

# College of Arts and Sciences LEADS 2025

DEPARTMENT OF  
BIOLOGY

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Department Head



**BE BOLD.** Shape the Future.

# NMSU Mission

The mission of the New Mexico State University system is to serve the diverse needs of the state through comprehensive programs of education, research, extension and outreach, and public service. As the state's land-grant and space-grant university, and as a Hispanic-Serving Institution, NMSU fosters learning, inquiry, diversity and inclusion, social mobility, and service to the broader community.

# NMSU Vision

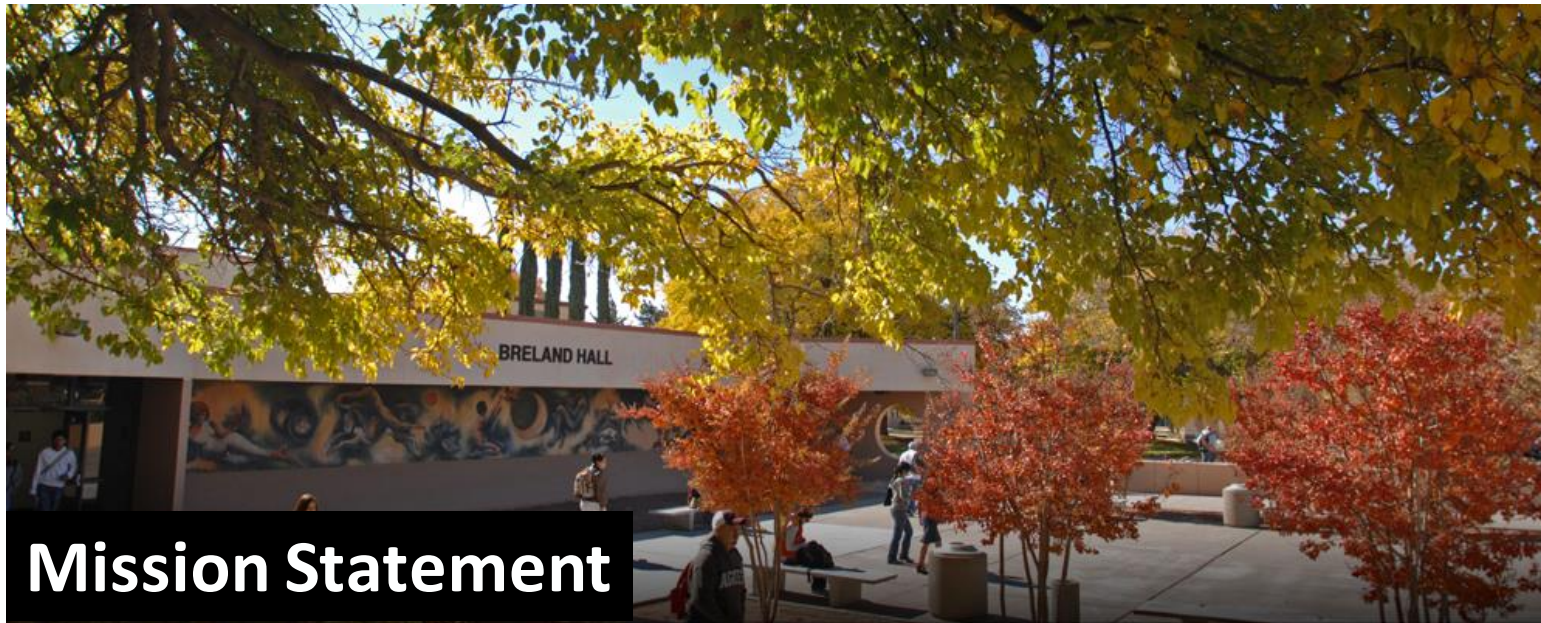
By 2025, the NMSU system will excel in promoting social mobility for our diverse student populations, achieve the highest Carnegie research status (R1), and maintain our Carnegie Community Engagement classification.



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# College of Arts & Sciences



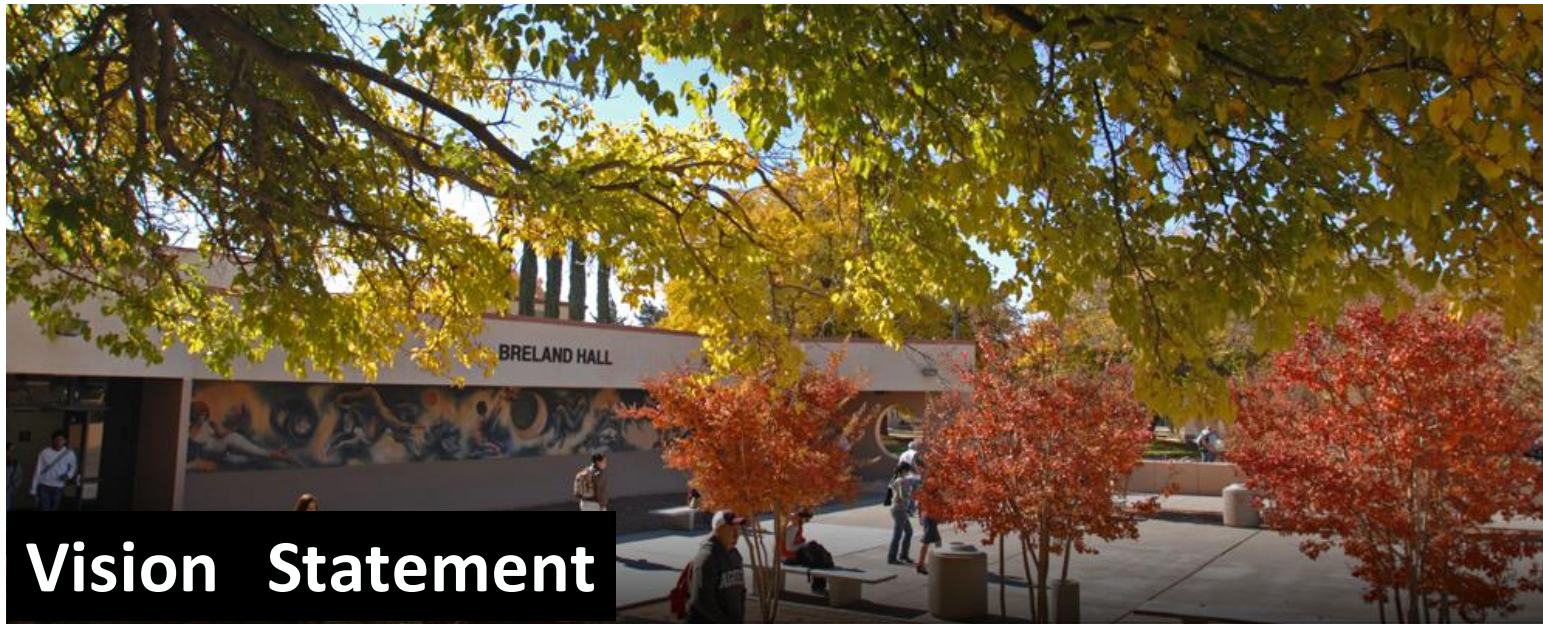
## Mission Statement

The College of Arts and Sciences is the intellectual core of New Mexico State University, providing cutting-edge academic programs supported by active research and creative activities. The College provides the foundational education for every NMSU student and a wide array of degrees preparing students to be life-long learners, knowledgeable and responsible citizens of our world.



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# College of Arts & Sciences

By 2025, the College of Arts and Sciences will excel in promoting academic success and social mobility for a diverse student population, sustain the university-wide vision of achieving the highest Carnegie research status (R1) through exceptional research programs and creative activities, and contribute to the social and economic development of communities locally, state-wide, and nation-wide.



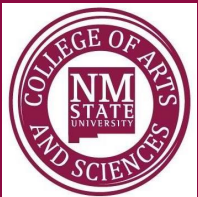
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# College of Arts & Sciences: **REAL**

- **Rigor & Excellence:** We believe the best education is rigorous, challenging, and demands perseverance. We believe that the best creative and scholarly work demands the same efforts. Those who excel in these endeavors should be recognized, cultivated, rewarded, and celebrated.
- **Exploring and Discovery:** We value and strive for excellence in research, scholarship and creative activities, positioning the College to be a leader in discovery and innovation, meeting the challenges of modern society and improving lives.
- **Accessibility:** We value being accessible to the diverse people of New Mexico and beyond. We value education and research that is inclusive, available, and affordable. We recognize diversity as a strength and an opportunity for excellence and success. We are the gateway to learning for all students, which provide us both an opportunity and responsibility to impact their learning experience in a positive way, developing a sense of inclusion, belonging and respect. We value serving the citizens of New Mexico, achieving a sustainable existence in the environment we occupy and integrating ourselves into the community and region of the border Southwest.
- **Learning and Knowledge:** We value learning and knowledge for their own sake, and creating broadly educated members of society who can think critically and improve their communities. We strive to model a love of learning and to instill a desire for a lifetime of learning. We value providing advanced education and scholarship through strong graduate and undergraduate programs.



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# Arts & Sciences Strategic Goals



**GOAL 1**  
Enhance Student  
Success and  
Social Mobility

**GOAL 2**  
Elevate Research  
and Creativity

**GOAL 3**  
Amplify  
Extension  
and Outreach

**GOAL 4** Build a Robust and Efficient College



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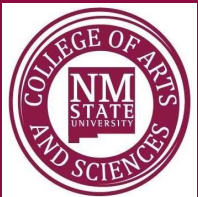


# Mission, Vision, and Values of the Department of Biology

The mission of the Biology Department states: "*The Faculty and staff of the Department of Biology seek to advance current knowledge of biology through world-class research and teaching.*" Encompassed within this mission are the following values:

- We value the application of evidence-based, teaching strategies that provide our majors with a broad knowledge of biology that 1) spans the vast scales of biological organization; and 2) prepares students careers in biology or subsequent post-graduate study.
- We value providing non-majors with a basic scientific literacy that will help them be informed citizens that understand and appreciate the role of science in their everyday lives.
- We value the involvement of undergraduate and graduate students in our research programs.
- We value the diversity of the student body of NMSU and the State of New Mexico, and strive to increase the representation of historically under-represented groups in the scientific enterprise as well as to provide an inclusive environment.
- We value the generation of new scientific knowledge, the dissemination of this knowledge to the scientific community, and the application of this knowledge to improve the health and welfare of citizens, society, and the environment both locally and globally.
- We value service within the department, the institution, and the broader scientific community.
- We value the activities that promote awareness and understanding of the biological world through outreach and the creation of media and resources that serve the general public.

These values underscore and expand upon the Core (REAL) Values of the College of Arts and Sciences. In formulating its strategic plan, the Department of Biology adopted College goals and objectives that are synergistic with the mission and expertise of the Biology department. The activities delineated in the strategic plan that will enable the department and college to meet its goals. The development of Departmental activities for this Strategic Plan derive from the results of our recent (2018) Academic Program Review and are consistent with key elements of the NMSU 2025 LEADS framework and the strategic plan set forth by the College of Arts and Sciences.

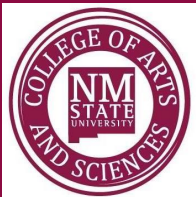


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# BIOLOGY GOALS

COLLEGE OF ARTS & SCIENCES



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# Goal 1:

**Enhance Academic Student Success and Social Mobility**



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# New Mexico State University Department of Biology

## 2019-2020 STRATEGIC TARGETS

OBJECTIVE	ACTION	METRICS	ASSIGNED LEADERS	PROGRESS MADE
<p>1. Participate in Aggie Experience and Aggie Welcome through open house demonstrations for visiting students and parents <b>NMSU LEADS 2025:</b> <b>Goal 1 Enhance student success and social mobility.</b></p>	<p>1.1 Establish an informative and attention engaging website and broader web presence that informs prospective applicants.</p>	<p>1.2 Percentage Enrolled in program 1.3 Percentage of students who have completed each year (soph, jr, sr) as compared to baseline freshmen numbers.</p>	<p>Dean Associate Dean Dept. Head Faculty</p>	
<p>2. Increase, Diversify and optimize graduate enrollment <b>NMSU LEADS 2025:</b> <b>Goal 1 Enhance student success and social mobility.</b></p>	<p>2.1 Provide detailed information on various programs. 2.2 Clear examples to potential career/future jobs. 2.3 Clarify/simplify application and admission procedures.</p>	<p>2.1 Percentage of new graduate students each year. 2.2 Job placement of graduates. 2.3 # of successful. recruits from efforts.</p>	<p>Graduate Dean Graduate Education Committee- Biology Director, RISE to the Postdoctorate</p>	



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# New Mexico State University Department of Biology

## 2019-2020 STRATEGIC TARGETS

OBJECTIVE	ACTION	METRICS	ASSIGNED LEADERS	PROGRESS MADE
3. Improve student services to support student success NMSU LEADS 2025: Goal 1 Enhance student success and social mobility.	3.1 Improve orientation to teaching and research. 3.2 Develop Individual Development Plans (IDP) for graduates. 3.3 Create database to track student success and their contribution to the teaching and research mission of NMSU.	3.1 Develop annual orientation program for new grad students. 3.2 Departmental tracking of faculty mentors and their students. 3.3 Work with OIA to obtain data.	Administration Graduate Dean Office of Institutional Analysis Department Head Faculty	
4. Increase student learning, retention, degree attainment, and work placement. <b>NMSU LEADS 2025: Goal 1 Enhance student success and social mobility.</b>	4.1 Institutionalize support for undergraduate peer instructors (BioCats). 4.2 Institutionalize BIOL 150- Intro to Scientific Thinking. 4.3 Regularize departmental career exploration activities. 4.4 Work with Admin/Foundation to fund renovation of Foster Hall 150 (TEAL-lite classroom) 4.5 Obtain support to resume advising for major. 4.6 Optimize timely completion of degree	4.1 Secured funding from Provost's office. 4.2 Schedule BIOL 150 regularly within the curriculum. 4.3 Schedule annual workshops for career advice. 4.4 Contact with possible donors/alumni through Foundation reps. 4.5 Work with College and Advising to house BIOL advisor in Foster. 4.6 Rework degree plans for various majors.		



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# New Mexico State University Department of Biology

## 2019-2020 STRATEGIC TARGETS

OBJECTIVE	ACTION	METRICS	ASSIGNED LEADERS	PROGRESS MADE
<p>5. Develop sense of belonging to College/Dept. in “Aggie Life”</p> <p><b>NMSU LEADS 2025:</b> Goal 1 Enhance student success and social mobility.</p>	<p>5.1 Improve communication with majors</p> <p>5.2 Develop casual engagement opportunities.</p> <p>5.3 Increase opportunities that provide students with professional development skills.</p>	<p>5.1 Social media- newsletter, twitter, Facebook, Instagram</p> <p>5.2 Career chats, clubs, open house with faculty speakers.</p> <p>5.3 Offer workshops, seminars, special courses.</p>	<p>Central Advising</p> <p>Undergraduate Education</p> <p>Committee-Biology</p> <p>Department Head</p> <p>Faculty</p>	
<p>6. Strengthen Career Pathways through service learning, experiential learning and research engagement.</p> <p><b>NMSU LEADS 2025:</b> Goal 1 Enhance student success and social mobility.</p>	<p>6.1 Institutionalize support for BIOL 302 and 309 (CURE) courses.</p> <p>6.2 Continue active participation in support, development and expansion of undergraduate research programs (BRIDGES, HHMI, MARC, LS-AMP, NSF REU).</p> <p>6.3 Secure funding for undergraduate research scholars.</p>	<p>6.1 Secured funding from Provost’s office and College to support experiential learning in courses.</p> <p>6.2 Regularize financial support for support staff and course release for faculty leads in these programs.</p> <p>6.3 Secure funding from Provost to extend program such as HHMI research scholars.</p>	<p>Provost</p> <p>College Dean</p> <p>VPR</p>	



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# Goal 2:

**Elevate Research and Creative Activities**



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# New Mexico State University Department of Biology

## 2019-2020 STRATEGIC TARGETS

OBJECTIVE	ACTION	METRICS	ASSIGNED LEADERS	PROGRESS MADE
<p>1. Be metric driven: Provide data and analytics for academic research.</p> <p><b>NMSU LEADS 2025:</b>  <b>Goal 4 – Build a Robust University System</b></p>	<p>1.1 Align with the new assessment process for scholarly activity reviews.</p> <p>a. Use the recent external evaluation to determine how each program is increasing research expenditures.</p>	<p>1.1 Percentage completed</p>	<p>College Administration            Department Head            Office of Assessment            Vice President of Research</p>	
<p>2. Convert our peer group data analysis process to our peer universities programs.</p> <p><b>NMSU LEADS 2025:</b>  <b>GOAL 2 – Elevate Research and Creativity</b></p>	<p>2.1 Assess where we position among our R1 peer groups in research expenditures.</p> <p>2.2 Based on assessment take appropriate actions.</p>	<p>2.1 Percentage completed</p>	<p>University Administration            College Deans            Office of Assessment            Vice President of Research</p>	



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