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### Colorado State University

The Department of Statistics at Colorado State University is a unit within the research-rich College of Natural Sciences. REU participants will collaborate with researchers within the college on the management of data, data analysis, data visualization, and summaries of studies within the natural sciences. Specific domain science projects include the exploration of anticancer agent properties, classification of salmonella serotype proteins, and simulating and examining optical density versus time data from particles under varying experimental conditions. The Statistics faculty who mentor this REU have many years of experience collaborating with scientists in other disciplines and involving students in these activities. The Statistics REU participants will be part of a larger REU student community at CSU, in scenic Fort Collins, Colorado, which organizes social and educational events during the summer.

### Morgan State University

The Department of Mathematics at Morgan State University is pleased to host the first Summer Program Advancing Techniques in Applied Learning of Statistics (SPATIAL-Stats). SPATIAL-Stats is a REU aimed at providing a mentoring structure that promotes active learning and engagement in problems in statistics, emphasizing spatial statistics. The SPATIAL-Stats research project involves developing and analyzing spatial statistical methods that will detect geographic distributions of populations at risk, determine cancer rates, and define environmental conditions that impact diseases. Students will also participate in field trips to government research labs, attend a professional conference, and engage in a plethora of opportunities for career development during the 10 week REU.

### North Carolina State University - Greensboro

The Department of Mathematics and Statistics at UNC Greensboro plans to recruit highly motivated undergraduate students and train them in complex data analysis techniques. The focus will be on developing and comparing predictive models for various diseases using machine learning and robust regression techniques. Various publicly available epidemiology data will be used for building predictive models. Students will also learn how to ensure data confidentiality through randomized response models. UNC Greensboro is located close to major research centers in NC and has a long history of providing research opportunities to undergraduate students through various NSF funded programs.

### REU Program Contacts

#### Colorado State University

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#### Morgan State University

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#### North Carolina State University - Greensboro

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#### American Statistical Association

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#### Program Details

- 10 Week Summer 2018 Research Program
- Stipend of \$8,000

#### Qualifications

- U.S. Citizen or permanent resident
- Currently enrolled as a rising sophomore, junior, or senior at an accredited institution of higher education

#### Application Process

- Contact the listed University representative for program specific application information.
- Women, minorities, and persons with disabilities are encouraged to apply.

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# REU

RESEARCH EXPERIENCE FOR UNDERGRADUATES

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