RISE5 –PHD SOLICITATION
FALL 2022 AND SPRING 2023 ADMISSION

PROGRAM GOALS

RISE to the Postdoctorate is supported by an NIH grant. The federal agency specifies the following goals (NIH PAR-10-004):

- "The goal of the RISE Program is to increase the number of students from UR groups in biomedical and behavioral research who successfully complete the Ph.D. degree in these fields."
- "For the purpose of the RISE Program UR groups include those reported by the National Science Foundation (NSF) as well as the National Academies to be nationally underrepresented in biomedical and behavioral sciences (i.e., African Americans, Hispanic Americans, American Indians, and Natives of US Pacific Islands, and people with disabilities)".

As per agency stipulation (NIH PAR-10-004): "To receive salary support from the RISE program, students must be **U.S. citizens, permanent residents, or non-citizen nationals** and must be **enrolled full time in academic degree programs in biomedical or behavioral science fields at the applicant institution**". NIH prohibits appointment of students concurrently supported by other federal funds.

PROGRAM BENEFITS

- RISE 5 is structured to provide the skills, resources, and knowledge necessary to earn a **PhD** (note that MS students are not eligible) and secure a competitive postdoctoral appointment at a research-intensive institution. The program offers professional development activities and focused research training enhancements.
- Students are eligible for RA appointments for up to 12 months per grant year for 20 hrs/week of effort (renewable yearly pending student progress). Students are eligible for tuition remission, health insurance reimbursement, supplies, travel to conferences, and paid research internships at partner institutions. All appointments and benefits are contingent on availability of external funds.

STUDENT ELIGIBILITY

Doctoral students who believe their participation will fulfill the goals for RISE specified by NIH (above) and meet the following requirements are encouraged to apply:

- full-time matriculation in a PhD degree program at NMSU (confirmable on NMSU transcript).
- Students who have not yet taken their **graduate qualifying exam** are preferred. Students who have already taken their **graduate comprehensive exam** are not eligible for the RISE program.
- above average academic standing. New NMSU grad students must have an undergrad BA/BS in a STEM discipline and should have a minimum 3.3 undergraduate science GPA; students who have completed graduate work at NMSU should have a 3.4 graduate GPA.
- dissertation research within the scope of the NIH mission (http://www.nih.gov/about/mission.htm) and under the direct supervision of **two** members of the NMSU Graduate Faculty (https://gradschool.nmsu.edu/For%20Faculty%20and%20Staff/index.html) as specified below.

MENTOR ELIGIBILITY

A student must identify both a primary mentor and a co-mentor. One of these mentors should have his/her primary academic affiliation in an engineering department and the other should have his/her primary academic affiliation in a life sciences department. Faculty may nominate 1 student per application round and may serve as primary mentor a maximum of 2 RISE supported students at a time.

Any member of the NMSU Graduate (Doctoral) Faculty (http://gradschool.nmsu.edu/gradfaclist.php#Alpha) who holds a tenured or tenure-track position at NMSU and meets these requirements may serve as a RISE mentor:

- Research expertise and experience relevant to bioengineering, biomedical, or biobehavioral research, with preference for mentors with a track record of interdisciplinary collaboration.
- Preference will be given to mentors with a track record, appropriate to seniority, of mentoring underrepresented minority students to graduate degrees
- Resources to support the student's project (collaborators, equipment, facilities, funding, etc)

APPLICATION PROCESS

Interested students and their mentors should submit an application (see below) to **Ms. Vanessa Fisher (vanessao@nmsu.edu)** with the subject line: **"RISE 5 Year 5 New PhD Applicant: Your Name".** Ms. Fisher will contact you to confirm receipt of the application:

Successful degree completion is dependent on the training environment provided by the faculty dissertation advisor. RISE dissertation faculty are expected to provide the mentorship that will enable the continued professional success of a new PhD: continuance to a postdoctoral appointment in a research institution under the guidance of an accomplished mentor.

Due to the importance of the mentor-mentee model**, the RISE to the Postdoctorate application is divided into a student and mentor component**. Successful applicants should meet RISE eligibility requirements, be ready to fulfill the program's expectations, and choose a mentor who meets the requirements set forth by the RISE program.

The Program Coordinator, Ms. Vanessa Fisher (vanessao@nmsu.edu), Program Directors, Drs. Jessica Houston and Dr. Charles Shuster (Houston jph@nmsu.edu ; Shuster, cshuster@nmsu.edu) and the Chair of the Admissions and Evaluation committee, Dr. Omar Holguin (frholgui@nmsu.edu) are available to assist students with identifying NMSU faculty with related research interests and to answer questions about the application process.

Application Requirements: Mentor Component

1. MENTOR and CO-MENTOR NIH BIOSKETCH (non-fellowship). Please see the following website for template and instructions: https://grants.nih.gov/grants/forms/biosketch.htm
2. INDIVIDUAL TRAINING PLAN FOR MENTEE (INCLUDED AT END OF THIS FORM). Please note that completing this form requires a three-way meeting between mentor, co-mentor and mentee; all to participate concurrently. Ideally, this meeting would happen in person but can happen electronically as needed.
3. MAJOR MENTOR LETTER OF SUPPORT. This letter must acknowledge that the mentor has met with the applicant either in person or electronically and has discussed: (i) the mentor's philosophy and practice of mentorship, (ii) the student's training, expectations for the Ph.D., and long-term professional goals, (iii) potential dissertation project(s), (iv) how the disciplines and research expertise of the mentor and co-mentor will be integrated in such dissertation project(s). This letter must also describe the resources, including grant support, and facilities available to support the student's training.
4. CO-MENTOR LETTER OF COMMITMENT: This letter must acknowledge that the secondary mentor had met with both the major mentor and the applicant, either in person or electronically, and

has discussed: (i) the co-mentor's philosophy and practice of mentorship, (ii) the student's training, expectations for the Ph.D., and long-term professional goals, (iii) potential dissertation project(s).

Application Requirements: Student Component

PLEASE REMOVE OR BLACKOUT ALL SOCIAL SECURITY NUMBER AND DATE OF BIRTH INFORMATION FROM YOUR APPLICATION

1. Cover letter addressed to the RISE Student Admission and Evaluation Committee
2. A copy of NMSU Graduate School acceptance letter OR current transcript showing degree being pursued
3. Resume or CV
4. Calculation of science GPA for graduate and undergraduate classes, listing separately all graduate and undergraduate courses.
5. A copy of your unofficial transcript
6. Two-to-three letters of recommendation, excluding those from your NMSU RISE mentors. **These are to be submitted directly to Ms. Vanessa Fisher (vanessao@nmsu.edu) and are not to be provided to the student.**
7. A PDF copy of any publications (published, submitted, in press). Note that publications are not required for admission.
8. RISE Goals Participation Statement. In 500 words or less, address how your participation will further the RISE goals for students established by the National Institutes of Health **(NIH PAR-10-004)**:
   - "The goal of the RISE Program is to increase the number of students from UR groups in biomedical and behavioral research who successfully complete the Ph.D. degree in these fields."
   - "For the purpose of the RISE Program UR groups include those reported by the National Science Foundation (NSF) as well as the National Academies to be nationally underrepresented in biomedical and behavioral sciences (i.e., African Americans, Hispanic Americans, American Indians, and Natives of US Pacific Islands, and people with disabilities)."
   - As per agency stipulation (NIH PAR-10-004): "To receive salary support from the RISE program, students must be U.S. citizens, permanent residents, or non-citizen nationals and must be enrolled full time in academic degree programs in biomedical or behavioral science fields at the applicant institution". NIH prohibits appointment of students concurrently supported by other federal funds, and of individuals on temporary visas, those seeking asylum, or refugees.
9. Research Statement (2000 words maximum). Applicants should be sure to address as many as applicable in their statement:
   - Interest areas within biomedical/bioengineering research and human health
   - Previous research experience and its biomedical/bioengineering relevance
   - Long term professional goals
   - How participation in RISE mentored research and RISE professional development activities will help you reach your goals

Review of Applications

The RISE Student Admission and Evaluation committee reviews all applications and makes recommendations to the Program Directors regarding student awards.

RISE TO THE POSTDOCTORATE PARTICIPATION EXPECTATIONS AND REQUIREMENTS

Summative Program Expectations of Mentors

- To have a clear understanding of, and support, the expectations of the RISE program for the student
- To ensure frequent, clear communication among the primary mentor, co-mentor and trainee
- To create individualized developmental objectives for students that are reasonable and will increase the mentee's research competitiveness.
- To remain committed to the continued involvement with the program throughout the total period of the mentee's participation in RISE.
- To serve as a professional resource and faculty role model for program developmental activities for RISE students.

Summative Program Expectations of RISE Students

- To maintain a bioengineering research project or a biomedical or biobehavioral research project with an engineering component.
- To participate in all program activities, particularly professional and research skills development workshops and courses
- To dedicate 20 hours per week to dissertation research. The RISE award does not support students to attend classes nor to participate in clinical training experiences. Hours dedicated to research and dissertation credit (550, 598, 600, 698, 700 etc.) also do not count toward the 20 hours/week of RA support.
- To complete the PhD in 5 years or less
- To maintain a minimum 3.4 GPA
- To pass the qualifier exam before the 3rd semester
- To pass the comprehensive exam before the 7th semester
- To disseminate of research findings at a national conference at least once during the course of training.
- To comply with institutional and federal guidelines for *Responsible Conduct in Research*
- To apply for independent funds for meeting travel from conference organizers and university sources (department, graduate school, etc.).
- To begin to publish as authors or co-authors by their third year and to complete the degree with at least three publications, at least one of which should be a first author publication.
- Note. While recognizing that the time to degree may vary between students for many reasons, the RISE program goal for degree completion is 5 years for a student entering an NMSU PhD program with a BS and 3-4 years for a student entering an NMSU PhD program with an MS degree.
- Note. Students are encouraged to submit grant applications that will enable them to secure independent funds and gain familiarity with grantwriting.

Benchmark expectations

1. Enroll in developmental courses:
    a. **BCHE 647 of BIOL 541** "Professional Development for Grad Students in Biomedical Sciences"
    b. **BIOL 540** "Science and Ethics" (if not previously completed)
2. Meet individually with the Program Directors and other mentors as specified by Program Leadership
3. Complete safety and ethics training requirements
4. Submit annual progress reports, which will include detailed individual development plans. Your progress will be evaluated by your mentor, the RISE evaluation committee, and the external evaluator
5. Attend invited RISE speaker seminars and Professional Development and Technical Skills Research Workshops during the academic year and during the summer term
6. Participation in a research externship at least once during PhD program is encouraged.

RISE5 Individual Development Plan for Use in Application for Admission

***Please note*:** The RISE expectation is that this document will be completed during a three-way meeting among the prospective student, mentor and co-mentor. Ideally, this meeting would happen in person but it can be conducted electronically if necessary. Feel free to expand the space taken by individual sections of this document as necessary to provide desired level of detail.

Student Name: **Primary Mentor Name:** **Secondary Mentor Name:**

Student's Professional Goal:

Student's Goal for Position to Follow Graduation:

Thesis project working title:

General Schedule for Communication Among Student, Mentor and Co-Mentor (ie how often are lab meetings, individual meetings, etc. to be held as a general rule):

Student's major strengths and previous training with respect to professional goal:

Student's major weaknesses and training gaps with respect to thesis research, general professional development:

Training Plan

Semester #	Semester/Summer	Courses	Graduate Exams	Research Goals	Publication/ Presentation Goals	Other Professional Development Activities
1						
2						
Summer						
3						
4						
Summer						
5						
6						
Summer						
7						
8						
Summer						
9						
10						

Additional comments:

I acknowledge that the three co-signers have met, either in person or electronically, on _____ (date here) to discuss and complete this individual development plan, and I agree that this represents a reasonable and fruitful path to degree completion and advancement to professional goal.

Student Signature: _____

Primary Mentor Signature: _____

Co-Mentor Signature: _____

This page is just to be used for your reference-these are the factors used by the admission committee in evaluating your application. Please use this to submit a strong application.

RISE Application Rubric:

Please state Yes or No

Mentor eligibility: Has two mentors in appropriate fields?
Mentor and/or Co-Mentor has a track record of inter-disciplinary collaboration?
Mentor and/or Co-Mentor has a track record of mentoring URM students?
Mentor and/or Co-Mentor have resources to support the student?
Student publications provided?
Grad school acceptance letter OR current transcript provided?

Please rank all categories below from 5 (highest) to 1 (lowest)

Mentor letter of support: meets guidelines, detailed, thoughtful?
Co-mentor letter of commitment: meets guidelines, detailed, thoughtful?
Individual Development Plan: thoughtful, appropriate, detailed?
Mentor Biosketch: Mentor has appropriate background, productivity, training experience commensurate with rank?
Co-mentor Biosketch: Co-mentor has appropriate background, productivity, training experience commensurate with rank?
Cover letter: Clear, thoughtful?
Student Transcript (5=4.0, 4=3.5, 3=3.0, 2=2.0, 1 = < 2.0); can decide to give different weight to general and science GFA in this ranking
Student Resume/CV: well-formatted, level of accomplishments, balance of accomplishments?
Letters of Recommendation:Personal, Detailed, Enthusiastic?
Student Goals/Participation Statement: Responsive to guidelines, well-written, detailed, appropriate?
Student Research Statement: interest area within biomedical research/bioengineering and human health well developed? Previous experience well described?
Student Research Statement: Clear articulation of how participation in RISE will help student reach goals?
TOTAL POINTS

Other comments

Are there other achievements (publications, service, etc.) of which RISE should take note?
Please answer Yes or No and describe in detail in the comments section*

In your judgement, is this student (Please answer Yes, No or Don't Know)

Eligible for RISE?

Admission Recommendation

Do you recommend that this student be admitted to RISE?
(Please answer Yes or No or Yes with Conditions or No with encouragement to Reapply)