Cover Visualization of telomeres, which are specialized DNA structures that protect the ends of chromosomes and have critical roles in cell division, aging and cancer.
LEADERS’ MESSAGE

I’m delighted that we have elected Joseph Day and Stephen Keck as our Co-Presidents. While I will retain the title of Chair and Chief Executive Officer, I feel it is time for the fourth generation of our founder, W. M. Keck, to assume greater leadership roles on our Committees and with our largest grants/programs. I’d like to thank Maria Hummer-Tuttle, our Succession Committee Chair, and Jim Ukropina, our Legal and Governance Committee Chair, both of whom put much time and thought into these governance changes last year.

– Robert A. Day, Chair and Chief Executive Officer

Before we comment on 2019, we wanted to acknowledge the effect of the COVID-19 pandemic in 2020 on the research institutions and local charities we support as well as our communities and country as a whole. The W. M. Keck Foundation has made $10 million in initial grants for COVID-19 research and emergency relief efforts to USC, UCLA and a host of non-profit groups that are on the front lines fighting the virus in Southern California. We thank each of our partners for their heroic efforts, and we plan to update you fully in our 2020 Annual Report.

Turning back to 2019, this year’s annual report is titled “Structures” – a fitting title for a year in which we made important Foundation governance changes, continued funding basic science that explores biological and physical properties, and made several large, special grants to support facilities that provide fabric for our region for years to come.

We added Board members both from the fourth generation of W. M. Keck’s family with the election to our Board of Brighton Keck and Dorothy Day, and from outside our family with the addition of Peter Carlton, President of Oakmont Corporation, and Ambassador Ronald Spogli, co-founder and Co-Chairman of Freeman Spogli, as new Directors and Executive Committee members.

After a strong year for our investment portfolio, the W. M. Keck Foundation endowment on December 31, 2019 was $1.36 billion, after distributing approximately $64.4 million in grants during the year. After a volatile first quarter in 2020, we still expect to make grants in the same range in 2020.

In early 2020, we made a $10 million grant to the Los Angeles County Museum of Art. While our Foundation has supported local universities and colleges with major grants in recent years, we have not made a large grant in the arts. Therefore, we are particularly pleased to support the Los Angeles County Museum of Art as it greatly expands and enhances its facilities and arts education programs and makes both even more accessible to students and their families.

Also in early 2020, we made a $10 million grant to the new 88,000 square foot W. M. Keck Science Center at Linfield College to enhance this Northwestern liberal arts institution’s science capabilities, while honoring our brother and uncle, TJ Day, a Linfield graduate and Trustee until his death in 2014. We are doubly pleased that this grant is made while our niece and cousin, Lucinda Day Fournier, is a Linfield trustee.

Our dedicated staff continues to research and recommend to our Board and Members projects aimed at fulfilling our mission of generating far-reaching benefits for humanity by supporting pioneering discoveries in science, engineering and medicine, and organizations that enrich the lives of children, youth and families. This year, we’ve chosen to highlight projects that explore important structures. For instance, our grant to the Salk Institute for Biological Studies is allowing researchers to better visualize the structures of chromatin, the complex combination of DNA and proteins that make up chromosomes. Through their study, the scientists at Salk hope to improve our understanding of how DNA structure affects cell function. Crystals are also important to our understanding of structures. At the University of California, Santa Barbara, Professor Stephen Wilson and his team have developed a new instrument to grow synthetic high purity crystals, which will help scientists globally study next generation materials. Structures are also crucial to effective social services. Our Southern California grant team worked twice with the Alliance for Children’s Rights to serve Los Angeles youth with education and workforce/employment opportunities by putting together a coordinated system of services easily accessible to foster youth aging out of the care system.

Together with our Board, officers, and staff, we look forward to a new decade in which we will work hard to continue to support the fabric of our nation’s scientific enterprise and our community’s social enterprise, especially as we all emerge from this difficult time.

Joseph Day
Co-President
W. M. Keck Foundation

Robert A. Day
Chair
W. M. Keck Foundation

Stephen M. Keck
Co-President
W. M. Keck Foundation
# W. M. Keck Foundation Directors, Committees, Members and Officers for 2020

## Founding Members
- **W. M. Keck, Sr.**
  - Chairman, 1954 – 1964
- **Howard B. Keck**
  - Chairman, 1964 – 1994
- **Narcisse G. Cummings**
- **Williamette Keck Day**
- **Dr. Benjamin Hager**
- **W. M. Keck, Jr.**
- **Harold C. Morton**

## Officers
- **Robert A. Day**
  - Chair and
  - Chief Executive Officer
- **Joseph Day**
  - Co-President
- **Stephen M. Keck**
  - Co-President
- **Lucinda Day Fournier**
  - Vice President
- **Matt Day, Sr.**
  - Vice Chair
- **James R. Ukropina**
  - Vice Chair
- **Allison M. Keller**
  - Senior Vice President,
  - Chief Financial Officer,
  - and Executive Director
- **Dr. Maria C. Pellegrini**
  - Executive Director of Programs
- **Stephanie L. Garacochea**
  - Corporate Secretary

## Members and Directors
- **James A. Baker, III**
- **Peter K. Barker**
- **Dr. William R. Brody**
- **Jerry Carlton**
- **Peter Carlson**
- **Dorothy W. Day**
- **Jonathan S. Day**
- **Joseph Day**
- **Matt Day, Jr.**
- **Matt Day, Sr.**
- **Robert A. Day**
- **Dr. James S. Economou**
- **Dr. Thomas E. Everhart**
- **Brian A. Finch**
- **Dr. Richard N. Foster**
- **Lucinda Day Fournier**
- **Bradford Freeman**
- **Maria Hummer-Tuttle**
- **Vernon E. Jordan, Jr.**
- **Stephen M. Keck**
- **Kent Kresa**
- **Sherry Lansing**
- **Nelson Rising**
- **Ronald P. Spogli**
- **Dr. Edward M. Stolper**
- **Dr. Edward C. Stone, Jr.**
- **James R. Ukropina**

## Executive Committee
- **Robert A. Day, Chair**
- **James A. Baker, III**
- **Peter K. Barker**
- **Dr. William R. Brody**
- **Jerry Carlton**
- **Peter Carlson**
- **Jonathan S. Day**
- **Dr. James S. Economou**
- **Dr. Thomas E. Everhart**
- **Dr. Richard N. Foster**
- **Lucinda Day Fournier**
- **Bradford Freeman**
- **Maria Hummer-Tuttle**
- **Vernon E. Jordan, Jr.**
- **Stephen M. Keck**
- **Kent Kresa**
- **Sherry Lansing**
- **Nelson Rising**
- **Ronald P. Spogli**
- **Dr. Edward M. Stolper**
- **Dr. Edward C. Stone, Jr.**
- **James R. Ukropina**

## Audit Committee
- **Peter K. Barker, Chair**
- **Jerry Carlton**
- **Matt Day, Sr.**
- **Brian A. Finch**
- **Bradford Freeman**
- **Maria Hummer-Tuttle**
- **Nelson Rising**

## Grant Programs
- **Dr. Maria C. Pellegrini**
- **Medical Research Committee**
- **Dr. Richard N. Foster, Chair**
- **Peter K. Barker**
- **Dr. William R. Brody**
- **Matt Day, Sr.**
- **Robert A. Day**
- **Dr. James S. Economou**
- **Dr. Thomas E. Everhart**
- **Stephen M. Keck**
- **Kent Kresa**
- **Sherry Lansing**
- **James R. Ukropina**

## Legal and Governance Committee
- **James R. Ukropina, Chair**
- **Jerry Carlton**
- **Brian A. Finch**

## Compensation Committee
- **Peter K. Barker, Chair**
- **Matt Day, Sr.**
- **Robert A. Day**
- **Dr. Edward C. Stone, Jr.**
- **James R. Ukropina**

## Investment Committee
- **Peter K. Barker, Chair**
- **Jerry Carlton**
- **Robert A. Day**
- **Bradford Freeman**
- **Stephen M. Keck**
- **Ronald P. Spogli**

## Grant Committees
- **Medical Research Committee**
- **Dr. Richard N. Foster, Chair**
- **Peter K. Barker**
- **Dr. William R. Brody**
- **Matt Day, Sr.**
- **Robert A. Day**
- **Dr. James S. Economou**
- **Dr. Thomas E. Everhart**
- **Stephen M. Keck**
- **Kent Kresa**
- **Sherry Lansing**
- **James R. Ukropina**

## Science and Engineering Committee
- **Dr. Edward C. Stone, Jr., Chair**
- **Dr. William R. Brody**
- **Dr. Dr. Joseph Day**
- **Dr. James S. Economou**
- **Dr. Thomas E. Everhart**
- **Dr. Richard N. Foster**
- **Theodore J. Keck**
- **Kent Kresa**
- **Dr. Edward M. Stolper**

## Independent Public Accountants
- Ernst & Young

## Southern California and Liberal Arts Committee
- Lucinda Day Fournier, Chair
  - **Peter K. Barker**
  - **Jerry Carlton**
  - **Joseph Day**
  - **Matt Day, Sr.**
  - **Robert A. Day**
  - **Maria Hummer-Tuttle**
  - **James R. Ukropina**

## Southern California and Humanities Committee
- **Lucinda Day Fournier, Chair**
  - **Peter K. Barker**
  - **Jerry Carlton**
  - **Joseph Day**
  - **Matt Day, Sr.**
  - **Robert A. Day**
  - **Maria Hummer-Tuttle**
  - **James R. Ukropina**

## Corporate Secretary
- **Stephanie L. Garacochea**

## Vice Chairs
- **James R. Ukropina**
- **Lucinda Day Fournier**
- **Dr. Richard N. Foster**
- **Ronald P. Spogli**
- **Dr. Edward M. Stolper**

## Chair and CEO
- **Robert A. Day**
  - Chairman, 1995 – Present

## Chair and President
- **W. M. Keck, Sr.**
  - Founder and President
  - 1954 – 1964

## Chair and CEO
- **Howard B. Keck**
  - Chairman, 1964 – 1994

## Corporate Secretary
- **Stephanie L. Garacochea**

## Other Notable Roles
- **Ernst & Young**
- **California**
- **Ernst & Young**
- **Los Angeles, California**
NEW METHODOLOGY FOR VISUALIZING THE STRUCTURE AND FUNCTION OF DNA

FEW EXAMPLES in biology offer a better case of structure determining function than the organization of genetic material in the nuclei of cells. In 1953, Watson and Crick determined that DNA forms a double helix, which provides the structural basis for the functional properties of storing and replicating genetic information. However, the double helix captures only a first level of DNA structure. In human cells, two meters of DNA are compacted in the nucleus through association with histone proteins into structures called chromatin. Genes in firmly packed chromatin domains are inactive, whereas genes in domains that are loosely packed are actively producing proteins. This is essential for cells to synthesize the proteins appropriate for the tissues they reside in. Liver cells need to make liver enzymes while bone marrow cells need to make proteins for red blood cells. Therefore, in liver cells, the genes that encode liver enzymes are located in more loosely packed chromatin so they are accessible to the machinery that enables the genes to be expressed into proteins.

However, previous models of chromatin structure did not account for or explain this gene expression activity. This may be because those models are based on chromatin reconstituted in vitro without all the components present in the cell. Researchers needed a way to observe chromatin in intact cells. Until recently, there had been no method to unambiguously visualize the fine structure of DNA in chromatin, down to the level of a single gene, in an intact cell. This problem was tackled by two investigators in Southern California, Clodagh O’Shea at the Salk Institute for Biological Studies and Mark Ellisman at the University of California, San Diego.

With Keck Foundation funding, the team developed a sophisticated labeling technique they called ChromEM, which essentially paints the DNA in the nucleus with a high-contrast dye so that it can be visualized by state-of-the-art electron microscopy. The investigators used ChromEM to study the fine three-dimensional structure of chromatin in different cells in culture, including primary cells from the lung, stem cells and tumor cells. They found that chromatin exhibits a diversity of structures including areas of flexibility and disorder. This observation helps explain gene accessibility and the rapid dynamics of telomeres, which are specialized DNA structures that protect the ends of chromosomes and have critical roles in cell division, aging and cancer.

Visualization of telomeres, which are specialized DNA structures that protect the ends of chromosomes and have critical roles in cell division, aging and cancer. ChromEM visualization of chromatin in the cell nucleus. Front block: Skeletonized chromatin chain backbone. Rear block: Three-dimensional heat map of chromatin packing density.
of chromatin rearrangement that allow groups of genes with related function, though located far apart on DNA, to be accessed and expressed together. In addition, their findings clarify how flexible chromatin bends to achieve varying levels of compaction as cells move through their life cycle. This also explains how chromatin can achieve the highest packing density needed to form chromosomes, which is a necessary state for cell division, and yet to remember these chromatin structures subsequently.

O’Shea is a key partner in the international 4D Nucleome consortium. The consortium aims to map the structure and dynamics of the human and mouse genomes. They hope to gain deeper mechanistic insights into how the nucleus is organized and functions. Through studies spanning several disciplines, including imaging, genomics, biophysics and computational modeling, the consortium aims to advance our understanding of the genome from a linear DNA sequence to a dynamic three-dimensional structure within the nucleus of living cells.

The team is now planning to couple ChromEM with genetically encoded self-assembling fluorescent metal nanobody particles (FIREnano) or gold antibody nanoparticles to label and visualize for the first time the dynamic three-dimensional structure within the nucleus of living cells.

The methodology would reveal important clues to the relationship between chromatin structure and gene expression.

Simulate, fabricate and test a novel ELECTRONIC-NERVE INTERFACE

MORE THAN ONE-EIGHTH OF AMERICANS OVER THE AGE OF 60 WILL LIKELY DEVELOP SOME FORM OF RETINAL DISEASE. The staggering emotional and economic impact of vision loss has triggered the development of electronic retinal implants to restore vision in patients with retinal disease. These implants are small chips with a few thousand photodiodes and electrodes that convert light to an electrical signal and transmit it to retinal neurons. The neurons then pass the signal to the brain restoring some vision, though this is far from ideal. A team of investigators at the University of Oregon led by physicist Richard Taylor thinks this is caused by the poor interfacing of conventional implants with retinal neurons. They posit that chips with electrodes in fractal patterns, i.e., patterns that repeat themselves at different scales, can provide much more efficient contact with retinal neurons, which are

The team performed computer simulations to show that, while conventional electrodes stimulate less than 10% of neighboring neurons, fractal electrodes stimulate all of them. They are now testing fractal simulations to show that, while conventional electrodes stimulate less than 10% of neighboring neurons, fractal electrodes stimulate all of them. They are now testing fractal electrodes made of carbon nanotubes with rodent retinal cells. Results are quite promising, with neurons attaching to the fractal branches and glial cells (cells supporting the neurons) proliferating between the branches. As fractal patterns are ubiquitous in nature, Taylor believes that fractal electronics can provide superior interfaces with living tissues in a broad range of biomedical applications.
According to Stephen Wilson, professor of Materials at the University of California, Santa Barbara (UCSB), crystal growth is undergoing a renaissance in the United States. Today, laboratory grown crystals are ubiquitous as substrates for microelectronic devices such as the chips found in our computers and for solar cells that generate electricity. Single crystals are critical to research in materials science, physics, and engineering. These disciplines strive to exploit their unique optical, mechanical, electronic, and quantum mechanical properties.

A 2015 Keck Foundation grant to Wilson to build a novel high temperature, high pressure crystal growth chamber is at the core of this exciting resurging field.

Crystals are special materials. By definition, the atoms that make up the crystal are rigorously ordered in three dimensions. This long-range order leads to important properties such as the clarity of gemstones, the hardness of diamonds, and unusual optical properties of calcite. Scientists are able to grow crystals in the laboratory with compositions that are not found in nature, and they often use these to search for new electronic states of matter, many of which may power future generations of electronic devices.

The gold standard for growing single crystals of high purity and low numbers of defects is the floating zone technique. Commercial float zone systems, first developed in the 1960s, focus light from halogen lamps onto precursor materials that have been pressed into a solid rod. The light is so intense that it melts a narrow band of the rod, which ‘floats’ between the remaining parts of the rod. This isolation of the molten zone from any container is the key to producing high purity crystals. By slowly translating the rod through the focal point of the light, the rod entering this zone melts, while the molten material exiting crystallizes. Generally, one crystal structure is favored and continues to grow as the melt region is swept along the rod, resulting in a single crystal that can be centimeters long.

Wilson has reimagined the float zone technique by focusing on growing crystals under high pressure. Synthetic ultrahigh purity crystals obtainable via floating zone crystal growth has been limited by the decomposition of the
starting materials at the temperatures needed to melt them. However, this decomposition can be avoided for many metal oxide and nitride materials under 10,000-15,000 pounds per square inch (psi) of oxygen or nitrogen, respectively. This pressure regime necessitated a reengineered crystal growth chamber and a new optical system. A key innovation was to move the light source outside of the chamber using diode lasers and directing this light through small windows into the center of a metal growth chamber. While working at these pressures for crystal growth is challenging, it turns out that it is routine in the oil and gas industry. The UCSB group used existing industrial mechanical and electrical feedthroughs, but needed to develop optical windows made of sapphire to handle these pressures.

The instrument is through the commissioning phase and is now used to routinely grow crystals in about a day. The unique high pressure environment and high temperature of the melt zone (capable of exceeding 3,000 °C) opens the door to new materials important for their electronic and magnetic properties. Wilson is finding great demand for his instrument. Theorists have made many predictions of new materials with unusual quantum properties. In his own work, Wilson is exploring the predictions of new types of superconductivity by slowly changing the ratio stoichiometry of two transition metals in an oxide compound. The National Science Foundation has taken note of the instrument and funded the construction of a second one at UCSB through a recent $25 million Quantum Foundry award. This prestigious award is to develop materials hosting unprecedented quantum coherence, train the next generation workforce, and to partner with industry to accelerate the development of quantum technologies.

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Theorists have made many predictions of new materials with unusual quantum properties. By collaborating with groundwater, mining, and oil and gas industries, they are able to incorporate subsurface evidence with their own surface studies, tracing the sources, flow paths, and reaction zones of diverse fluids throughout the basin, and understanding how this flow was driven by geologic forces over time. One of their objectives is developing a better understanding of how sedimentary-hosted copper and uranium deposits are formed. Their work points to a two-step process: an early organic- or sulfide-rich reducing fluid prepares the rock to act as a trap for elements dissolved in a later oxidizing fluid. This and other ideas they are developing will help geologists understand other subsurface fluid-rock systems on Earth and even other planets such as Mars, where diverse fluid-rock reaction products indicate a very different near-surface environment in the past.
Foster children who reach adulthood have a very difficult road ahead as they face life’s realities without traditional family support. When youth age out of foster care in Los Angeles County, less than 15% have had any type of work experience before age 18 and more than half have had no earnings by age 21. Equally troubling, less than half of foster youth graduate from high school. Consequently, they are more likely to be unemployed, homeless or incarcerated.

Recognizing these dismal outcomes, the California state legislature passed landmark bills to address the educational needs of all foster youth and to extend foster care for youth through age 21. At the same time, federal funds were directed toward young adults disconnected from school or work. But youth had trouble cobbling together the disparate services provided by numerous organizations across Los Angeles County even though new opportunities were created.

To serve youth more effectively, a group of 50 public and private organizations established the Los Angeles Opportunity Youth Collaborative (OYC) in 2014. OYC’s focus is on systems-level issues and practice changes across three interconnected but fundamentally distinct systems: education, child welfare and workforce/employment. The collaborative’s members came together to coordinate their efforts through information sharing, co-case management and systems changes. Work on the original three goals continues: to increase the number of youth who complete high school, succeed in postsecondary/credential programs, and embark on a career.

The Alliance for Children’s Rights serves as the backbone organization for the collaborative. In 2015, a Keck Foundation grant to the Alliance for Children’s Rights supported additional staff dedicated to managing the OYC’s activities, subgrants to partners to support staff participation, and evaluation.

A thriving career often starts with pre-employment support, work readiness training, and meaningful work experience, especially for youth who have been in foster care. Before the OYC formed, virtually no foster youth accessed public workforce development programs or publicly subsidized jobs and there was no systematic, coordinated way for them to get a job. There were no requirements of county-contracted providers to ensure that youth were setting college and career goals or participating in a work experience before aging out of the foster care system.

6,000 youth have been supported on pathways to high school graduation, post-secondary education and the workforce.

800% increase in the number of foster youth participating in a paid work experience achieved.

© LA County Board of Supervisors declared October “Foster Youth College Awareness Month.”

© 2019 youth have been supported on pathways to high school graduation, post-secondary education and the workforce.

© boost increase in the number of foster youth participating in a paid work experience achieved.
High school graduation and post-secondary education are key predictors of occupational success and economic security.

Care or probation systems. In addition, conflicting federal and state eligibility rules prevented foster youth from participating in a publicly funded workforce program, which was resolved by the OYC’s success in winning a federal waiver.

To effectively coordinate efforts across work systems, the Alliance and Unite-LA brought together the Department of Children and Family Services (DCFS) and the public workforce development agency staff for LA County. OYC developed a universal referral process which will be launched online in 2020. In addition, OYC created a curriculum to guide and prepare youth for the work of work. OYC partner iFoster uses that curriculum to train peer navigators, who also have access to an online resource directory developed by the OYC. The searchable database includes job training resources and other supports such as housing, legal assistance and health care specifically for transition age youth. During the two-year grant period, over 1,900 youth gained work experience through publicly subsidized employment and private sector jobs. African American youth were most likely to have been employed.

High school graduation and post-secondary education are key predictors of occupational success and economic security. OYC took a number of actions to build a strong education pathway for foster youth by partnering with John Burton Advocates for Youth to lead the Foster Youth College Advancement Project as the OYC’s higher education pathway. This collaboration led to the financial aid guide for California foster youth, and the Los Angeles Community College District compiled a list of all career and technical education opportunities offered. DCFS is sending notifications of key college deadlines to caregivers, and in 2020 its forms for service providers will include college and career planning milestones as part of their work with transition age foster youth.

Data on nearly 1,200 youth revealed that those who met with their navigator more frequently made greater progress on their educational and employment goals. Seventy percent had earned a high school diploma or equivalent or were on a path to do so. Enrollment in college slightly increased to 45%. The Los Angeles County Office of Education is sharing data with the state to track post-secondary educational outcomes for its foster youth graduates.

When the OYC began its work, public and private child welfare agencies had little awareness about workforce and higher education opportunities available to foster youth. Bridges were built among these entities to coordinate opportunities, identify service gaps and establish common measurements to track improvements in foster youth self-sufficiency and wellbeing. OYC youth leaders with lived experience have become the go-to experts and continue to inform decision-makers about various ways to improve systems.
MEDICAL RESEARCH

City of Hope
Duarte, CA
Sawwiti Chaterjee
$1,000,000
To investigate a novel genome editing mechanism.

Huntington Medical Research Institutes
Pasadena, CA
Michael Harrington, Linda Petzold, Brian Stoltz
$1,000,000
To understand sodium level changes in the central nervous system and their relationship to brain function.

Johns Hopkins University
Baltimore, MD
Abdel Hamad, Thomas Donner, Chunfa Jie, Ruhong Zhou, Mario Suva
$1,000,000
To study a novel lymphocyte and its role in autoimmunity.

Louisiana State University
Baton Rouge, LA
Alyssa Johnson, Adam Bohnert
$1,000,000
To study tubular lysosomes: new players in cellular health and homeostasis.

Memorial Sloan-Kettering Cancer Center
New York, NY
Jingyi Li
$500,000
To develop a new fluorescent molecular rotor technology for analyzing protein complexes.

Texas A&M University
College Station, TX
Michael Golding, Tracy Clement, Ivan Ivanov
$500,000
To explore the mechanisms of paternal contributions to fetal alcohol spectrum disorders.

Tulane University
New Orleans, LA
James McLachlan, John McLachlan, Frank Maurais-Jarvis
$1,000,000
To investigate how extra-lymphoid tissue regulates sex differences in the immune response.

University of California, Davis
Davis, CA
Johannes Hell, Kit Lam, James Ames, Manuel Navedo
$1,000,000
To investigate how cancer cells enter and survive the cerebrospinal fluid in a condition called leptomeningeal metastasis.

Vanderbilt University Medical Center
Nashville, TN
Kasey Vickers, MacRae Linton, Ryan Allen, Quanhu Sheng
$1,000,000
To examine the role of microbial RNA in cardiovascular disease.

Washington State University
Pullman, WA
James Krueger, Cheryl Dykstra-Auello, Ilia Karatsoreos, Alexander Panchenko
$1,000,000
To investigate the role of microbiome-derived molecules with circadian rhythms.

SCIENCE AND ENGINEERING RESEARCH

Columbia University
New York, NY
Tanya Zelenevsky, John Doyle
$800,000
To create ultracold quantum gases via molecular fragmentation.

Montana State University, Bozeman
Bozeman, MT
Eric Boyd, Tallis Onstott, Tom Kieft, Barry Freifeld, David Mencin, Carol Finn, Susan Bilick, Jeff Hungerford, Christina Rush, Shazia Hakim
$1,000,000
To explore the effect of seismic activity on subsurface microbial blooms.

Northwestern University
Evanston, IL
Andrew Geraci, Vicky Kalogera, Shane Larson
$1,000,000
To build a novel high-frequency gravitational-wave detector.

University of California, Los Angeles
Los Angeles, CA
Nanhu Li
$500,000
To study the effects of anti-functional mechanisms of translational control to advance mRNA therapeutics and other biomedical technologies.

University of California, Los Angeles
Los Angeles, CA
Andrew Geraci, Vicky Kalogera, Shane Larson
$1,000,000
To build a novel high-frequency gravitational-wave detector.

University of Colorado at Boulder
Boulder, CO
Xiaojuan Ding, Jill Slansky, Todd Murray, Carey Philip Neu
$1,000,000
To develop an acoustic activated flow cytometer for sorting cells based on their mechanical properties.

University of Colorado, Boulder
Boulder, CO
Adrienne Boire, Christine Iacobuzio-Donahue, Dana Pe’er
$1,000,000
To investigate how cancer cells enter and survive the cerebrospinal fluid in a condition called leptomeningeal metastasis.

University of Colorado, Boulder
Boulder, CO
Andrew Geraci, Vicky Kalogera, Shane Larson
$1,000,000
To build a novel high-frequency gravitational-wave detector.

University of Florida
Gainesville, FL
Andrew Geraci, Vicky Kalogera, Shane Larson
$1,000,000
To build a novel high-frequency gravitational-wave detector.

University of Colorado, Boulder
Boulder, CO
Xiaojuan Ding, Jill Slansky, Todd Murray, Carey Philip Neu
$1,000,000
To develop an acoustic activated flow cytometer for sorting cells based on their mechanical properties.

Vanderbilt University Medical Center
Nashville, TN
Kasey Vickers, MacRae Linton, Ryan Allen, Quanhu Sheng
$1,000,000
To examine the role of microbial RNA in cardiovascular disease.

Washington State University
Pullman, WA
James Krueger, Cheryl Dykstra-Auello, Ilia Karatsoreos, Alexander Panchenko
$1,000,000
To investigate the role of microbiome-derived molecules with circadian rhythms.

University of California, Los Angeles
Los Angeles, CA
Nanhu Li
$500,000
To study the effects of anti-functional mechanisms of translational control to advance mRNA therapeutics and other biomedical technologies.

University of Colorado at Boulder
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University of Colorado, Boulder
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$1,000,000
To build a novel high-frequency gravitational-wave detector.

University of Colorado, Boulder
Boulder, CO
Xiaojuan Ding, Jill Slansky, Todd Murray, Carey Philip Neu
$1,000,000
To develop an acoustic activated flow cytometer for sorting cells based on their mechanical properties.
University of Arizona  
Tucson, AZ  
Mohammed Hassan  
$1,200,000  
To develop an atom-level electron microscope.

University of California, Santa Barbara  
Santa Barbara, CA  
Omar Saleh, Enoch Yeung  
$1,000,000  
To investigate materials properties of complex fluids containing genes, RNA, and proteins.

University of Denver  
Denver, CO  
Mark Siemens, Mark Luk  
$1,000,000  
To explore novel quantum and topological properties of light.

University of Michigan  
Ann Arbor, MI  
Zetian Mi, Emmanuel Kisomakpi, Mackillo Kira, Robert Hovden, Theodore Norris  
$1,000,000  
To develop a semiconductor platform for the emission, processing, and detection of quantum entangled light.

University of Texas at Austin  
Austin, TX  
Sean Roberts, Michael Rose, Joel Eaver  
$1,000,000  
To uncover design rules for triplet energy transfer at organic/inorganic interfaces.

Whitehead Institute for Biomedical Research  
Cambridge, MA  
Jing-Ki Weng  
$1,000,000  
To harness plant-virus interactions for evolving biocatalysts.

SOUTHERN CALIFORNIA

Art and Culture

La Plaza de Cultura y Artes  
Los Angeles, CA  
$250,000  
To enhance learning opportunities about the permanent exhibit, LA Starts Here!, by developing print, audio and digital materials.

Performing Arts Center of Los Angeles County  
Los Angeles, CA  
$250,000  
To create a public gathering space and make the arts more accessible for all residents by renovating the Music Center’s plaza.

Zimmer Children’s Museum  
Los Angeles, CA  
$250,000  
To expand access to exhibits and programs for children of all ages by constructing a new children’s museum.

Civic and Community

Children’s Institute  
Los Angeles, CA  
$250,000  
To provide therapeutic, educational and enrichment programming by constructing a new campus in Watts.

Executive Service Corps of Southern California  
Los Angeles, CA  
$250,000  
To enhance counseling services for nonprofit agencies, which enable them to more effectively carry out their missions.

ImaginE LA  
Los Angeles, CA  
$250,000  
To recruit volunteer mentors to assist formerly homeless families retain their housing and improve their financial stability.

Jewish Big Brothers Big Sisters of Los Angeles  
Los Angeles, CA  
$250,000  
To increase access to emotional support for teens by teens through the Teen Talk smartphone app.

APLA Health  
Los Angeles, CA  
$250,000  
To expand educational resources by furnishing and equipping the new Main Library in downtown Long Beach.

Planned Parenthood Los Angeles, CA  
$200,000  
To provide reproductive and sexual health care services at five high-need high schools in Los Angeles County.

Westside Family Health Center  
Santa Monica, CA  
$200,000  
To increase comprehensive health care services for vulnerable populations by renovating a building.

Precollege Education

Lynwood Unified School District  
Lynwood, CA  
$150,000  
To expand two STEM Pathway Programs by building a new modular classroom and lab at Firebaugh High School.

Children’s Institute  
Los Angeles, CA  
$150,000  
To connect and coordinate efforts to transform Los Angeles County’s juvenile justice system.

Salvation Army, California South Division  
Long Beach, CA  
$150,000  
To construct a Youth and Community Center in Long Beach to serve vulnerable populations. [Redirected to respond to the COVID-19 crisis.]

SLATE-Z  
Los Angeles, CA  
$150,000  
To support a collaborative initiative to revitalize South Los Angeles by addressing the causes of poverty.

Early Childhood

Linc Housing Corporation  
Long Beach, CA  
$150,000  
To construct a child development center as part of an affordable housing development in South Los Angeles.

Health Care

APLA Health  
Los Angeles, CA  
$100,000  
To expand health care services in South Los Angeles by constructing a clinic on the campus of Charles R. Drew University.

Harbor Community Clinic  
San Pedro, CA  
$100,000  
To improve children’s health by expanding pediatric services.

Orthopaedic Institute for Children  
Los Angeles, CA  
$100,000  
To provide specialized orthopedic trauma care for more low-income children by building a new Urgent Care Center.

2019 REPRESENTATIVE GRANTS (continued)
REPORT OF INDEPENDENT AUDITORS

The Board of Directors
W. M. Keck Foundation

We have audited the accompanying financial statements of the W. M. Keck Foundation, which comprise the statements of financial position as of December 31, 2019 and 2018, and the related statements of activities, and cash flows for the years then ended, and the related notes to the financial statements.

Management’s Responsibility for the Financial Statements
Management is responsible for the preparation and fair presentation of these financial statements in conformity with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

Auditor’s Responsibility
Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity’s preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity’s internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the W. M. Keck Foundation as of December 31, 2019 and 2018, and the results of its activities and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

May 15, 2020
### STATEMENTS OF FINANCIAL POSITION

<table>
<thead>
<tr>
<th>December 31 (in thousands)</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$36,026</td>
<td>$19,521</td>
</tr>
<tr>
<td>Interest and dividends receivable</td>
<td>1,797</td>
<td>1,649</td>
</tr>
<tr>
<td>Prepaid federal excise taxes</td>
<td>666</td>
<td>423</td>
</tr>
<tr>
<td>Investments</td>
<td>1,310,508</td>
<td>1,153,384</td>
</tr>
<tr>
<td>Unsettled trade</td>
<td>617</td>
<td>12,771</td>
</tr>
<tr>
<td>Right-of-use asset</td>
<td>4,357</td>
<td>–</td>
</tr>
<tr>
<td>Other assets</td>
<td>1,229</td>
<td>402</td>
</tr>
<tr>
<td>Total assets</td>
<td>$1,355,110</td>
<td>$1,168,650</td>
</tr>
</tbody>
</table>

| **Liabilities and net assets** |        |        |
| Payable to brokers           | $134   | $138   |
| Accounts payable and accrued expenses | 2,067  | 1,389  |
| Lease liabilities            | 4,351  | –      |
| Grants payable               | 34,041 | 34,351 |
| Deferred federal excise taxes payable | 4,678  | 2,938  |
| Total liabilities            | 45,155 | 28,820 |
| Net assets without donor restrictions | $1,310,957| $1,313,826|
| Total liabilities and net assets | $1,355,110| $1,168,650|

See accompanying notes.

### STATEMENTS OF ACTIVITIES

<table>
<thead>
<tr>
<th>Year Ended December 31 (in thousands)</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues, income and gains (losses):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net investment income and (losses) gains:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>$8,461</td>
<td>$7,495</td>
</tr>
<tr>
<td>Dividends</td>
<td>8,381</td>
<td>9,419</td>
</tr>
<tr>
<td>Net realized gains on investments</td>
<td>44,448</td>
<td>55,141</td>
</tr>
<tr>
<td>Change in net unrealized gains (losses)</td>
<td>(107,235)</td>
<td>(107,235)</td>
</tr>
<tr>
<td>Investment management expenses</td>
<td>(6,696)</td>
<td>(6,163)</td>
</tr>
<tr>
<td>Taxes withheld</td>
<td>(212)</td>
<td>(261)</td>
</tr>
<tr>
<td>Total net investment income and gains (losses)</td>
<td>244,000</td>
<td>(44,064)</td>
</tr>
<tr>
<td>Other Income</td>
<td>183</td>
<td>110</td>
</tr>
<tr>
<td>Total revenues, income and gains (losses)</td>
<td>$244,183</td>
<td>$(44,174)</td>
</tr>
</tbody>
</table>

| **Expenses:** |        |        |
| Grants       | $66,066| $64,110|
| Salaries, employee benefits and payroll taxes | 3,433  | 3,590  |
| Professional services, contract services and general services and management | 2,143  | 2,048  |
| Federal excise tax provision (benefit) | 2,196  | (78)   |
| Total expenses | $74,138| $68,973|

| Change in net assets without donor restrictions | 170,045| (113,497)|
| Net assets without donor restrictions, beginning of year | 1,313,826| 1,313,826|
| Net assets without donor restrictions, end of year | $1,355,110| $1,168,650|

See accompanying notes.
STATEMENTS OF CASH FLOWS

Year Ended December 31 (in thousands) 2019  2018

Operating activities
Change in net assets without donor restrictions $ 170,045  $(13,465)
Adjustments to reconcile change in net assets without donor restrictions to net cash used in operating activities:
  Depreciation and amortization 335  42
  Net realized gains on investments (44,444)  (51,148)
  Net unrealized losses (gains) on investments (189,651)  107,735
Changes in operating assets and liabilities:
  Interest and dividends receivable (38)  (157)
  Other assets (33)  (12)
  Prepaid federal excise taxes (244)  9
  Payable to brokers (4)  (797)
  Accounts payable and accrued expenses 549  (247)
  Deferred federal excise taxes payable 1,740  (1,144)
  Grants payable 6,087  16,115
Net cash used in operating activities (51,359)  (2,083)

Investing activities
Purchases of investments (495,141)  (483,365)
Proceeds on disposition of investments and return of capital 473,749  330,869
Acquisition of fixed assets (744)  (34)
Net cash provided by investing activities 68,862  47,574

Net increase (decrease) in cash and cash equivalents 16,505  (5,111)
Cash and cash equivalents, beginning of year 9,687  10,818

Cash and cash equivalents, end of year # 36,018  # 19,131

Supplemental disclosures
Unsettled trade at year end $ 627  $ 12,771
Taxes paid during the year $ 900  $ 950

See accompanying notes.

NOTES TO FINANCIAL STATEMENTS

December 31, 2019

1. Organization
Formation and Goals of the Foundation
W. M. Keck established the W. M. Keck Foundation (the Foundation) as a charitable trust in 1954. In 1959, Mr. Keck changed the trust entity to a corporate entity by forming the W. M. Keck Foundation as a Delaware corporation and transferring the trust’s assets, and eventually by bequeathing the residue of his estate, to the corporation. It is this Delaware corporation that exists today and continues to be known as the W. M. Keck Foundation. The Foundation’s goals are principally to identify and support university and college research and education programs in the areas of science, engineering, and medicine. In addition, the Foundation gives some consideration to promoting liberal arts education and, in Southern California, to supporting community services, health care, pre-collegiate education, and the arts. Operations are funded by the Foundation’s return on its investment portfolio.

2. Summary of Significant Accounting Policies
Use of Estimates
The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Grant Payments
In accordance with accounting standards for not-for-profit entities, unconditional grant payments are recognized as an expense in the period in which they are approved. If these grants are to be paid over a period exceeding one year, they are recorded at the net present value of the future cash payments, using an applicable Treasury Bill rate. Grants that are conditioned upon a future and uncertain event are expensed when these conditions are met. A conditional promise to give is considered unconditional if the possibility that the condition will not be met is remote.

Cash and Cash Equivalents
Cash and cash equivalents are defined as liquid investments with remaining maturities of three months or less at time of purchase.

Investments
Investments in equity securities with readily determinable fair values and all investments in debt securities are measured at fair value in the statements of financial position. Fair value is established based on quoted prices from recognized securities exchanges. Investments in private equity funds and hedge funds are measured at fair value, using the net asset value (NAV) as a practical expedient, which is based on net asset values reported by the fund managers. Pursuant to provisions of Accounting Standards Update (ASU) 2010-23, Fair Value Measurements and Disclosures (Topic 820): Investments in Certain Entities That Calculate Net Asset Value per Share (or its Equivalent), the Foundation believes that the net asset value of these investments as of December 2019 and 2018 approximates their fair value as of that date. However, because of the inherent uncertainty of valuation, the estimated fair values for these securities and interests may differ from the values that would have been used had a ready market for the investments existed, and the differences could be material.

Purchases and sales of securities are recorded on the trade date. Dividend income is recorded based upon the ex-dividend date. Interest income is recorded on an accrual basis. Realized gains and losses are recorded upon disposition of securities based on the specific identification method. Unrealized gains and losses are included on the statements of activities and represent the net change in fair value for investments held at the end of the year.
NOTES TO FINANCIAL STATEMENTS (continued)

Fair Value of Financial Instruments

The Foundation's statements of financial position include, but are not limited to, the following financial instruments: cash and cash equivalents, accounts payable, and accrued liabilities. The Foundation considers the carrying amounts of these assets and liabilities on the statements of financial position to approximate the fair value of these financial instruments because of the relatively short period of time between origination of the instruments and their expected realization.

Concentrations of Credit Risk

Financial instruments that potentially subject the Foundation to concentrations of credit risk consist of cash and cash equivalents and investments. The investment portfolio is managed within the Foundation's established investment guidelines.

Fixed Assets

Fixed assets are carried at cost, less accumulated depreciation, and are included in other assets on the statements of financial position. Depreciation is computed on the straight-line method over the estimated useful life of each type of asset or the term of the related lease, whichever is shorter. The depreciable lives for leasehold improvements are ten years, for furniture and equipment five years, and for software three years.

Leases

Effective January 1, 2019, the Foundation adopted Accounting Standards Codification 842, Leases ("ASC 842") using the modified retrospective transition approach by applying the new standard to all leases existing at the date of initial application. Results and disclosure requirements for reporting periods beginning after January 1, 2019 are presented under ASC 842, while prior period amounts have not been adjusted and continue to be reported in accordance with the Foundation's historical accounting under Accounting Standards Codification 840.

Under ASC 842, the Foundation determines if an arrangement is a lease at inception based on whether the Foundation has the right to control the asset during the contract period and other facts and circumstances. The Foundation has obligations as a lessee for office space and office equipment with initial noncancelable terms in excess of one year. The Foundation classified these leases as operating leases. Operating leases are included in right-of-use (ROU) assets and lease liabilities on the statements of financial position. ROU assets represent the Foundation's right to use an underlying asset for the lease term, and lease liabilities represent the Foundation's obligation to make lease payments arising from the lease, both of which are recognized at the commencement date based on the present value of future lease payments over the lease term. For this purpose, the Foundation considers only payments that are fixed and determinable at the time of commencement. The office space lease contains a renewal option of five years. Because the Foundation is not reasonably certain to exercise the renewal option, the option periods are not included in determining the lease term, and associated payments under the renewal option are excluded from lease payments. As the implicit rates for the Foundation's leases were not readily determinable, the Foundation's incremental borrowing rate was used in determining the present value of lease payments. The Foundation's incremental borrowing rate is a hypothetical rate based on the rate of interest the Foundation would have to pay on a collateralized basis to borrow an amount equal to the lease payments under similar terms and in a similar economic environment.

Leases

The office space lease agreement contains variable costs such as common area maintenance, insurance, real estate taxes or other costs. Variable lease costs are expensed as incurred on the statements of activity. Leases with a lease term of 12 months or less at inception are not recorded on the statements of financial position and are expensed on a straight-line basis over the lease term in the statements of activities. The Foundation's lease agreements generally do not contain any residual value guarantees or restrictive covenants.

Recent Accounting Pronouncements

Effective January 1, 2019, the Foundation adopted FASB ASU No. 2018-028, Not-for-Profit Entities (Topic 958): Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made. This accounting pronouncement clarified guidance for not-for-profit entities regarding whether transactions should be accounted for as contributions (nontreasurerial transactions) or as exchange (reciprocal) transactions. It also clarified guidance related to determining whether a contribution is conditional. The adoption of this ASU did not materially impact the Foundation's financial statements.

On January 1, 2019, the Foundation adopted ASC 842, Leases, as amended, which superseded the lease accounting guidance under ASC 840, and generally requires lessees to recognize operating lease liabilities and corresponding right-of-use assets on the statement of financial position for all leases with terms greater than 12 months. The guidance also requires enhanced disclosures surrounding the amount, timing and uncertainty of cash flows arising from leasing arrangements. The Foundation adopted the new guidance using the modified retrospective transition approach by applying the new standard to all leases existing at the date of initial application and not restating comparative periods. The most significant impact was the recognition of ROU assets and lease liabilities for operating leases. For information regarding the impact of ASC 842 adoption, see Note 5 – Significant Accounting Policies – Leases above and Note 8 – Leases below.

FASB ASU No. 2016-18 Statement of Cash Flows (Topic 230) Restricted Cash was effective January 1, 2018. The main provisions require that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. The Foundation does not have any restricted cash or restricted cash equivalents. The adoption of this ASU did not materially impact the Foundation's financial statements.

Fair Value of Measurement

The Foundation applies the principles of Accounting Standards Codification (ASC) 820, Fair Value Measurement, for all financial assets and liabilities that are recognized or disclosed at fair value in the financial statements. This standard defines fair value, establishes a consistent framework for measuring fair value, and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. The standard clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the Foundation establishes a three-level fair value hierarchy, that prioritizes the inputs used in measuring fair value as follows:

Level 1 – Assets that have readily observable prices (quoted prices in active markets accessible at the measurement date for assets). The fair value hierarchy gives the highest priority to Level 1 inputs.

Level 2 – Assets that are based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Financial assets and liabilities in this category generally include asset-backed securities, corporate bonds and loans, municipal bonds, forward contracts, future contracts, interest and credit swap agreements, options, and interest rate swaps.

Level 3 – Assets whose fair value cannot be determined by using observable measures, and can only be calculated using estimates, which may only be substantiated with reasonable certainty. The fair value hierarchy gives lowest priority to Level 3 inputs.

Assets and liabilities measured at fair value are based on one or more of three valuation techniques noted below:

(a) Market approach. Prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.
(b) Cost approach. Amount that would be required to replace the service capacity of an asset (replacement cost).
(c) Income approach. Techniques to convert future amounts to a single present amount based on market expectations (including present value techniques, option-pricing, and excess earnings models).
The Foundation’s assets measured at fair value on a recurring basis at December 31, 2019 were as follows (in thousands):

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Investments at NAV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common and preferred stock</td>
<td>$34,689</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>–</td>
<td>29,838</td>
<td>–</td>
</tr>
<tr>
<td>Municipal bonds</td>
<td>–</td>
<td>4,187</td>
<td>–</td>
</tr>
<tr>
<td>Government bonds</td>
<td>35,721</td>
<td>44</td>
<td>–</td>
</tr>
<tr>
<td>Foreign investments</td>
<td>47,169</td>
<td>38,867</td>
<td>–</td>
</tr>
<tr>
<td>Mortgage- and asset-backed securities</td>
<td>–</td>
<td>68,010</td>
<td>–</td>
</tr>
<tr>
<td>Mutual funds</td>
<td>241,876</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Private equity funds</td>
<td>–</td>
<td>–</td>
<td>292,028</td>
</tr>
<tr>
<td>Hedge funds</td>
<td>–</td>
<td>–</td>
<td>10,009</td>
</tr>
<tr>
<td>Total</td>
<td>$877,355</td>
<td>$131,116</td>
<td>$322,028</td>
</tr>
</tbody>
</table>

The Foundation’s assets measured at fair value on a recurring basis at December 31, 2018 were as follows (in thousands):

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Investments at NAV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common and preferred stock</td>
<td>$38,658</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>–</td>
<td>31,935</td>
<td>–</td>
</tr>
<tr>
<td>Municipal bonds</td>
<td>–</td>
<td>3,883</td>
<td>–</td>
</tr>
<tr>
<td>Government bonds</td>
<td>25,622</td>
<td>65</td>
<td>–</td>
</tr>
<tr>
<td>Foreign investments</td>
<td>64,108</td>
<td>24,937</td>
<td>–</td>
</tr>
<tr>
<td>Mutual funds</td>
<td>244,113</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Private equity funds</td>
<td>–</td>
<td>–</td>
<td>292,028</td>
</tr>
<tr>
<td>Hedge funds</td>
<td>–</td>
<td>–</td>
<td>31,935</td>
</tr>
<tr>
<td>Total</td>
<td>$718,241</td>
<td>$127,215</td>
<td>$280,228</td>
</tr>
</tbody>
</table>

The Foundation has classified its mutual funds, equity securities, preferred stock, and certain of its government bonds and foreign investments that have quoted prices in active markets as Level 1 within the fair value hierarchy. These securities are valued under the market approach using inputs observable in active markets for identical securities. The Foundation has classified certain of its government bonds, corporate bonds, municipal bonds, foreign bonds, and mortgage- and asset-backed securities as Level 2’s investments. The fair value of these assets is valued under the market approach using inputs observable in active markets for similar assets. The Foundation has measured its investments in hedge funds and private equity funds at fair value using the net asset value as a practical expedient, which is based on net asset values reported by the fund managers. These investments that use net asset value as a practical expedient are not classified in the fair value hierarchy. The fair value of the underlying assets in private equity funds is valued under the income approach using discounted cash flows and other inputs not observable in active markets. The hedge funds in which the Foundation is invested hold a mix of Level 1, 2 and 3 instruments.

### 3. Liquidity and Availability of Resources

The Foundation’s financial assets available within one year of the statements of financial position date for general expenditure are as follows (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31 (in thousands)</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$36,026</td>
<td>$19,121</td>
</tr>
<tr>
<td>Interest and dividends receivable</td>
<td>$1,707</td>
<td>$1,549</td>
</tr>
<tr>
<td>Liquid investments (excludes private equity)</td>
<td>1,018,400</td>
<td>899,410</td>
</tr>
<tr>
<td>Unsettled trades</td>
<td>617</td>
<td>1,771</td>
</tr>
<tr>
<td>Total financial assets available to management for general expenditure within one year</td>
<td>$1,056,830</td>
<td>$953,573</td>
</tr>
</tbody>
</table>

### Supplemental disclosures

Grant commitments due within one year | ($13,000) | ($11,700)

### Liquidity Management

The Foundation has $1,018,480,000 of financial assets available within one year of the balance sheet date to meet cash needs for general expenditure. None of the financial assets are subject to donor restrictions that make them unavailable for general expenditure within one year of the statements of financial position date. The Foundation maintains a policy of structuring its financial assets to be available as its general expenditures, liabilities, and other obligations come due. In addition, the Foundation invests cash in excess of daily requirements in short-term investments.

### 4. Investments

The cost and fair value of investments are as follows (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31, 2019</th>
<th>Cost</th>
<th>Fair Value</th>
<th>Year Ended December 31, 2018</th>
<th>Cost</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common and preferred stock</td>
<td>$310,601</td>
<td>$344,689</td>
<td>$280,316</td>
<td>$314,015</td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>26,910</td>
<td>29,838</td>
<td>31,935</td>
<td>31,935</td>
<td></td>
</tr>
<tr>
<td>Municipal bonds</td>
<td>3,483</td>
<td>4,187</td>
<td>3,883</td>
<td>3,883</td>
<td></td>
</tr>
<tr>
<td>Government bonds</td>
<td>211,610</td>
<td>31,764</td>
<td>21,352</td>
<td>21,352</td>
<td></td>
</tr>
<tr>
<td>Foreign investments</td>
<td>54,622</td>
<td>73,937</td>
<td>12,771</td>
<td>12,771</td>
<td></td>
</tr>
<tr>
<td>Mortgage- and asset-backed securities</td>
<td>68,850</td>
<td>68,020</td>
<td>3,883</td>
<td>3,883</td>
<td></td>
</tr>
<tr>
<td>Mutual funds</td>
<td>209,410</td>
<td>248,876</td>
<td>1,649</td>
<td>1,649</td>
<td></td>
</tr>
<tr>
<td>Private equity funds</td>
<td>235,371</td>
<td>230,238</td>
<td>33,009</td>
<td>33,009</td>
<td></td>
</tr>
<tr>
<td>Hedge funds</td>
<td>35,000</td>
<td>30,009</td>
<td>47,000</td>
<td>47,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$718,241</td>
<td>$1,271,215</td>
<td>$280,228</td>
<td>$1,133,884</td>
<td></td>
</tr>
</tbody>
</table>

The change in net unrealized gains on investments is reflected on the statements of activities and is summarized as follows (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31 (in thousands)</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net unrealized gains, beginning of year</td>
<td>$143,855</td>
<td>$254,000</td>
</tr>
<tr>
<td>Net unrealized gains (losses) on investments for the year</td>
<td>($189,633)</td>
<td>($107,235)</td>
</tr>
<tr>
<td>Net unrealized gains, end of year</td>
<td>$310,601</td>
<td>$314,015</td>
</tr>
</tbody>
</table>
4. Investments (continued)

The Foundation has made total capital contributions (net of distributions/return of capital) of $168,375,000 to private equity funds and hedge funds as of December 31, 2019. The hedge funds can be redeemed on a quarterly basis after a one-year lock-up and are invested in Level 1, Level 2 and Level 3 investments. Two hedge funds were fully redeemed in 2019. Proceeds from one of these redemptions totaling $67,000 have not been received as of December 31, 2019 and are separately reported as an unsettled trade in the 2019 statement of financial position. The private equity funds are primarily invested in assets valued using Level 3 inputs and, as of December 31, 2019, are subject to lock-up provisions up to 10 years subject to certain further extension adjustments. The Foundation had total future capital commitments related to private equity funds of $81,532,000 as of December 31, 2019.

5. Taxes

The Foundation qualifies as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code and, accordingly, is not subject to federal income taxes. However, the Foundation is classified under the Internal Revenue Code (IRC) as a private foundation and, as such, is subject to a 2% (3% if certain criteria is met) federal excise tax on net investment income through December 31, 2019.

During 2019, the Foundation accrued a 1% excise tax on net investment income. Private foundations are required to distribute annually, in qualifying charitable distributions, an amount equal to approximately 5% of the average fair market value of the Foundation’s assets (the minimum distribution). If the Foundation does not distribute the required minimum distribution, a one-year grace period is granted to distribute the undistributed income.

The Foundation uses the liability method for accounting for excise taxes. The federal excise tax provision (benefit) consists of the following (in thousands):

<table>
<thead>
<tr>
<th>Year ending December 31 (in thousands)</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>6,625</td>
<td>1,359</td>
</tr>
<tr>
<td>Deferred</td>
<td>1,740</td>
<td>(1,144)</td>
</tr>
<tr>
<td></td>
<td>8,365</td>
<td>(785)</td>
</tr>
</tbody>
</table>

Deferred federal excise taxes arise primarily from the net unrealized appreciation in the fair value of investments and the Foundation uses the maximum federal excise tax rate of 1.5% for the years presented for years after December 31, 2019.

The Foundation completed an analysis of its tax positions, in accordance with FASB ASC 740, Income Taxes, and determined that there are no uncertain tax positions taken or expected to be taken. The Foundation has recognized no interest or penalties related to uncertain tax positions. The Foundation is subject to routine audits by the taxing jurisdictions, however, there are currently no audits in progress for any tax periods (tax years 2015 through 2019 remain open and subject to selection for such routine audits).

6. Functional Classification of Expenses

Functional expenses present expenses by function and natural classification. Expenses directly attributable to a specific functional area of the Foundation are reported as expenses of that functional area. Indirect or shared costs are allocated between Program Services and Management and General Services based on the proportion of full-time employee equivalents of a program or other supporting service versus the total organizational full-time employee equivalents.

The following is a functional classification of the Foundation’s expenses:

<table>
<thead>
<tr>
<th>Year Ended December 31, 2019 (in thousands)</th>
<th>Program Services</th>
<th>Management and General</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants</td>
<td>$66,066</td>
<td>$ –</td>
<td>$66,066</td>
</tr>
<tr>
<td>Salaries, employee benefits and payroll taxes</td>
<td>3,513</td>
<td>300</td>
<td>3,813</td>
</tr>
<tr>
<td>Professional services, contract services and other management and general services</td>
<td>2,967</td>
<td>886</td>
<td>3,853</td>
</tr>
<tr>
<td><strong>Total functional expenses</strong></td>
<td>$72,556</td>
<td>$966</td>
<td>$73,522</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Ended December 31, 2018 (in thousands)</th>
<th>Program Services</th>
<th>Management and General</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants</td>
<td>$64,320</td>
<td>$ –</td>
<td>$64,320</td>
</tr>
<tr>
<td>Salaries, employee benefits and payroll taxes</td>
<td>3,216</td>
<td>274</td>
<td>3,490</td>
</tr>
<tr>
<td>Professional services, contract services and other management and general services</td>
<td>1,883</td>
<td>215</td>
<td>2,098</td>
</tr>
<tr>
<td><strong>Total functional expenses</strong></td>
<td>$69,419</td>
<td>$499</td>
<td>$70,018</td>
</tr>
</tbody>
</table>

7. Grants Payable and Conditional Grant Commitments

Grants payable and grant commitments as of December 31, 2019, are as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Unconditional</th>
<th>Conditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$11,000</td>
<td>$1,039</td>
</tr>
<tr>
<td>2021</td>
<td>1,000</td>
<td>11,000</td>
</tr>
<tr>
<td>2022</td>
<td>1,800</td>
<td>11,000</td>
</tr>
<tr>
<td>2023 and thereafter</td>
<td>11,700</td>
<td>101,000</td>
</tr>
<tr>
<td></td>
<td>$25,500</td>
<td>$122,135</td>
</tr>
<tr>
<td>Less present value discount</td>
<td>(1,457)</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>$24,043</td>
<td>$121,135</td>
</tr>
</tbody>
</table>

Projected timetable and payment amounts shown above for conditional grants are estimated. Conditional grants will be recorded as an expense in the period when the conditions to the grant are met. These grants are conditioned upon other donors matching the amounts contributed by the Foundation, receipt of building permits and other regulations, and compliance with budget, timetable, and grant agreement requirements.
8. Lease Commitments

The Foundation has operating leases related to office space and office equipment. During 2019, new leases commenced for office space and for office equipment. Statement of Financial Position information related to operating leases is as follows (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31, 2019</th>
<th>Right-of-use asset</th>
<th>Lease liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of December 31, 2019</td>
<td>$4,313</td>
<td>$4,313</td>
</tr>
</tbody>
</table>

As of December 31, 2019, the Foundation’s leases have original lease periods expiring between 2022 and 2039. The office space lease includes an option to renew for an additional 5 years.

The components of lease costs, lease term and discount rate for the year ended December 31, 2019 are as follows (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31, 2019</th>
<th>Operating lease cost</th>
<th>Variable lease cost</th>
<th>Weighted-average remaining lease term for operating leases</th>
<th>Weighted-average discount rate for operating leases</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of December 31, 2019</td>
<td>$697</td>
<td>497</td>
<td>9.88 years</td>
<td>4.04%</td>
</tr>
</tbody>
</table>

Operating lease expense was $435,000 for the year ended December 31, 2018 under ASC 840.

The following table summarizes the maturity of the Foundation’s operating lease liabilities as of December 31, 2019 (in thousands):

<table>
<thead>
<tr>
<th>Year ending December 31</th>
<th>As of December 31, 2019</th>
<th>After December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$454</td>
<td>454</td>
</tr>
<tr>
<td>2021</td>
<td>471</td>
<td>471</td>
</tr>
<tr>
<td>2022</td>
<td>487</td>
<td>487</td>
</tr>
<tr>
<td>2023</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>2024</td>
<td>520</td>
<td>520</td>
</tr>
<tr>
<td>Thereafter</td>
<td>2,875</td>
<td></td>
</tr>
<tr>
<td>Total operating lease payments</td>
<td>$5,307</td>
<td>5,307</td>
</tr>
</tbody>
</table>

As of December 31, 2018, the Foundation’s minimum lease payments under noncancelable operating leases was approximately $493,000 (related primarily to the office space lease that expired during 2019).

Supplemental cash flow information related to leases for the year ended December 31, 2019 are as follows (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31, 2019</th>
<th>Cash paid for amounts included in the measurement of lease liabilities:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Operating cash flow from operating leases</td>
</tr>
<tr>
<td></td>
<td>ROU assets obtained in exchange for lease obligations:</td>
</tr>
<tr>
<td></td>
<td>Operating leases</td>
</tr>
<tr>
<td></td>
<td>Reductions to ROU assets resulting from reductions to lease obligations:</td>
</tr>
<tr>
<td></td>
<td>Operating leases</td>
</tr>
</tbody>
</table>

9. Employee Retirement Plan

The Foundation maintains a qualified 401(k) Profit Sharing Plan (the Plan) for eligible employees. Employees can contribute a percentage of their pre-tax compensation subject to Internal Revenue Service (IRS) limitations. The Foundation matches 100% of the employee’s deferral, but not more than 6% of the employee’s compensation in total until IRS compensation limits are reached. The Foundation’s matching contributions to the Plan were approximately $272,000 and $285,000 for the years ended December 31, 2019 and 2018, respectively.

10. Subsequent Events

The Foundation’s management has evaluated subsequent events through May 15, 2020, which is the date these financial statements were available to be issued. Due to the COVID-19 pandemic, quarantines and related economic slowdown, there has been significant volatility in equity and debt markets. Any public health emergency, including the outbreak of COVID-19 or other epidemic diseases, and the resulting financial and economic market uncertainty could have a significant adverse impact on the Foundation, including the fair value of investments. The Foundation considers the emergence of the COVID-19 coronavirus pandemic to be a non-recognized post financial statement event and hence any future impact is likely to be in connection with the assessment of the fair value of investments at future valuation dates.

In April 2020, the Foundation made grants for COVID-19 research and emergency relief efforts. In connection with its $4,000,000 COVID-19 research grant to USC, the Foundation and USC amended their 2011 grant agreement to include the additional amount and extend the agreement to 2033. The Foundation also revised the terms of its $4,000,000 grant to the Salvation Army to remove the building permit contingency on a capital project and allow the Salvation Army to use the funds for emergency food at 20 centers. The Foundation’s other COVID-19 research and relief grants in 2020 were new grants.

Management has determined that no other material subsequent events have occurred during that period that would require the Foundation to either recognize the financial impact of such events in the accompanying financial statements or disclose any such events to ensure the financial statements are not misleading.
Our sincere thanks and appreciation to those who graciously gave their time to help tell these stories and who allowed their work and images to be used.

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