## JMU MATERIALS SCIENCE INVESTIGATION FOR THE VA SCHOOL FOR THE DEAF AND THE BLIND



### THE PEOPLE WHO MADE IT HAPPEN





#### **VSDB TEACHER AND JMU ALUM**

VSDB TEACHER, DYLAN BOECKMANN, REQUESTED THE STEM CENTER'S "JMU STEM EXPERIENCE" CHEM. PROGRAM FOR HIS STUDENTS. HE IS A JMU ALUMNUS: (CHEM AND MAT). THE ADAPTATION WORK BEGAN RIGHT AWAY, BUT FIRST, THE STUDENT-LED BACKSTORY ON WHAT WE ADAPTED.

#### **JMU CHEMISTRY FACULTY & STUDENTS**

THE CHITOSAN BIOPLASTICS INVESTIGATION WAS ORIGINALLY PROPOSED BY CHEMISTRY MAJOR, HOLLI SCOTT, IN A RESEARCH PROPOSAL WRITTEN FOR HER *POLYMER CHEMISTRY* COURSE TAUGHT BY DRS. BOARDMAN AND PETERS.





#### **OFFICE OF RESEARCH & SCHOLARSHIP SUPPORT**

THE PROTOCOLS USED IN DRS. BOARDMAN'S AND PETERS'S RESEARCH WERE ADAPTED FOR THE STEM CENTER'S OUTREACH PROGRAM BY CHEMISTRY MAJOR, CONNOR PEARSON, UNDER DR. BOARDMAN'S MENTORSHIP WITH FUNDING FROM THE JMU OFFICE OF RESEARCH & SCHOLARSHIP SUMMER STUDENT RESEARCH GRANT.

#### PILOTING THE INVESTIGATION



JMU CHEMISTRY INSTRUCTOR AND OUTREACH ENTHUSIAST, LINDSEY SEQUEIRA, WAS SUPPORTED BY THE STEM CENTER WITH MADISON TRUST FUNDS TO PILOT THE LAB WITH TWO GROUPS OF SIGHTED HIGH SCHOOL STUDENTS IN FALL OF 2022.

## ADAPTING THE INVESTIGATION FOR STUDENTS WITH BLINDNESS AND LOW VISION

LINDSEY, DYLAN, VSDB ORIENTATION & MOBILITY SPECIALIST- LISA AUWARTER, AND THE JMU STEM CENTER COLLABORATED TO ADAPT THE PROTOCOL FOR STUDENTS WITH VISUAL IMPAIRMENT TO CARRY OUT WITH INDEPENDENCE WHILE REACHING THE SAME LEARNING GOALS.



# 300

#### 12 JMU STUDENTS FROM 7 MAJORS

- CHEMISTRY
- BIOLOGY
- ELEM. EDUC.
- NURSING
- HISTORY
- PUBLIC POLICY
- INCLUSIVE EDUC.

THIS TEAM OF STUDENTS WORKED SIDE-BY-SIDE WITH VSDB STUDENTS, LEARNING FROM EACH OTHER, THROUGHOUT THE DAY.

**James Madison University Center for STEM Education and Outreach**