



Search for the Biosphere Sciences & Engineering Division Director  
Carnegie Science  
Pasadena, California

## THE SEARCH

Carnegie Science seeks nominations and applications for a visionary leader to serve as the Biosphere Sciences & Engineering Division Director based in Pasadena, California.

Carnegie Science is a private research institution that is an incubator for independent, interdisciplinary research that transcends scales through the linkage of genomes to ecosystems and planet to the cosmos. The Director joins at a pivotal moment for Carnegie Science, as our biologists are exploring the interconnected web of life on Earth – underpinned by complex relationships between microbes that adapt to thrive in a range of changing environments. This position represents an exceptional opportunity to reimagine, establish, and lead an internationally renowned research center focused revealing connections between the synthesis of molecules that comprise individual physiological functions and the complex community interactions that shape ecosystem resilience. This remarkable opportunity includes helping the team continue their research at their new research facility in Pasadena, strengthening the scientific research strategy and developing our research partnership with Caltech.

Reporting to the President, the Director will work with staff to develop and implement the Division's strategic direction and will be responsible for all aspects of operations, including research oversight, personnel management, federal awards, fundraising, budgeting and financial management, and catalyzing partnerships with local institutions including Caltech, as well as others in the region. The successful candidate will present a distinguished record of achievement in research, administration, and fundraising, as well as experience in leading an organization through periods of change. They will demonstrate impeccable scientific judgment, an uncompromising commitment to research excellence, a commitment to the institution's community and culture, exceptional interpersonal skills, clarity in oral and written expression, and a deep commitment to interdisciplinary collaboration. They will bring an ability to think strategically about the future of global science, and about the ways in which Carnegie Science can expand its role as an innovative leader of the scientific enterprise. The Director also must be

a strong and persuasive communicator who will work with Carnegie Science's leadership to further build organizational reputation and secure resources to advance our strategic priorities, now and in the years to come.

A list of the desired qualifications and characteristics of the Division Director can be found at the conclusion of this document, which was prepared by the search advisory committee with the assistance of Isaacson, Miller, a national executive search firm. All confidential applications, inquiries, and nominations should be directed to the parties listed at the conclusion of this document.

## ABOUT CARNEGIE SCIENCE

[Carnegie Science](#), previously known as Carnegie Institution for Science, was established by Industrialist and pioneering philanthropist Andrew Carnegie in 1902 to devote significant resources to exceptional individuals, enabling them to explore the most intriguing scientific questions of the day in an atmosphere of complete freedom and fostering the application of this knowledge to the improvement of humankind. For more than a century, Carnegie Science has empowered visionary investigators to demonstrate intellectual courage, challenge conventional ideas, and transform the world.

Today, Carnegie Science's mission—to advance investigation, research, and discovery, and apply that knowledge to the improvement of humankind—is more urgent than ever. An independent research institution, Carnegie Science empowers top investigative minds and provides them with the flexibility to boldly pursue independence, agility, and a collaborative spirit to lead the research community in studying the nexus of life, our planet, and the universe. Carnegie researchers continue to ask and answer compelling questions on innovative research topics and to demonstrate the leadership to mobilize the international research community and the vision to transform our understanding.

This pursuit of answers—fueled by curiosity, intellect, boundless creativity, and cutting-edge technological advancements—has resulted in substantial breakthroughs over the last hundred years, including Edwin Hubble's discovery that the universe is expanding, Charles Richter's development of a seismic scale to measure earthquakes, and Vera Rubin's confirmation of dark matter, among many others. Carnegie's approach has also fostered new fields of research that led to unexpected benefits to society, including the development of hybrid corn, radar, the technology that led to Pyrex® glass, and novel drugs that deploy RNA interference technology.

## Research

Carnegie Science is composed of three research Divisions: [Biosphere Sciences & Engineering](#), [Earth & Planets Laboratory](#), and [Carnegie Observatories](#). Carnegie Science currently employs ~70 Principal Investigators, which includes Staff Scientists, Staff Associates, and Research Scientists, and ~90 postdocs across its U.S. campuses and its Las Campanas Observatory in Chile.

Carnegie Science is one of few organizations worldwide where dedicated scientists can choose to explore new research directions that could redefine our collective future. Carnegie's research breakthroughs have fundamentally changed how we understand biology, our planet, and the universe. From genomes to ecosystems and from planets to the cosmos, Carnegie Science is an incubator for cutting-edge, interdisciplinary research that is expanding our knowledge of all that is around us. On a scale encompassing the entire natural world, and at myriad intersections of both related and disparate disciplines, Carnegie investigators are tackling the biggest questions of our time such as: What are the origins of our universe? How did life emerge? How can we combat the devastation of climate change?

We are now entering a time of scientific discovery unparalleled in our history. This new age brings a convergence of trends in scientific practice and technology that allows interdisciplinary research to thrive. Carnegie's growing partnership with Caltech, including significant collaborations on the technology driving 21st-century science, is accelerating Carnegie's ability to capitalize on this pivotal moment. This new alliance between Carnegie Science and Caltech will strengthen historical collaboration in astronomy and the physical sciences to advance bold new directions in life and environmental research and burnish Pasadena's reputation as a hub for high-impact scientific research.

### **Path to Pasadena**

In 2020, Carnegie brought together its developmental biology, global ecology, and plant science research efforts into a unified, interdisciplinary division where their experts will study the natural world at every scale, from the molecular to the global. Understanding that the future of the scientific enterprise is interdisciplinary and collaborative, Carnegie Science formed a new alliance with Caltech, which will open many opportunities for breakthrough research between the two institutions. This partnership builds on their shared history in astronomy and astrophysics. To meet this grand challenge, Carnegie Science will be leaving their campuses in Baltimore and Palo Alto and integrating the departments into a comprehensive, multi-disciplinary program, currently named Biosphere Sciences and Engineering, which will be housed on the Caltech campus.

From their new home base, Carnegie scientists with expertise that spans from genomes to ecosystems to planet-scale dynamics—will be able to address some of the most significant challenges facing humankind today—including co-evolution of planetary atmosphere, climate and biosphere, patterns and mechanisms from molecules to ecosystems, and life across diverse and changing environments.

The Pasadena location will also enable Carnegie to expand upon existing research partnerships with the Jet Propulsion Laboratory, the Huntington Library, Art Museum, and Botanical Garden, the University of Southern California and other Southern California-based universities and research institutes, making a powerful contribution to Los Angeles' robust intellectual ecosystem.

### **Biosphere Sciences and Engineering (BSE) Division**

Launched in 2022, Carnegie's [newest scientific division](#) is devoted to disrupting the traditional, siloed perspective on research in the life sciences and deploying a fully integrated genome-to-ecosystems

approach to solving humanity's greatest challenges. Every day, Carnegie biologists use a variety of cutting-edge approaches to answer these crucial questions, and more, with the hope of building a foundation for a sustainable world. Research areas in the BSE Division include Genetics and Developmental Biology, Plant Science, and Global Ecology. Carnegie's developmental and plant biologists are experts in deploying the latest research tools and techniques to decipher the complexity of cellular and molecular interactions, aiming to uncover the genetic processes underpinning community relationships between species. Carnegie's ecologists are at the vanguard of knowledge on the planet's dynamic systems and cycles and reveal the links between ecosystem processes, human activity, and global impacts, which are critical to addressing the devastation of climate change.

Scientists in this Division are deeply engaged in research across a wide range of interests, including terrestrial ecology, plant physiology, embryogenesis, climate science, water resources, nutrient cycling, aquatic ecology, and molecular mechanisms underlying symbiosis and adaptive strategies in animals and plants.

### Financial Overview

Carnegie's financial health is fundamental to the institution's mission, balancing today's research needs with the interests of future scientists and continued leadership within the greater scientific enterprise.

The [endowment](#) is the primary source of support for Carnegie's activities. Established by Andrew Carnegie's founding gift of \$10 million, it has grown to greater than \$1 billion in value as of June 30, 2025.

It enables Carnegie Science to pursue its mission to empower creative and enterprising individuals who challenge conventional ideas, define new fields of research, and drive breakthrough discoveries for the betterment of humankind.

Endowment support is enhanced by both generous philanthropic giving and a robust program of federal grants. These successes are a testament to the high quality of Carnegie scientists and Carnegie's leadership of research initiatives within the broader scientific community. The operating budget for Carnegie Science is \$96.1 million in fiscal year 202, of which \$14.9 million will be funded through outside revenue. The proforma operating budget for fiscal year 2027 is \$80.2 million, of which \$11.6 million will be funded through outside revenue.

### KEY OPPORTUNITIES AND CHALLENGES FOR THE DIVISION DIRECTOR

Reporting to President John Mulchaey, the Director will be responsible for all aspects of the Division's research activities, fundraising, federal awards oversight, financial management, outreach, and other operations. As a member of the Carnegie Science leadership team, the Director also will work closely with fellow Directors and professional staff to manage Division programs and resources in furtherance of Carnegie Science's scientific and organizational goals.

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**Provide cohesive vision and strategic leadership for the Division's next chapter of success**

In close collaboration with the President and scientific staff, the Director will lead a robust strategic vision for the Division that is grounded in excellence in life and environmental sciences research and driven by Carnegie's mission of scientific discovery in service to humanity. The Director will inspire, unite, and energize faculty, staff, and the Board to achieve even higher levels of excellence and ensure that all programs, hiring plans, investment areas, and activities are consistent with the implementation of that vision.

The Director will also take a leadership role in developing Carnegie's alliance with Caltech, supporting stronger ties between Carnegie Science researchers, their Caltech peers, and other researchers and institutions throughout Southern California and beyond.

**Manage and advance the scientific enterprise through impactful recruiting and collaborative research**

The Director must encourage the ongoing success of Carnegie Science and Division scientists by staying abreast of trends in the field and identifying new opportunities. The new Director will have the opportunity to hire exceptional scientists, identifying a diverse group of talented and productive researchers and working in collaboration with colleagues within the Division to recruit and retain next-generation talent to Carnegie. The Director will maintain efficient and effective systems that support the work of the Division, encourage efficient and impactful collaboration, and ensure that developmental and funding opportunities for the team are widely available.

The Director will foster a strong, mutually reinforcing scientific community by promoting interdisciplinary collaborations in ways that leverage and deepen Carnegie research excellence across the entire institution. These cross-Divisional collaborations, which often enable the pursuit of unusual and non-mainstream ideas, reflect Carnegie's distinct organizational advantage in investigating novel research directions that can emerge at the often unexplored areas where disciplines intersect and that can lead to innovative and creative research partnerships and fundamental scientific breakthroughs.

**Grow resources in support of the Division's mission**

Over time, the Director will actively pursue additional resources to support the Division's strategic vision. The new Director will work closely with colleagues in the Carnegie Science Office of Advancement to identify development opportunities and to take an active part in fundraising and community engagement. This responsibility will require an innovative and entrepreneurial approach to align potential donors with opportunities to support crucial research. At the same time, the Director will ensure the ongoing strength of federal, state, industry, corporate, and private foundation support, and that Carnegie Science and the Division use resources wisely to protect the long-term sustainability of the endowment.

## QUALIFICATIONS AND CHARACTERISTICS

To ensure Carnegie Science's continued success, the new Biosphere Sciences & Engineering Division Director will meet many, if not all, of the following qualifications and characteristics:

- A research scientific background with a PhD in life or environmental sciences, or a related field.
- Distinguished record of achievement in research, administration and fundraising, as well as experience in leading an organization through periods of change.
- A track record of supporting competitive grant proposals, including as an investigator, and organizing successful teams to pursue funding opportunities.
- Current awareness of research trends and federal funding directions; networks and relationships with sponsoring agencies.
- Demonstrated impeccable scientific judgment and an uncompromising commitment to research excellence and interdisciplinary collaboration.
- Ability to think strategically about the future of global science, and about the ways in which Carnegie Science can expand its role as an innovative leader of the scientific enterprise.
- A track record that demonstrates a dedication to creating a culture of inclusion and belonging
- Strong and persuasive communicator who will work with Carnegie Science's leadership to further build our organizational reputation and secure resources to advance our strategic priorities.
- A talent and track record for recruiting, developing, and inspiring a creative faculty and staff and a commitment to each parties' professional growth.
- Superb interpersonal skills, ability to listen effectively, and clarity in oral and written expression.
- Familiarity with research space planning, including planning and oversight of shared facilities and research resources.
- Management style that is open, transparent, and collaborative yet results-oriented.

## COMPENSATION AND LOCATION

This position is located in Pasadena, CA, on the Caltech campus. Pasadena is a flourishing and attractive community offering a wide range of amenities:

- High-quality housing, with a median home price of \$1,230,000, and the average rent for a two-bedroom apartment is \$3,450. The city includes many architecturally significant homes and buildings.
- Highly ranked public and private schools, including Pasadena Polytech, which is considered one of the best K-12 schools in the country.
- Light rail access to downtown Los Angeles, with easy links to the metropolitan transit system.
- Convenient access to airports. LAX is about 40 minutes away by car and the Hollywood Burbank airport is about 20 minutes away.
- More restaurants per capita than New York City and a thriving downtown offering a variety of national chains and local boutiques.

The starting salary for this position is anticipated in the range of \$300,000-350,000. Compensation will be commensurate with the final candidate's qualifications and experience.

## APPLICATIONS, INQUIRIES, AND NOMINATIONS

Screening of complete applications will begin immediately and continue until the completion of the search process. Inquiries, nominations, referrals, and CVs with cover letters should be sent via the Isaacson, Miller website:

<https://www.imsearch.com/open-searches/carnegie-science/life-environmental-sciences-division-director>

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*Carnegie is an equal opportunity employer. All applicants will receive consideration of employment without regard to race, color, religion, gender, sexual orientation, gender identity or expression, national origin, age, genetic information, disability, veteran status or any other characteristics protected by law.*

*We are committed to building an inclusive and diverse research community and we encourage applications by members of all underrepresented groups.*

*This document has been prepared based on the information provided by Carnegie Science. The material presented in this leadership profile should be relied on for informational purposes only. While every effort has been made to ensure the accuracy of this information, the original source documents and information provided by Carnegie Science would supersede any conflicting information in this document.*