

# **Research Opportunities for Science Educators (ROSE)**

## **Pilot Project Report**

### **Part A. Activities**

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Steve Cabaniss, Professor of Chemistry  
Jeffrey Rack, Professor of Chemistry  
Susan R. Atlas, Associate Professor of Chemistry

Jeremy Edwards, Chair, Professor of Chemistry

Department of Chemistry and Chemical Biology  
University of New Mexico

## Executive Summary

The Research Opportunities for Science Educators (ROSE) pilot program was a collaboration between the University of New Mexico (UNM) and the New Mexico Public Education Department (PED). The idea was originally conceived by researchers in the Department of Chemistry and Chemical Biology at UNM and the final version of the pilot program was developed through discussions among these researchers and PED officials over a period of several weeks in Spring 2021. The goal of the program is to help improve the quality of science education in New Mexico by enabling educators to refresh their knowledge and develop new skills, while gaining appreciation for and inspiration from current scientific research. Another long-term goal is to substantively change perception of the research enterprise, as high school science teachers experience the excitement and satisfaction of cutting-edge research first-hand and convey this to their students.

Applications were solicited from New Mexico high school chemistry/science teachers across the state, and finalists were invited to join principal investigator (PI)-led research laboratories at UNM for one month as resident researcher-Scholars. Demand for the program far outstripped available positions in hosting labs, with 39 official applications and 3 additional inquiries for 5 positions. Additional funding from the UNM research office allowed a total of 8 Scholars to be funded, 2 from Albuquerque and 6 from smaller communities throughout NM. All selected Scholars teach at schools with high percentages of under-represented minorities in the student bodies. The Scholars' projects in five research groups included molecular modeling, chemical synthesis and chemical biology.

Assessment of the program is ongoing, through personal interviews with the ROSE Scholars and PI lab directors. An independent third party is conducting the personal interviews and anonymizing the results. Initial results indicate that the pilot program was an extraordinary success. Participants were enthusiastic about their experiences and willing to recommend the program to colleagues. A second round of follow-up interviews will be held in the fall to gain insight into how the 2021 cohort of Scholars have incorporated their experiences within their classroom lessons, and a final assessment report will be issued in late 2021.

Based on the success of the 2021 summer pilot, we are excited about the possibility of improving and expanding the ROSE Program in the future, and we look forward to future collaborations with NM PED and hope to include other partners as well.