



Fighting Infection with Big Sagebrush: The Antimicrobial Properties of Utah's Native Flora

DAVID AND KAYLA SUISSE



About Us

DAVID

- Senior
- Languages, Philosophy and Communication Studies Department
- Honors Program, Undergraduate Research and Creative Opportunities Grant recipient
- Hometown: North Ogden
- Pursuing an MD, a Master of Public Health, and a career in Pediatrics



About Us

KAYLA

- Senior
- Biology Department
- Honors Program
- Hometown: Twin Falls, Idaho
- Pursuing a PhD in Human Genetics and a Master's and career in Genetic Counseling

How We Got Started

DAVID

- I'd been looking for research opportunities and jumped at the chance to work with my wife on something that we loved.
- We've always been interested in medical history and anthropology, and this project, with Dr. Kaundal in the department of plants, soils, and climate, allowed us to dive into research on cultural remedies. We also love spending time in the mountains around Logan, so to work on local flora has been very rewarding.

KAYLA

- I've always wanted to do research as a career, and Dr. Kaundal was kind enough to take me in and allow me to learn.

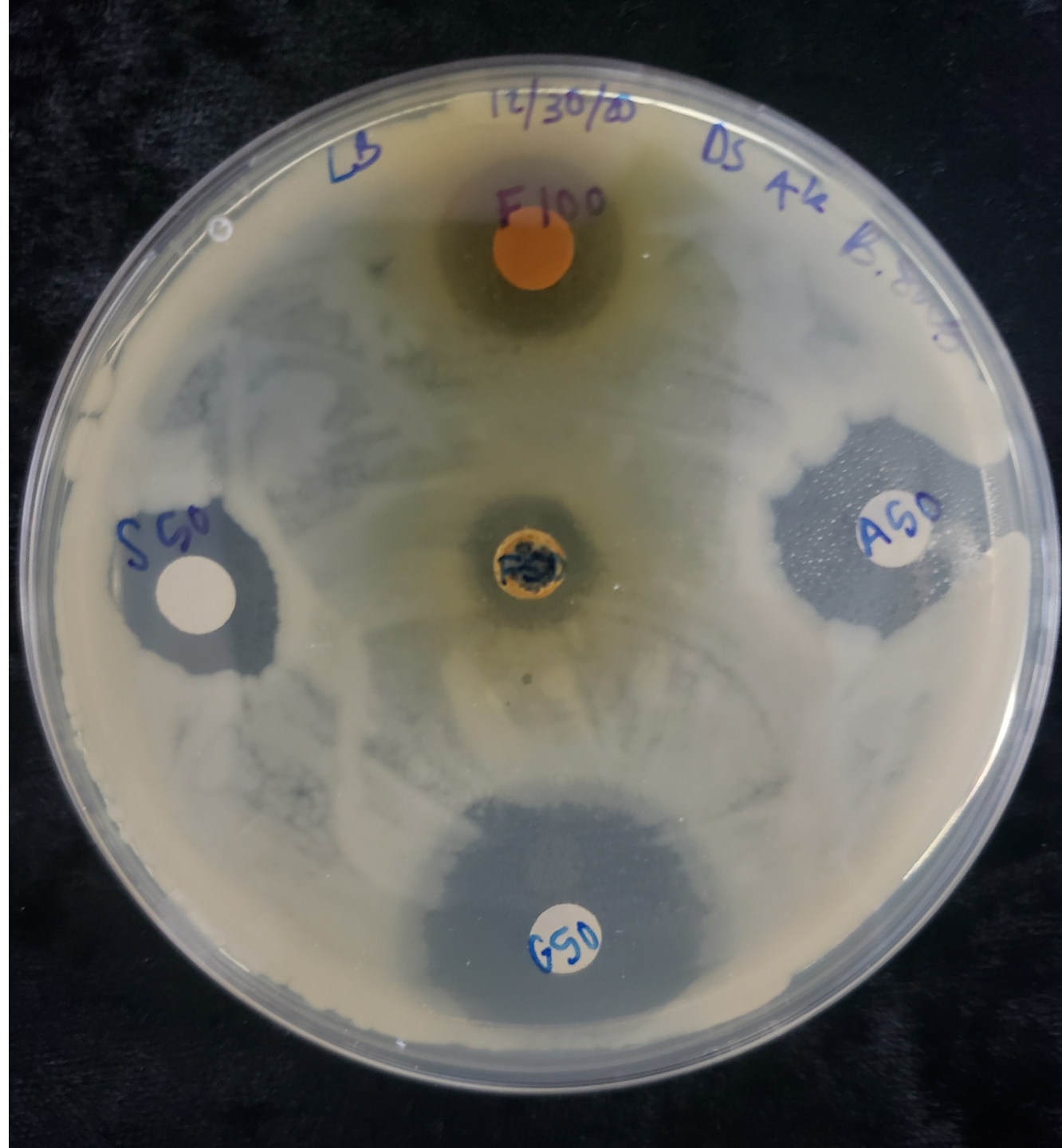


Our Project

- Sagebrush has long been used as an indigenous medicine for ailments ranging from stomach pain to snake bites
- We broke down the compounds in Big Sagebrush and tested them against various microbial diseases

Our Results

- Study evidence shows Big Sagebrush has very effective antimicrobial properties



Impact on Utah

- Big Sagebrush is native to Utah, so production of this natural antimicrobial/antibiotic agent could be very cheap or even free.
- Finding new antimicrobial compounds is incredibly important as over time, our bodies build up immunities to antibiotics, so new and fresh compounds will be necessary going forward.

Our Research Experience

- Undergraduate research has bound our university experience together. There is so much valuable information taught in our courses, but in the research environment those lessons become practical and allows it to click.
- Undergraduate research has been a powerful networking tool. Nothing helps you get to know someone better than asking to borrow bacteria!