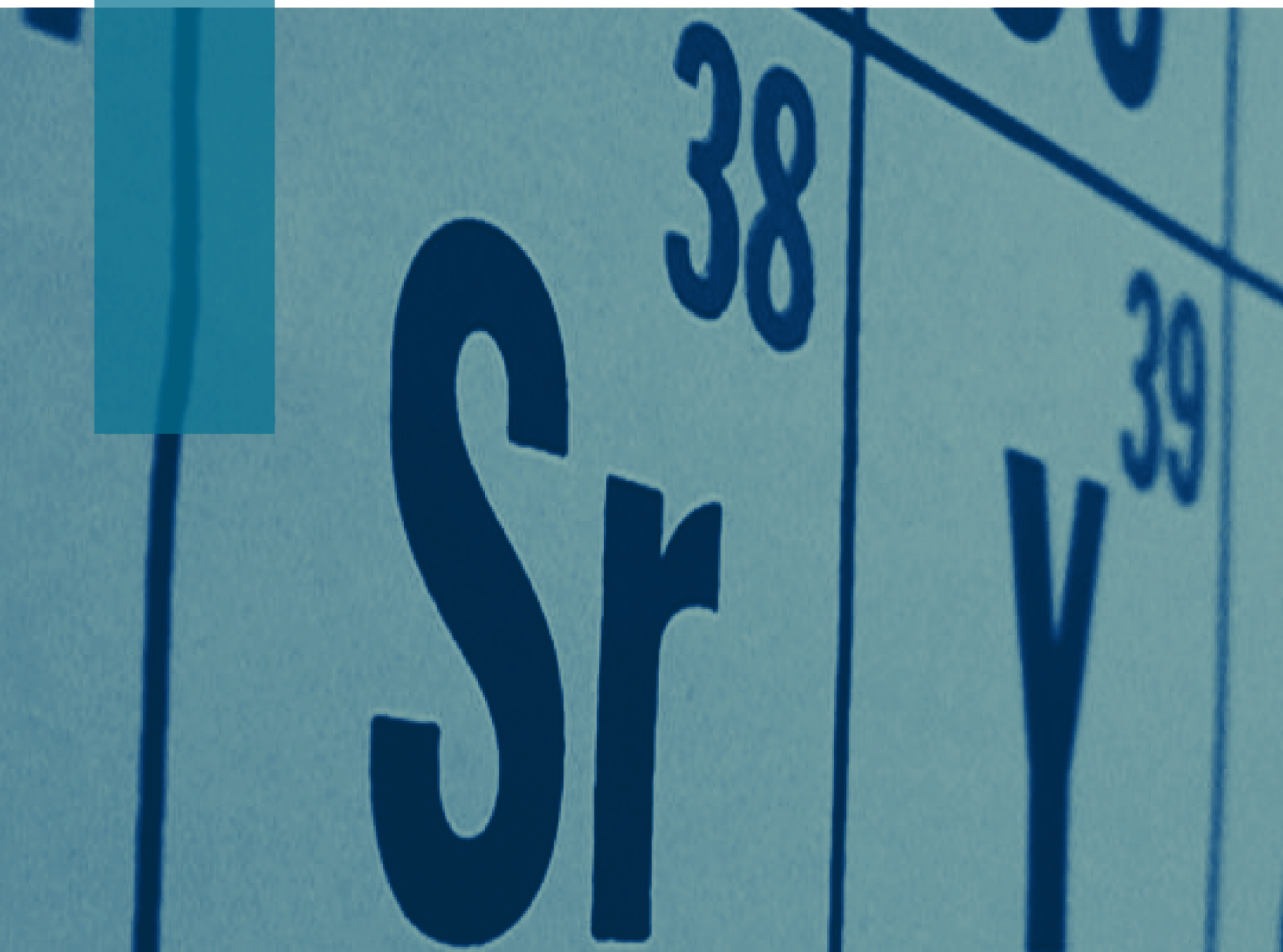


# REU in Chemistry

EVALUATION REPORT 2022



# STRENGTHS

## The program was highly rated.

The 10-week Research Experiences for Undergraduates (REU) in Chemistry program provided 19 students with a successful summer research experience. Students' average rating of the program overall was...



The **highest rated** aspects of the program were

Faculty Advisors ★★★★★ 4.8/5  
Project Topic ★★★★★ 4.7/5  
Research Experience ★★★★★ 4.7/5

The **lowest rated** aspects of the program were

Quantum Chemistry Course ★★★☆☆ 3.6/5  
Computational Chemistry Workshop ★★★☆☆ 3.6/5

Even the lower rated aspects of the program were still talked about positively!



# STRENGTHS

## The program was engaging and students' research self-efficacy improved.

The most engaging parts of the program were the **research lab** and **ethics training**.

A few students reported not having enough **prior knowledge** to follow the computational chemistry workshop, which could explain the lower engagement ratings.

Students' research experiences were not only engaging but also helped them **develop their research self-efficacy**.

Students who entered the program with low research self-efficacy caught up to their high self-efficacy peers by the end of the program (see page 3).

How much do you agree with the following statements?	Research Lab	Computational Chemistry Workshop	Professional Seminars	Ethics Training
I made an effort to learn the material	2.68	2.5 + 1.28	2.00	2.32
I was motivated to learn about the topic	2.63	1.53	1.89	2.11
I realize the importance of what I have learned	2.74	1.84	2.22	2.68
I have used what I learned	2.47	1.33	2.00	2.47
I plan to use what I learned	2.63	1.53	2.50	2.74

Scale



-3 Strongly disagree      -2 Disagree      -1 Somewhat disagree      0 Neither agree nor disagree      1 Somewhat agree      2 Agree      3 Strongly agree

# STRENGTHS

## Students' research self-efficacy improved.



# STRENGTHS

## The program helped students realize their future educational and career goals.

The program provided students with a **hands-on experience** of what it is like to do academic research, thereby helping them make informed educational and career decisions.

Most students entered the program with an idea of their future plans. This was a motivated group of students, **94%** entered the program intending to apply to graduate programs:

- 12 Ph.D. only
- 5 Master's & Ph.D.
- 1 Master's only

**88%** of students entered the program thinking that they wanted to pursue a career in chemistry.

For those who were unsure, **the program helped them determine their future plans.**

One student realized they wanted to pursue a career in chemistry while another student determined they wanted go into medicine.

Another student thought they wanted to work in an industry setting but after their experience, realized they'd like to pursue an academic path.

**"The REU program broadened my horizons and gave me a better feel for what it is actually like to be a scientist."**



**"Before coming here, I didn't think of going into grad school. This experience showed me that grad school is something I want to pursue."**

# RECOMMENDATIONS

## The program would benefit from enhancing students' food options.

52% of students mentioned the food card as an area where the program could improve.

The \$700 food card only covers 25% of students' \$2,695 food cost for the duration of the program.

Students would have benefited from knowing upfront that they would be personally responsible for most of their food expenses.

Students would have also benefited from more food options. Those with dietary restrictions felt limited by the options available at the UCONN dining hall.

If the program could include the \$700 on the food card as part of the summer stipend, students wouldn't be limited to the dining hall and could explore more options. Otherwise it could work on accommodations for students with dietary restrictions.

### Cost of Dining @ UCONN



Meal	Day	Week	Program
Breakfast	\$8.50	\$59.50	\$595.00
Lunch	\$13.50	\$94.50	\$945.00
Dinner	\$16.50	\$115.50	\$1,155.00
<b>Total</b>	<b>\$38.50</b>	<b>\$269.50</b>	<b>\$2,695.00</b>

# RECOMMENDATIONS

## The program would benefit from expanding diversity and inclusion efforts.

There is room for the program to expand its efforts to **represent and include** individuals from different backgrounds (e.g., race, gender). A demographic breakdown of students found that most were from privileged backgrounds, with **66% white** and **61% male**.

Students from underrepresented backgrounds performed **equally well** in the program compared to their non-underrepresented peers.

Research suggests REU-type programs are **essential for women and racial minorities** who are less likely to persist through STEM Careers.<sup>1</sup>

As the program continues to diversify, it can continue to facilitate an inclusive culture that **prioritizes fairness and comfort** of students from underrepresented backgrounds.

Some **examples** of this include but are not limited to... reviewing applications blind, increasing the diversity among faculty mentors, encouraging faculty to introduce their pronouns throughout the program.

