

The logo for the National Solar Observatory (NSO), consisting of the letters "NSO" in white on a dark blue rectangular background with a white sunburst graphic behind the text.

NSO

The National Solar Observatory

Careers at NSO

Meet the Folks at NSO...



Tishanna Ben

Education and Public Outreach Officer



Education

Bachelor of Arts (B.A.) in Cell Biology w/minor in Chemistry
Master of Science (M.S.) in Conservation Biology and Environmental Science
Teacher Certification; Secondary Science Education

Career Path

Laboratory Technician at the Research Corporation of UH (RCUH)
Graduate Researcher at RCUH
Science Teacher at Hawaii Department of Education
Education and Public Outreach Officer at NSO

Key Skills & Experiences

“I work a lot with students, teachers, and other members of the community, so to be successful in my position, it’s helpful to be outgoing, relatable, and a good listener. Key skills are communication, creativity, collaboration, and self-motivation.”

Job Duties

Develop science education program
Organize and/or participate in community outreach events
Manage social media content

Favorite Thing About Working With NSO?

“I’m always meeting new people in the community and I get to help develop engaging science lessons and activities for students.”

Gianna Cauzzi

Astronomer



Education

Bachelor of Science (B.S.) in Physics
Doctor of Philosophy (Ph.D.) in Solar Physics

Career Path

Graduate Researcher
Postdoctoral Researcher
Astronomer with the Italian Institute for Astrophysics (INAF)
Astronomer with NSO

Key Skills & Experiences

“I have long worked in observational physics - devising and conducting observations, and use them to address new aspects of stellar/solar physics. I have also contributed to the development of new instrumentation. Key skills for becoming a successful astronomer are creativity, hard work, commitment, self-motivation, and curiosity.”

Job Duties

Identify research topics
Design research strategies
Public Outreach

Favorite Thing About Working With NSO?

“We are building the largest solar telescope in the world - that in itself is really amazing; we will be able to look at the surface of our Star with a whole new level of detail and understanding, enabled by state-of-the-art instrumentation. Plus, I get to meet a lot of people from all sorts of paths, choose what I research, and travel all over the world!”

Eric Cross

Information Technology Manager



Education

Bachelor of Science (B.S.) in Business Administration
Master of Science (M.S.) in Computer Information Systems

Career Path

UNIX based Technical Support for software company developing real estate MLS systems

UNIX/Linux Systems Administrator at HP, SGI, Yahoo, Raytheon
IT Manager at Raytheon

IT Manager at National Ecological Observatory
IT Manager at National Solar Observatory

Key Skills & Experiences

“Experience leading projects from start to finish is key in my current role. Of critical importance is the ability to communicate across all levels of organization. Deep technical understanding of computer hardware, operating systems, and networking concepts is also important.”

Job Duties

Design, develop, and guide the construction of internet technology
Management of IT staff members
Provide administration support

Favorite Thing About Working With NSO?

“NSO’s science mission to advance knowledge of the Sun, and working directly to deliver the DKIST observatory successfully. I also enjoy working with solar astronomers and helping them solve and find new questions about our Sun.”

Jennifer Ditsler

Director's Office Administrator



Education

High School Diploma
On the job training

Career Path

Clerical work as a teenager
Office Manager
Director's Assistant at AURA (Gemini Observatory)
Administrative Manager for DKIST construction
Director's Office Administrator for NSO

Key Skills & Experiences

"In order to be successful in my position, I need to be organized, competent, reliable, professional, and a good problem-solver."

Job Duties

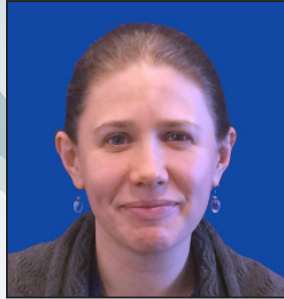
Ensure NSO follows policies and procedures
Support observatory management
Arrange travel and logistics for meetings and employee work

Favorite Thing About Working With NSO?

"This is a unique field to work in. There are a wide variety of people to work and interact with such as scientists, engineers, and administrators. I love to continue learning new things and meeting new people."

Anna Hughes

Scientific Programmer



Education

Bachelor of Arts (B.A.) in Physics and Astronomy
Doctor of Philosophy (Ph.D.) in Astrophysics and Planetary Science

Career Path

Research Experience for Undergraduates (REU) student
Graduate Student (Astrophysics/Planetary Science)
Scientific Programmer at NSO

Key Skills & Experiences

“This is a scientific support role, which requires me to be flexible, adaptable, and precise. My scientific background is a huge asset, allowing me to communicate effectively with our science users, anticipate their needs, and work independently to build current code with future projects in mind. My job is very much not do-what-you’re-told-style labor. Instead, my creative problem-solving skills and independent focus are as important to my success as my science and programming background.”

Job Duties

Running/maintaining legacy data-processing code
Writing new code and data-processing programs
Scientific writing and documentation

Favorite Thing About Working With NSO?

“My co-workers are awesome. As a whole, they are all intelligent, focused, and kind, and all dedicated to making the best possible data products available to those who will use them. My efforts matter to people. I love that I can meaningfully contribute to NSO’s legacy.”

Sarah Jaeggli

DKIST Scientist



Education

Bachelor of Science (B.S.) in Physics & Astronomy
Master of Science (M.S.) in Astronomy
Doctor of Philosophy (Ph.D.) in Astronomy

Career Path

Undergraduate Researcher at NSO-Tucson & NRAO Charlottesville
Graduate Researcher at the Institute for Astronomy (UH) & NSO-Sacramento Peak
Post-Doctoral Researcher at Montana State University
NASA post-doctoral program fellow at Goddard Space Flight Center
DKIST Scientist at NSO

Job Duties

50% Independent solar physics research
50% Scientist supporting the development of a telescope 4-D solar camera called DL-NIRSP (COOL!)

Favorite Thing About Working With NSO?

“I have a lot of confidence in the people I work for and the people I work with. The last solar telescopes were built 50 years ago, so this project is a place where all of the advancement and ideas we’ve developed since that time can be put to use. Maui is specifically very exciting. Not only is the telescope on our doorstep, but we are building a new research group composed mostly of early career scientists. This gives us a chance to shine at our own research and set the tone for ground-based solar astronomy in the U.S. for years to come.”

Geoff Roberts

Procurements and Shipping/Receiving Manager



Education

Bachelor of Arts (B.A.) in Management and Human Relations
On the job training in the Automotive Industry

Career Path

Automotive Industry
Procurements and Shipping/Receiving Manager with NSO

Key Skills & Experiences

“Communication, organization, flexibility, adapting to changing situations, thinking outside the box, problem-solving, and research skills”

Job Duties

Keep track of shipment orders and deliveries to NSO
Work with scientists and engineers to get quotes for equipment needed to be purchased

Favorite Thing About Working With NSO?

“NSO offers good health benefits. I also like working with a group of people that are science and education driven.”

Thomas Schad

Assistant Astronomer



Education

Bachelor of Science (B.S.) in Physics
Bachelor of Arts (B.A.) in Philosophy
Doctor of Philosophy (Ph.D) in Planetary Sciences

Career Path

Undergraduate Student
Graduate Student
Research Associate at the University of Arizona
Instrument Scientist at the University of Hawaii
Assistant Astronomer with DKIST and the National Solar Observatory

Key Skills & Experiences

“Education in physics, astronomy, and engineering is valued in my current role. Key skills include: Self-motivation, organization, management, and communication.”

Job Duties

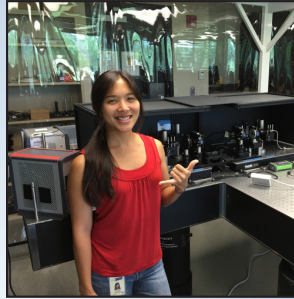
Conduct solar research related to DKIST
Serve DKIST user community needs for scientific operations
Manage and develop telescope instruments

Favorite Thing About Working With NSO?

“We are building the largest solar telescope ever built and look forward to seeing the Sun like no one has ever seen it. This gives us the possibility to understand basic physics important to understand solar evolution and its affects across the heliosphere. This is exciting in itself, but along the way I get to work with some of the most advanced technologies and great people.”

Stacey Sueoka

Optical Systems Engineer



Education

Bachelor of Science (B.S.) in Physics w/minors in Math & Japanese
Doctor of Philosophy (Ph.D.) in Optical Sciences

Career Path

Summer intern with Akamai Workforce Initiative, Naval Research Laboratory, & Pacific Missile Range Facility (PMRF)
English Teacher in Japan through the “Japan Exchange and Teaching (JET) program
Research Associate at the College of Optical Sciences (University of Arizona)
Optical Systems Engineer with NSO

Key Skills & Experiences

“Skills important in my field are: knowledge of optics, teamwork, collaboration, and hands-on experience working with delicate instruments.”

Job Duties

Design and build optical (lenses, crystals, mirrors) components for the Daniel K. Inouye Solar Telescope
Work with a team of engineers to assemble, test, and finally, install our system into the telescope!

Favorite Thing About Working With NSO?

“I like the community feeling and the people. The team aspect of work is great. Most importantly, I can do the job I love and have the opportunity to share my knowledge back in my home state of **Hawai’i!**”

Han Uitenbrock

Project Scientist



Education

Bachelor of Science (B.S.) in Theoretical Physics
Doctor of Philosophy (Ph.D.) in Solar Physics

Career Path

Researcher with the Harvard Smithsonian Institute for Astrophysics
Assistant Astronomer at NSO working with telescopes
Project Scientist with NSO

Key Skills & Experiences

“One needs a deep understanding of the science that a telescope is capable of, even if without having a lot of actual technical experience using telescopes. The ability to guide a team, solve personal conflicts, and manage a project, is also very valuable.”

Job Duties

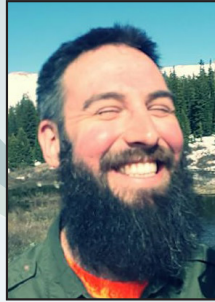
Oversee operations of the telescope
Serve on the Time Allocation Committee (TAC)
Overall scientific guidance for the telescope

Favorite Thing About Working With NSO?

“Lots of international visitors, freedom to pursue your own research interests, interactions with experts from other institutions, and being close to the telescope on the mountain allows you to get very well acquainted with all the elements of it.”

Dustin Van Gorp

Mechanical Drafter and Production Manager



Education

Community College studying Business and Marketing

Career Path

Animal vaccine manufacturing at a pharmaceutical company
Mechanical Drafter and Production Manager at NSO

Key Skills & Experiences

“Communication, attention to detail, Computer Assisted Design (CAD) drafting, and the ability to work in a fast-paced, high-pressure environment.”

Job Duties

Create mechanical drawings in CAD
Identify parts to be purchased and/or manufactured
Work with manufacturers and engineers

Favorite Thing About Working With NSO?

“I enjoy working to answer some of the great unanswered questions about our local star.”

Carolyn Watkins

Business Manger for NSO Operations



Education

Bachelor of Arts (B.A.) in Psychology
Master of Business Administration (M.B.A.) Coursework
Work Experience

Career Path

Federal Government internship while in High School
30 years employment in Federal Government Contracting
Financial / Accounting Manager
Business Manager for NSO Operations

Key Skills & Experiences

“Excellent interpersonal and communication skills (written and oral), as well as the ability to adapt quickly and learn new tasks independently”

Job Duties

Budget Development and Management
Financial Planning and Reporting
Audit and Policies and Procedures Compliance

Favorite Thing About Working With NSO?

“I like working in a positive environment with people looking to make a difference in the world.”