Program Report
2017
0.1 Purpose

This report provides an overview of the OSU program SPARK – the Year of Arts and Science (2016-2017). The report has 3 objectives:

1. To capture, for stakeholders and participants alike, the scope of the program and a documentation of its events.
2. To provide, for stakeholders and participants, data that may be utilized to support applications of research, pedagogy, and community engagement related to the convergence of the arts and science.
3. To summarize, for a general audience, the stories and experiences that define SPARK’s contributions to the university and its communities.

0.2 SPARK Steering Team

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Celene Carillo
Gildha Cumming
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Claire Meints
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0.3 Website and Social Media

http://spark.oregonstate.edu

This report produced in December 2017.
All questions and comments can be directed by email to spark@oregonstate.edu.
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In 2016 Oregon State University launched SPARK: a program of events to celebrate and elevate convergence between the arts and science.

Convergence is central to the mission of the modern university – and a cornerstone of OSU’s identity in the 21st century.

SPARK recognizes that there is no one approach to solve the urgent problems of today and tomorrow. They demand the inspiration and genius of multiple disciplines and multiple perspectives. Collaboration across the arts and science directly advances the university's strategic goal to create transformative learning experiences for all Oregonians. By inciting this collaboration and convergence, SPARK supports and extends the efforts of OSU faculty, students, and our community partners in the pursuit of knowledge, innovations and solutions.
**executive summary**

Shorthand for “arts+science@osu,” SPARK was a yearlong celebration of the interdisciplinary, collaborative work that’s possible when and where the arts meet science, and vice versa. From one end of the campus and Corvallis to the other, and throughout Oregon, SPARK succeeded as it explored the heart of the OSU mission: the continuous search for new knowledge and solutions.

SPARK was many things:

SPARK was a **magnification** - of the wonder that lies at the creative intersection between the worlds of what we often think of as “art” and “science.”

SPARK was a **recognition** - of the tremendous and exciting progress that OSU faculty, students, and alumni have made and continue to achieve in our quest to make Oregon and the world a better place.

SPARK was an **invitation** - to create, to dream, to study, to test, to learn, to teach, to grow, to solve.

SPARK was a **yearlong calendar** - of exciting events happening on campus and off.

SPARK was a **collaboration** - between the College of Liberal Arts, the College of Education, the College of Science, the University Honors College, the OSU Libraries and Press, and the Division of Outreach and Engagement.
SPARK index

Total number of SPARK events: 90
Number of SPARK event owners: 138
Hours spent in collaboration on SPARK events: 46,405
Percent of SPARK events that offered experiential learning for students: 44%
Number of SPARK Sponsors: 6
Number of Organizations Partnered with SPARK: 56
Percent of OSU Colleges taking part: 81.8%
Percent of SPARK events open to the community: 88%
Number of SPARK events taking place aboard ship: 1
Number of Oregon counties that hosted SPARK events: 4
Farthest distance from Corvallis a SPARK event took place: 238,000 miles
Smallest SPARK event (measured by # participants): 1
Largest SPARK event (measured by # participants): 535,090
What does “SPARK” stand for?: Nothing (it's a metaphor!)
Number of Nobel Prize winners taking part in SPARK events: 1
Number of Walt Disney Dreamers and Doers award winners taking part in SPARK events: 1
Most social media impressions for a single SPARK event: 1,500,000,000
Percent of SPARK events involving Star Trek in some way: 6.66%
Longest distance travelled to attend a SPARK event: 4,884 miles
SPARK index notes

a. Owners are defined as OSU faculty or staff, or community members, directly responsible for an event’s success – in short, the leaders who got things done.

b. SPARK tracked collaboration hours as a measure of the person time invested in researching, planning, and attending an event. Far more than a measure of single outcome (such as seats filled), this metric suits the collaboration so crucial to arts+science integration.

c. Experiential learning involves creating meaningful opportunities to learn, with emphases on reflection, experiences outside the classroom, and an emphasis on process as well as product.

d. The R/V Pacific Storm, along the Oregon coast (see SPARK01)

e. The distance from the earth to the Moon, across which the light of the solar eclipse traveled for SPARK83-90.

f. For the Beavers football game (and its SPARK-inspired halftime show – SPARK26), including 35,090 in person and an estimated 500,000 TV viewers

g. Crayola’s announcement that it was launching a new blue crayon based on an OSU pigment discovery, Yin-Mn Blue (see SPARK66)

h. Haruo Uchiyama traveled from Hiratsuka, Japan to attend SPARK58 & SPARK59
SPARK sponsors

SPARK was spearheaded by the OSU Division of Arts and Sciences, and brought to life as a partnership among:

The College of Education
The College of Liberal Arts
The College of Science
The Division of University Outreach & Engagement
The Honors College
The Oregon State University Libraries and Press

Photo Caption - SPARK Leadership: (L to R) Faye Chadwell, Scott Reed, Sastry Pantula, Larry Flick, Toni Doolen, Larry Rodgers
SPARK partners

SPARK was made possible through the extensive and energetic participation of many campus and community organizations. Thank you all!!

ALP
American Chemical Society
The Anarres Project for Alternative Futures
Art Works
The Arts Center
City of Corvallis, Oregon
The CO• / Corvallis Maker Fair
Corvallis Benton County Public Library
Corvallis 509J School District
Darkside Theater
Dasfilmfest
Divine
FIESTAS
German Embassy
Grass Roots Books
Hatfield Marine Science Center
HP Inc.
Juntos
Lane Arts
LaSells Stewart Center
Lower Nehalem Watershed Council
Muddy Creek Charter School
OMSI
Oregon Academy of Sciences
Oregon Sea Grant
Oregon NASA Space Grant Consortium
Oregon State ADVANCE
OSU Athletics
OSU Center for Genome Research and Biocomputing
OSU College of Business
OSU College of Engineering
OSU College of Forestry
OSU Cyberlab
OSU Environmental Arts and Humanities Initiative
OSU Extension
OSU Free Choice Learning Lab
OSU H.J. Andrews Experimental Forest
OSU Marine Studies Initiative
OSU Office of Student Life
OSU Open Campus
OSU Pre-College Programs
OSU President’s Committee on the Status of Women
OSU Robotics
National Science Bowl
Necanium Watershed Council
North Coast Land Conservancy
SAC Academy
SMILE
Spring Creek Project
Trek Theater
University of Oregon Museum of Natural and Cultural History
Visit Corvallis
The Wetlands Conservancy
The Whiteside Theater
the SPARK calendar

SPARK promoted 90 convergence events in the arts and science during 2016-2017. Browse the list below - more information about each event follows.

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SPARK events

On the pages that follow we describe each of our signature SPARK events. These happenings ran a wide range from intimate connections for small groups of people, to performances and experiences seen and enjoyed by thousands.

If you’d like more information about any of these events, please consult our website and reach out to the SPARK team at spark@oregonstate.edu.
Artist Abigail Losli (BFA ’16) accompanied an all-female scientific crew led by Sarah Henkel, a senior researcher at Hatfield Marine Science Center, on a five-day research cruise in June 2016. The research team aboard R/V Pacific Storm conducted a study of organisms and habitat classification on the seafloor between Newport and Coos Bay to obtain a greater understanding of the seafloor in preparation of offshore wind energy installations. The cruise was sponsored and funded by the Bureau of Ocean Energy Management (BOEM) with support from the Colleges of Science and Liberal Arts.

This unique collaboration between arts and science was the first event of SPARK, and Losli’s paintings based on the voyage are emblematic of the powerful integrative potential that so typified this program throughout the year.
Dr. Randall Milstein (of the OSU Physics department and resident astronomer with Oregon Space Grant) offered an engaging overview to new Honors College students of the amazing possibilities for study in the arts and science at Oregon State University.

SPONSORS: Honors College

LOCATION: Learning Innovation Center, OSU

COLLABORATION HOURS: 630

KEY CONTACTS: Randall Milstein, COS
               Gildha Cumming, Honors College
VividScience applies art and design principles to science teaching. OSU Senior Instructors Lesley Blair and Mark Lavery construct object assemblages that range from activity stations, to educational exhibits, interactive manuals, lecture performances, and public science displays. These projects utilize varied science artifacts to explore relevant, interesting, and sometimes beautiful, science topics.

The fall exhibit featured assemblages from the General Biology 101 course for non-science majors, "Art From Nature Collage".
The Department of Microbiology organized several opportunities for community artists to learn more about the science of microbiology. The first workshop was held at the John L. Fryer Aquatic Animal Health Laboratory, and artists heard from researchers and graduate students about investigations into aquatic microbiomes. They had the opportunity to culture organisms from different water sources and to look at this life more intimately under the microscope. Participants were provided nutrient agar plates to culture microbes from soil, water and themselves. Three subsequent workshops were held in the microbiology teaching laboratory in Nash Hall. Attendees heard talks by microbiology graduate students and postdoctoral researchers about microbes that inhabit aquatic and land environments, the air and our own bodies. They also toured working laboratories, and explored microbiomes that they had cultured themselves and painted with bacteria. Participants were provided nutrient agar plates to culture microbes from soil, water, and themselves. Bacteria produce a variety of pigments, and attendees also “painted” with a palette of Pseudomonas aeruginosa (blue-green), Pseudomonas aureofaciens (orange), Serratia marcescens (red), Micrococcus luteus (yellow), Staphylococcus aureus (pale yellow), and Bacillus subtilis (white).
The science fiction author, scientist, and futurist David Brin, whose 1985 novel *The Postman* was set largely in Corvallis and at Oregon State helped launch SPARK with a mini-residency around themes of futurism and science fiction. As part of the experience, he delivered a public lecture, “Storytelling in Novels and Film: Adaptations,” met with OSU undergrad classes, held faculty workshops on topics of futurism and the use of science fiction in prototyping research and development ideas, and held a “Beers with Brin” evening for graduate students in robotics.

SPONSORS:
College of Liberal Arts
College of Engineering

LOCATION:
Multiple locations across Corvallis

COLLABORATION HOURS:
562

KEY CONTACTS:
Cindy Grimm, Engineering
Charles Robinson. CLA
Bill Smart, Engineering
As part of its celebration of the 50th anniversary of the TV series Star Trek, the Anarres Project for Alternative Futures in the College of Liberal Arts presented a viewing and discussion of Deep Space Nine’s “Far Beyond the Stars” episode. This award-winning episode is a powerful and emotional examination of racial oppression and police brutality, as well as the power of the radical imagination to envision alternative futures, that is as poignant now as it was when it first aired almost 20 years ago.
Dr. Karen Rader joined us as the first of several speakers on the Horning Lecture Series on the Material Body (hosted by the OSU School of History, Philosophy, and Religion). Her talk, *From Watchful Grasshoppers to Rat Basketball: Practices of Live Animal Display in Twentieth-Century Science Museums*, built from her recent award-winning scholarship of museum science. Dr. Rader studies the intellectual, cultural and social history of the modern life sciences in the U.S., and is currently Director of the Science, Technology and Society program at Virginia Commonwealth University.
As part of the celebration of the 50th anniversary of Star Trek, the Anarres Project presented Dr. Randall Milstein discussing the cultural and technological influences the series has had on society and everyday life. His talk, *The Final Frontier*, ranged across the broad impact of the show on our cultural practices, our narrative traditions, and even our technological innovations over the past half-century.
Waterviz is a water cycle visualization tool developed at the Hubbard Brook Experimental Forest in New Hampshire. The specific goals of the Waterviz project were to explore how we can use emerging real-time “Big Data” in ecology to drive a new age of data visualizations and sonifications that allow users to better intuit and appreciate fundamental patterns and processes in the natural world. In so doing, we will address a broader goal to promote a more meaningful integration and confluence of the Arts (writ large) and Sciences in order to advance the study of ecosystems and our ability as a society to successfully address the complex social-ecological challenges we currently face as well as problems future generations may encounter. In a collaboration with visiting artist Xavier Cortada at OSU’s H.J. Andrews Experimental Forest, this interdisciplinary workshop shared some of the possibilities on the forefront of visualization and sonification.
As part of its celebration of the 50th anniversary of Star Trek, the Anarres Project hosts the Trek Theatre’s performance of Star Trek: The Next Generation’s “The Drumhead” episode. This classic episode is a story about the clash between state security and the protection of human rights. In addition to the performance, the evening celebrated the series with a community costume contest.
In celebration of the 50th anniversary of Star Trek, the Anarres Project presented a discussion with Dr. Christina Allaback, the artistic director for the Eugene based Trek Theater, about the social justice emphasis of the classic TV series. She explained the origins of Trek Theater, how she sees it embracing the lessons of the theater of the oppressed, and what we can learn about social justice from science fiction.
The OSU Honors College conducted a special literary arts evening in Portland with author Louise Erdrich. The reading focused on the final book in a loose trilogy that includes National Book Award winner *The Round House*. The live event was broadcast on Oregon Public Radio and hosted by Portland Arts and Lectures. In preparation for the event, HC students had the opportunity to discuss the novel with Professor Ray Malewitz. The sold out lecture was held at the Arlene Schnitzer Concert Hall in downtown Portland.
Spark13. Youth Engagement Symposium
October 20, 2016

The Honors College Board of Regents hosted a special event exploring student perspectives on political issues and activism. The event was held in the South Waterfront area of Portland. Oregon State University alumni and friends joined Honors College Dean Toni Doolen; Dr. Christopher McKnight Nichols of the School of History, Philosophy and Religion; and five current honors students for a panel conversation touching on issues ranging from climate change to the nation’s long-term fiscal health.

The students – representing majors from the Colleges of Engineering, Liberal Arts and Science – fielded questions from the audience and provided perspective on the issues that motivate both youth engagement and disengagement from political topics and processes.
With the assistance of Devon Quick of the Integrative Biology program and the Human Anatomy Lab, drawing students in Julie Green’s classes worked exploring the human form from cadavers in Cordley Hall.
Eileen Pollack joined us as a guest lecturer. She is most recently the author of *The Only Woman in the Room: Why Science is Still a Boys’ Club* and the novel *A Perfect Life*. She is a professor on the faculty in the Helen Zell MFA Program in Creative Writing at the University of Michigan. In addition to attending a women-in-policy leadership workshop on campus, she offered a workshop on “The Facts Behind Fiction: Research in Creative Writing”, and a public talk based on her book *The Only Woman in the Room*. 
Eric Meslow, OSU class of 1991, was named alumni fellow of the College of Education. He lives in Tualatin and is president and CEO of Timbercon, Inc., an industry leader in "ruggedized" fiber optic solutions. He has devoted countless hours at the state and regional levels to developing education programs to provide the U.S. tech industry with the talent it needs. He joined us to deliver a talk on STEM leadership within the undergraduate curriculum.
State of the Coast is a chance to have fun and learn while listening to informative talks on current marine science and policy issues, participate in hands-on activities, and network with research, industry, and community leaders. This is Oregon's coastal conference for everyone! Over 200 attendees came together this year, and SPARK was a proud co-sponsor for the conference.

Asking as it does every year, “What is the State of the Coast”, the conference explored the role of arts and ocean science across a number of marine themes, and included for the first time an art exhibit alongside marine science poster presentations and a community art project.

SPONSORS:
Sea Grant / Outreach & Engagement
College of Liberal Arts

LOCATION:
Salishan, Gleneden Beach, OR

COLLABORATION HOURS: 1,970

KEY CONTACTS:
Flaxen Conway, COS
Jamie Doyle, O&E/Sea Grant
Divine, Oregon State University’s premiere all-female A Cappella group, performed a concert of Biochemistry and Biophysics Professor Kevin Ahern’s *Metabolic Melodies*, proof that music is the perfect backdrop for science, teaching and learning.

*Metabolic Melodies*, a collection of hundreds of biochemistry songs, captures biochemical processes in catchy lyrics based on popular melodies.

A legend at OSU for more than 20 years, Ahern regularly sings to his students to make biochemistry less daunting. It has worked wonders to ease students’ fears in introductory biochemistry classes over the years.

**SPONSORS:**
College of Science

**LOCATION:**
LaSells Stewart Center, OSU

**COLLABORATION HOURS:**
150

**KEY CONTACTS:**
Kevin Ahern, COS
Debbie Farris, COS
The play “Photograph 51” was given a live reading at Oregon State University’s Valley Library. The play, written by Anna Ziegler, is about the famous photo taken by scientist Rosalind Franklin that led to James Watson and Francis Crick’s discovery that the DNA molecule exists in the form of a double helix, for which Watson and Crick shared a Nobel Prize in 1962. The Valley Library has the only known original print of Franklin’s photograph 51.

In this production of the play, all the men in the play were portrayed by women and the sole female role of Rosalind Franklin was read by a man. Charlotte Headrick, emeritus in Theatre Arts at OSU, coordinated the reading of the play.

“Photograph 51” is the first of a series of plays by women dramatists about women and science that will be presented as readings throughout the 2016-17 academic year.
Recent militant protests at Malheur National Wildlife Refuge drew national attention, but the rich history of this area was overlooked. In his talk, *From Marshland to Dustbowl to Restoration*, Dr. Bill Robbins, Distinguished Emeritus Professor of History, School of History, Philosophy, and Religion, explored Harney County's history of native peoples, cattle empires, and the restoration of one of the nation's most significant marshland habitats by naturalist William Finley and others. Part of the expanding Collections at the Center Event series from the OSU Special Collections and Archives, the talk invited the OSU campus and Corvallis community to engage with historical materials through an expert lecture, participant discussion, and close observation of material objects. These facilitated encounters draw from our collections to find items that attract closer examination, provoke new questions, captivate our attention, and inspire further discoveries.
The Oregon State International Film Festival was founded by faculty members at Oregon State University. A curated festival, OSIFF presents award-winning films from across the globe, many of which premiere at Berlinale, Cannes, and Sundance. OSIFF also regularly screens world premieres, US premieres, and west coast premieres.

The festival ran for several nights, kicking off with “Berlin – Sinfonie der Großstadt,” or “Berlin: Symphony of a Metropolis, that was accompanied live by the German band, ALP, which travelled to Oregon from Berlin for the event. The event, sponsored by the German Embassy in Washington, D.C., also featured a reception with the musicians after the screening.

The festival screened 18 films in all, from Spain, Japan, the Philippines, Russia, Austria, Germany, Brazil, Switzerland, Venezuela, Malaysia, and the Netherlands.
The Anarres Project presented a panel discussion on indigenous science fiction and the radical imagination, inviting Native American artists, writers, and scholars to share the ways in which they incorporate indigenous stories and imagery into their sci-fi work in order to create new understandings of Native life in the United States. Panelists included: writer and scholar Dr. Grace Dillon, painter Ryan Singer, and hip hop artist/writer and OSU alum Joel South.
In honor of the 500th anniversary of the publication of Thomas More's classic work *Utopia*, the Anarres Project hosted a symposium on the possibilities and limits of utopian thinking for radical politics today. Speakers included Alexander Riccio (OSU), Barbara Muraca (OSU), and Clifton Ross, author of “Until the Rulers Obey” and “Home from the Dark Side of Utopia”.

SPONSORS:
College of Liberal Arts
Anarres Project

LOCATION:
Memorial Union, OSU

COLLABORATION HOURS:
25

KEY CONTACTS:
Joseph Orosco, CLA
The circulation of surveillance videos and images of African Americans murdered or detained by police and private security has been enhanced by the spectacle of new media. Joining us from the Department of Information Studies at UCLA, Safiya Umoja Noble’s new research argues that media spectacles are created by surveillance records to foster news ratings and advertising revenues at the expense of national conversations and public policy addressing racial justice. The use of digital technologies has become an enticing way of giving voice to marginalization and oppression, but technological engagements are an insufficient intervention on racist, sexist, and systemic economic oppression.

In this talk, Dr. Noble discussed the importance of the academic-activist scholarly community to offer models of intervention through research and teaching, and the importance of examining the consequences and affordances of information and technology projects.
Biology instructors Lesley Blair and Mark Lavery teach a very popular series of general biology courses to 1,000 undergraduates from 72 majors each year.

They employ the medium of “VividScience”—applying art and design principles to science teaching—to cover topics of biodiversity, ecology, genetics, animal behavior, anatomy and disease. The duo construct “object assemblages” to explore science topics and foster a greater understanding of science. For example, rabbit artifacts from media and cultural representations entice students to learn about the animal's life cycle.

They use VividScience in conjunction with state-of-the-art technology of wall-to-wall screens, stellar acoustics, microphones and headsets to enhance student engagement and learning. Blair's highly effective teaching methods have been featured in The Chronicle of Higher Education.
Spark26. The Science in Art Halftime Show
November 19, 2016

The “Science in Art, Art in Science” halftime show celebrated art and science as interwoven disciplines, rather than independent entities. The drill forms and movements were based in mathematics, focusing on the works of Pythagoras and Escher. In addition to his famous theorem in euclidean geometry, Pythagoras also is credited with discovering pythagorean commas, a mathematical concept that defines the relationship between Equal Temperament, the standard for western music, and Just Intonation, its key-perfect counterpart. The band executed forms including “impossible” shapes such as Escher Triangles.

The show opened with Jupiter from the Planets suite by Holst. Written in the late days of World War II, the Planets suite was a composition based on the other planets in our solar system. This was followed by a piece by David Cope. David’s body of research and career is dedicated to computer programs that write music. The show closed with El Cascabel by Lorenzo Barcelata, one of the pieces of music chosen to represent humanity on the golden record that went beyond our solar system on board the Voyager mission.
Corvallis native Dr. Carl Wieman joined OSU as the College of Science Fall Distinguished Lecturer to offer a lecture “Taking a scientific approach to learning and teaching science (and most other subjects)”.

Wieman holds a joint appointment as Professor of Physics and of the Graduate School of Education at Stanford University. He has conducted extensive experimental research in both atomic physics and science education at the university level. Wieman has received numerous awards recognizing his work in atomic physics, including the Nobel Prize in physics in 2001 for the first creation of a Bose-Einstein condensate. He has also studied student learning and problem solving and the comparative effectiveness of different methods for teaching science.

In his talk, Wieman discussed research that is setting the stage for a new approach to teaching and learning that can provide the relevant and effective science education for all students that is needed for the 21st century.
Dr. Nicole Howard joined us to deliver her talk “Exposed to the Lazy and the Ignorant” on scientific literature in the early modern period.

The 17th century witnessed exponential growth in the number of printed medical books, from academic anatomies to popular herbals. Within this ferment of activity, some medical authors approached print reluctantly, with concern for the widespread audience that publication implied. Others, however, embraced the possibilities of print and the potential to put their work in the hands of lay readers. For these authors, print was a means of accreting authority, rather than compromising it. In her talk, she examined the ways medical authors from many backgrounds approached print to bend it—as a technology, but also as a social medium—to their needs and to construct, or at least preserve, their medical authority.
Spark29. Visiting Artist – Damien Gilley

January 8, 2017

Damien Gilley is an artist and educator working in Portland, Oregon. His work exposes hidden architectures through site-specific perceptual installations that combine drawing and sculptural approaches. Influenced by vintage computer graphics, techno-structures, and science fiction the work integrates digital languages with the physical world to question historical, current, and potential environments. His work was on view at OSU’s Fairbanks Gallery in Winter 2017.

SPONSORS:
College of Liberal Arts

LOCATION:
Fairbanks Gallery, OSU

COLLABORATION HOURS:
65

KEY CONTACTS:
Kerry Skarbakka, CLA
Andrew Nigon, CLA
In 2016, “wellness” is a familiar feel-good label slapped on everything from smoothies and school lunch programs to swanky real estate developments. But it was not always so. Historian and wellness advocate Natalia Mehlman Petrzela, Ph.D., explains where our current wellness fascination originated and how it's grown into a massive movement that bafflingly unites libertarian businessmen, the yoga-and-organic food set, soccer moms, and public health advocates, (among others) while alienating a smaller but similarly diverse set. Historical and contemporary research illuminates what potential wellness - a concept ubiquitous but poorly understood - has to make our lives both better and worse.

Her visit was hosted by the Horning Lecture Series - The Material Body and the Citizenship and Crisis Initiative.
Each year the University Honors College hosts a faculty-student book club series, in which students read texts over the Winter break and meet with faculty advisors upon the start of Winter term. In tune with the focus of SPARK, this year the students read selections exploring the convergence of the arts and science.
This exhibit by Ardis DeFreece celebrated the convergence of science and art. Ardis was the Artist-In-Residence at HMSC in 2016, sponsored by NOAA-NWFSC. “This display was inspired by my love of nature and by a curiosity about the world around us. Artists can convey ideas to a wider audience,” says Ardis, who encourages viewers to use close observation and curiosity when looking at her work. The artist’s unique perspective on animals and plants is surprising and engaging - and may require a second look to reveal the true subjects of her paintings.
VividScience applies art and design principles to science teaching. OSU Senior Instructors Lesley Blair and Mark Lavery construct object assemblages that range from activity stations, to educational exhibits, interactive manuals, lecture performances, and public science displays. These projects utilize varied science artifacts to explore relevant, interesting, and sometimes beautiful, science topics.

The winter exhibit featured the theme of patterns of nature and feature student work from General Biology 102, Before and After Paper Construction.
Leah Ceccarelli is a rhetorical critic and theorist who joined us from the University of Washington. Her research focuses on interdisciplinarity and public discourse about science. She came to OSU as part of the School of Writing, Literature and Film’s Critical Questions Lecture Series. She offered a brown-bag roundtable discussion on rhetoric and science, and delivered a lecture, *The Public Ethos of the Engaged Scientist: Prophet, Profligate, Politicos*.

In it she asked what is selected and deflected when scientists represent themselves in public address through the mythic figure of the pioneer. In this talk, she discussed some subsequent projects that she has been developing on how scientists are characterized in the public sphere. In these three cases, the scientist is envisioned as occupying different roles in society, with different duties and powers. An understanding of the rhetorical possibilities available for constructing the ethos of the scientist in the contemporary public sphere can help us in the future to select those representations that are most likely to benefit society and reject those representations that are most likely to do harm.
The Beaver Tales Environmental Art & Science Exhibit was created to draw attention to the beauty and utility of beavers and the habitats they create and maintain. Not only as Oregon's state animal, and the beloved OSU mascot, the beaver holds a special and crucial place within the ecosystem of the northwestern United States.

The exhibit featured more than 150 works of art about the beaver, including paintings, photographs and sculptures using an incredible array of materials including wood, glass, clay, pine needles, cedar bark, leather, felt, and even cross-cut saws. The artists include many who are well-known and some who are just getting started. The exhibit was designed in partnership with several conservation organizations in Oregon: The Wetlands Conservancy, the North Coast Land Conservancy, the Necanicum and Lower Nehalem Watershed Councils.

In addition to the artworks on display, OSU scientists and others were on hand to offer perspectives on their research into the Beaver, including the noted author Frances Backhouse (Once They Were Hats), and representatives from OSU Forest Ecosystems and Society, the OSU Center for Genome Research and Biocomputing, and more.
The live reading of the play “Photograph 51” was such a hit in Fall term that a second performance took place in February. The play, written by Anna Ziegler, is about the famous photo taken by scientist Rosalind Franklin that led to James Watson and Francis Crick’s discovery that the DNA molecule exists in the form of a double helix, for which Watson and Crick shared a Nobel Prize in 1962. The Valley Library has the only known original print of Franklin’s photograph 51.
FIESTAS (Families Involved in Education: Sociocultural Teaching and STEM) presented its first Family Math and Science Night of 2017 at Garfield Elementary School. Education undergraduate students (with support from the SMILE program) facilitated a variety of hands-on STEM activities with students, families, and the public. All were welcome for this community event.

The primary focus of the 4-H STEM program is to enhance the knowledge of STEM related topics of Latino and underrepresented youth in the 3rd to 5th grades. The primary reason for this age range is to reach youth early in their schooling, especially those underrepresented in STEM fields. Because of the changing demographics of the K-12 population, which do no align with the demographic of the preservice teacher demographics we think that engagement with culturally and linguistically diverse youth is needed. The SMILE program is an outreach program to serve underrepresented students in STEM fields predominantly from rural areas. SMILE offers after-school programming, professional development for teachers, and family math and science nights in local communities.

**SPONSORS:**
College of Education

**LOCATION:**
Garfield Elementary School, Corvallis

**COLLABORATION HOURS:**
265

**KEY CONTACTS:**
Kathryn Ciechanowski, CoED
SueAnn Bottoms, CoED
Spark38. Cannupa Hanska Luger Artist Residency
February 14, 2017

Artist and activist Cannupa Hanska Luger, a native of North Dakota who was born on the Standing Rock Reservation, conducted a 3-day residency at OSU as part of the Visiting Artist series and SPARK.

Luger creates socially conscious work interweaving his identity as an American Indian with global issues. Luger, who is of Mandan, Hidatsa, Arikara, Lakota, Austrian and Norwegian descent, creates unique, ceramic-centric, multidisciplinary artwork that tells provocative stories of complex indigenous identities coming up against 21st-century imperatives, including mediation and destruction. Luger’s studio is currently based in New Mexico.

While at OSU, he attended a “Lunch and Learn” session, presented his work at an Indigenous Poetry Night, worked closely with faculty and students in the Art department, and delivered a public lecture on his recent work, which speaks to the environmental impact of energy extraction on the collective human psyche, and the political framework of unsanctioned land deals that primarily affect indigenous and rural communities and their land and water.
FIESTAS (Families Involved in Education: Sociocultural Teaching and STEM) presented its second Family Math and Science Night of 2017 at Lincoln Elementary School. Once again, education undergraduate students (with support from the SMILE program) facilitated a variety of hands-on STEM activities with students, families, and the public. All were welcome for this community event.

SPONSORS:  
College of Education

LOCATION:  
Lincoln Elementary School, Corvallis

COLLABORATION HOURS:  
170

KEY CONTACTS:  
Kathryn Ciechanowski, CoED  
SueAnn Bottoms, CoED
Jacob Bronowski said, “Man is unique not because he does science, and his is unique not because he does art, but because science and art equally are expressions of his marvelous plasticity of mind.” The Microbiomes: Imagining the Unseen exhibit (February 20 – March 24) showcased work from several local artists whose creative talents ignite curiosity and reimagine the beauty and elegance of microbial science and ecosystems. This collection of abstract and stylized visual art exemplifies the inquisitive and inventive nature of the human mind in its quest to understand the mystique that lies in the unseen reaches of our planet. Join us at The Little Gallery in Kidder Hall and be inspired to see microorganisms in a whole new way.

RECEPTION:
THURSDAY
MAR. 16
4:00 – 7:00 PM
Light Refreshments Provided
THE LITTLE GALLERY
Kidder Hall, 210
2000 SW Campus Way
Corvallis, OR

If you have any questions, please email news@oregonstate.edu.
Accommodations for disabilities may be made by calling 541-737-4307.
Daniel Solórzano delivered the College of Education’s annual Carpenter Lecture on issues of race and class in America's community college system, “Critical Issues Along the Community College Transfer Pipeline: A Case Study of California”. Dr. Solórzano is a Professor of Social Science and Comparative Education in the Graduate School of Education and Information Studies at the University of California, Los Angeles. His teaching and research interests include critical race theory in education; racial microaggressions and other forms of everyday racism; critical race spatial analysis; and critical race pedagogy. Over his 44-year career, Solórzano has taught at the Los Angeles County Juvenile Hall, in the California Community College (East Los Angeles College; Santa Monica College), the California State University (California State University Northridge; California State University Bakersfield), and the University of California (UCLA) Systems.
Geologist and photographer Ellen Morris Bishop read from her book *Living with Thunder: Exploring the Geologic Past, Present, and Future of the Pacific Northwest*. Living with Thunder enlivens Northwest geological history by combining engaging science writing with the author's stunning color photographs. In addition, color maps and time charts help guide the reader. The book presents evidence of changing ecosystems and ancient life, as well as the Northwest's exceptional record of past climate changes and the implications for our future.

**SPONSORS:**
OSU Libraries and Press

**LOCATION:**
Valley Library Rotunda, OSU

**COLLABORATION HOURS:**
25

**KEY CONTACTS:**
Anne Bahde, OSULP
Don Frier, OSULP
Kristin Luck is a serial entrepreneur based in Bend, Oregon, and a globetrotting internationally recognized keynote speaker on marketing measurement. She’s a futurist and growth hacking expert, specializing in nontraditional marketing and branding strategies, and regularly contributes to both the commercial (Fast Company, Forbes) as well as the academic press (Research World, Journal of Brand Strategy) where she explores emerging marketing and research methods. She joined us to deliver a public lecture addressing the increasing role of data in our lives.
Harsha Walia joined us as the keynote speaker for the Transform-able Identity/ies graduate conference (sponsored by the School of History, Philosophy and Religion, SPARK, and other partners). Harsha is a South Asian activist, writer, and popular educator rooted in migrant justice, indigenous solidarity, Palestinian liberation, antiracist, feminist, anti-imperialist, and anticapitalist movements and communities for over a decade.

In her lecture and other campus conversations, Harsha discussed the global refugee crisis and its implications for North America by reformulating immigrant and refugee rights movements within a transnational analysis of capitalism, labor exploitation, settler colonialism, state building, and racialized empire. In an era of Trump and heightened attacks on racialized communities, this talk aims to challenge and strategize opposition to white supremacy rooted in the leadership of racialized communities.
March 14 is Pi Day around the world, and the Math Department offered OSU and Corvallis a treat by hosting a performance of the national touring production of *Calculus the Musical*. The musical tells the historical story of the development of Calculus and features several scientists and mathematicians across eras who contributed to the development of modern calculus: Archimedes, Isaac Newton, Gottfried Leibniz among others. The musical is “a comic review of the concepts and history of calculus.” According to its creators, the musical employs a mix of genres from light opera to hip hop to bring alive the concepts of limits, integration and differentiation. It promises to be entertaining to the “arithmophobe and the rocket scientist alike.”
Discovering the Scientist Within (DSW) is an annual, free weekend workshop designed to introduce middle school girls to careers in science, technology and engineering. The workshop includes hands-on activities and the opportunity to meet successful women engineers, doctors, veterinarians, research scientists, and university professors. DSW is hosted by COSEY (the Center for Outreach in Science and Engineering for Youth).

During the workshop this year, the girls broke off into groups and spread out all over the OSU campus to participate in a dozen activities, including extracting DNA from a strawberry, turning a penny gold, riding hovercrafts and imploding soda cans.

SPONSORS:  
College of Science

LOCATION:  
Multiple locations across OSU  
Corvallis campus

COLLABORATION HOURS:  
2,000

KEY CONTACTS:  
Kari van Zee, COS
During the Science Worth Spreading event, the College of Science (in partnership with the Oregon Academy of Science and the American Chemical Society) presented a series of powerful, stimulating 7-minute talks from scientists in our own backyard at Oregon State University followed by a mind-bending conversation about science. Students, faculty, and community learned about the discoveries, powerful insights and sustainable science happening at OSU at this event, becoming part of the conversation about the impact and value of science. Topics ranged from science start-ups in Oregon and our warming oceans to influencing policy for better decision making.

World-renowned marine ecologist and OSU Distinguished Professor, The Honorable Dr. Jane Lubchenco kicked off the event in a welcome video with a clarion call for the importance and value science offers our society in these changing times.
VividScience applies art and design principles to science teaching. OSU senior instructors Lesley Blair and Mark Lavery construct object assemblages that range from activity stations, to educational exhibits, interactive manuals, lecture performances, and public science displays. These projects utilize varied science artifacts to explore relevant, interesting, and sometimes beautiful, science topics.

The spring exhibit “High-Touch Visuals” featured student projects from General Biology 103 in which students created Science Concept Artist Trading cards.

SPONSORS:
College of Science

LOCATION:
Weniger Hall, OSU

COLLABORATION HOURS:
250

KEY CONTACTS:
Lesley M. Blair, COS
Mark Lavery, COS
Robert Mason, a nationally recognized scientist and teacher whose research helped unlock the mysteries of chemical communication and reproduction in garter snakes, presented the 2017 F.A. Gilfillan Memorial Lecture. In his talk, Mason introduced audiences to the extraordinary research discoveries he made during his 35-year career.

The talk ranged from a discussion of the biological and chemical processes that influence reproduction in snakes as well as the larger implications of his research. He explained the fascinating phenomenon of pheromone-fueled mating in snakes and what makes pheromones an indispensable ingredient for sex among reptiles.

A wonder of the natural world, the Narcisse Snake Dens of Manitoba, Canada, are the winter home to tens of thousands of garter snakes and the setting for much of Mason's field research. His research has appeared in the media and in leading publications worldwide, including the Discovery Channel, National Geographic, BBC to Science magazine, Nature and more. His work has also inspired the award-winning children’s book, The Snake Scientist.
Lisa Temple-Cox joined us as an Artist in Residence with the Horning Lecture Series on the Material Body.

Lisa Temple-Cox’s interest in medical and natural history museum display and taxonomy have recently tied in with experiments which are concerned with the use of collage and assemblage to explore both the methodology of display and a kind of auto-ethnography. She is currently involved in a body of work which explores several themes concerned with identity and consciousness. The use of the box as an allegory of the head – a container not just for objects but ideas, memories, and narratives of the self – emerges from the historical “wunderkammer” or curiosity cabinet, that excites wonder, imagination, and desire for knowledge.

While here at OSU, in addition to visiting with a number of faculty and classes, she delivered 3 lectures, a private talk for OSU student ornithology group, and a weekend arts program at the Shotpouch Cabin retreat with students from the Environmental Arts and Humanities Initiative.
Data visualization makes information easier to understand through visual presentation and arrangement and has its origins in diagrams of celestial bodies, maps and thematic representations of the known world.

This exhibit (which ran from April through August 2017) explored the evolution of graphics through six centuries as new forms of data visualization developed in response to technological innovations (color, lithography, printing press and computers), social conditions, cultural values and advances in visual thinking and cognition.

The exhibit showcases how the practice of visualizing data has inspired new insights in numerous fields and encouraged collaboration across disciplinary boundaries, grouping the great variety of data visualization into four different categories: integrity, beauty, utility, and novelty.
Catherine Keyser is an associate professor of English and a Peter and Bonnie McCausland Fellow at the University of South Carolina. She received her doctorate from Harvard University in 2007. Her book, *Playing Smart: New York Women Writers and Modern Magazine Culture* (Rutgers University Press 2010) considers the witty personae of women writers of the 1920s like Dorothy Parker and Anita Loos. Keyser has published articles on American literature, periodical culture, and food studies. Her current book project, *Artificial Color: Modern Food and Racial Fictions*, argues that modern U.S. literature uses the global-industrial food system and the new technologies that come along with it to explore and often challenge racial categorization.

SPONSORS:
College of Liberal Arts

LOCATION:
Memorial Union, OSU

COLLABORATION HOURS:
40

KEY CONTACTS:
Ray Malewitz, CLA
With music, creative writing, and science, A Call to Life affirms the wonder and worth of the Earth’s wild lives and our responsibility to save them from extinction. In this special SAC Presents / SPARK event, writer Kathleen Dean Moore and classical pianist Rachelle McCabe bring their powerful weaving of music (Sergei Rachmaninoff’s Variations on a Theme of Corelli) and words back to Oregon State University.
The Microbiome Art Project was a year-long art plus science collaboration between OSU’s research community and “The Art Center | Corvallis” that culminated in an exhibition from April 13 to May 27, 2017. The project focused on microbial systems that affect human health, biodiversity of animal species, and air, earth, and water quality. This exhibition asked both artists and researchers, How Can We See the Unseen? Microbiology tries to measure, visualize and understand complex microscopic systems in the same way artists seek understanding for life’s many questions. Through this exhibit, the arts documented and interpreted complex research concepts and offered a unique perspective to both the public and the scientific community.

The yearlong catalog of Microbiomes-inspired events was long and included community art+sci workshops, youth art residencies, a juried arts show at The Arts Center in Corvallis, music performances, and much more.
The College of Science hosted the statewide Science Olympiad, “the nation’s most exciting K-12 science competition” on campus. Middle-school and high-school students who won regional championships earlier in the year competed in one of 23 categories across STEM disciplines, ranging from “Astronomy” to “Robot Arm,” “Hydrogeology,” and “Food Science.”

The winning teams were honored at an award ceremony later that day where they were welcomed by College of Science Dean Sastry G. Pantula. He urged students to continue to pursue science, “where discoveries begin,” and reminded them of the societal challenges that lie ahead, “whether it be climate change, saving corals from getting bleached, fighting drug-resistant bacteria, or decreasing pollution,” all challenges which scientists at Oregon State are actively working on.

Chemistry instructor and outreach coordinator Margie Haak was a key organizer who helped orchestrate the event. The Olympiad has proven an effective way to ignite middle and high-school students’ interests in science and other STEM fields while developing their cooperative skills as part of a team.
Science and art converge in the monthly Corvallis Science Pub held at the Old World Deli in downtown Corvallis. As a part of a spring series of art+science pubs, on April 10, Sue Queisser discussed the science of baking. Sue manages the Center for Sensory and Consumer Behavior Research at Oregon State University, is a former HP engineer, and owns Melarova Baking. Among other tasty topics, her talk covered the science behind how leavening agents and other ingredients work together in the baker’s tool box.

SPONSORS:
College of Science
OMSI
Terra Magazine

LOCATION:
Old World Deli, Corvallis

COLLABORATION HOURS:
40

KEY CONTACTS:
Sue Queisser, COS
Nick Houtman, Terra Magazine
The Honors College hosted a medical humanities event in Portland, Oregon for current students and alumni. Participants met at the OSU Foundation offices in downtown Portland for dinner and a discussion facilitated by Dr. Courtney Campbell of the School of History, Philosophy, and Religion on the topic “What do the humanities have to contribute to medicine?” Joining Dr. Campbell on the panel were a current pre-med student, Ibrahim Moussaoui, and OSU alum Jackie Wirz, the assistant dean for graduate studies and the director of the Career and Professional Development Center at Oregon Health and Science University. Immediately following the discussion, guests attended a talk by Dr. Siddhartha Mukherjee, author of *The Emperor of All Maladies: A Biography of Cancer*, winner of the 2011 Pulitzer Prize in general nonfiction, a part of the Portland Literary Arts Series.
A world-class artist, Haruo Uchiyama, makes wood carvings of birds for conservation projects of endangered species across the world. He joined us from his home in Japan to share his artwork, philosophy and methods. Among these are the unique education tools he has developed called Touch Carving to teach many, including visually impaired individuals, biology and ornithology through bird carvings with scientific accuracy.
In collaboration with The CO•’s Corvallis Maker Fair, Oregon Sea Grant, and other partners, the College of Education hosted a day-long festival encouraging children, students, and people of all ages to engage in art and science via a wide array of engaging and fun activities. Held in concert with OSU’s Bring Your Kid to Work Day, the event offered an opportunity for a variety of audiences (schools, OSU and Corvallis community) to see and experience this interface through an array of activities offered in and around Joyce Collin Furman Hall.
Spark60. The CO• / Corvallis Maker Fair
April 15, 2017

The CO• is an annual Oregon maker fair, hosted by Oregon State University, and free and open to the public.

“Maker” culture is a popular movement honoring craftsmanship and technology and the sharing of knowledge, skills, and resources. The CO•, a campus-community partnership, offers the OSU community and the general public the opportunity to collaborate, innovate, and create in addition to providing a forum for research and teaching the value of hands-on learning in K-12 classrooms and beyond.

Attendees were able to talk to experts in the arts, crafts, technology, and sciences and leave with unique souvenirs. Over 2,000 guests and more than 50 exhibitors took part.

SPONSORS:
College of Liberal Arts
College of Education
OSU Libraries & Press
Division of University Outreach & Engagement
College of Forestry
HP Inc

LOCATION:
Memorial Ballroom & Plaza, OSU

COLLABORATION HOURS:
4,185

KEY CONTACTS:
Charles Robinson, CLA
Margaret Mellinger, OSULP
The Microbiomes: Connecting Communities exhibit featured works shaped by collaborations between science and art. This was a curated exhibition and featured art by students and faculty/staff that highlights how the intricacies of microbial systems connect us more deeply to global cycles, communities, and/or concepts.

The exhibit highlighted the interconnectedness of micro and macro perspectives. What can the drama and elegance of the microbial world show us about the environment, ourselves, and the connections that unite life on this planet? Collaborations across disciplines incorporate the arts and sciences and spark wonder and curiosity about how the intricacies of microbial ecosystems connect us more deeply to global cycles, communities, and concepts.

The exhibit featured art from Stephen Atkinson, Riley Bednar, Amy Gibson, True Gibson, Claire Howell, Samm Newton, Anastasia Prymolienna, Deborah Sether, Koa Tom, and Wei Wei.
This talk – the Flat, the Round, and the Lively – Animating the Inorganic with George Eliot and Gertrude Stein - brought into conversation work on literary character in both the Victorian and modernist periods in England in order to narrate a shift in the history of characterization away from a concern with the dialectics of flat versus round toward that of a new, scientifically informed binary—the mechanistic versus the lively. Drawing a series of unexpected parallels between the work of George Eliot and Gertrude Stein, Brilmyer tracked the emergence of this new characterological paradigm, a paradigm in which character inhereed not the production of individuality or apparent consciousness but in the eruption of an inexplicable liveliness.

S. Pearl Brilmyer is currently an Assistant Professor in English at the University of Pennsylvania. Her work lies at the intersection of the history of philosophy, science, and literature with a focus on problems of description in the Victorian novel. Her current project, Character Density: Late Victorian Realism and the Science of Description, concerns the philosophical implications of the disarticulation of character from plot at the end of the nineteenth century.
One of Oregon State University’s most popular and beloved traditions returned to campus as part of SPARK. On May 2 and 3, 2017, more than 1,500 elementary school students flocked to take part in Discovery Days, an outreach program held twice annually that immerses students in the rich and diverse worlds of science. The events are held in LaSells Stewart Center on Oregon State’s campus. Students can participate in a wide variety of hands-on learning exercises that include tie dying using chromatography, exploring dry ice experiments, learning about juvenile alligators with the aid of a live specimen, experiencing static electricity and much more in dozens of stations that showcase chemistry, zoology, physics, marine science as well as the engineering sciences. Sponsored by the Colleges of Science and Engineering, Discovery Days strives to inspire future generations of doctors, scientists, engineers, mathematicians, physicists and other growing STEM careers. The program relies on volunteers to run stations showcasing science and engineering. The volunteers are mostly Oregon State science and engineering students, eager to pass along their love of science to young students.
Since its origins over two centuries ago, data visualization has been transformed by new technologies, social conditions, cultural values, and cognitive advances, literally reshaping how humans see information. This lecture panel brought together three experts from diverse disciplines to examine the impact of data visualization on their work, and to explore the interdisciplinary connections that bring new insight to the study and production of visualized data.

Ehren Pflugfelder, “Elusive Elegance in Data Displays” Assistant Professor in the OSU School of Writing, Literature, and Film

Ben Dalziel, “Data as Wilderness” Assistant Professor in OSU Integrative Biology and Mathematics

Dan Rosenberg, “Against Infographics” Professor of History at the University of Oregon, co-author of Cartographies of Time: A History of the Timeline with Anthony Grafton
In February 2017, the 9000-year-old bones of the man known as “the Ancient One,” or, to scientists, “Kennewick Man” were buried at an undisclosed location on tribal lands near the Columbia River, where his remains had originally been found. Thus ended two decades of scientific debate and legal challenges, centered on the Native American Graves Protection and Repatriation Act (NAGPRA).

In this conference/workshop, expert speakers approached several sides of this debate and its outcome, with ample time for community discussion. In addition, OSU students displayed posters on the scientific, legal, historical, and spiritual implications of the discovery and fate of the Ancient One.
The College of Science hosted a series of events to celebrate the immensely fertile meeting point of science, art, color and cultural trends in Mas Subramanian's groundbreaking discovery in 2009 discovery of a durable, non-toxic and intensely brilliant new blue pigment, called YInMn blue, which has awakened the public's interest in the science of colors, inspired works of art, sparked innovation in the paint industry, and made history as the first new inorganic blue pigment in more than 200 years. (The name derives from its composition from the elements Yttrium, Indium, Manganese and Oxygen).

The signature feature of the event was a stimulating discussion by a panel of color experts ranging from the fields of science and chemistry, color theory and design to history and industry. Partners included the Shepherd Color Company, the Harvard Art Museum and Forbes Pigment Collection, Nike, HGTV, and Crayola.

The event was capped off by Crayola's surprise announcement of a new blue crayon inspired by OSU's YInMn blue pigment to appear in fall 2017. Crayola CEO Smith Holland also announced a national contest to name the blue crayon.
As part of the OSU Family Weekend events, the Oregon State University Honors College and College of Science partnered to host an Art and Talent Show in the Learning Innovation Center on the Corvallis campus. Over two dozen students participated by sharing visual or performance art. Additionally, the event highlighted a dozen colloquia courses with topics that examine the intersection of art and science.
As part of the OSU Family Weekend events, OSU Special Collections and Archives opened its doors for an open house celebrating the history of family events at OSU.

SPONSORS:
OSU Libraries and Press

LOCATION:
Special Collections and Archives, Valley Library, OSU

COLLABORATION HOURS:
300

KEY CONTACTS:
Anne Bahde, OSULP
In preparation for the total solar eclipse coming later in the year, Dr. Randall Milstein discussed the science and history of solar eclipses and offer practical tips on how to witness the event safely. “With it crossing so much of North America, it may become the most widely shared natural event in human history,” said Milstein, an astronomy instructor in the Department of Physics and College of Earth, Ocean, and Atmospheric Sciences at Oregon State University and Astronomer-in-Residence for the Oregon NASA Space Grant Consortium.

The event drew so much interest from the Corvallis area that the location was rescheduled to the much larger venue of the Learning Innovation Center on the OSU campus.
“UNSEEN: Experiments in Story” was curated as a group exhibition at Fairbanks Hall featuring works by members of OSU’s Department of New Media Communication faculty. Amanda Tasse, Carmen Tiffany, Dan Faltesek and Todd Kesterson each offered unique perspectives on the vital relationship between data collection and the visual arts. This multimedia exhibition highlighted strategies for visualizing complex information by presenting platforms where ideas can be more easily understood, interpreted and discussed.
The Phi Beta Kappa Visiting Scholar Program presented speaker Nora Naranjo Morse. Morse is an artist, poet and producer of films on Pueblo Indian culture who is best known for her work with clay and organic materials that speak to environmental, cultural and social practice issues. Her work, entitled “Always Becoming,” is the first outdoor sculpture featured in Washington, D.C. that was created by an indigenous woman.

A documentary screening, lecture, and discussion explored Nora Naranjo Morse’s Always Becoming (AB), a living art piece made of organic material. The five sculptures of AB are ephemeral, and were installed outside of the National Museum of the American Indian on the Smithsonian Mall in Washington D.C. She is a sculptor, writer, and producer of video films that look at the continuing social changes within Pueblo Indian culture. Her installation exhibits and large-scale public art speak to environmental, cultural, and social practice issues. Beyond New Mexico and Washington D.C., her work can be seen at the Heard Museum in Phoenix, and the Minneapolis Institute of Art.
Matthew T. Hora joined us to challenge the concept of a “skills gap,” highlighting instead the value of broader twenty-first-century skills in postsecondary education. He and his colleagues advocate for a system in which employers share responsibility along with the education sector to serve the collective needs of the economy, society, and students.

He is an assistant professor of adult and higher education in the Department of Liberal Arts and Applied Studies at the University of Wisconsin–Madison, and a research scientist at the Wisconsin Center for Education Research.

SPONSORS:
College of Education

LOCATION:
Furman Hall, OSU

COLLABORATION HOURS:
75

KEY CONTACTS:
Claire Meints, CoED
If a lightsaber and a guitar had a baby it would be the Optron, a light-based electronic music controller & visualizer designed by Chet Udell, OSU faculty in Biological and Ecological Engineering and director of the OPEnS Lab. Chet and the Optron won Best Performance at the world-renowned Guthman Musical Instrument Competition in 2017.

In this presentation and concert, Udell offered both an insightful discussion of technical and artistic innovation and delivered an amazing performance!
One Ocean. Two Perspectives. For a one night only reception, this pop-up duo show featured the creative work from local artists Samm Newton and Tara Pierce. Pieces were inspired by the sea that surrounds us—the deep blue heart of this planet.

SPONSORS:
College of Liberal Arts

LOCATION:
Bad Human Studio, Corvallis

COLLABORATION HOURS:
100

KEY CONTACTS:
Samm Newton, CLA
Tara Pierce, CLA
Award-winning science author Ed Yong joined us to present a public lecture on microbiomes as the inaugural lecture of the Oregon State University Microbiome Initiative (OMBI). Yong is the author of the widely acclaimed book on microbiomes I Contain Multitudes and an astute and entertaining reporter of science for The Atlantic.

OMBI is a microbiome research and education program that centers on greater understanding of how microbiomes and their environments interact.

SPONSORS:
College of Science

LOCATION:
Memorial Union, OSU

COLLABORATION HOURS:
654

KEY CONTACTS:
Debbie Farris, COS
The Arts Center presented an afternoon of art + science with Dr. Jerri Bartholomew, Charles Goodrich of the Spring Creek Project and Dana Reason, instructor of Popular Music Studies at OSU. Goodrich and poets read poems presented in the catalog, while pianist, composer and improvisor Dana Reason and students performed newly created music. Musicians included Jason Flick, Mike Gamble, Jayanthi Joseph, and Chet Udell. Writers included Eleanor Berry, Zoe Bossiere, Robin Cedar, Paisley Green, Jenna Noska, and Jennifer Richter.
Spark77. Visiting Artist Julia Oldham
May 23, 2017

Julia Oldham combines live action video with traditional animation to create narratives about science and nature. She creates fantastical worlds by layering animated sequences and video footage. Oldham’s work has been screened or exhibited at prestigious galleries in New York, Chicago, Portland, San Diego, Lisbon, London and more. While here at OSU, she delivered a public lecture and met with students in several Art classes.

SPONSORS:
College of Liberal Arts

LOCATION:
Multiple campus locations

COLLABORATION HOURS:
150

KEY CONTACTS:
Anna Fidler, CLA
At this Science Pub, Jonathan White shared what he learned about the tides after nearly losing his 65-foot wooden schooner along the coast of Alaska and his other adventures around the world. He has traveled to the Arctic to shimmy down a hole in the ice with an Inuit elder to hunt for blue mussels in the dark cavities below; to the Qiantang River in China to witness the Silver Dragon, a 25-foot tidal bore that crashes its way up the 80-mile river; and to California to shadow the Mavericks competition, where surfers paddle into deadly waves 60 feet high. His book about his experiences is *Tides: The Science and Spirit of the Ocean*. 
This art exhibit showcased selected works of scientific illustration by Integrative Biology, Botany and Plant Pathology, and Studio Art graduate and undergraduate students under the guidance of professor David Maddison.
This interactive experience showcased the work of New Media Communications students in the newly completed visualization lab in Snell Hall. Video, animation and virtual reality projects were screened on multiple large displays in this unique presentation space. Featured this year was a multifaceted exploration of Oregon’s river systems. The program and the new facility itself celebrate the diverse array of work at OSU that bridges art and science through creative approaches to digital storytelling.

SPONSORS:
College of Liberal Arts

LOCATION:
Snell Hall Visualization Lab, OSU

COLLABORATION HOURS:
750

KEY CONTACTS:
Todd Kesterson, CLA
Students enrolled in the art+sci Protein Portraits class in the Honors College presented their final projects in the Learning Innovation Center. The course added paint brushes and plaster-of-paris to the toolkit for studying protein molecules. Students build protein molecules as they would imagine them, depicting them as reflections of not only experimental science but of our living experience in the world. In short, art meets science every single time we think about protein molecules. We depend on art to make the invisible visible.
The OSU Chamber Choir under the direction of Dr. Steven Zielke presented its annual President's Concert, with an art+science themed performance of the “Music of Spheres.”


The program also includes Michael Barrett and Ralf Schmitt's arrangement of “Indonana,” a traditional South African folk song; “Sainte-Chappelle” by Eric Whitacre; a Craig Hella Johnson adaptation of Dolly Parton's “Light of a Clear Blue Morning”; “Balleilakka,” by A.R. Rahman; and “Pseudo-Yoik” by Jaakko Mäntyjärvi.

SPONSORS:
College of Liberal Arts

LOCATION:
First United Methodist Church, Corvallis

COLLABORATION HOURS:
400

KEY CONTACTS:
Steve Zielke, CLA
Celene Carillo, CLA
The exhibition “Totality” ran from Monday 14th August until September 21st in the Fairbanks Gallery on the Oregon State University campus. “Totality” was a group exhibition of artists who responded to the Cosmos in some manner, with an emphasis on lyrical, conceptual, scientific, fantasy, and historic responses to the universe or to humankind’s space exploration. The goal of the exhibition was to make science through the arts accessible, imaginative, thought provoking, and awesome.

“Totality” was a companion exhibition to the events happening on campus for the August 21st Solar Eclipse. On that day, Corvallis experienced the path of totality for 1m 40s. The university hosted thousands of visitors to the campus on the weekend of 19/20 August and the exhibition “Totality” will be one of several activities open to the public.

Participating artists included a selection from Eric William Carroll’s ‘Standard Stars’ project, Penelope Umbrico’s single channel video ‘Sun/Screen’, local astrophotographer Tom Caricco, and works by Julia Oldham, John Whitten, and many others.

SPONSORS:
College of Liberal Arts

LOCATION:
Fairbanks Hall, OSU

COLLABORATION HOURS:
1,488

KEY CONTACTS:
Julia Bradshaw, CLA
Gabriel Jaime Gómez Carder, former director of the Planetarium of Medellín in Colombia, travelled to Corvallis – in partnership with the Juntos program - to join in the campus events celebrating the solar eclipse.

He delivered two public lectures for Spanish-language audiences as part of the OSU150 Space Grant Festival. Session 1, El Impacto del Eclipse Solar en la Naturaleza, focused on the influence of the eclipse on the natural environment, and Session 2, El Eclipse Total de Sol a Través del Arte, on the role total eclipses have played in art and human expression through the ages.
OSU painter Johnny Beaver created a cosmically-inspired mural during the Festival, inviting the public to experience the process of creating the work. “One of the unifying aspects of the human experience is a fascination with the cosmos and our place within it. This has erected the framework for much of our collective history and culture, giving rise to the way we create, live, and treat one another. In the spirit of the eclipse and associated gatherings, this mural will reduce the grand concept to a reflective scene where human figures have simply gathered to observe, gaze, and wonder.”

Johnny Beaver is an interdisciplinary artist living in the Willamette Valley. His practice is dominated by painting and conceptualism, but includes sound design, poetry, music composition, electronics, and video. His work focuses on the development of personal creative language, the study of abstraction, and projections of human experience narratives.
Mono-printing is a very accessible form of printmaking – and one of the easiest forms of printmaking to learn. Sun printing involves using the light of the sun to print and fix images on paper. In several drop-in sessions, participants were provided with art supplies and plates and instructed in this form of printmaking, using the eclipse and our Cosmos as inspiration.

Angie Purviance Parrott facilitated these sessions. She is a graduate of Oregon State University’s studio art program where she specialized in printmaking. She is known for her vibrant color intaglio prints, which generally feature children in narratives that could be described as magical realism. She maintains a studio in Corvallis, Oregon.

SPONSORS:
College of Liberal Arts

LOCATION:
Fairbanks Hall, OSU

COLLABORATION HOURS:
258

KEY CONTACTS:
Julia Bradshaw, CLA
This illustrated lecture by art historian Dr. Liena Vayzman of the City University of New York considered some ways that historical and contemporary artists have imagined and visualized the cosmos, particularly the sun and moon - easily observable by humans and the subject of myth-making, speculation and worship in many cultures.

The lecture included works spanning the centuries that imagine and question our place in the cosmos and the role of the artistic imagination in defining our shared humanity. How have the invention of and improvement in photographic techniques in modern times influenced artists’ understanding of the cosmos? How do artists’ unique perspectives, which combine observation and imagination, complement the ways of seeing cultivated by the sciences?

SPONSORS:
College of Liberal Arts

LOCATION:
Fairbanks Hall, OSU

COLLABORATION HOURS:
300

KEY CONTACTS:
Julia Bradshaw, CLA
Spark88. Eclipse Poetry Writing Workshops
August 19-20, 2017

Poetry is a central tool to tell our stories and document our lives and the world around us. As humans, our star-scapes have guided our navigation, informed our sacred practices, inspired us to create stories and songs, and have helped us find places of liberation and freedom. Specifically centering people of color and LGBTQ+ communities and writing, this workshop focused on developing, revising, and performing original poetry centering the knowledges we gain from our relationship with the sky and stars. It was conducted by Qwo-Li Driskill, a non-citizen Cherokee, Two-Spirit, and Queer poet, performer, and educator also of African, Irish, Lenape and Lumbee ascent, and an Associate Professor in the Women, Gender, and Sexuality Studies Program at Oregon State University.

SPONSORS:
College of Liberal Arts

LOCATION:
Fairbanks Hall, OSU

COLLABORATION HOURS:
96

KEY CONTACTS:
Julia Bradshaw, CLA
Qwo-Li Driskill, CLA
Throughout the Eclipse weekend, a wide variety of performances and art activities took place in and around Fairbanks Hall. These included opportunities for festival goers to create artworks in the theme of the eclipse.

Events included postcard designing and buttonmaking, as well as story time sessions with children's author Eric Dickey, performance art from Kaitlyn Wittig Menguc, and live music from Mike Gamble and others.

SPONSORS:
College of Liberal Arts

LOCATION:
Fairbanks Hall, OSU

COLLABORATION HOURS:
1,307

KEY CONTACTS:
Julia Bradshaw, CLA
Spark90. OSU Summer Choir Concert – The Path of Totality
August 19-20, 2017

Featuring a special repertoire chosen especially for this historic occasion, the OSU Summer Choir performed a collection of works, The Path of Total, Singing of Darkness and Light. The program included choruses from *Israel and Egypt, Samson* and *Creation*, accompanied by the OSU Summer Orchestra, and other selections from Haydn, Mendelssohn, Handel, and many more. The Summer Choir is composed of both students and community members.

SPONSORS:
College of Liberal Arts

LOCATION:
LaSells Stewart Center, OSU

COLLABORATION HOURS:
300

KEY CONTACTS:
Steven Zielke, CLA
Celene Carillo, CLA
the future of SPARK?

Now that the formal Year of the Arts & Science at OSU has drawn to close, where does SPARK go? What new chapters lie ahead for the intersections of arts and science at OSU?

We’re excited to say that the convergence of the arts and science at OSU is more alive than ever. Across a number of dimensions, the interdisciplinary spirit continues to drive, influence, and inspire the work and the learning that lies at the heart of OSU’s mission throughout Oregon and the world.

The SPARK modalities remain active in:

- **research**, where interdisciplinary investigation brings creative solutions to research projects aiming to solve major issues of our time

- **curriculum**, where more and more OSU students can access and build upon cross-disciplinary, integrative courses, with faculty working together across schools, colleges, and units

- **collaboration** across campus units and with community partners, where OSU faculty engage in new projects, community engagement, and much more, and

- **student** civic engagement and experiential learning classes, internships, and other opportunities.

To explore options related to any of these and more, email us at spark@oregonstate.edu, or contact Charles Robinson in the College of Liberal Arts Dean’s Office at (541) 737-4582.


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