

Abigail Lea Doyle

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PERSONAL PROFILE

Attentive chemical engineer trained in biological and chemical research laboratories with recent focus as a research chemist for emergency response. Experience organizing and completing lab proficiency and capacity exercises between multiple branches. Software programmer for automated liquid handlers. Member of Tau Beta Pi. Currently looking for a return to engineering applications and simulation programming.

CORE SKILLS

- **Software proficiencies: MATLAB, Excel VBA, Python, ChemCAD, C++, JavaScript, LabVIEW, Hamilton Robotics, Microsoft Office**
- **Agile Methodologies**
- **Proper use of PPE and safe laboratory practices**
- **Trained in quality assurance**
- **Trained in conflict resolution**
- **Multitasker and critical thinker**
- **Creative and scientific writing**
- **Dependable and self-motivated**
- **Attentive to detail**

EDUCATION

University of Tennessee at Chattanooga, August 2015 – May 2019

177 earned hours, GPA: 3.763

Magna Cum Laude

Brock Scholars Program – Honors College

Major: Chemical Engineering – Minor: Biology

Dobyns-Bennett High School, August 2011 – May 2015

GPA: 3.758

Magna Cum Laude

AP courses in Calculus, Biology, US and European History, Spanish, English Language and Literature, and Psychology

WORK EXPERIENCE

The Center for Disease Control and Prevention, Battelle Contractor, Emergency Response Branch (*July 2019 – Present*)

- Accepted and prepared all specimen for analysis in the multi-branch 2019 Lung Injury Response
- Created a liquid handling automation program for COVID-19 response sample aliquots
- Completed proficiency testing programs, emergency responses, and sample logistic exercises
- Managed inventory, material handling, and branch shipments
- Aided research deadlines by meeting data analysis goals by providing efficient, timely, and accurate support via laboratory and sample preparation services
- Received passing CLIA (Clinical Laboratory Improvement Amendments) lab accreditation required to test human specimens for health assessment or to diagnose, prevent, or treat disease
- Coordinated work with maintenance support groups working in the lab to insure they work in a safe efficient manner and ensured that all safety permits were completed, and that workers were aware of hazards in the lab

Chattem Sanofi, Cleaning Validation & Process Engineering Intern (*August 2018 – May 2019*)

- Maintained strict product development timelines to meet consumer product release dates
- Developed protocols and standard operating procedures for product development
- Trained to validate new manufacturing and packaging processes, write protocols, and design cleaning procedures
- Conducted weekly DI water testing to insure contaminated water does not come in contact with industry processes while generating manufacturing reports

University of Tennessee at Chattanooga, research assistant (*January 2016 – May 2019*)

- Trained in aseptic technique
- Headed a multi-discipline research team to collect data for publication and future grants
- Experience in writing research protocols and analyzing data to support or reject hypotheses

The Center for Disease Control and Prevention, ORISE fellow, Emergency Response Branch (*May 2018 – August 2018*)

- Biohazard Safety, Hazardous Chemical Waste, Safety Survival Skills, Bloodborne Pathogens, First Aid, CPR, and AED certifications
- Created automation programs for Hamilton pipetting devices to decrease processing time for emergency preparedness protocols

University of Tennessee at Chattanooga, tutor (*January 2017 – December 2017*)

- Tennessee certified tutor
- Created individualized lesson plans for General and Organic Chemistry classes to ensure student success for continuation in course catalogue

Tupelo Honey, server (*May 2017 – November 2017*)

- Successfully resolved any conflict resulting in customer satisfaction
- Memorized over 50 menu items and rotating specials to give customized recommendations to guests

WORKPLACE AWARDS

The Center for Disease Control and Prevention, Battelle Contractor, Emergency Response Branch (*July 2019 – Present*)

- Granted current DOD Top Secret Security Clearance
- Presented 2 awards for the work on the 2019 Lung Injury Response
- Cited on the 2019 Lung Injury Response CDC Publication
- “She was an invaluable asset to the lab during the lung injury response earlier this year and it’s worth noting, she nearly handled the response singlehandedly for the IRL (Incidents Response Lab). She has been a source of continuity in the lab this year as many staff have transitioned out of the lab. She has worked diligently in the IRL, taken on more tasks and helped maintain continuity during staff transitions. She communicates well and is responsive to both Battelle and CDC requirements.” – 2020 Performance Review

UNIVERSITY HONORS, AWARDS and ACTIVITIES

Tau Beta Pi, The University of Tennessee at Chattanooga

Spring 2018 – Present

- Requires members to be in the top 1/8 of the engineering class

Departmental Honors Thesis, The University of Tennessee at Chattanooga

Spring 2019

- “Influence of environmental conditions on fatty acid-induced changes in *Vibrio cholerae* persistence and pathogenicity”
- Defended and Passed April 2019
- Presented research at conferences in Washington D.C., Boston, and Chattanooga

UTC Symphony

November 2017 – May 2019

- Auditioned and placed as first violin

Dean’s List, The University of Tennessee at Chattanooga

August 2015 – May 2019

- Requires being in the top 10% of Major

Chemical Engineering Mentor

August 2016 – May 2019

- Oversee underclassman chemical engineering majors
- Advise on class scheduling and course loads

Placed in the William E. Brock Scholar’s Program, The University of Tennessee at Chattanooga

August 2015 – May 2019

- 1 of 50 students allowed into the four-year interdisciplinary, liberal arts program

COMMUNITY SERVICE

The Trevor Project, remote

- Maintain weekly shifts as a Crisis Counselor for at risk youth through TrevorCall and TrevorChat
- Completion of a 12-week training program
- Trained in crisis resolution to deescalate high risk situations resulting in Contact’s current and future safety

SPCA of Bradley County, Chattanooga, TN

- Trained to socialize reactive and fearful animals in preparation for adoption
- Coordinated adoption meetings and matched prospective owners with animals best suited to their lifestyles

The Lantern at Morning Pointe, Chattanooga, TN

- Designed and created baby blankets to be donated to local shelters

City of Chattanooga Parks Dept., Chattanooga, TN

- Regularly installed ‘Pollinator Patches’ to provide food and shelter for butterflies, birds, and bees

Andrew Johnson Elementary School, Kingsport, TN

- Carried out afternoon summer school sessions for the kindergarten class in the subjects of reading and spelling
- Gave afternoon lessons to the kindergarten children behind in reading and spelling skills in the summer
- Worked in group and individual settings to teach students phonics, pronunciations, and reading skills with games, activity sheets, and small books

TCGC Animal League, Kingsport, TN

- Coordinated and worked weekly adoption events for prospective pet owners
- Trained in pet maintenance and organization of meetings between pet foster families and interested owners

English, (Native)

Spanish, Upper Intermediate Proficiency (5 years)

American Sign Language, Lower Proficiency (6 months)
