

Sydney E. Isaacks

sisaack@clemson.edu

843-714-7388

curriculum vitae

2982 Sturbridge Rd

Mt Pleasant, SC, 29466

EDUCATION

2021 – 2025

B.S. Microbiology, Clemson University
Concentration: Biomedicine

B.A. Modern Language, Clemson University
Concentration: Spanish Language

Minor in Biological Sciences, Clemson University

Language Immersion (6 credits, 2023), Polytechnic University of Valencia, Spain

PROFESSIONAL SUMMARY

I am a highly motivated pre-dental student with a strong desire to utilize the knowledge and skills I have gained to make a substantial impact on healthcare. Possessing valuable experience in both research and medical/dental shadowing, I am confident that I can not only make a difference in the lives of my future patients but can utilize my interest and skills in research to advance the dental field. My dedication to academic excellence and strong work ethic enable me to succeed in challenging environments, while my curiosity and adaptability increase my desire for continuous learning. Seeking to improve my overall skills and knowledge, I am eager to embrace new challenges and strive to continue to learn every day.

RESEARCH EXPERIENCE

May 2022 – Aug 2022 **Undergraduate Research Fellow**, Ralph H. Johnson VA Medical Center
Charleston, SC

- Worked under the supervision of Dr Nichole Tanner, MD, Department of Pulmonary Medicine
- Worked on Nucleix and DELFI clinical trials
- Was responsible for design of marketing and educational materials to increase enrollment of eligible patients into assigned clinical trials
- Took phlebotomy certification course to participate in patient screening for clinical trial enrollment

- Attended all research team meetings
- Completed written summary on research project with final report on project goals, associated data and outcomes presented to the Health System Research Director, Chief Medical Officer and Chief Executive Officer

June 2023 – Aug 2023 **Undergraduate Research Fellow, Ralph H. Johnson VA Medical Center / Medical University of South Carolina**
Charleston, SC

- Worked under the supervision of Dr Elizabeth Santa Ana, PhD, Department of Psychiatry
- Worked on a randomized controlled trial comparing a psychosocial intervention of Group Motivational Interviewing (GMI) referred to as Combined Recovery Program (CRP) to treatment-as-usual for substance use disorder patients
- Attended all GMI training sessions
- Attended all research team meetings
- Final report and presentation about the trial with completed descriptive analyses presented to the Health System Research Director, Chief Medical Officer and Chief Executive Officer upon completion of internship
- Publication with Dr Santa Ana in progress

Fall 2023 Semester **Creative Inquiry, Clemson University**

- Worked with Dr. Dev Arya and his associated graduate students on his project involving discovery of new drug targets in the genome of pathogenic bacteria
- Involved the search for new sites of intervention in the bacterial genome and approaches of targeting nucleic acid and enzyme targets selective to bacteria
- Attended all graduate student report meetings
- Required to understand and be able to discuss the idea of controlling DNA topoisomerase functions in terms of developing new antibacterial agents to combat anti-bacterial resistance

WORK EXPERIENCE

- Dental Service Internship in Cusco, Peru (July 2025)
 - This internship is designed to give an experience as close to being a practicing dentist as possible before going to dental school. Interns learned directly from local dental professionals while broadening knowledge about dentistry in a low-middle income country.
 - Practice and improve vital skills, learn and organize all instruments and prepare the

trays

- Class monitor for Clemson University athletes (2022 - present)
 - Involves taking attendance for Clemson student athletes and being a liaison to ensure they are attending class and completing their academic hours
- 6 years of restaurant and customer service experience
 - Charleston, SC: Basil Thai Restaurant
- 300+ hours of community service
 - Local church (Vacation Bible School)
 - Coaching Recreational Track and Field team
 - Tutoring (Spanish and Biology)
 - Volunteer at Roper St Francis Health Center, Charleston, SC

EXTRACURRICULARS

- Beta Beta Beta: Biological Honor Society
 - Elected to the executive position of Membership Committee for the years 2024-2025
- Sigma Delta Pi: Hispanic Honor Society
- Clemson University Panhellenic: Chi Omega
 - Elected to two executive positions: Secretary and Vice President of Recruitment for the year of 2024
- Clemson Heart Association
 - Elected to executive position of Secretary for the year of 2024
- Alpha Epsilon Delta
- Clemson Pre-Dental Club
- VAW Dental Outreach
- Spanish Professional Society
- Spanish Club
- Think Strong Mental Health Club

SKILLS

- Laboratory Techniques include but may not be limited to centrifuging, gram-staining, endospore staining, acid-fast staining, counterstaining, NMR spectroscopy, IR spectroscopy, mass spectrometry, thin layer chromatography, creating slides, quadrant streaking, spread plating, filter sterilization, and more
- Comfortable handling bacteria and know sterilization procedures and types of growth media
- Proficient in Microsoft Office (Word, Excel, PowerPoint), Google (Docs, Slides, Sheets, Drawings), Adobe Acrobat
- Proficient in technology in general
- General coding experience

- Phlebotomy certified
- Fully proficient in Spanish

SHADOWING EXPERIENCE

June 2018

- Operating room (8 hours): hernia removal, orthognathic surgery
- GI lab (6 hours)
- Ralph H Johnson VA Medical Center, Charleston

May 2022 – Aug 2022

- Operating room (48 hours): toe amputation, replacement of Parkinson's device, total hip replacement, CABG surgery, ear surgery, kidney tumor removal with DaVinci robot
- Bronchoscopy (8 procedures)
- Reading LDCTs
- Pathology, transition from biopsy to microscope
- Stent placement (2 procedures)
- EBUS biopsy (6 procedures)
- Monarch robot procedures (3 procedures)
- ICU (4 hours)
- Tumor board (attended twice)
- Medical University of South Carolina, Charleston
- Ralph H Johnson VA Medical Center, Charleston

June 2023

- Nursing home and geriatric care in Valencia, Spain (4 hours)
- Primary care facility in Valencia, Spain (2 hours)
- Dental care in Valencia, Spain (4 hours)

July 2023 – Present

- Inpatient hospitalist rounds with Dr Neal Axon, MD, Department of General Internal Medicine (6 hours)
- Ralph H Johnson VA Medical Center, Charleston

May 2023 – August 2023

- Operating room (32 hours): bovine graft for torn labrum, fat grafting, total knee replacement, breast implant change, knee arthroscopy
- Roper St Francis Health Center, Charleston

May 2024 – July 2024

- North Charleston Dental Clinic (72 hours)
- Root canal, gum graft, molar extraction, crown creation and process of creation, general dentistry

REFERENCES

- Available upon request