

Leadership Profile

## President

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This Leadership Profile is intended to provide information about the Desert Research Institute (DRI) and the position of President. It is designed to assist qualified individuals in assessing their interest in this position.

## The Opportunity Overview

The Regents of the Nevada System of Higher Education (NSHE) invite inquiries, nominations and expressions of interest for the position of President of the Desert Research Institute (DRI). DRI's next President will be a distinguished, collaborative and entrepreneurial scientific leader who can advance the organization, increase its financial independence and promote its mission to excel in fundamental and applied research in the atmosphere, earth, water and biology to improve people's lives and the environment throughout Nevada, the United States and the world.

This is a compelling opportunity for a motivated individual to lead a research enterprise that advances environmental study, technological development, science education, and policies that impact the long term sustainability of the planet. Created in 1959 and with campuses in Reno and Las Vegas, Nevada, DRI is comprised of over 500 employees, which includes approximately 150 principal investigators who conduct research and development in more than 40 scientific fields. Its operating budget of \$50 million is funded through contracts and grants from the government, industry partnerships, state appropriations, investment income, and private philanthropy. DRI faculty members also teach courses and advise students at universities and colleges throughout the Nevada System of Higher Education.

DRI's faculty investigators are non-tenured, entrepreneurial and responsible for their own salaries from external grants and contracts. This blend of academic rigor and private-sector pragmatism has earned DRI a reputation for delivering rapid, high quality environmental and related sciences research in a businesslike fashion. Through its research on the effects of natural and human-induced environmental change and on advancing environmental technologies to assess our changing planet, DRI researchers increase scientific knowledge and understanding of the earth's environment, promoting preservation of diverse ecosystems, advancing responsible resource management, and improving human health and welfare.

As the chief executive officer, DRI's next President will be responsible for creating a shared vision while providing executive leadership and scientific direction. Reporting to the NSHE Chancellor and Board of Regents, the President has overall responsibility for the management and operation of the Institute and serves as the principal spokesperson and advocate to engage external constituencies, industry partners, and private donors to invest in DRI and its mission. She or he also promotes collaborations and represents the interests of DRI regionally, nationally and internationally.

Although a Ph.D. or equivalent terminal degree from an accredited institution in a related environmental discipline is preferred, the NSHE Regents will consider innovative leaders who possess knowledge of the environmental and related sciences as well as a record of advancing scientific and technological initiatives, research and education. The successful candidate must be a United States citizen and have demonstrated achievements in fundraising, leading on a broad intellectual front and developing important programs or initiatives in the environmental or related sciences and engineering. DRI's next President will be forward thinking and able to promote science and service priorities within funding opportunities and organizational capabilities. He or she will have a track record of successful leadership of a complex research organization and possess both the interpersonal and managerial skills necessary to build and operate an effective enterprise. The President will have evidence of a strong commitment to increasing diversity and inclusion in the environmental and related sciences community and will have demonstrated the highest level of integrity and ethical standards. Compensation will be based upon qualifications and experience. Additional information about DRI and this position can be found at <a href="http://www.dri.edu/dri-Presidential-search">http://www.dri.edu/dri-Presidential-search</a>.

For information on how to be considered or to submit nominations, please refer to the section, "Procedure for Candidacy" below.

## The Role of the DRI President

As the intellectual champion and chief administrative officer, the DRI President holds a significant and influential role in national scientific leadership and advancing the frontiers of the environmental and related sciences through pure and applied research and related technological development. This is a particularly important leadership role as societies respond to changes in the global climate and the environment. The DRI President is responsible for the overall success, strategic direction and operational excellence of DRI at its campuses in Reno and Las Vegas, Nevada, and facilities across Nevada and the globe. He or she will lead in creating a shared vision, collective strategic planning processes, and organizational changes in response to the shifting landscape of research funding, emerging opportunities and challenges that might arise for the Institute. Reporting to the NSHE Chancellor and Board of Regents (https://www.dri.edu/about/nshe-organizational-chart), the President serves as DRI's principal representative to the NSHE Board of Regents, Nevada institutions of higher education and other public and private entities.

#### **DRI Administrative Organizational Structure and Direct Reports**

The office of the DRI President consists of approximately a dozen direct reports that include a Vice President of Research & Chief Science Officer, a Senior Vice President for Finance & Administration & Chief Operations Officer, and other administrators who oversee:

- Government & Community Affairs
- Development
- Communications
- Legal Affairs
- Diversity and Diversity Outreach

A complete organization chart can be found at: <u>http://www.dri.edu/about/dri-administrative-organizational-chart</u>

## **Opportunities and Expectations for Leadership**

Last year DRI faculty, staff and stakeholders, along with the NSHE Regents, identified a number of strategic priorities, initiatives and areas of leadership importance to the Institute. These were reported in a DRI document entitled <u>Critical Objectives Task Force Executive Summary</u>. Among the many operational duties and responsibilities of the President, the next executive leader will be expected to pursue and advance these objectives while also paying attention to new and emerging issues and strategic opportunities.

# Promotion of Excellence in Environmental and Related Sciences Research, Training and Communication

The next DRI President will continue to build a research enterprise and an *esprit de corps* that strives for the highest levels of achievement in the environmental and related sciences by working at the cutting edge of research, recruiting and training the next generation of outstanding scientists, and communicating science and research results to a range of audiences through exceptional presentation skills. He or she will lead efforts to actively recruit and support high quality post-doctoral fellows and early career scientists to increase the breadth of DRI research

and establish long-term collaborations. As part of this effort the President will increase the visibility, attractiveness and scientific leadership of DRI through various external initiatives.

The highest quality of DRI research, products and services remains a chief priority of the Institute, and the President will ensure that resources, processes and procedures are in place to maintain excellence in scientific output through proposals, publications, reports, software and other research and development products. Providing support to effectively and broadly present and communicate these findings by DRI faculty to the science community and public will be a goal of the next President.

Given DRI's reliance upon extramural sponsored funding to support DRI's research mission, the President will need to enhance business development practices by identifying gaps in strategic research areas and funding opportunities with funding agencies and industry partners to increase revenue. Part of this effort will include enhancing DRI's brand recognition, visibility and value in the world of science and to potential customers.

#### Long-Term Sustainability and Operational Excellence

In today's competitive environment, the challenges facing leaders of nonprofit research organizations are formidable and most likely ongoing. Navigating the financial landscape and ensuring financial sustainability will be essential for DRI's next President. The next DRI President will need to be creative and entrepreneurial in identifying and developing diverse revenue streams to support the DRI mission of advancing the environmental and related sciences in the pursuit of knowledge.

The President will need to work collaboratively with the DRI Foundation to support and enhance the enterprise through increased fundraising and partnering efforts, developing proactive business development processes, and fostering more long-term research contracts that respond to environmental and climate change concerns. The President will need to engage constituencies who benefit from and recognize the importance of environmental research, discovery and education, such as governmental agencies, industry partners, foundations and private donors. Part of these efforts will leverage the Desert Research Corporation and facilitate the transfer of technologies and intellectual property to the commercial sectors that gain from DRI-supported innovations, products and services resulting from environmental research and technology development.

The intellectual capital and human resources are the foundation of DRI and its future, and therefore maintaining mentorship, training, and professional development programs for DRI personnel are a critical responsibility of the next President. Parallel to this effort will be assuring the retainment of talent and growing recognition mechanisms to incentivize faculty and reward excellence, research productivity, scientific contributions and technological developments.

The DRI President is responsible for the fiduciary obligations and business practices of the Institute, which includes annual expenditures of approximately 50 million dollars. As such the President will monitor and assess DRI processes and organizational structures to ensure best practices, accountability, operational efficiencies, appropriate centralization and cost effectiveness of scale. New operating methods and structures that enhance business practices and respond to advantageous opportunities should be explored and proposed to advance the DRI enterprise to become more self-supporting and financially independent. Maintaining, upgrading and, as appropriate, building facilities, laboratories and equipment will also remain

vital to the long-term sustainability of the Institute. Designing efficient ways to fund and upgrade IT infrastructure, research equipment and the physical plant will be important, long-term objectives and responsibilities of the President.

#### **Reputation and Visibility**

As the chief spokesperson, the DRI President is responsible for bringing greater recognition and prominence to the Institute and will advocate regionally, nationally and internationally for the environmental and related sciences and the many societal benefits of DRI's distinctive research, technology development, education and outreach programs. The President also serves as a convener and champion for the environmental sciences community and must continuously promote collaborations that benefit the interests of DRI and its collaborating institutions and partners.

Realizing these objectives will include increasing support for faculty involvement in professional societies, editorial boards, and participation in national and international committees, panels and symposiums that address the environmental and related sciences and related policy matters. As a recognized leader in the earth sciences, the DRI President will convene and host professional conferences at DRI campuses with other national and international leaders and audiences.

Enhancing DRI's reputation regionally and beyond will also entail partnering with private industry, philanthropic foundations, other research institutes, and universities to address specific environmental issues and scientific educational programs that benefit cities, communities and society at large.

#### Service to the State

DRI has the capabilities to serve as the *go-to* resource for responding to Nevada-related environmental issues and providing practical solutions. DRI and its President must continue in this scientific leadership role by increasing outreach and improving relationships with state and local agencies, identifying DRI experts who can engage legislative groups to address ongoing environmental concerns, such as drought and air quality, and leveraging former and existing associations to enhance scientific consulting services. DRI's successful track record of environmental research within the state can help build and lead appropriate teams with other NSHE institutions to conduct collaborative relevant research across Nevada, bringing greater visibility, value and recognition to the system. Competitive funding and cost sharing models could be considered to promote service to the state when funding Nevada-related environmental consulting and research.

#### **DRI's Role in STEM Education**

DRI plays a leadership position in the environmental and related sciences by pursuing cutting edge science and research. One of the primary purposes of DRI, as written in Nevada Statute (NRS 396.7951), is to encourage and foster a desire in students and faculty to conduct research, and to the discovery and development of talent for conducting research. Education at DRI encompasses the STEM disciplines (science, technology, engineering and math) in a cross-curricular approach, including K-12, higher education, career and professional development, and lifelong learning. This continuum, known as the STEM Stream at DRI, is a career-long and lifelong suite of programs for STEM research, education, and application. The President can strengthen this role by growing partnerships with educational institutions at state (NSHE),

regional, and national levels to create pathways for research-focused learning experiences and to diversify funding. DRI's participation in higher education is particularly important to DRI's overall mission and success with graduate students and postdoctoral researchers. The next DRI President needs to explore additional, mutually beneficial and financially sustainable programs that provide value and benefits to DRI, its faculty and students to meet the state's education needs and objectives. The President will engage the DRI STEM Stream, DRI stakeholders, and educational institutions, including NSHE, to create a strategic vision and plan for harnessing the strengths of DRI to more broadly educate and train students in the environmental and related sciences and to improve the global environment.

#### **Champion Transparency, Diversity and Inclusion**

DRI and NSHE are committed to diversity and inclusion of all faculty, staff and students. The next DRI President must continue to inspire and motivate staff at all levels while also recruiting and retaining a diverse and talented workforce. Given the many demographic and societal changes taking place nationally and internationally, the next President must also be attentive and sensitive to ensuring an organizational culture of openness, fairness and transparency that celebrates a diversity of thought and expression and that promotes an environment of tolerance, acceptance and inclusion. The new President must lend personal authority and passion to these efforts and ensure strong and consistent communications and collaborations across the enterprise.

## **Qualifications and Guiding Principles of Assessment**

The search for the next DRI President will be guided by this document and the values, goals and aspirations set forth by the original mission and mandate of the Institute. The following lists of duties, responsibilities and professional qualifications will be used to help the search committee assess candidates.

#### **Primary Duties and Responsibilities**

- Provides scientific, strategic, and administrative leadership and vision for DRI through consensus-building among DRI faculty, staff and stakeholders to ensure operational and administrative efficiencies.
- In concert with the DRI Foundation, expands philanthropic support to DRI for endowments and to fund specific DRI activities.
- Identifies opportunities and implement changes that are likely to lead to increased research funding from government, industry, and private organizations.
- Recruits, supervises and evaluates DRI leadership, including the Vice President of Research & Chief Science Officer and the Senior Vice President for Finance & Administration & Chief Operations Officer.
- Establishes and operates a sound management structure and procedures in order to
  ensure effective performance of DRI in scientific achievement, the provision of worldclass computational and observing facilities, the transfer of knowledge and technology
  for the benefit of society, education and outreach, and financial and business
  management excellence.
- Serves as the final decision maker and spokesperson on all DRI matters and as the primary liaison to the NSHE Chancellor and Board of Regents.

- Establishes and maintains an effective system of communication, consultation, and coordination with the NSHE Chancellor and Board of Regents, as well as with other agencies and sponsors, on operational matters related to DRI programs, facilities and administration.
- Leads the development of administrative plans, budgets and priorities for DRI and recommends these to the NSHE Chancellor and Board of Regents. Provides leadership on the development of DRI strategic plans and other documents related to the effective management of DRI activities.
- Keeps informed of emerging environmental science initiatives and policies and participates closely with DRI senior leaders in designing and carrying out activities to advocate for DRI's environmental and related sciences.
- Advocates for scientific education, training and outreach programs.
- Excels in communicating and speaking publicly to lead DRI and serves as an expert on national and international environmental science and education matters.
- Plays a leadership and service role in the national and international environmental and related sciences communities, e.g. serving on committees of the National Research Council and other advisory, planning or review committees.
- Ensures that all activities of DRI meet the highest standards of scientific, management, operational and ethical excellence.
- Works with Desert Research Corporation to facilitate technology transfer and commercialization.
- Travels regionally, nationally and internationally to represent DRI's interests.

#### Professional Requirements, Qualifications and Qualities

- A Ph.D. or other terminal degree from an accredited institution in a relevant discipline is highly preferred. In lieu of a terminal degree, candidates should have a demonstrated record of successful executive leadership and comparable credentials and/or experiences sufficient to warrant the respect and confidence of the DRI community and stakeholders.
- Citizen of the United States and be able to obtain and maintain both US Department of Energy "Q" and US Department of Defense Top Secret clearances, which will require a background investigation by the Federal government with subsequent reinvestigations.
- Broad knowledge and significant record of experience and achievement in the environmental or related sciences or engineering.
- Experience and/or strong ability and skill to raise external funds and increase revenue.
- Demonstrated ability to lead on a broad intellectual front for the environmental and related sciences.
- Strong interpersonal and collaborative skills.
- Demonstrated ability to work successfully with a range of constituencies, such as the university research community, appropriate governmental agencies, industry partners, and other interested entities.

- Advanced skill and demonstrated experience in planning, budgeting, managing, executing, and administering a complex research institution or facility of similar scale, including the ability to balance strategies and opportunities with capabilities and funding.
- Breadth of interest, vision, judgment, demonstrated through the successful management of research and/or technological development, and through effective service on national or international boards and committees dealing with science and public policy goals, strategies, organization and management.
- Demonstrated ability to provide scientific leadership, management, and guidance to a diverse research-based staff. Advanced skill in assessing priorities among research and facility objectives, resulting in high quality programs that integrate and complement the efforts of DRI's broad environmental and related sciences.
- Knowledge of the scientific, political and funding community relative to DRI's mission.
- Advanced skill in effectively communicating (orally and in writing) and advocating for programs, plans, activities and accomplishments to diverse audiences, including the scientific community, government agencies, the U.S. Congress, the private sector, and the public.
- Leadership skills to inspire and motivate staff of all levels, and with a demonstrated commitment to fairness, diversity and inclusion.
- Experience with organizational change management and ability to deal with competing institutional stakeholder interests, limited resources and ambiguity.
- Ability to address complex, sensitive, confidential and sometimes controversial matters with skill and diplomacy.
- Highest levels of integrity and ethical standards.

#### **Procedure for Candidacy**

Nominations and expressions of interest, including a CV and cover letter describing professional background and qualifications, can be sent in confidence to <u>DRI-President@wittkieffer.com</u>. Questions can also be directed to the above email address or by telephone (630-575-6936) to the search consultants assisting DRI: Brian Bloomfield and Zach Smith, Ph.D. The position will remain open until filled, but for initial consideration materials should be received by November 4<sup>th</sup>, 2016. The recruitment will be conducted in confidence until finalists' names are presented in the final interview agenda.

The Desert Research Institute (DRI) is an equal opportunity/affirmative action employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, sexual orientation, gender identity or expression, genetic information, national origin, political affiliation, disability status, protected veteran status or any other characteristic protected by law. DRI employs only U.S. citizens and persons lawfully authorized to work in the United States.

## The Desert Research Institute Overview

In 1959, the Nevada State Legislature passed NRS396.7951, creating a division of the University of Nevada specifically devoted to conducting research. From this, a small group of farsighted scientists, academic leaders, and entrepreneurs created the Desert Research Institute, a unique organization that combined the classic academic tradition of high quality basic research with the productive focus of applied interdisciplinary research. DRI became an autonomous division of the University of Nevada System (now called the Nevada System of Higher Education), on equal footing with its two educational campuses, in 1969. Before that, it functioned as a research division of what is now the system's northern university campus.

Through its studies to understand basic environmental processes, DRI also has served its earliest mission—the management and understanding of Nevada's arid land resources. DRI also has proven to be extremely responsive to the world's changing priorities. It has shifted the emphasis of much of its research to address environmental issues on a global scale and conducts studies on every continent in the world.

DRI's research calls on the expertise and methods of scientists from multiple scientific disciplines. DRI's highly skilled researchers are able to collaboratively apply their expertise toward effectively solving multi-faceted scientific questions, and this collective approach to research has helped make DRI successful in producing research of the highest quality and in competing for research funding.

#### **Basic and Applied Research at DRI**

DRI's research calls on the expertise and methods of scientists from multiple scientific disciplines. Highly-skilled scientists, engineers, technicians and students are collaboratively focused on understanding and answering critical environmental science questions about global climate change, water quality and availability, air quality, sustainability of desert lands, life in extreme environments, and more. More information about these areas can be found on the DRI Research page (<u>http://www.dri.edu/dri-integrated-research-themes</u>) and following the below links.

- Atmospheric Sciences: <u>http://www.dri.edu/atmospheric-sciences</u>
- Earth and Ecosystems:
   <u>http://www.dri.edu/earth-ecosystem-sciences</u>
- Hydrological Sciences: <u>http://www.dri.edu/hydrologic-sciences</u>
- Wildland Fire Science Center: <u>http://www.dri.edu/research-main/wildland-fire-science-center</u>

- Climate Data & Services: <u>http://wrcc.dri.edu/</u>
- Renewable Energy: <u>http://www.dri.edu/renewable-energy</u>
- Interdisciplinary Research: <u>http://www.dri.edu/research-at-</u> <u>dri/interdisciplinary-research</u>
- Center for International Water and Sustainability: <u>http://www.dri.edu/center-for-international-water-and-sustainability</u>

#### **Research Support at DRI**

DRI has become internationally recognized for its environmental research in disciplines ranging from microbiology to atmospheric physics. This research helps answer critical questions about

global climate change, water quality and availability, air quality, sustainability of desert lands, life in extreme environments, our archaeological heritage, and much more.

One of the challenges to building research programs in DRI's soft money environment is providing faculty with financial and human resources that facilitate innovation, encourage development of competitive research, and allow the patenting of new technologies.

Research support at DRI comes through the office of the Vice President for Research (VPR). Within this office the VPR has several key responsibilities, including promoting and advocating DRI's research and development activities, both internally and externally, through the investment of institutional resources and support services while ensuring strict compliance with Federal and State regulations regarding research practices and quality.

DRI's role and reputation with research sponsors, and local, state, and federal government representatives, and the Reno, Las Vegas, and rural Nevada communities is enriched by developing business structures and opportunities. Encouraging research through business development promotes economic diversification and the development of new technologies and high technology companies in Nevada. Future solutions to major environmental problems facing the residents of Nevada and the world are now within reach.

#### **Education and Outreach Programs at DRI**

Fostering scientific talent and providing research-focused educational opportunities are critical to the future of DRI. For higher education students, DRI provides a learning environment strongly focused on collaborative, interdisciplinary research. DRI faculty members participate in Atmospheric and Hydrologic Science academic programs with the University of Nevada, Reno, University of Nevada, Las Vegas, and Nevada State College. Students conduct their research at DRI while earning their degrees through the universities. More information about the various educational, support and outreach programs included below can be found at: <a href="https://www.dri.edu/education-and-outreach">https://www.dri.edu/education-and-outreach</a>

- Atmospheric Sciences Graduate Programs
- Hydrologic Sciences Graduate Programs
- Graduate Fellowships/Scholarships
- Graduate Assistantships

- DRI GRAD Association
- Courses/Programs at Storm Peak Lab
- Courses Taught by DRI Faculty
- 5th & 6th Grade Weather & Climate Program

#### **Outreach at DRI**

DRI's K-12 outreach programs directly benefit Nevada's students and the professional development of our teachers through science-based environmental education. DRI emphasizes "teaching the teachers" so they can bring real world knowledge back into their classrooms. Current programs include:

• **GreenPower Outreach Program**: GreenPower supports Nevada's preK-12 educators in science-based, environmental education by providing the tools, resources, and knowledge they need, so all students acquire the knowledge and skills needed to work, live and contribute in our community. GreenPower increases scientific knowledge and understanding of the earth's environment, promoting preservation of diverse ecosystems, advancing responsible resource management, and improving human health and welfare.

- **Green Boxes for Education Program**: Green Boxes are self-contained teaching kits that provide educators with a unit of lesson plans along with all of the supplies necessary to conduct each activity. Every box employs active learning strategies to engage students in hands-on projects that foster critical thinking and problem solving skills. These standards-based lessons are designed to enhance student literacy in various STEM subject areas, from water conservation in the Desert Southwest to the environmental impact associated with natural resource extraction. This resource is offered FREE of cost to any formal or informal educator in Nevada.
- **Storm Peak Lab Outreach Program**: The Storm Peak 5th and 6th grade weather and climate program is to inspire local students with science, while teaching them skills needed for success. The program encourages students to be lifelong learners in science and gain an understanding of the methodology of science, rather than factual recall.

#### **DRI Foundation**

Formed in 1982 as a not-for-profit, 501 (c)(3), the DRI Foundation was designed to cultivate philanthropic giving in support of the mission and vision of DRI. For over 25 years the Foundation trustees have worked with DRI benefactors to support environmental science research to maximize DRI's impact on improving people's lives throughout Nevada, the nation, and the world. Private philanthropy plays an integral part in supporting DRI's continuing research and educational outreach. The DRI Foundation's mission is to maximize DRI's global environmental impact by securing necessary funding, promoting DRI to multiple constituencies and expanding DRI's reach through its relationships with donors and other supporters.

The essence of the DRI Foundation is found in its leaders, those willing to dedicate their time and effort to the advancement of DRI. Led by Chair Charles T. Creigh, Jr., a 30-member volunteer Board of Trustees works with DRI's President to focus on private funding opportunities to increase DRI's strength and broaden its reach throughout Nevada, across the Nation, and around the World. More information about the DRI Foundation can be found at <a href="https://www.dri.edu/foundation">https://www.dri.edu/foundation</a>

#### **Desert Research Corporation**

The Desert Research Corporation (DRC) is the for-profit affiliate of the DRI Foundation and helps facilitate DRI technology to be commercialized. DRC aligns DRI scientists and innovation platforms with private-sector partners to drive the development of market-based solutions. With research funding streams changing from governmental to public-private partnerships, the DRC will play an increasing role in procuring funding sources through the translation of fundamental scientific research and technology development to commercial applications and services. More information about the Desert Research Corporation can be found at <a href="http://www.innovatedri.com/">http://www.innovatedri.com/</a>

#### **DRI Dandini Research Park**

The DRI Dandini Research Park is a developing district and initiative to promote research and provide a foundation for a community of collaboration between the private sector and world-

class facilities and research faculty of DRI, the University of Nevada with workforce development access to Truckee Meadows Community College. The National Oceanic and Atmospheric Administration (NOAA) operates its Western Regional Office for the National Weather Service at the DRI Dandini Research Park.

The material presented in this leadership profile should be relied on for informational purposes only. This material has been copied, compiled, or quoted in part from the Desert Research Institute documents and personal interviews and is believed to be reliable. While every effort has been made to ensure the accuracy of this information, the original source documents and factual situations govern.

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