Applying to a Research for Undergraduates (REU)

Tips and tricks
Applying to REUs is nerve-racking.

Having no previous research experience makes applying to REUs daunting. What do you put on your resume? What do you mention in your personal statement? **It's OK if you have no experience.** That's the whole point of applying for REUs - to have the chance to experience a research environment!

If you want to explore the world of research, then an REU is for you.
Topics

- Looking for REU Programs
- Recommendations
- Personal Statements
Looking for an REU program.

What have you always been curious about?

Chemistry: Organic, Inorganic, Physical, Analytical, Biochem etc.  
Biology: Microbiology, Zoology, Botany, Conservation etc.  
Mathematics: Algebra, Number Theory, Geometry, Arithmetic etc.  
Physics: Classical, Modern, Astrophysics, Nuclear, Biophysics etc.  
Comp Sci: Comp. systems, AI, Security, Software Eng., Bioinformatics etc.  
Psychology: Clinical, Cognitive, Behavioral, Biopsychology etc.

There are so many types of research. It can be quite overwhelming! Ask yourself what branch of your subject you'd like to know more about.

Look at the NSF website (nsf.gov) and do some digging on school REU programs. Remember to take into account the location and whether you'll feel comfortable in the area!

Only apply to as many programs as you're comfortable applying to. It's takes work!

If you're an international student:

The National Science Foundation (NSF) only funds domestic students, but sometimes programs have funds set aside for international students. Check the program's website, or ASK a professor or a program director if they have the funds to support you. This means sending an email. Be direct!
Recommendations are important.

Ask about a month before the deadline. You want to make the recommendation process as easy as possible for your recommenders. **Ask them early.**

If they say yes, have a detailed email ready with:
- Program you’re applying to
- Its deadline
- Links or addresses where they’ll send the letter

Add why you’re applying to these programs. Do they explore clean energy (this was my reason)? Do they have funds for international students?

Here’s one of my emails for reference:

Give a gentle reminder about each deadline a week before it’s due! Your recommenders have busy schedules. Remind them!
What makes a great personal statement?

It's always weird giving solid advice for personal statements mostly because each program looks for different things. Here's some suggestions that helped me out when writing mine.
Email a professor/grad student.

First, check if the program allows this. The email is mostly to express interest in doing research with the group. Ask for some publications. Here's an example:

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Dear Dr. Cossairt,

I hope my email finds you well. On my search for research opportunities for this coming summer, I noticed that you are involved in an REU and wanted to write to you about the potential of me doing research in your lab. I was reading your website and I noticed that you are working on optical energy conversion and making new materials. I am very interested in learning more about how molecules are designed to harvest light.

While, I don't have previous research experience, I have been learning photochemistry in my classes and I will have finished the first semester of organic chemistry before this summer. I have also had several chemistry classes, including sustainable chemistry and medicinal chemistry, these classes all make me really interested in the work you do.

I was wondering; will you be taking summer students this year? I know you are probably very busy, but if you are taking students I was hoping you might suggest some papers I could read to find out what kind of research students will be doing.

Best,
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Are you under-represented in science?

"Do you attend a non-research institution (aka Bennington)"
"Are you minority in research?" "Do you come from an area with little resources?" "Are you FLoW?"
Mention it!!!!

Express your love for science!

What’s your motivation to pursue research in science? What draws your interest into the subject? An adversity from your childhood? An inspiration? A simple curiosity?

Research takes time and commitment - can you withstand the environment? (Short answer is yes, duh!)
“Future goals”

Can include:
- PhD
or career paths like,
- Professor
- Research Scientist
- etc.

I would suggest looking into a path that involves research for these applications!

Refer to experiences you’ve had.

This can include:
- Classes you’ve taken
- Jobs you’ve learned from
- General past experiences (hobbies, skills)

Sharing small personal examples can be a great way to do this. This'll show what your background looks like on the subject your interested in!

It may even be helpful to mention that you've never had real solid experience in research/in a lab because of the limited resources and instruments at Bennington.
Do what feels right.

Remember that these are all suggestions. Express yourself in a way that makes you feel comfortable, and don't feel obligated to follow what I've put here!

Use this winter to really grind on the whole process since most applications are due sometime early February. If you have questions feel free to reach out to me via email: julisajuarez@bennington.edu!
This is for you.

Getting an REU seriously changed my perspective on the world and on my future. I figured out what I'd love to do for the next few years of my life and am applying to grad school for chemistry now! GOOD LUCK! If you get one, awesome. If you don't, don't stop looking for opportunities to learn. You got this.