Tristan Nolan

(808)725-8180, tristanqnolan@arizona.edu

EDUCATION

University of Arizona – August 2018 – May 2022   Tucson, AZ
Geosciences   **GPA 4.0**
  Ecology and Evolutionary Biology Minor

Catalina Foothills High School – graduated May 2018   Tucson, AZ
  Weighted GPA   **GPA: 4.05**
  Unweighted GPA   **GPA: 4.0**

HONORS AND AWARDS

- University of Arizona Dean's List Fall 2022
- University of Arizona Academic Year Highest Academic Distinction Spring 2022
- University of Arizona Dean's List with Distinction Spring 2022
- University of Arizona Dean's List Fall 2021 - Spring 2022
- University of Arizona Academic Year Highest Academic Distinction Spring 2020
- University of Arizona Dean's List with Distinction Fall 2019 - Spring 2020
- University of Arizona Academic Year Highest Academic Distinction Spring 2019
- University of Arizona Dean's List with Distinction Spring 2019
- Awarded University of Arizona Wildcat Excellence Award, Fall 2018 – Spring 2022
- Catalina Foothills High School Silver Award for Outstanding Academic Achievement, 2018

EMPLOYMENT, PROFESSIONAL ENGAGEMENT, AND RESEARCH SCHOLARSHIP

- Laboratory Manager, Arizona Laserchron Center, University of Arizona, Summer 2023 – present
  - Supervisors: Dr. Mark Pecha, Prof. Mauricio Ibañez-Mejia, Prof. George Gehrels
    Full-time management of electron microscopy lab, continuing work of sample preparation and analysis in an electron microscope and Raman microscope spectrometer, organizing and billing user sessions.
- Part Time Laboratory Technician, Arizona Laserchron Center, University of Arizona, Spring 2022 – Summer 2023.
  - Supervisors: Prof. George Gehrels, Dr. Zachary Michels, Dr. Mark Pecha
    Continued work from undergraduate position, with increased focus on electron microscopy and associated instruments and techniques, including carbon coating, sample cleaning and image processing.
- Undergraduate Laboratory Technician, Arizona Laserchron Center, University of Arizona, Fall 2018 – Spring 2022.
  - Supervisors: Prof. George Gehrels, Dr. Zachary Michels, Dr. Mark Pecha, Dominique Giesler, MS
    Prepared and analyzed samples for ALC users and visitors, primarily using scanning electron microscopy techniques, as well as optical microscopes and laser ablation mass spectrometers.
- Field Camp: Accessible Earth, University of Arizona in Orvieto, Italy, Summer 2022
  - Supervisor: Dr. Richard A. Bennett
    Collected and analyzed online, publicly available data to map tectonic motion of the Italian peninsula, contributing to a project correlating tectonic motion with coastline

migration. Also practiced data collection/analysis for smaller projects while working in an unfamiliar foreign environment.
- Undergraduate Poster Presentation, Geological Society of America, Fall 2019
  - Supervisors: Prof. George Gehrels, Dr. Kurt Sundell, Dr. Mark Pecha
    Processed and analyzed samples collected in Sabino Canyon, Arizona, in fall 2018 by the GEOS 251 Honors Students. Used laboratories and resources of the UA Arizona Laserchron Center to separate, mount and image zircon grains for sample preparation, then used the ALC laser ablation mass spectrometer to map U-Pb age regions within the collected grains.
- Undergraduate Research Assistant, OSIRIS-REx Mission, University of Arizona, Summer 2019
  - Supervisors: Dr. Carina A. Bennett, Dr. Daniella DellaGiustina
    Assisted with sample site selection by performing registration and processing of transmitted spacecraft images using Linux commands and mission-specific software. Contributed to the construction of a high-resolution global basemap of asteroid 101955 Bennu, published in Icarus, March 2021.

VOLUNTEER EXPERIENCE

Undergraduate Preceptor – Paleontology, under Prof. Andrew Cohen | Spring 2022
Outreach Events for Arizona Laserchron Center | Spring 2019 - present

PUBLICATIONS

Nolan, T.Q., Gehrels, G.E., Pecha, M., Sundell, K.E. 2019. AGE MAPPING OF COMPLEX ZIRCON CRYSTALS FROM THE CATALINA CORE COMPLEX (ARIZONA). Geological Society of America Abstracts with Programs. Vol. 51, No. 5, 2019. doi: 10.1130/abs/2019AM-339255

Bennett, C.A., DellaGiustina, D.N., et al., A high-resolution global basemap of (101955) Bennu, Icarus, Volume 357, 2021, 113690, https://doi.org/10.1016/j.icarus.2020.113690.

SKILLS

- Spanish language fluency
- Microsoft Word, Excel, and PowerPoint
- Python, MATLAB, JavaScript, and HTML
- Bash, Sed, Awk, and GMT
- Adobe Photoshop, Adobe Illustrator, and GIMP image processing
- Hitachi S-3400N Scanning Electron Microscope
- Renishaw InVia Raman Microscope