

# THE PERIODIC TIMES

STUDENT NEWSLETTER - OCT 2022



CHEMISTRY AND  
FERMENTATION  
SCIENCES NEWSLETTER

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## WELCOME!

BY EDITOR-IN-CHIEF  
HANNAH NIXON

Welcome to the first edition of *The Periodic Times: Student Newsletter*. We are all very excited to be part of a new way to showcase the many happenings and achievements of our students, faculty and staff here in the Department of Chemistry and Fermentation Sciences. Delivered to you on the first week of each month and written by students, this newsletter will present the latest research, events, and opportunities surrounding our community. In this edition we highlight some of the resources available to students applying to graduate school this fall, as well as introduce our first Alumni of the Month: Sophie Knier.

*We hope that you find this newsletter resourceful and engaging!*

# JOBS AND INTERNSHIPS

BY TAYLOR BROWN

## Looking for a job or internship?

Be sure to sign up for Handshake to stay connected with the Career Development Center! They post job and internship availability daily, sending weekly emails out with highlighted jobs that fit your preferences. Handshake is a great resource for your job search at the end of your college career and a great way to connect with employers directly about a listing. Handshake allows you to filter by job type, position, location, and more!

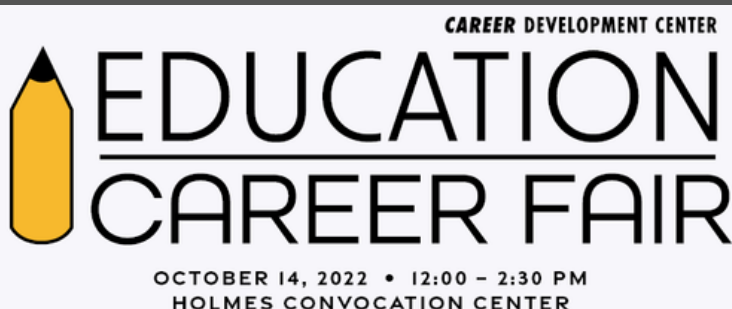
Also keep an eye out for emails from the department office about job openings and internship opportunities both in North Carolina and abroad. These emails usually go out as they are presented to the office, so be sure to be on the lookout.



## Interested in pursuing a career in education?

On Friday October 14th, the Reich College of Education will hold the annual Education Career Fair at the Holmes Convocation Center. Alumni, school administrators, and other education personnel from across the country will meet with current Appalachian State students interested in pursuing careers in primary and secondary education. If you are interested in attending the career fair, use the link below to register! Don't forget to bring your AppCard, your resume, and your best professional attire.

<https://careers.appstate.edu/education-career-fair-students>



# PROFESSIONAL DEVELOPMENT CORNER

BY TAYLOR BROWN & ZACH DAVIS

***There are certain skills in the professional world that stand out when combined with other skills. Here are some skills that you should consider learning to improve the quality of your resume.***



**Public speaking and communication.** This has been touted as one of the most important skills that recruiters look for. Having someone that can do excellent work is great, but also having that same person explain it elevates the applicant because they have a deeper understanding of the material and will be able to help others learn it as well.

**Computer skills.** Learning how to use a computer seems to be a no-brainer, especially in a post-pandemic world. There are still many skills that can be learned and honed that are important in the workforce. Proficiency in Microsoft Office, specifically Excel, cannot be understated. This program is used in many different applications, and having the skills to use it efficiently can be a game changer. Other skills to consider would be the coding language Python, Adobe Photoshop, or search engine efficiency.

**Learn another language.** Learning another language shows a potential employer that you have the discipline to learn something new and are open to communicating with other people. Speaking foreign languages can imply good people skills, a willingness to communicate with others, and the potential for showing off leadership skills. Even if the language isn't pertinent to the position, it should still be mentioned because it can help separate you from the masses.

## Have an application or interview to prepare for?

As a student, the best resource for you is the Career Development Center. They orchestrate professional events, resume workshops, career fairs, information on the interview process, guidance on graduate school (if applicable to you), student employment here on campus, and much more. Visit them in the Plemmons Student Union for drop-in assistance or to make appointments for one-on-one meetings with their staff.

## Professional Activities Coming Soon!

### Talent Jam at Booneshine

The Talent Jam is coming to Boone on Thursday, November 10th. Hosted by Booneshine Brewing Company off of Industrial Park Road, the Talent Jam is a showcase in which you can present your talents, passions, and interests to employers or organizations looking for people like you! Prepare a minute long "advertisement" of yourself and after presentations are done, participants can casually mingle and network.

<https://careers.appstate.edu/talent-jam-work-it-watauga>

## CLUB NEWS

BY CHRISTIAN HAMMOND

**Are you interested in learning more about fermented foods and beverages? Do you want to get more involved in interdisciplinary science? Do you want to make new friends that share the same interests?**

Come check out Fermentation Science Club! Ferm Club kicked off the fall semester with several exciting projects including hot sauce, cheese, and hot dogs, and we have a bunch of other fun plans in store for the months ahead. Check out the following link to sign up for the club email list to get notified about upcoming meetings!

<https://orgsync.usl7.list-manage.com/subscribe?u=5dd1b7c4acee6c91ef2ace823&id=5dab8bf433>

## ORDERS ARE OPEN FOR CHEM CLUB APPAREL!

The Chemistry Club is now offering t-shirts and hoodies for the Fall 2022 semester starting at \$20.00 for t-shirts and \$35.00 for hoodies. The back of all apparel has the sample design shown to the right. The only difference is the color the design is printed in. The colors are the same for the front and back of a given shirt. This year's shirt will be in white with the element of the year: Sr on the front with a periodic table on the back (in black lettering).

Below is a **QR code** that will direct you to the Chemistry Club Apparel Order Form. Cash, check, or Venmo are possible forms of payment. Payment will be expected on delivery of goods, unless shipping is required, then advanced payment will be required.

**All orders must be placed prior to Nov 30, 2022 at 5pm. Orders placed after this time will not be filled during the Fall semester. If you have any questions please contact Dr. Bates ([batesje@appstate.edu](mailto:batesje@appstate.edu)).**





# STUDENT & FACULTY NEWS

BY KENDALL BYRD & SARAH TRAYLOR

**Ever wonder what your classmates are up to?**



Dr. Weber's research group involving Tanner McMinn, Logan Jenkins, Joshua Russell, Connor McMinn, and Jason Wilt released a journal of undergraduate chemistry research paper focused on *A Streamlined Synthesis of TBDMS Protected C1 Substituted Sorbic Alcohol Derivatives from Sorbaldehyde*. This paper was submitted May 31, 2022 and accepted June 10, 2022.

[https://www.westmont.edu/sites/default/files/2022-07/Dieter%20Weber\\_final\\_21\\_3.pdf](https://www.westmont.edu/sites/default/files/2022-07/Dieter%20Weber_final_21_3.pdf)

Over the summer Nick Khorozov was accepted to be an intern at the Raleigh Crime Lab, working with the toxicology department. He was put on method validation duty, validating an LC/MS/MS method for opiates in whole blood samples. He was able to develop a method that eluted all opiate analytes (12 of them). This method was more sensitive and selective than the current GC/MS method used to analyze opiates. In addition to method validation, he compiled thousands of toxicological-related articles into a shared database for easy employee access, as well as added more novel psychoactive substances into the QTOF library.

## ChemAppalooza

This past summer, Dr. Wallen and Dr. Reddish introduced the first annual ChemAppalooza! During Covid, we lost the valuable interactions between our peers and instructors after transitioning to an online-based learning system. ChemAppalooza was designed to mend the interactions between chemistry and fermentation science research students and faculty through team bonding exercises and professional development activities. SuperGroups gave students the opportunity to share their research in a supportive and stress-free environment to further their confidence in scientific communication. Interlab competitions were a fun and social way to meet other members of the department and have some friendly competition. Make sure to congratulate Dr. Christian and her research team for being the first to take home the Erlenmeyer trophy! To learn more about ChemAppalooza and their mission, check out their website via the link below.

<https://sites.google.com/appstate.edu/dcfs-srp/home>



# PREPARATION FOR GRADUATE & PROFESSIONAL SCHOOL

BY ZACH DAVIS & CHRISTIAN HAMMOND

**It's that time of year again for applying to graduate programs, and there is a lot to be done for the applicants. Letters of recommendation, personal statements, and deadlines are just a few of the things that need to be taken care of, but there are other things that need to be answered as well, such as where do you even apply. Hopefully, by the end of this article, some of your questions will be answered.**

**Determine where you want to go and what you want to study.** Start looking for schools early. Look everywhere and pick places based on location, research at the school, and the faculty doing the research. You can apply to graduate school in any program as long as the prerequisites are met, so don't feel like you're locked in.

**Look at the application requirements.** Take the GRE if schools require it and take it early so that higher scores can be achieved later on as needed. Determine what needs to be written and how much the application costs. Some schools require multiple personal writing pieces, so be sure that you follow the details. Having a resume or curriculum vitae (CV) ready for your application is also a must.

**Prepare letters of recommendation early.** Try and give your writers at least a month to write the letters. This will improve the letters and ensure that you aren't rushing anyone.

**Save for the application fees.** Graduate school applications are expensive, ranging from \$50-\$150 each. Many colleges offer fee waivers, so check if you qualify for a waiver before paying. Otherwise, start saving.

**Talk to a professor you trust for advice.** Talking to someone that has been through the process can be enlightening and make things easier. They can include details for specific universities, refine your application, and give advice and confidence boosters. If you haven't already tried talking to someone, you definitely should.

**Q: What were your top priorities in choosing a graduate program? (i.e. lab social environment, facilities, prestige, institution, P.I. relationship, etc.)**

A: I chose VCU because I knew that they were well-known for their forensic science masters program, and also because many App alumni and faculty have gone to VCU to pursue further education and research careers. I also considered the hire rate of graduates from my program, that was a major factor as well.

**Q: What would you say is the biggest factor contributing to your choice to pursue graduate studies?**

A: I was motivated to continue my education for several reasons, apart from trying to get a good job right out of school. I really wanted to continue working in a lab setting because it's engaging, and forensics is something that I'm passionate about and was interested in continuing to study. I wanted to be a part of more research opportunities in forensics and getting to study under true experts in the field is invaluable.

**Q: What is some advice you would give to someone who is beginning the grad school application process?**

A: If you have opportunities to engage with faculty or current students at your prospective institutions (like at a virtual open house event), do it!! I feel that it is really important to have somewhat of an idea of the environment that you are going into before you get there so you can reduce the chances of getting stuck. Talking to current students is especially valuable because it can give you a more intimate inside look at what your life could look like for the next 2+ years.

## Q & A

**Sophie Knier graduated Appalachian State University in May 2022. She is currently a graduate student at Virginia Commonwealth University in Richmond, VA pursuing a M.S. in Forensic Science, with a concentration in Forensic Chemistry/Trace Analysis.**



# ALUMNI SPOTLIGHT

## SOPHIE KNIER

**Graduation Year:** 2022

**Degree:** BS in Chemistry with  
a concentration in Forensic  
Sciences

Graduate student at Virginia  
Commonwealth University  
pursuing a M.S in Forensic  
Sciences



## DEAR LABBY

Do you have a question or need advice from a fellow chemistry student here at App? Feel free to drop a line on the google form below and let us know how we can help you out.

[https://docs.google.com/forms/d/e/1FAIpQLSfa526nmn6y8EQe7I6cSPi\\_fe9\\_QY7LVefWs7EPiUWXkoWWDA/viewform](https://docs.google.com/forms/d/e/1FAIpQLSfa526nmn6y8EQe7I6cSPi_fe9_QY7LVefWs7EPiUWXkoWWDA/viewform)

## CONTRIBUTIONS

**Editor-in-Chief:** Hannah Nixon

**Layout/Formatting Editor:** Lauren McHenry

**Contributors:** Taylor Brown, Kendall Byrd, Sarah Traylor, Christian Hammond & Zach Davis