

### Nuts and Bolts of SSuRF.

What is the SSuRF Program?	An intensive faculty-mentored undergraduate research (UR) or creative activity (CA) program.
When is the SSuRF Program?	Summer 2021 (1 June to 10 August, 10 weeks).
Location.	Westfield State University campus.
When is the application due?	Monday April 15 at 11:59pm
What's in it for the student?	\$3,500 stipend and many highly-transferable gains.
What's in it for the faculty?	\$1,500 stipend + \$300 for supplies (as needed) + a great way to stay active as a scholar.
What else do I need to know?	Continue reading
Questions?	Contact Dr. Lamis Jarvinen (CURCA Director).

Students participating in this highly-competitive program are expected to spend about 40 hours per week on-campus working on their project and should not be working elsewhere or taking any classes. In addition, all faculty and students are required to participate in scheduled summer workshops and research in progress meetings with the Director and the group as a whole. Additionally, students will be involved in peer-mentorship with Urban Education Summer Bridge Program students. Students and faculty will be asked to participate in assessments regarding their experience and SSuRF students will be **required** to give an oral presentation of their work at our Fall CURCA Celebration and to create a video of their project. The Director will provide the necessary workshop tools and guidance for these requirements.

### Rationale and Benefits.

It is well-established (e.g. [Laursen et al. 2010](#)) that undergraduate students realize the greatest benefits from their undergraduate education if they expand their coursework with authentic and meaningful experiences in their field to provide the real-world context to apply the knowledge and skills they acquired. Laursen et al. (2010) further found that intensive, sustained, and high-level undergraduate research (UR, e.g. summer research programs) can lead to greater intellectual, personal, and professional gains than other high-impact practices (e.g. internships, service learning, international programs, etc.).

It is also clear that students (and faculty) often find UR/CA projects during the academic year stressful and difficult to balance with other coursework and commitments ([Lopatto, 2009](#)). In contrast, summer research allows both students and faculty to more fully commit and concentrate on their scholarship. It is therefore not surprising that 10-weeks is an accepted and standard length of time (at least in the sciences) for an intensive summer research experience / project. On the faculty side, intensive UR or CA projects with students over the summer can be effective contributions to their own scholarship. In other words: a way to stay active as a scholar and active in the discipline.

### **Key for Success #1: A Great Project.**

Laursen et al. (2010, Page 206): “[It] is not just ‘like’ real; it is real”.

A great SSuRF project is, first and foremost, authentic: a scholarly project of significance to the field or discipline. Of course, every SSuRF Project is different, but the following features (modified from Laursen et al., 2010) are usually present:

1. The project starts at an appropriate level for the student and fits the student’s background, interests, available time frame, and available resources.
2. The project uses skills the student already possess or can learn quickly so progress can be made quickly.
3. The project has a modest scope that can be simplified, extended, redesigned, or redirected as needed.
4. The project involves intensive engagement in scholarly work over an entire summer.
5. The project includes appropriate levels of independence, collaboration, and responsibility - the student is playing an active part.
6. The project has a good chance of producing results with the time frame available.
7. The project is presented publically and conference travel funding is available on a competitive basis.
8. Multi-Year engagements (i.e. ‘stacking’) of different UR/CA experiences is possible and desirable for greater benefits ([Banks and Gutierrez, 2017](#)).

In other words: the project has to be conceptually and technically accessible for the student within the 10 weeks of the SSuRF Program.

Authenticity is the key factor for both students and faculty: the project has to be what scholars actually do in their respective fields in terms of questions, methods, and ways of thinking and working. Often the easiest way to achieve this authenticity is a UR/CA project that is embedded into faculty scholarship, following the ‘apprenticeship’ model (for example by accomplishing data collection or lab/field work). Additional authenticity and legitimacy is provided by formal project presentations (if possible at an off-campus conference).

### **Key for Success #2: A Great Faculty Mentor.**

The educational research literature is quite clear: the single most important factor for student success in UR/CA is effective and personalized faculty mentoring. Faculty mentors, in-general, want their students to “become a scientist/scholar” and look for three signs of such a progress (modified from Laursen et al. 2010):

1. Demonstrate confidence to do scholarly work - this means that they function and succeed intellectually and professionally in new situations.

2. Demonstrate ownership of their project and the intellectual and personal commitment that this requires.
3. Demonstrate a sense of belonging and identifying as a scientist or scholar - this means that they interpret their own activities as valid scholarly work.

### **Key for Success #3: A Great Student.**

The SSuRF Program is a great opportunity for a highly-motivated student, but it comes with high demands and represents a considerable commitment. Ideally, you would be able to build a relationship with a suitable student early-on who can then participate in the SSuRF Program during the summer between their 3rd and 4th-Year at Westfield State University.

### **Key for Success #4: A Proven Framework.**

We are not reinventing the wheel, but rather transposing successful models such as the [NSF Research Experience of Undergraduates \(REU\) program](#) or the [Adrian Tinsley Program \(ATP\)](#) at Bridgewater State University to our campus.

Faculty and students do not work in isolation during the SSuRF Program. Instead, a cohesive and supportive peer community develops - facilitated by the CURCA Director and supported with programming and funding - and brings together all students and faculty engaged in UR/CA projects during a given summer. For example, weekly meetings provide informal opportunities for students to explain their projects to others and share their progress with others.

The SSuRF Program 'Contract' details the expectation and responsibilities of the faculty mentor and student, for example:

- Working hours, professional behavior, research ethics, etc. (as applicable).
- Reading to be completed before SSuRF Programs starts, etc.
- End-of-summer presentation; CURCA presentation (during the following fall or spring semester).
- Exit interviews with the CURCA Director and student self-assessment using the URSSA instrument.

The student is expected to keep an ongoing and detailed record of their intellectual journey (aka. 'the lab notebook'), including weekly reflections, as a Google Doc shared with the faculty mentor and CURCA Director who will both review the document on a weekly basis.

**Questions? Concerns? Please contact Dr. Lamis Jarvinen (CURCA Director) for help or advice with your SSuRF Program Application.**