

## SMU-Math Research Experience for Undergraduates (SMU-REU): Summer 2021



The Department of Mathematics at SMU invites applications for two consecutive two-week research and training experiences covering topics in mathematical and computational neuroscience (**REU 1**) and dynamics in complex systems (**REU 2**).

**REU 1: Computation-enabled Investigations into Neural Circuits** 

**Dates:** June 21-July 2, 2021

Faculty Mentors: Andrea Barreiro, Kathryn Hedrick (SMU)

Research projects using experimental data from partner labs in the UT Southwestern Department of

Neuroscience.

**REU 2: Dynamics in complex systems** 

Dates: July 6-16, 2021

Faculty Mentors: Binh Minh Tran and Alejandro Aceves

Research projects will center on applications in nonlinear optics and general wave phenomena.

We anticipate some projects will be in collaboration with National or private Laboratories.

To participate, students must be US citizens or permanent residents and must not have completed their undergraduate degree before January 2021. Selected students will receive a stipend of \$1,200 per two-week session, plus up to \$600 towards travel to Dallas as well as accommodation. We encourage applications from women and groups traditionally underrepresented in mathematics. Students can apply to one or both REUs.

Review of applications will begin on March 26, 2021: later applications will be considered as space permits.

To more information or to apply, contact <a href="mailto:abarreiro@smu.edu">abarreiro@smu.edu</a>.

Southern Methodist University (SMU)-Math Research Experience for Undergraduates (REU): Summer 2021. Location: Southern Methodist University, Dallas TX

The Department of Mathematics at SMU invites applications for two consecutive two-week research and training experiences covering topics in mathematical and computational neuroscience (**REU 1**) and dynamics in complex systems (**REU 2**). These REU are supported by an NSF-RTG grant. The format will consist of a combination of core lectures on the SMU campus and participation in team-based research projects.

## **REU 1: Computation-enabled Investigations into Neural Circuits**

Dates: June 21-July 2, 2021

Faculty Mentors: Andrea Barreiro, Kathryn Hedrick (SMU)

Research projects using experimental data from partner labs in the UT Southwestern Department of Neuroscience.

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To submit a complete application, please submit the following items via e-mail to <a href="mailto:abarreiro@smu.edu">abarreiro@smu.edu</a>:

- One letter of recommendation, preferably from a mathematics professor. Letters may be sent directly from the individuals who are writing the letters.
- An essay of 250-500 words describing your research interests, educational interests, and professional plans.
- An academic transcript (unofficial or official)
- Students should indicate which REU she/he is applying for (REU 1, REU 2, Both)

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