# JOB POSTING\_ UNDERGRADUATE RESEARCH ASSISTANT AT FOOD SENSOROMICS AND METABOLOMICS LAB (FSML) - UASAL SUMMER 2024 PILOT PROGRAM

# • Job description

Undergraduate research assistant position for summer 2024 at Dr. Joana Pico's research group (Food Sensoromics and Metabolomics lab, FSML) in the Nutrition, Dietetics, and Food Science Department (NDFS) to assist in a project related to the determination of the antidiabetic properties of phenolic compounds. This position is part of the Utah Academy of Sciences, Arts, and Letters Symposium (UASAL) Summer 2024 Pilot Program, which focuses on funding entry-level research experiences for students in support of faculty-led research. The selected candidate will assist a PhD student in basic analytical operations of *in vitro* enzymatic analyses with starch sources:

- Weighing chemicals
- Preparing buffers and solutions
- Pipetting
- Centrifuging
- Measuring pH
- Spectrophotometric determinations
- Data analysis with Excel
- Results presentation with PowerPoint

## Requirements

- Undergraduate student currently enrolled in a BS degree at the NDFS program.
  Preference will be given to Food Science students
- Undergraduate students from the BS in Chemistry, Biochemistry, Biological Engineering, Biotechnology, and Biology will also be accepted
- First- and second-year students and those transitioning from a 2-year to a 4-year degree program (i.e., freshman, sophomore, or junior)
- Students do not need to be enrolled for Summer 2024 if they are enrolled for Fall 2024

#### Expectations

- Attend three 1-hour trainings at the UASAL program (these may be virtual) related to researcher identity formation
- The selected student will be involved in the above-described research activities

- The selected student will prepare PowerPoints for oral presentations at my meetings
- At the end of the summer, the faculty mentor and student will submit a report together to the UASAL Program, documenting learning and research outcomes
- The selected candidate is required to submit an abstract for the 2025 Utah Academy of Sciences, Arts, and Letters Symposium (UASAL) in Salt Lake City
- The selected candidate is required to present their research involvement at the Fall or Spring USU Student Research Symposia in the academic year 2024-2025

#### Benefits for the selected candidate

- Learning basic analytical tasks (e.g., weighing chemicals, preparing buffers and solutions, pipetting, etc)
- Attending the Fall 2024 Research Explorations series (a USU new orientation series for student researchers)
- Attending the 2025 UASAL Symposia and the 2025 USU Student Research Symposia
- o Getting the experience of working with an international PhD student
- Learning basic concepts in the use of Excel to compute laboratory data and PowerPoint to present results
- From a socio-economical perspective, the selected research intern will also learn about type-2 diabetes, the associated health problems, and the natural ways to mitigate type-2 diabetes through healthy food consumption
- The selected student will be co-author of the publication of one manuscript in a highimpact journal (assuming that the contribution of the student in the project will be substantial)

### Stipend and Schedule

- o 10-week period during the summer 2024
- 10 hours/week during the period of the assistantship
- Longer shifts with a shorter total duration of the research activities will be allowed until completion of a total of 100 hours
- As per the UASAL Summer 2024 Pilot Program, the selected candidate will receive one
  \$2,000 scholarship to support participation in research
- The selected candidate will receive a \$1,000 travel grant to present at the UASAL conference in March 2025