sciences program.

✓ Search websites of relevant WVU schools, departments, and programs and read up on faculty research interests.

✓ Narrow down search for a faculty mentor to three or fewer. Finding a faculty research mentor is the hardest part. **UGR can help!**
Research Apprenticeship Program (RAP)

- Academic year and 2-semesters
- No research experience required to participate in apprenticeships with WVU research faculty.
- Students participate in wide array of disciplines (business, geography, women’s studies, chemistry, pharmacy, medicine, public health).
- Federal work study and/or course credit
- Assistance with finding a research mentor
- Professional development through 1-credit research course
- Questions: Contact Dr. Kimberly Quedado RAP@mail.wvu.edu or (304)293-7382
WVU Summer Undergraduate Research Experience (SURE)

• **Provides** - Stipend of $3,700 per UG for 8-weeks of full-time mentored research and $500 of enrichment. Accompanied by 1-credit class involving workshops, career mentoring, trainings, and culminating poster symposium.

• Applications due in early March

• **# UG supported** - 50 UG/summer. Competitive application process.

• **Limitations?** UG must permanently reside in WV or attend WV institutions, and be U.S. citizens or permanent residents of U.S. Also, must be interested in research and attending graduate school.

• **Funding** - By state of WV: Research Challenge Fund grant, HEPC Division of Science and Research. Augmented by internal funding provided by Provost, Statler, Eberly, Davis, HSC, Chemistry and Biology Depts., CPASS, Business and Creative Arts.

[https://undergraduateresearch.wvu.edu/research-opportunities/wvu-opportunities/summer-undergraduate-research-experience-sure](https://undergraduateresearch.wvu.edu/research-opportunities/wvu-opportunities/summer-undergraduate-research-experience-sure)
On-Campus Programming

- **Spring Undergraduate Symposium**: Campus-wide symposium to celebrate scholarly activities. Coordinated with Decide WVU Day for current high school students and parents. This year’s event was held April 12-13 (180 posters & 6 orals).

- **Workshops**: Such as NSF GRF, Introduction to UG Research, How to Communicate Research
Other Programming (cont.)

Support undergraduates in applying and attending:

• **NIST SURF:** 11-week research opportunity at a national lab. 2016-18: 32 applicants, 12 offers and 10 participants.

• **CUR Posters on the Hill:** Competitive abstract submission for 2-day conference to promote research in Nation’s Capitol and to Legislators. WVU undergrad representative in each of 2016, 2017, 2018 & 2019.
Other Programming (cont.)

Support undergraduates in applying and attending:

- **NCUR**: Nationwide undergraduate research conference. Eighteen (18) student representatives (chemistry, biology, biochemistry, engineering, history) in spring 2017-2019.

- **Competitive Travel Funding**: $500 for 10 UG/year. UG must apply. Application includes budget and budget justification.
Conference Locations at which WVU Undergraduates Presented Their Research in 2017
External Opportunities

✓ Explore External Opportunities at UGR: https://undergraduateresearch.wvu.edu/research-opportunities/external-opportunities

✓ Explore External Opportunities at the S.O.C.: https://honorswvu.wufoo.com/forms/q18o8uq71k5pyiw/