

Astronomy Educator Profiles



<u>Alexis Ann Acohido</u> Gemini Observatory Contact: <u>aacohido@gemini.edu</u>

Alexis Ann Acohido graduated of the University of Hawaii at Manoa in 2015, where she obtained her Bachelor's of Science in mathematics. Born and raised on Oahu, she moved to Hawai'i island last year and is currently part of the Public Information and Outreach department at Gemini Observatory in Hilo, Hawai'i. In 2013, she was part of the Akamai Workforce Initiative and interned at the Institute for Astronomy on Maui where she worked on parallax ranging methods for point source objects.



<u>Nobuo Arimoto</u> Subaru Observatory Contact: <u>arimoto@naoj.org</u>

Nobuo Arimoto's intense interest in astronomy began when a neighbor showed him how to use a telescope when he was 11 years old. He went on to become a student of astronomy at Tohoku University, where he received his Ph.D. in astronomy in 1980. He has held positions the Observatoire de Paris-Meudon in France (1984-1988), the University of Durham in the United Kingdom (1988-1991), the Universitaet der Heidelberg in Germany (1991-1993), the Institute of Astronomy at the University of Tokyo in Japan (1993-2001), and NAOJ in Japan (2001-2012). He served as part of Subaru's Time Allocation Committee (2000-2004) and as Chair of the Subaru Advisory Committee (2004-2012). He took over Director of the Subaru Telescope in April of this year (2012). A heavy user of Subaru's telescope (59 nights as a principal investigator in a little over a decade), Dr. Arimoto focuses his scientific research on understanding galaxy evolution and the properties of individual stars within galaxies.



<u>Brad Bailey</u> SSERVI/NASA Contact: <u>brad.bailey@nasa.gov</u>

Brad Bailey will always be an Astrobiologist... dedicated to discovering the origin and evolution of life, both here on Earth and beyond! Brad's road to Astrobiology began with his B.S. in Physics with minors in optics, chemistry and Japanese from the Rose-Hulman Institute of Technology. In 1998, Brad was accepted into the NASA Ames Astrobiology Academy where he worked on determining the composition of the interstellar medium. From there, he received his M.S. in Astrophysics from New Mexico Tech where he used the Very Large Array (VLA) (seen in the movie "Contact"!) to look at pulsars. After working for two years at NASA Ames as a hardware engineer for the International Space Station, Brad went back to graduate school at Scripps Institution of Oceanography in San Diego and completed his Ph.D. in marine microbiology and geochemistry. His Ph.D. work included diving into submarine volcanoes in Hawai'i and Samoa via small submersibles to study how life can survive in extreme environments. Brad is now the NASA Solar System Exploration Institute Staff Scientist at NASA Ames Research Center and also directs the NASA Ames Academy, a summer student research and leadership development program. He actively speaks to the public on a wide variety of topics from astrobiology and planetary science to robotics and exploration.

Jennie Berghuis is an Observation System Associate for Subaru Telescope. She completed her education at the University of Hawai'i at Hilo, graduating with a B.S. in Astronomy in 2007. She gained experience through locally offered internships included studying and reducing asteroid research data collected at NASA's Infrared Telescope Facility (IRTF), working as a Night Attendant for IRTF, assisting in the fabrication, assembly, and organization of Subaru's HiCIAO instrument project, and building a remotely-controlled telescope dome currently in operation on Mauna Loa. She is also currently helping to build a new telescope container that will be placed on Mauna Loa, and is taking classes towards a Physics degree at UHH. She enjoys adventure, backcountry hiking, skydiving, surfing, paddling, snowboarding, movies, playing music, and most importantly: looking up!



<u>Jennie Berghuis</u> Subaru Telescope Contact: <u>Berghuis@naoj.org</u>



<u>Dan Bintley</u> East Asian Observatory

Dan Bintley is the Instrument Scientist responsible for SCUBA-2 at the James Clerk Maxwell Telescope. Together with a team of engineers and scientists he keeps one the world's most advanced sub-millimetre cameras operating at its' best. He has a PhD in experimental low temperature physics from Bristol University in the UK and before coming to the JCMT, worked on the design of SCUBA-2 and testing the sensitive detector arrays. His research interests include instrumentation for astronomy, low temperature detectors and properties of superconductors. Outside of work, Dan enjoys distance running and cycling and when not at the summit of Mauna Kea can often be seen at lunchtime riding up the hill with cyclists from other observatories.

Contact: <u>d.bintley@eaobservatory.org</u>



Dan Birchall came to Maunakea in 2004 as a volunteer at the Visitor Information Station. After part-time jobs at UH88, Keck and Gemini, he now operates the Subaru Telescope, observes supernovae with UH88, studies sustainable development and tells his toddlers about the planets.

Dan Birchall Subaru Telescope Contact: <u>djb@naoj.org</u>



Kelly Blumenthal is a second year graduate student at the Institute for Astronomy at UH Manoa, and received her B.A. in astronomy and physics, with a minor in saxophone performance from Boston University in 2014. She is interested cosmology, or the study of how the Universe (and everything in it) formed and evolved. If you manage to find her not ruining her eyesight in front of a computer, Kelly is likely either reading some overly dense sci-fi novel, or trying desperately to teach herself to play the ukulele.

<u>Kelly Blumenthal</u> UH Institute for Astronomy Contact: <u>kblumy@ifa.hawaii.edu</u>



<u>Jerry Brower</u> Gemini Observatory Contact: <u>jbrower@gemini.edu</u>

Jerry Brower is the self proclaimed "Information Systems guy to the stars!" (literally the stars) He has over 25 years in the information technology field, including designing data centers, cyber security, and many industry certifications from Microsoft, Cisco, Comp TIA, SANS, and others. As a security consultant, he performed audits/penetration testing on financial institutions and performed independent security research. When not on the computer at work, he can often be found in such cyber places as Tatooine, Azeroth, or Jita in The Forge.



<u>Joanna Bulger</u> Subaru Telescope Contact: j<u>bulger@naoj.org</u>

Joanna Bulger is a Support Astronomer at Subaru Telescope since 2015. Originally from the UK, she obtained her Master's degree in Physics with Astrophysics at the University of Exeter, and there subsequently went on to obtain a PhD in Astronomy in 2014. Joanna first experienced observing at the summit of Maunakea in 2010 and was hooked on both the operations and environment ever since. Throughout her graduate studies Joanna has observed at a wide variety of telescopes across Northern and Southern America such as the Large Binocular Telescope (LBT) in Arizona, and the Atacama Large Millimeter Array (ALMA) in Chile. Now at Subaru Telescope, she assists astronomers with their observations, and also carries out her own research, which focuses on the formation of low-mass stars, brown dwarfs, and exoplanets. Having fallen in love with the Island since her fist visit, Joanna enjoys spending her spare time outdoors exploring the beautiful landscape and ocean.



<u>Andre-Nicholas Chene</u> Gemini Observatory Contact: <u>achene@gemini.edu</u>

André-Nicolas Chené is an assistant scientist at the Gemini North Observatory since early 2013. He obtained his Ph.D. in astrophysics from the Université de Montréal in 2007. He then moved across his home country ("A Mari Usque Ad Mare") to become a research associate for the National Research Council Canada at the Herzberg Institute of Astrophysics from 2007 to 2010. From 2010 to 2013, he held a joint post-doctoral position between the Unversidad de Concepcion and the Universidad de Valparaiso, in Chile, and joined the science team of the VISTA Variable in Via Lactea survey. His main scientific interests are massive stars and young stellar open clusters. His expertise covers optical and near infrared imaging and spectroscopy. Two things he enjoys a lot since he moved to Hawai'i are long observing runs at Mauna Kea, and his daily bike ride to work up and down Puainako St.



<u>Madeline Close</u> Gemini Observatory Contact: <u>mclose@gemini.edu</u>

Madeline is the Systems Engineer Manager for Gemini Observatory, overseeing the application of systems engineering to develop and operate complex interdisciplinary systems. In 2014, she transitioned from the defense industry to join Gemini, and it was one of the most difficult but most rewarding decisions she has ever made. She previously managed and engineered communications systems for Boeing and Booz Allen. Outside of work, Madeline enjoys running, traveling and keeping up with family and friends.



<u>Kathy Cooksey</u> UHH Physics & Astronomy Contact:<u>kcooksey@hawaii.edu</u>



Sandra Dawson TMT International Observatory Contact: sdawson@tmt.org



Brian Day SSERVI/NASA Contact: brian.h.day@nasa.gov

Kathy Cooksey, an assistant professor in astronomy, received her PhD in 2009 from UC Santa Cruz and was an NSF postdoctoral fellow at MIT until starting at UH Hilo in January 2014; both institutions enabled her to learn about science pedagogy and practice teaching. She researches the large-scale gaseous structure in the universe to understand how various elements cycle in and out of galaxies, over cosmic time. As for hobbies, she enjoys soccer, hiking, and camping (and crocheting and watching anime, on the sedentary side).

Sandra Dawson is Manager, Hawai'i Community Relations, for the Thirty Meter Telescope Project. Dawson has a Bachelor of Arts degree in Political Science and a Master's Degree in International Studies from Claremont Graduate University. For 20 years as an employee of the California Institute of Technology (Caltech) she worked at Caltech's Jet Propulsion Laboratory on some of JPL's largest projects for NASA, including the Galileo, Cassini and Mars missions, and received numerous group and individual awards. With her husband, Dwayne, she moved to Hilo six years ago to work on the Thirty Meter Telescope project and has been engaged in many civic, nonprofit, and educational programs.

Brian Day is the Lead for Citizen Science and Community Development at the Solar System Exploration Research Virtual Institute (SSERVI). In this role, he coordinates programs with numerous internal and external partnering organizations, focusing on providing opportunities for students and the public to directly participate in NASA science and exploration. He currently acts as SSERVI's project manager for NASA's Lunar Mapping and Modeling Portal (http://lmmp.nasa.gov), a set of tools designed for mission planning, lunar science, and public outreach. From 2010-2014, Brian served as the Education/Public Outreach Lead for NASA's Lunar Atmosphere and Dust Environment Explorer (LADEE) mission to the Moon, which flew through and studied the Moon's tenuous atmosphere. From 2007-2010 he served as the E/PO Lead for NASA's LCROSS lunar impactor mission which discovered deposits of water ice at the Moon's South Pole. He has also participated in producing the Education/Public Outreach sections for numerous NASA mission proposals. Brian has played key roles in various NASA Mars Analog Field Studies, providing technical support in the field for webcasts and robotic rover tests in extreme environments here on Earth. In 2007, he flew on the Aurigid-MAC mission to record fragments of comet Kiess entering Earth's upper atmosphere. Brian is a frequently-requested speaker at local schools and community organizations. As a member of NASA's Speakers Bureau, he is sent by NASA to give talks on a wide range of NASA missions and research topics.



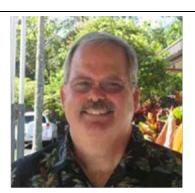
<u>Fidencio De Leon</u> University of Hawaii at Hilo Contact: <u>fdeleon@hawaii.edu</u>

Fidencio De Leon is an undergraduate student working his way to a B.A. in Astronomy at the University of Hawaii at Hilo. After that he will work his way to a masters then a PhD. He has been interested in all subjects of science since a very young age, but mostly astronomy, physics and the physics of astronomy. His inspiration for all sciences (but mostly astronomy, physics and the physics of astronomy) came from the same place of, most likely, many people his age, Bill Nye the Science Guy. He hopes to one day help change the world for the better by making a contribution to the ever growing compendium of the universe and how it works. While not too busy trying to do that he likes to read and continue to think and wonder about the many things about the universe we have yet to discover.



Daniel Devost is the Director of Science Operations at the Canada-France-Hawaii Telescope since 2008. He started at CFHT in 2007 as a Canadian Resident Astronomer and was the WIRCam Instrument Scientist. Before Moving to Hawaii, Daniel worked at Cornell University from 2000 to 2007 as an Instrument Scientist for the Infrared Spectrograph. The spectrograph is one of three instruments on board the Spitzer Space Telescope that was launched in August 2003. Daniel did his PhD at the Université Laval in Québec City, Canada in collaboration with the Space Telescope Science Institute in Baltimore where he spend three years. His science interests are the formation of massive stars and the amount of metals in the Universe.

Daniel Devost Canada-France-Hawaii Telescope Contact: <u>devost@cfht.hawaii.edu</u>



<u>Jeff Donahue</u> Gemini Observatory Contact: <u>jdonahue@gemini.edu</u>

Jeff Donahue is Senior Laser Technician at Gemini Observatory. He supports the laser guide star, preparing the laser for each laser run. Jeff and his wife came from Oregon, where he spent 17 years at Hewlett Packard. Jeff also worked in Corvallis, Oregon as an electronic and laser maintenance technician supporting Inkjet Manufacturing. Jeff has a B.S. degree in Industrial Technology from Central Washington University and an A.S. degree in Electronic Engineering Technology from Linn Benton Community College. In addition to his laser activities, Jeff enjoys snorkeling and exploring the Big Island.



<u>Angelic Ebbers</u> Gemini Observatory Contact: <u>aebbers@gemini.edu</u>



<u>Anna Ferre-Mateu</u> Subaru Telescope Contact: <u>aferre@naoj.org</u>

Angelic Ebbers is a Senior Software Engineer for Gemini Observatory. She is part of the Software Operations group as well as a Telescope Technical Manager. Angelic specializes in motion control systems, EPICS real-time development, and troubleshooting. Angelic earned a B.Sc. from York University in the Space and Communications Sciences stream, with Honors in Computer Science and Physics, plus a minor in Astronomy. Prior to joining Gemini, Angelic worked for The Herzberg Institute of Astrophysics as well as the University of Toronto Southern Observatory in Chile. Outside of work, Angelic can be found training/competing in Dog Agility, scuba diving, or reading a good science fiction book.

Anna Ferre-Mateu was born in Barcelona, Spain. She always has one eye on the Earth, the other one looking up to the skies. Anna moved to the Canary Islands at the age of 22 to pursue a major in Astrophysics. The magic of the island, so similar to Hawaii, kept her in there for 8 amazing years filled with sun, sea, high mountains, big telescopes and the intrigues from the Universe. After receiving her PhD there in 2013, from the Insitituto de Astrofisica de Canarias, Anna moved to another fascinating volcanic island, Big Island. Now she is working as a research specialist in the extragalactic field for Subaru Telescope. Her work is focused on shedding some light into the puzzle of the formation and evolution of the most massive elliptical galaxies in the Universe. Anna studies how the properties of their stars vary over cosmic time and how this evolution fits on the assumed theories. When she is not thinking about the Universe and its secrets, she likes to spend her time outdoors: surfing, skiing, diving, hiking, or simply relaxing at the beach reading a book. But her favorite hobby is to travel, and she travels as much as she can so maybe is not that easy to find her around.



<u>Scott Fisher</u> University of Oregon Contact: <u>rsf@uoregon.edu</u>

Scott Fisher is a faculty member within the University of Oregon, Department of Physics, where he teaches astronomy courses and serves as the Director of Outreach for the department. Scott previously worked at the National Science Foundation in Washington, DC where he was responsible for selecting and funding astronomy programs across the United States. Before his time in Washington, Scott worked as a staff member of the Gemini Observatory as an instrument scientist and as a member of the Gemini Outreach team. Scott lived in Hilo-town for just over 10 years while he worked at Gemini. He obtained his Ph.D. from the University of Florida in 2001 after working his way through the Florida state school system, including a stint at Lake Sumter Community College. Scott's main area of research is searching for and studying planet-forming disks around young stars. He is also involved with the design, construction, and use of infrared camera systems that are used on some of the biggest telescopes in the world. He has spent approximately 350 nights observing from the summit of Mauna Kea since his first trip to Hawai'i in 1996. In addition to his love of astronomy, Scott is an amateur photographer and a Geocacher.



Ashley Garnett was born in New Port, California and moved to the Big Island of Hawaii when she was 4. She grew up in Puna area on the Big Island. She now attends the University of Hawaii at Hilo. She is majoring in Geology and minoring in Astronomy. Her goal is to become a planetary geologist. From a young age she has always had a strong desire to understand the earth and the skies above. As she became older her interests grew even stronger pushing her to pursue her dreams.

<u>Ashley Garnett</u> University of Hawaii at Hilo Contact: <u>agarnett@hawaii.edu</u>



<u>Tom Geballe</u> Gemini Observatory Contact: <u>tgeballe@gemini.edu</u>

Tom Geballe obtained a PhD in physics in 1974 under Prof. Charles Townes at U.C. Berkeley. Following postdoctoral fellowships at Berkeley and Leiden, and a Carnegie Fellowship at Hale Observatories in Pasadena, he became a staff astronomer at the United Kingdom Infrared Telescope in 1981. He was Astronomer-in-charge, Associate Director, and Head of Operations at UKIRT from 1987 until 1998, when he joined Gemini. Among his research interests are the Galactic center, the late stages of stellar evolution, H3+ as a probe of interstellar gas, the composition of interstellar dust, the surfaces, atmospheres, and aurorae of planets and moons, and brown dwarfs.



<u>Jeff Goldstein</u> National Center for Earth and Space Science Education Contact: <u>jeffgoldstein@ncesse.org</u>

Jeff Goldstein is a nationally recognized science educator and planetary scientist who has dedicated his career to the public understanding of science and the joys of learning. As Center Director for the National Center for Earth and Space Science Education, Jeff oversees the creation and delivery of programs that engage entire communities, train 3,000 teachers annually, and emphasize family learning. He led the inter-organization team that permanently installed the Voyage model Solar System on the National Mall in Washington, D.C., in front of the Smithsonian. The Voyage National Program is permanently installing low-cost replicas in 100 communities world-wide. Jeff also oversees the Student Spacelight Experiments Program (SSEP) that provides real research opportunities for pre-college students on the Space Shuttle and International Space Station. Jeff was the Keynote Speakers for the NSTA National Conference in San Francisco, California, in March 2011. Jeff was at the National Air and Space Museum for 8 years, departing in 1996 as acting Chair of the Lab for Astrophysics. He was on the senior staff at Challenger Center from 1996-2005. In 2005 he created the National Center for Earth and Space Science Education. Visit Jeff's website at http://blogontheuniverse.org.



<u>Alyssa Grace</u> Gemini Observatory, UHH Contact: <u>agrace@gemini.edu</u>



<u>Olivier Guyon</u> Subaru Telescope Contact: <u>oliv.guyon@gmail.com</u>

Alyssa Grace is an administrative assistant for Journey through the Universe and a University of Hawaii at Hilo senior studying Psychology, Astronomy, and Biology. Alyssa works in a Neuroscience lab on the University campus. She has interned at Gemini Observatory in the Public Information and Outreach department for 4 months in which she developed a science communication program for college students and participated in various outreach events including a Family Day at the International Astronomical Union conference in Honolulu 2015. Alyssa is from Oahu but much prefers the Big Island. Her favorite activities include: volunteering at the Mauna Kea Visitor's center, hiking, yoga, and karaoke.

Olivier Guyon is an astronomer at the Subaru Telescope. He started looking at stars from the age of 10, and he is now both an avid amateur astronomer and a professional astronomer. Olivier graduated from University of Paris 6 in 2002 (Ph.D. research topic: wide field interferometry), and now works with other scientists to directly observe exoplanets. Olivier has been developing new techniques for imaging exoplanets (planets around other stars) from telescopes on Earth and also future telescopes in space. With these new techniques, astronomers will soon be able to observe planets like ours and start to find out if there is life elsewhere in the Universe. In 2007, Olivier received a Presidential Early Career for Scientists and Engineers award from President Bush at the White House. Olivier received in 2012 the MacArthur fellowship (nicknamed the "Genius grant") for his innovative work in astronomical optics. In his spare time, he builds telescopes which he then uses to observe from the clear skies of Mauna Kea and Mauna Loa.



<u>John Hamilton</u> UHH Physics & Astronomy, PISCES Contact: j<u>ch@hawaii.edu</u> John Hamilton is currently serving as Education/Public Outreach and Logistics Manager of the Pacific International Space Center for Exploration Systems (PISCES) based at the University of Hawai'i at Hilo. An astronomer by trade, he has been associated with space exploration since 1972 with the Skylab missions, spent most of his career supporting astronomical observations at multiple observatories in Hawai'i on Haleakala and Mauna Kea and also in Chile. He has most recently managed the first two International ISRU analog field tests in Hawai'i in 2008 and 2010 and is currently working on the 2012 deployment. John currently teaches undergraduates in Physics and Astronomy courses at UH Hilo. He also serves as co-founder and chief scientist for a local high-tech R&D company Akeakamai Enterprises LLC.



<u>Janice Harvey</u> Gemini Observatory Contact: <u>jharvey@gemini.edu</u>

Janice Harvey is the Community Outreach and Education Programs Leader at Gemini Observatory and serves as the director of the nationally recognized Journey through the Universe Program on the Big Island. Janice is also the National Team Site Leader for the Family Astro/Project Astro program in Hawaii and serves as the StarLab Portable Planetarium instructor and trainer. In 2010 she was awarded the Outstanding Individual in Business award by the Rotary Club of Hilo. She is a member of the Astronomical Society of the Pacific, the International Planetarium Society, and the National Science Teachers Association. Janice has a BS in mathematics and went back for her associate degree in astronomy in 2000 at UHH. She has lived on the Big Island for 40 years and has worked as the Mayor's Executive Assistant, owned and operated Sylvan Learning Centers and three travel agencies in Hawaii. Janice's passion is bringing science and astronomy into the local classrooms.



<u>Guenther Hasinger</u> UH Institute for Astronomy Contact: <u>Hasinger@ifa.hawaii.edu</u>

Günther Hasinger is a world leader in the field of X-ray astronomy and in the study of black holes, having received numerous awards for his achievements. Before becoming Director of the IfA in 2011, he was Director of the Max-Planck-Institutes for extraterrestrial Physics and for Plasma Physics, where he also was responsible for space technology and X-ray detector development. Prof. Hasinger gained his doctorate at the University of Munich and holds an honorary professorship at the Technical University Munich. He began his research career in astrophysics, receiving numerous awards for his contributions in this area, including the Leibniz prize in 2005, for his work on cosmic background x-radiation and black holes, and the Cospar award in 2010 for outstanding contributions to space science. He has also been active in explaining cosmology to a wider audience, winning a Science Book of the Year Award in 2008 for his book "Fate of the Universe". His new book "Astronomy's Limitless Journey" has been published by UH Press in 2015. He used to be a rock musician.



Yutaka Hayano received Ph. D from the Tokyo University in 1995. He worked for adaptive optics system for the ground-to-satellite laser communication at Communication Research Laboratory (1995-2001), the laser guide star system for adaptive optics (1997-2012), adaptive optics system for Subaru Telescope (2001-2015). He lived in Big Island from 2004 until the summer of 2015. He moved to TMT project office, NAOJ in Japan in August 2015 as a co-investigator of the first light instrument of TMT, IRIS. NAOJ is responsible for building imager subsystem of IRIS.

<u>Yutaka Hayano</u> Thirty Meter Telescope - Japan Contact: <u>hayano@naoj.org</u>



<u>Saeko Hayashi</u> Subaru Telescope Contact: <u>saeko@naoj.org</u>

Saeko S. Hayashi grew up in Tohoku, a northeastern rural part of Japan, where she spent part of her childhood in Fukushima. After graduating from a local high school, she boldly went on to attend the University of Tokyo as one of the few women undergraduates in STEM majors; she continued there and became the first woman to pursue Ph.D. in astronomy. She conducted her graduate research at the 45-m radio telescope in Nobeyama, Japan. After receiving her doctorate, she worked at the 15-m James Clerk Maxwell Telescope in Hawai`i and then joined the 7.5-m Japan National Large Telescope (JNLT) project, which began at the National Astronomical Observatory of Japan in 1990, and later became known as the Subaru Telescope with 8.2-m diameter. She has performed a variety of roles at Subaru from taking care of telescope optics, managing day crews to currently managing the Public Information and Outreach Office. She hopes to participate in the publication of research that will lead to major discoveries of Earth-like exoplanets, possibly with water and vegetation. She says, "Subaru Telescope, where people from all over the world come together and work with each other [as ancient Japanese word "Subaru" stands for], is a great place to work. The technical and other challenges at work and the laid back life in this beautiful island is an ideal combination for me".



<u>Stephanie W. Henry</u> NASA Marshall Space Flight Center Contact: <u>stephanie.I.Wilson@nasa.gov</u>

Stephanie W. Henry serves as a Communications Strategist with Arctic Slope Regional Corporation, Inc. in Huntsville, AL. Stephanie's duties include external communications for the Lunar Quest and Discovery/New Frontiers Program Office at NASA's Marshall Space Flight Center. Stephanie assists in developing communication products and materials for the programs. She visits schools, museums, and community organizations to excite students and teachers about NASA's mission and encourages the students to study science, technology, engineering, and math. Stephanie is a graduate of the University of North Alabama where she received a Bachelor of Arts degree in Spanish/Political Science and a Master of Arts in Community Counseling. Stephanie also attended Belmont University in Nashville, TN where she earned her teacher certification for kindergarten through eighth grade. Before joining ASRC, Stephanie's experience includes work in a variety of educational arenas. Stephanie spent seven years working in Student Affairs at different universities and seven years teaching in the classroom, formal and informal instruction. Stephanie is a native of Tupelo, MS and has lived in the Huntsville, AL area for the past nine years. She is married and has a 15-year-old stepson. Stephanie enjoys traveling, shopping, tennis, and spending time with her family in her spare time.



<u>Michael Hoenig</u> Gemini Observatory Contact: <u>mhoenig@gemini.edu</u>

Michael Hoenig is a Science Operations Specialist at Gemini Observatory. He did his undergraduate degree in Astrophysics at the University of Sussex (England) in the last millennium, and then went on to do a Ph.D. at the University of Cambridge, which he completed in 2004. His thesis centered on the construction of a wide field infrared camera called CIRSI, which meant he ended up going on a number of observing trips to Mauna Kea and the Canary Islands. Once all the data from the instrument was properly reduced and calibrated, it was used to search for distant clusters of galaxies - and he is happy to report he actually found some, too. After his Ph.D. he worked in translation and publishing for a few years. But the call of the cosmos was impossible to ignore! Which is why in 2008 he packed his bags and moved to Hilo, and the rest, as they say, is history... When he's not up at the telescope observing the night sky, or reviewing the images back down in Hilo, he likes to paddle canoes, dance Argentine tango or read a good book.



<u>Matthew Hosek</u> UH Institute for Astronomy Contact: <u>mwhosek@gmail.com</u>

Matt Hosek is a second year graduate student at the University of Hawaii Institute for Astronomy, having received a B.A. in Astrophysics from Williams College in 2012. He is interested in how stars interact with and affect their galactic environment, and is currently studying star formation near the supermassive black hole at the center of our galaxy. Interested in astronomy from a young age, he is excited for the opportunity to share his enthusiasm through education and outreach. Outside of astronomy, he is a huge football fan (GO GIANTS!) and enjoys hiking and playing ultimate frisbee.



<u>Stewart Hunter</u> Mauna Kea Support Services Contact: <u>shunter@ifa.hawaii.edu</u>

Stewart Hunter has been the General Manager at Mauna Kea Observatories Services (MKSS) since 2010. MKSS operates and maintains the mid-level astronomy facilities at Hale Pohaku on Mauna Kea. This includes the astronomy dormitories, the dining facility and the Visitor Information Station as well as maintaining the summit roads. Prior to working at MKSS, Stewart spent 24 years in the Navy, serving on submarines as an electronics technician, then after receiving a commission, a logistics officer until retiring in 2004 as a Lieutenant Commander. He received a BS in Earth Science from Oregon State University in 1991 and a MS in Systems Management from the Naval Postgraduate School in 1999. Stewart and his wife Lory have been Hilo residents since 2000, where they also own and operate a local Bed and Breakfast.



<u>Masa Imanishi</u> Subaru Telescope Contact: <u>mimanishi@naoj.org</u>

Masatoshi Imanishi works at Subaru Telescope. He studies merging galaxies and supermassive blackholes in the universe.



<u>Russell Kackley</u> Subaru Telescope Contact: <u>rkackley@naoj.org</u>



<u>Carolyn Kaichi</u> UH Institute for Astronomy Contact: <u>kaichic@ifa.hawaii.edu</u>

Russell Kackley holds a Bachelor of Science in Mechanical Engineering from Wayne State University and a Master of Science in Mechanical Engineering from Stanford University. He worked for 16 years on spacecraft design and analysis at Lockheed-Martin before moving to Hawai'i. Here in Hilo, he worked for 11 years at the Joint Astronomy Centre and was responsible for the Telescope Control System software. Since April 2011, he has been working at the Subaru Telescope in the Observation Control Software group. He also mentors the Waiakea Intermediate and Honoka'a High School robotics teams.

Carolyn Kaichi is the Education/ Outreach Specialist for IfA-Hilo. She has always been fascinated by astronomy, and with a background in news media, it was a perfect fit for her to pursue a career in communicating her love of astronomy and space science. Carolyn (Ms. Kaichi?) was born and educated in Hawai'i and enjoys working with students and the public. "It is incredibly exciting to see peoples' eyes light up with wonder when you share the excitement of the Universe with them", she says. Prior positions include: Imaginarium Manager for the Center for Aerospace Studies at Windward Community College, Hawaii State Science Fair Director and Planetarium Manager for Bishop Museum. Carolyn enjoys astronomical observing, travel and has practiced yoga for many years.



<u>Yuko Kakazu</u> Subaru Telescope Contact: <u>kakazu@naoj.org</u>

Yuko Kakazu joined the Subaru Telescope as an outreach specialist in 2013. A native Okinawan, she began her journey into astronomy when she attended the NASA U.S. Space Camp program at age 13. Yuko graduated from Tohoku University in Japan and then obtained her Ph.D. at the Institute for Astronomy, University of Hawai'i at Manoa. Since then she has worked as a researcher in Paris, France (Institut d'Astrophysique de Paris), California (California Institute of Technology), and Chicago (University of Chicago). Her research focuses on metal poor galaxies and distant galaxies with the aim of improving our understanding of galaxy formation and chemical enrichment history of the Universe. At Subaru, Yuko arranges and conducts public outreach events and lectures for the local and the international communities, including Japanese audiences. She is hoping to help fill the gap between scientists and the public and wants to encourage young people, especially women and minorities, to engage in science and technology. When Yuko is not talking about astronomy or playing with her baby galaxies, she enjoys dancing Argentine tango, cooking (as well as eating), listening to piano jazz and classical music, and taking yoga or Zumba class at the gym. She is a certified Zumba fitness instructor.



<u>Rob Kelso</u> Pacific International Space Center for Exploration Systems (PISCES) Contact: <u>rkelso54@gmail.com</u> Rob Kelso has served as the Executive Director at the Pacific International Space Center for Exploration Systems since November of 2012. Kelso is a career civil servant, serving 37 years at NASA's Johnson Space Center (JSC), formerly holding a position as the NASA Shuttle Flight Director at NASA's famed Mission Control Center. Kelso's career in flight operations spans 21 years, beginning in April of 1981 as a flight controller on STS-1. In February of 1988, Kelso was selected to the Flight Director "Class of 1988" following the Challenger disaster, which took the life of Hawaii's Ellison Onizuka. He directed 25 Space Shuttle missions during the 1980s and 1990s. During his time in Flight Control, Kelso was instrumental in launching Department of Defense (DoD) spacecraft aboard the Space Shuttle, beginning with overseeing the first DoD launch from Mission Control while Ellison Onizuka served as the Astronaut in the Shuttle cockpit in January 1985 for STS-51C. He also served as NASA's Mission Director, responsible for the launch and delivery of the Chandra X-Ray telescope, the last of the great NASA observatories sent into space by NASA. After leaving the Flight Director Office at NASA JSC, Kelso served on JSC's senior staff as Deputy Director for Safety and Mission Assurance, responsible for directing safety and quality activities supporting manned space flight. One of Kelso's last roles at NASA was leading efforts to preserve and protect the Apollo lunar landing sites on the Moon. Kelso has been the recipient of the NASA Outstanding Leaderships Medal, and NASA Exceptional Service Medal. He holds a Bachelor's Degree in physics, and a Master's in Business Administration.



Mary Beth Laychak is the outreach program manager at the Canada-France-Hawaii Telescope, her second time working at CFHT. Previously, Mary Beth was one of CFHT's service observers and outreach coordinator before moving to Oahu. On Oahu, she worked as the manager at the Imaginarium planetarium and astronomy lecturer at Windward Community College. Mary Beth has a BA in astronomy and astrophysics from Penn State University as well as a MA in Education from San Diego State.

<u>Mary Beth Laychak</u> Canada-France-Hawaii Telescope Contact: <u>name@cfht.hawaii.edu</u>



<u>Chien-Hsiu Lee</u> Subaru Telescope Contact: <u>leech@naoj.org</u>

Chien-Hsiu Lee is a Support Astronomer at Subaru Telescope. He obtained a BS in Physics from National Taiwan University, a MSc in Astronomy from National Central University, and a PhD in Astronomy from Ludwig Maximilians University of Munich in 2011. Before joining Subaru Telescope, he was a postdoc research fellow at National Central University in Taiwan (2011-2013) and at University Observatory of Munich in Germany (2013-2015). His research focuses on variable stars and transients in the Milky Way and in our neighboring galaxy M31.



<u>Julien Lozi</u> Subaru Telescope Contact: <u>lozi@naoj.org</u>

Julien Lozi is senior optical scientist at Subaru Telescope, National Astronomical Observatory of Japan. Born in France in 1985, he was introduced to astronomy at the age of 10 and has been avidly pursuing this subject ever since. A 6-month internship at Subaru Telescope in 2008 first introduced him to Hawai'i, before he went back to France to study for his PhD in instrumentation for Astronomy. After earning his doctorate from Université Paris-Sud XI in 2012, Lozi worked in Silicon Valley for two years at the NASA Ames Research Center, to work on space telescopes that can look at extrasolar environments. In 2014, he returned to Hilo to accept his "dream job" at Subaru Telescope, where he is currently working on a first generation high contrast imaging instrument dedicated to the direct observation and characterization of exoplanets.



<u>Nadine Manset</u> Canada-France-Hawaii Telescope Contact: <u>manset@cfht.hawaii.edu</u> **Nadine Manset** has been a resident astronomer at CFHT since 1999, right after finishing her PhD thesis at Universite de Montreal. Over the years, she has helped astronomers observe in classical mode at CFHT, with spectrographs and imagers. Now in charge of the Queued Service Observing mode, she prepares observations for CFHT's spectropolarimeter and oversees the nightly observations taken with the various instruments. In addition to chairing the Maunakea Astronomy Outreach Committee, Nadine participates to public outreach events a few times every year.



Rachel Mason is an Associate Astronomer at the Gemini Observatory, where she specialises in infrared astronomy, nearby active galactic nuclei, and generally getting things done. Originally from northern England, she came to Hawai'i via a PhD in Edinburgh, Scotland, and a postdoctoral position split between Arizona and Chile. Outside work, Rachel is very interested in sustainable agriculture and the food system, and spends a lot of time hanging out with trees, plants, goats, and chickens.

<u>Rachel Mason</u> Gemini Observatory Contact: <u>rmason@gemini.edu</u>



<u>Callie Matulonis</u> James Clerk Maxwell Telescope Contact: <u>c.matulonis@eaobservatory.org</u> **Callie Matulonis** is currently a Telescope System Specialist at the James Clerk Maxwell Telescope. Callie graduated from the University of Hawai'i at Manoa in the Spring of 2012 with a Master's degree in Educational Technology. Callie has worked for several Mauna Kea observatories over the past ten years fulfilling a variety of positions including public outreach, laser operations, and telescope operations.



<u>Tony Matulonis</u> NASA Infrared Telescope Facility Contact: <u>matuloni@ifa.hawaii.edu</u> **Tony Matulonis** works at NASA Infrared Telescope Facility (IRTF). He earned his Bachelor of Science in Astronomy from the University of Hawai'i at Hilo in 2002. After working as an Interpretive Guide at the Ellison Onizuka Center for International Astronomy Visitor Information Station, Telescope Operator at the UH 2.2-meter telescope, Science Operations Specialist at Gemini Observatory, he joined IRTF in 2013.



<u>Peter Michaud</u> Gemini Observatory Contact: <u>pmichaud@gemini.edu</u>

Peter D. Michaud, Gemini's Public Information and Outreach Manager, has pursued a career that has provided a broad set of experiences in education, media relations and photography. These have ranged from the initiation and management of many informal science education programs to the authoring of a monthly newspaper column on astronomy. Prior to moving to Honolulu in 1989 to manage the Bishop Museum Planetarium, Peter obtained his Bachelor's Degree in Atmospheric Physics and certification in Physical Science Education in 1985. This led to his selection for the highly competitive annual planetarium education internship at the Strasenburg Planetarium in Rochester N.Y. in 1985 - 86. During almost a decade at the Bishop Museum Planetarium, Peter worked closely with local educators as well as the Mauna Kea astronomical community and initiated many new projects that included a NASA-funded project to produce a nationally distributed planetarium program about Mauna Kea. In June 1998, Peter accepted his current position at the Gemini Observatory in Hilo. Since arriving here, Peter has been involved in a variety of projects that have included the management of multiple outreach, education and media relations initiatives. An example of the innovative products produced by his office is the Gemini Observatory Virtual Tour CD-ROM/Kiosk which is currently being translated into multiple languages and has been installed in a variety of public facilities around the world.



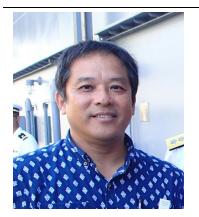
<u>Joseph Minafra</u> NASA Ames Research Center Contact: <u>joseph.minafra@nasa.gov</u>

At the NASA Ames Research Center, Joseph Minafra serves as Lead of Technical Systems and Collaborative Technology Specialist for the NASA Solar System Exploration Research Virtual Institute (SSERVI). Joe has an extremely diverse background that ranges from Meteoritic studies, biology, project management, software development including web design, collaborative technology development to Scientific Illustration and graphic design, even a few years as a professional Chef. With his varied background, Joe has been responsible for a broad set of technical tasks for the NASA Ames Center Director as well as the Space and BioSciences Divisions, Astro and Synthetic Biology workshops just to name a few. Currently, his work is to oversee technology innovation and Robotics education initiatives in order to enable collaboration and communication between competitively selected science and research teams across not only the United States but internationally as well. Joe has a long history of integrating government work with commercial enterprises and bringing that message to the public through the education and public outreach sectors. He is excited to share his NASA experiences with the Journey through the Universe communities! Ad Astra!



<u>Brian Mitchell</u> NASA Contact: <u>brian.k.mitchell-1@nasa.gov</u>

Brian Mitchell is the Education and Public Outreach manager for NASA's Discovery/New Frontiers/Lunar Quest Program Office. He has more than 25 years at the Marshall Space Flight Center located in Huntsville, Alabama and has worked on various Space Shuttle payload missions including ASTRO, ATLAS, and Spacelab, as well as several experiments for the International Space Station. He has been the Program Office Education and Outreach lead during the LRO, LCROSS, LADEE, JUNO, GRAIL, and IML missions to our Moon, Jupiter and Mars. Future missions in his Office include the asteroid sample return mission OSIRIS-REx, INSIGHT seismic mission to Mars, and the New Horizon spacecraft nearing Pluto now. Brian is tasked with communicating Planetary Missions Program Office (Discovery, New Frontiers, and Solar System Exploration programs) science goals and objectives to the public in order to promote STEM participation and inspire the general public by using new and existing opportunities. He spends much of his time speaking in classrooms and public venues, as well as designing innovative interactive exhibits that travel the country. When not talking about space, Brian keeps his 1965 Ford tractor alive, competes in shooting events, and occasionally gets to swing a golf club with his two teenagers.



<u>Junichi Noumaru</u> Subaru Telescope Contact: <u>noumaru@naoj.org</u>

Junichi Noumaru Current position: Associate Professor, Subaru Telescope, National Astronomical Observatory of Japan. Born in Kitakyushu, Fukuoka, Japan. Graduated from Kyoto University, Japan. Ph.D in Astronomy. Studied optical property of young stellar object such as emission nebulae and Herbig-Haro objects. Also joined to instrumentation such as prototyping fiber-fed multi-object spectrograph and control system of the telescope. After I moved from Kyoto University to National Astronomical Observatory of Japan in Tokyo in 1992, I joined the design of control system and instrument interface of Subaru Telescope. Moved to Hilo in 1996 for Subaru Telescope Project and oversaw progress of construction of Subaru Telescope. At Subaru Telescope at Hilo, I was in charge of operator's group and Instrument Division. Currently I'm the division chief of Computer and Data Management Division and the Safety Officer of Subaru Telescope.



<u>Prashant Pathak</u> Subaru Telescope Contact: <u>prashant@naoj.org</u>

Emily Peavy UHH Physics & Astronomy Contact: epeavy@imiloahawaii.org

Prashant Pathak is a second year graduate student at Subaru Telescope, enrolled at Sokendai university, Japan. He did his undergraduate studies at the Indian Institute of Science Education and Research Thiruvananthapuram, India, with a major in Physics and minor in Biology. At Subaru telescope, he is part of the SCExAO group, who are working on developing an instrument, which will be able to directly image exoplanets and do its spectroscopic studies. His current field of research is to measure the on-sky atmospheric dispersion and its correction using chromaticity of Speckles to achieve the high contrast images for direct detection of exoplanets.

Emily Peavy is a recent graduate of UH Hilo's Astronomy program and a full time Planetarium Support Facilitator and Technician at 'Imiloa Astronomy center; where she worked as a student employee since January 2012. Emily also enjoys volunteering at the Maunakea Visitor Information center whenever she gets some free time. Emily plans on going into the outreach and education side of astronomy but is still intrigued and excited by much of the research that is occurring in the field.



<u>Yvonne Pendleton</u> Solar System Exploration Research Virtual Institute NASA Ames Research Center Contact: <u>yvonne.pendleton@nasa.gov</u> Dr. Yvonne Pendleton is the Director of the Solar System Exploration Research Virtual Institute. Pendleton joined NASA Ames in July 1979 having earned her Bachelor of Aerospace Engineering degree from the Georgia Institute of Technology. Under NASA sponsored programs, she obtained a Master's Degree in Aeronautics and Astronautics from Stanford University (1981) and a Ph.D. in Astrophysics from the University of California at Santa Cruz (1987). As a research astrophysicist in the Space Science and Astrobiology Division from 1979-2005, Yvonne published 80 scientific papers and contributed significantly to our understanding of the origin and evolution of organic material in the universe. The goal of her ongoing research program is to understand the composition of the organic material found in the interstellar medium and to investigate the incorporation of the organic material from space into the early Earth environment. She is an elected fellow of the California Academy of Science and Asteroid 7165 Pendleton was named in honor of her research contributions. Appointed Chief of the Space Science and Astrobiology Division at NASA Ames Research Center in 2005, she led a scientific and technical staff of 160 people. When asked to serve as the senior

advisor for research and analysis programs for the Science Mission Directorate at NASA Headquarters, she moved to Washington, DC from 2007-8. There she provided independent assessments and guidance to the Associate Administrator of the Science Mission Directorate concerning NASA's science research programs and increased scientific productivity across the nation as the time required to evaluate and award research grants was significantly reduced. During that time she was also responsible for the Education and Public Outreach of NASA's Science Mission Directorate and led a team that managed the nearly 50 million dollar investment made in EPO activities, including those from NASA's science missions. Returning to NASA Ames in July of 2008, Yvonne became the deputy associate director where she provided guidance and direction to several collaborative scientific and technical efforts and served as an academic Dean of Students for the several hundred students on the Ames campus each summer. Yvonne has been very active in education and public outreach throughout her career. She served as the Director for Research for the NASA Ames Astrobiology Academy in 2004, developed the Voyages Through Time education curricula with the SETI Institute, served as an astronomer to local classrooms for over a decade with the Astronomical Society of the Pacific, and taught astronomy at the college level as an adjunct lecturer at Santa Clara University. To read more about Yvonne, please read "A Lifetime Spent Studying the Stars, Searching for Answers", a biography of Dr. Yvonne Pendleton on the official NASA-Ames Research Center website.



<u>Andreea Petric</u> Gemini Observatory Contact: <u>apetric@gemini.edu</u>

Andreea Petric is a Science Fellow at the Gemini North Observatory since November 2013. She has received her PhD from Columbia University with a thesis on X-ray scattering halos and was a postdoctoral fellow at Caltech working on IR and millimeter observations of interacting galaxies and galaxies hosting Active Galactic Nuclei (AGN). Her current research focuses on near-IR observations with Gemini of the impact of AGN on the interstellar medium of their host galaxies.



<u>Tae-Soo Pyo</u> Subaru Telescope Contact: <u>pyo@naoj.org</u>

Tae-Soo Pyo is an Assistant Professor at the Subaru Telescope. His research focuses on star and planet formation, especially outflows and jets from young stellar objects. He has been working at Subaru Telescope since 2000 December. He was a Support Astronomer engaging in management and night support of InfraRed Camera and Spectrograph (IRCS) and Adaptive optics system (AO188) and other instruments. He got Bachelor and Master degrees in Astronomy from Seoul National University at Seoul in South Korea in 1992 and a PhD in Astronomy from the University of Tokyo at Tokyo in Japan in 2003. Tae-Soo loves Ukulele and various music including heavy metal and reading books.



<u>Bo Reipurth</u> UH Institute for Astronomy Contact: <u>reipurth@ifa.hawaii.edu</u>

Bo Reipurth graduated from the University of Copenhagen in Denmark. After spending some years as a postdoc there, he took up a position as staff astronomer with the European Southern Observatory in Chile for 11 years. Subsequently, he worked at CASA in Colorado as a Research Professor, and later joined the Institute for Astronomy at the University of Hawaii in Manoa in order to pursue studies of star and planet formation. "One of my first astronomical experiences as a small kid was to see the craters of the Moon and the rings of Saturn through the telescope at the public observatory on top of the Round Tower in Copenhagen. After that I was never in doubt that I had to become an astronomer. Conditions in Copenhagen were already in those days not ideal for looking at the night sky, but instead I spent innumerable hours with my small telescope drawing sunspots as they crossed the Sun. I took out a subscription to Sky and Telescope, which I then painstakingly read through with the help of a dictionary. One day I read an article about small mysterious blobs called Herbig-Haro objects which might be signposts of stars in the making. I was completely captivated by the possibility that we might actually be able to see stars in the process of being born, and I have spent most of my professional career trying to learn about how stars are formed."



<u>Marc Roberts</u> University of Hawaii at Hilo Contact: <u>mfr@hawaii.edu</u>

Marc Roberts is the Physics Lab Coordinator and Lecturer at the University of Hawaii, Hilo(UHH). He has a B.Sc. from Trent University, Canada and a M.Ed. from The College of New Jersey. Marc has taught in the USA, Canada, Japan, Korea, and Vietnam. He has taught at many levels from Kindergarten through to College. He loves to tinker with computers and electronics and is currently the faculty lead for the UHH NASA RMC Robotics team. He is an avid cyclist and has traveled extensively by bicycle in the above mentioned countries, as well as a one month tour of France. He can speak multiple languages as he put effort in learning the language of each of the foreign countries he has lived in.



<u>Rodrigo Romo</u> Pacific International Space Center for Exploration Systems (PISCES) Contact: <u>rfvromo@gmail.com</u>

Rodrigo Romo is the Project Manager for the Pacific International Space Center for Exploration Systems (PISCES), and is primarily in charge of the Robotic Village - an initiative to test in-situ resource utilization (ISRU) and robotics at planetary analogue testing sites. He is currently leading and supervising the development of PISCES' Alpha Argo planetary exploration rover, as well research and integration of future components for the Robotic Village. Romo began his career near Tucson, Arizona at Biosphere II - the largest fully enclosed facility dedicated to researching climate change, ecosystem interactions, and space colonization during its time. From 1992 through 1997, he held several key positions overseeing instrumentation and air monitoring systems, as well as working in research and engineering departments. Romo held his last position at Biosphere as the Plant Manager for a 6 megawatt cogeneration power plant on site. From 1997 through 2014, Romo served as the Vice President of Engineering for the Zeta Corporation, researching and developing new applications for the company's technologies. He is originally from Guadalajara, Mexico and earned his undergraduate degree in Chemical Engineering from ITESO University in 1992. He later obtained his Master's degree in Business Administration from the University of Arizona.



<u>Kathy Roth-Guyon</u> Gemini Observatory Contact: <u>kroth@gemini.edu</u>

Kathy Roth-Guyon is an Associate Scientist based at Gemini North. She is the instrument scientist for the Gemini Multi-Object Spectrograph (GMOS-N) and has been with Gemini since July 2000. She obtained her B.Sc. in Physics and Computer Science at Duke University in 1985 and her Ph.D. in Astrophysics from Northwestern University in 1992. She held a postdoctoral position at the Space Telescope Science Institute (STScI) in Baltimore from 1992 until 1995, followed by a Hubble Fellowship at the University of Hawai'i Institute for Astronomy from 1995 until 1998. In 1998 she joined the staff of the Far Ultraviolet Spectroscopic Explorer (FUSE) at Johns Hopkins University in Baltimore. Her research interests include the chemical enrichment of the interstellar medium in our galaxy and in the high-redshift universe via quasar absorption line spectroscopy, the study of distant young galaxies, and the use of gamma ray bursts to probe chemical enrichment of the early universe by the first stars.



<u>Dennis Schatz</u> Pacific Science Center Contact: <u>Dennis_Schatz@pacsci.org</u> Dennis Schatz is Senior Advisor at Pacific Science Center in Seattle, Washington. A research solar astronomer prior to his career in science education, he worked at the Lawrence Hall of Science at the University of California, Berkeley, prior to moving to Seattle in 1977. At Pacific Science Center he has held a broad range of positions from Director of the Planetarium in his early years to VP for Exhibits and VP for Education to Senior VP in more recent years. In the last 4 1/2 years, he was a Visiting Scholar at the University of Queensland, Brisbane, Australia, followed by four years as a Program Director at the National Science Foundation (NSF). He has provided leadership to several of Pacific Science Center's major initiatives, including Washington State LASER and Portal to the Public. He is active in the Association of Science-Technology Centers (ASTC), being a past member of its Program Committee, Professional Development Committee and past chair of its Education Committee, and its Leading Edge Awards Selection Committee. He is also active in the National Science Teachers Association, having been Program or General Chair for three of NSTA's Conventions. He has dedicated many years to identifying effective ways to teach astronomy concepts, especially through his involvement with the Astronomical Society of the Pacific (ASP), the largest international society dedicated to astronomy education in and out of school. He is a past board member and a past president of the ASP. He has received numerous honors, including the 1996 Distinguished Informal Science Educator Award from the National Science Teachers Association (NSTA). He received NSTA's 2005 lifetime achievement award (Distinguished Service to Science Education). In 2006 ASTC made him an ASTC Fellow for his lifetime achievement in service to the field and furthering the public's understanding of science. He is only one of 24 ASTC Fellows awarded in the history of ASTC and the first non-CEO or public official to receive the award. In March, 2009 he received the Faraday Science Communicator Award, presented annually by the National Science Teachers Association (NSTA). This award recognizes and honors an individual or organization that has inspired the public's interest in and appreciation of science. He joins an elite group of highly prestigious honorees, including the PBS series NOVA and NPR Science Correspondent Ira Flatow. Most recently, he received the 2014 Klumpke-Roberts Award from the Astronomical Society of the Pacific for outstanding contributions to the public understanding and appreciation of astronomy. Past awardees include stellar astronomy communicators, such as Carl Sagan, Isaac Asimov, Timothy Ferris and Dava Sobel. He is the author of 23 science books for children, including Uncover A T.rex, the Fossil Detective series of four books and the popular Totally series of six books (Totally Dinosaurs in 2000 to Totally Sea Creatures in 2003). His most recent book is The Amazing Squishy T.rex. His books have sold almost 2 million copies worldwide and have been translated into 23 languages. His Uncover A T.rex book was a 2003 Parents Choice Award Winner, and his Fossil Detective Woolly Mammoth received a 2006 iParenting Media award. He is also co-author/editor of several curriculum

resources for teachers, including Astro-Adventures, Universe At Your Fingertips and More Universe At Your Fingertips.



<u>Sharon Schleigh</u> East Carolina University Contact: <u>schleighs@yahoo.com</u>

Sharon Price Schleigh, originally from Hawaii, has been an educator for over 20 years, teaching all ages, from preschool to university. She received the Distinguished Award for Innovative College Science Teaching from the Hoosier Science Teacher Association in 2013. She earned her BS from the University of Hawaii, Hilo, has earned two masters degrees, and has earned a doctoral degree from Arizona State University. Her research interests include understanding how people think about and engage in science. This has led to research projects that have examined argumentation in a science classroom; authentic research in astronomy and problem-based curriculum designs; how students, teachers and scientists think about the nature of science; and how curriculum impacts content knowledge and attitudes about science. She has been involved in projects such as the NASA Deep Impact Mission (Institute for Astronomy, Hawaii); Toward Other Planetary Systems (IFA/NSF); Ali'i Astrobiology Summer Workshops; and Teacher Leaders in Research-Based Science Education (NOAO, Kitt Peak). She is sought out across the country to lead teacher and k-12 science workshops and presentations, focusing on argumentation and on astronomy content (building telescopes and image analysis). She has been on the education board for the Las Cumbres Observatories of Global Telescopes network (LCOGT), the Faulkes Telescopes, and GoScience. She has served as the director of the Research Engaged Science Teacher Education Program to improve STEM (RESTEP to STEM), funded by NASA and the NC Space Grant to promote astronomy/science education with pre-service teachers. She has also served as a Regional Science & Engineering Fair Director, a Regional Science Olympiad Director, a trainer and presenter of the ECU Portable Planetarium program, an AAPT State Representative (HI), as the Mentor Coordinator for the Near East School Alliance Virtual Science Fair, and is the Chair of the Advisory Board for the NSTA Journal of College Science Teaching. Dr. Schleigh is the co-author of the Scientific Argumentation in the Biology Classroom, and the soon to be released Scientific Argumentation in the Earth & Space Science Classroom.



<u>Dehrich Schmidt-Chya</u> University of Hawaii at Hilo

Dehrich Schmidt-Chya was born and raised in Alaska. He is currently working on obtaining a Bachelor of Science in Astronomy from University of Hawaii at Hilo. He is interested in Astronomy because there is so much we do not know about the Universe, and he has always wanted to help solve the countless mysteries that the Universe hides from us. Ultimately, his goal is to receive a Ph.D. in the field, and not only conduct research - but help to educate future generations by becoming a professor.

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<u>Jessica Schonhut</u> UH Institute for Astronomy Contact: <u>Jessicaschonhut@gmail.com</u> **Jessica Schonhut** is currently working as an intern at the Institute for Astronomy. She will be working in Hilo for a year, before moving back to the UK to finish her Degree in Astrophysics. This year she is looking at asteroseismic data and working on various projects. In England, she studies at the University of Hertfordshire just north of London and works at the university observatory, Bayfordbury giving planetarium shows to curious members of the public as well as working with the telescopes. Her hobbies include music, which she studied before moving to astrophysics, and photography.



<u>Jenny Shih</u> Gemini Observatory Contact: <u>jshih@gemini.edu</u> Jenny Shih is a Science Fellow at the Gemini Observatory. She earned her bachelor degree in Astrophysics from UCLA in 2004, and her Astronomy PhD from the Institute for Astronomy at UH Manoa. She spent most of her time in graduate school studying how supermassive black holes affect galaxy evolution. In particular she focused on the black holes that have very powerful radio jets. These jets are strong enough to blow a large amount of gas out of the galaxy, and thus affecting the star formation and black hole accretion activities. After graduate school, she wanted to stay in Hawaii, so she moved to the Big Island and continue to do her research while also helping with daily operations at the Gemini telescope. Other than Astronomy, she is also obsessed with cute and furry animals. If you catch her taking a break from working on the computer, she is probably watching live panda or otter cams.



<u>Jasmin Silva</u> University of Hawaii at Hilo Contact: j<u>asminks@hawaii.edu</u>

Jasmin Silva is a junior majoring in Physics and Astronomy at UH Hilo. She was a NASA Hawaii Space Grant Consortium fellow in the Spring 2015 and Fall 2015 semesters. Through her fellowship she studied the evolution of the gaseous regions surrounding galaxies with Dr. Kathy Cooksey. She is interested in science education and particle astrophysics, and hopes to pursue those interests in the future. In her free time, Jasmin enjoys reading, hiking and trying to learn German.



<u>Doug Simons</u> Canada-France-Hawaii Telescope Contact: <u>simons@cfht.hawaii.edu</u> **Doug Simons** received his B.S. in astronomy at the California Institute of Technology in 1985, and a Ph.D. in astronomy at the University of Hawai'i in 1990, before working as a staff astronomer at the Canada-France- Hawai'i Telescope (CFHT) for 4 years. Doug joined Gemini in May of 1994 as the Systems Scientist, then managed Gemini's instrument development program for 5 years before becoming Gemini's Director from 2006-2011. Doug returned to CFHT in 2012 where he now serves as Executive Director. Principal areas of interest include infrared instrumentation and studies of the Galactic center, low mass stars, and star formation regions.



<u>Evan Sinukoff</u> UH Institute for Astronomy -Manoa Contact: <u>sinukoej@gmail.com</u>

Evan Sinukoff is a graduate student at the University of Hawaii Institute for Astronomy. Born and raised in Toronto, Canada, he completed his undergraduate degree at McMaster University, majoring in Physics. As part of this degree, he spent time working as a research assistant at NASA's Goddard Space Flight Center in Maryland. There, he had the opportunity to meet astronauts, and was exposed to the amazing world of space exploration. He became particularly interested in the detection and characterization of extrasolar planets, especially those which might be host to alien life. Presently, as a graduate research assistant, he is using some of the world's most powerful telescopes to search for Earth-sized exoplanets and the black hole remnants of exploded stars. His research team recently measured the mass and density of a hot, Earth-sized exoplanet, Kepler-78b, finding its composition to be mostly rocky like Earth. Aside from astronomy, Evan loves to hike, surf and play a variety of different sports, and, as most Canadians, this includes ice hockey.



<u>Breann Sitarski</u> UCLA Contact: <u>bsitarski@astro.ucla.edu</u>

Breann Sitarski is a graduate student researcher in the Galactic Center Group at UCLA. She got her Bachelor's degree in Astrophysics from UCLA, and continued there for graduate school, where she is currently working on her Ph.D. in Astronomy. Breann studies dusty objects near the supermassive black hole at the center of our Galaxy to try to understand where they come from, what they are, and how they survive in such a hostile environment. She also studies the adaptive optics system on the Keck II telescope to try to correct for aberrations that the NIRC2 instrument itself is making on astronomical data. She was the lead coordinator for Astronomy Live!--the award-winning astronomy outreach group at UCLA--for four years. Breann also likes studying history, traveling, playing various sports, and reading!



<u>Robert Sparks</u> NOAO Contact: <u>rsparks@noao.edu</u>



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<u>Niki Thomas</u> Pacific International Space Center for Exploration Systems (PISCES), UHH Contact: <u>nkthomas@hawaii.edu</u>

Rob Sparks earned his B.A. in Physics from Grinnell College and M.S. from Michigan State University. He taught high school physics, math and astronomy for 11 years at schools on St. Croix, Florida and Wisconsin. He spent the 2001-2002 academic year at Fermilab working on the Sloan Digital Sky Survey as part of the Fermilab Teacher Fellowship Program. He spent 13 years as a NASA Astrophysics Educator Ambassador for the Swift Satellite and spent the summer of 2003 at the National Radio Astronomy Observatory in Green Bank as part of the Research Experience for Teachers program. He joined the Education and Public Outreach Group at the National Optical Astronomy Observatory in 2005 where he has worked on a variety of educational programs and is currently the Tucson Project Astro Site Director. He is also part of the resident improv troupe at Unscrewed Theater where he also teaches improv classes and is a member of the creative team. Rob performs with Musical Mayhem Cabaret and is an avid distance runner.

Gordon K. Squires is an astronomer at the California Institute of Technology, working with the Thirty Meter Telescopes as well as NASA's Spitzer Space Telescope, the Herschel Space Observatory, the Galaxy Evolution Explorer and other space telescopes with Caltech involvement. His research explores the old, cold and distant universe, understanding how galaxies formed billions of years ago, and the nature of the dark matter and dark energy that fills space.

Niki Thomas is an undergraduate student at the University of Hawaii at Hilo majoring in Astronomy and Biology. She has interned at the Pacific International Space Center for Exploration Systems and currently does research under the Hawaii Space Grant Consortium related to looking at Hawaii as an analog to early and present day Mars. She is also currently working on a NASA funded project called B.A.S.A.L.T. and is part of a UH Hilo team aiming to choose the first human landing site on Mars. In her spare time Niki likes to do challenging calculus problems, play with her pet chicken, watch movies, and eat delicious food.



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Chad Trujillo is an Astronomer at Gemini Observatory in Hilo. He obtained a BS in Physics from MIT in 1995 and a PhD in Astronomy from the University of Hawaii in 2000. After work as a Postdoctoral Scholar at Caltech he joined Gemini in 2003. At Gemini, he has been involved in the science operation of the Adaptive Optics system (Altair) guiding with both natural stars and laser beacons. His research interests include the Kuiper Belt, the solar system, star and planet formation and extrasolar planets. His recent work includes co-discovery and surface measurements of several of the largest Kuiper Belt Objects including the so-called "10th Planet", and co-discovery of the first high inclination Neptune Trojan asteroid.

John Vierra was born and raised in Hilo and graduated from Hilo High School. He joined the United States Airforce after graduation and spent the next 10 years in the US Airforce as a firefighter, earning a degree in Fire Science. He left the Airforce in 1992 to move back home and be close to his family. Upon returning to Hilo he was hired as a firefighter at Pohakuloa Federal Fire Department. He spent 22 years with the Federal Fire Department retiring as an Assistant Fire Chief. During his time at the Fire Department he also worked as a Flight Medic/Rescue Specialist with Priority 1 Air Rescue simultaneously teaching Emergency Medical Responder classes around the island. He has been a CPR instructor since 1989. Since 2008 he has worked with Gemini as a Safety Trainer. In November 2014 he starting working full-time as Gemini's Safety Manager and ensures the Safety of all Gemini employees at the telescope and base facilities in Hawaii and Chile.



<u>Josh Williams</u> Subaru Observatory Contact: j<u>cwilliams@naoj.org</u>

Josh Williams is an Operator for Subaru Observatory where he's been since March of 2011. He got his Bachelor's of Science degree in 2007 from the University of Hawaii – Hilo where he majored in Astronomy, and minored in Physics and Mathematics. Since graduating he has spent a significant amount of his time above an altitude of 9,000 ft. in various facets – as a volunteer and then Interpretive Guide at the Visitor Information Station on Mauna Kea (9,100 ft.), a Telescope Operator for the AMiBA Observatory on Mauna Loa (~11,100 ft.), and now as a Telescope Operator on the "proper" mountain, Mauna Kea (13,800 ft.). As a long time regular on Mauna Kea he has enjoyed eating copious amounts of ice cream at the mid-level facility.



<u>Tom Winegar</u> Subaru Observatory Contact: <u>winegar@naoj.org</u>

Tom Winegar works as the archive administrator for the pictures of the Subaru Telescope in Hilo, Hawaii. After graduating from UC Berkeley in 1982, Tom has worked as a database programmer and administrator for 30 years - the last 17 at the Subaru developing web-based query and archive software used by astronomers to retrieve observation data from an international-mirrored 100TB archive. In his spare time, he submerges himself in the ocean and mows.



<u>Sherry Yeh</u> Subaru Observatory Contact: <u>yeh@naoj.org</u>

Sherry Yeh joined Subaru Telescope in 2013 as a NAOJ-Subaru Research Fellow. She knew she wanted to become a scientist at a young age, and she made up her mind to become an astronomer after attending summer schools at the Ken-Ting Observatory and Academia Sinica Institute of Astronomy and Astrophysics in Taiwan. Sherry received her PhD at the University of Toronto in Canada; using nearand mid-infrared instruments on telescopes around the world, her research focuses on the interplay between massive star clusters and their interstellar medium in nearby galaxies. When not exploring the Universe, Sherry enjoys knitting, long-distance cycling, and wandering in the volcano park.