## San Diego State University Mathematics Research Experience for Undergraduates 2018 Program Survey Summary

Participants were asked to anonymously answer ten survey questions evaluating the program. The question response rate was 100%. Each question was answered on a six-point scale. The overall average was 4.38, Positive/Good. The responses were bimodal; one research group was very satisfied, while the other struggled to make progress and were unhappy with their project director.

	1=Terrible 2=Bad 3=Neutral 4=Positive 5=Good 6=Excellent
Ave.	Question
5.08	Please evaluate your Project Team.
4.92	Please evaluate the social/recreational environment.
4.75	Please evaluate the expected impact of the REU program on your career and life.
4.50	Please evaluate the REU program as a whole.
4.50	Please evaluate the SDSU campus facilities you used.
4.42	Please evaluate the opening week.
4.17	Please evaluate your specific research topic.
4.17	Please evaluate your Project Director.
3.83	Please evaluate the outcome of your research.
3.50	Please evaluate the overall organization of the REU program.

Here are some quotes from these anonymous surveys.

- I am so proud of our research and the two papers we are focused on writing.
- I definitely better understand the nature of academic research now.
- My team had a very friendly dynamic and often spent weekends together exploring the lovely surroundings.
- I've learned a tremendous amount.
- Loved the topic.
- I am grateful for this experience.
- I will always remeber this fantastic experience.
- Very very excited about the topic!
- I enjoyed the opening week!

Participants were also asked to answer seven questions about attitudes toward the mathematical sciences. They were surveyed both at the beginning of the program and at its conclusion. All survey pairs were received, with a question response rate of 100%. Each question was on a six-point scale.

1=Strongly Disagree 2=Moderately Disagree 3=Disagree Slightly 4=Agree Slightly 5=Moderately Agree 6=Strongly Agree

Change in Attitude	Question
0.67	I understand the nature of research in mathematics.
0.50	I write technical material in mathematics well.
0.33	I enjoy discussing mathematics with others.
-0.08	I plan to pursue (further) graduate study in mathematics.
-0.25	I understand the nature of graduate study in mathematics.
-0.33	I enjoy doing mathematics.
-0.42	I want research in mathematics to be part of my career.

Note the dramatic attitude increases in several questions. The questions with small decreases were generally split – most students increased their desire for mathematics research and graduate school, while several had dramatic decreases in these desires. We consider these outcomes excellent. It is better for students to make good choices about their future, whether or not those futures include research in mathematics, based on their experiences in our program.