

## Research Tier I Research and Creativity Grant

### Eligibility:

Any College of Allied Health student ***who is in good academic standing and not on academic or professional probation***, and who is conducting research and presently enrolled in the:

- B.S. in Communication Sciences and Disorders
- B.S. in Medical Imaging and Radiation Sciences - Nuclear Medicine
- B.S. in Medical Imaging and Radiation Sciences - Radiation Therapy
- B.S. in Medical Imaging and Radiation Sciences - Radiography
- B.S. in Medical Imaging and Radiation Sciences - Sonography
- B.S. in Nutritional Sciences
- B.S. R.S. Capstone

### Funding:

One or two awards of up to \$500 each may be granted per academic year based on availability of funds and quality of applications received. Funding will cover a period of 9 months, and **all funds must be expended no later than June 30<sup>th</sup>, 2018**. Award funds will be distributed to the student's mentor through the department. Awarded funds may be used only according to approved OU policy and at mentor's discretion. Please note that these are not travel awards, so only a minority of the total funds requested in any application should be applied to travel expenses. ***Awardees are required to submit their project for poster or oral presentation at the 2018 CAH Research Day and at GREAT Symposium or OU Tulsa Research Day. Awardees may be requested to also present at other appropriate on-campus venues as determined by the CAH Research Committee.***

### Application:

Interested student applicants should initiate a proposal only after receiving approval and guidance from the faculty mentor. The student applicant assumes ultimate responsibility for following the application guidelines as specified below. **Any proposal that does not meet all criteria will be considered incomplete and will NOT be scored.** After funding decisions are made, authors of incomplete applications will be notified that their proposals were not scored. They are eligible to submit a complete application for future funding cycles only.

**All applications must adhere to ½ inch margins, 12 point Times New Roman, single spaced format.**

1. **Cover page** includes:
  - a. A concise yet appropriately descriptive title of the proposed research.
  - b. Student's name, program and year in the program, name of research mentor and any other faculty on the project, and indication if the research study is the student's dissertation or another project.
  - c. Signature of the research mentor approving the research study. ***By signing, the mentor confirms that he/she has read the proposal in full, contributed guidance as needed, and that the application is worthy of funding. The mentor further agrees to provide sufficient oversight and support from start up to dissemination and will ensure that the project is completed if funded.***
2. **Abstract (1/2 page limit)** – Organize as Background/ Purpose or Aims/ Methods/ Future Use of Data. Future use of data should describe how this project will inform larger submissions, the career trajectory of the student, and/or otherwise advance the scientific field.
3. **Narrative (3 pages)** – Must include the following sections

- a. **Background/significance (1 page limit):** Use a succinct review of relevant current literature to highlight the research gap or otherwise provide compelling support for the need for this project.
- b. **Study Aims (1/2 page limit)** Must be measurable and clearly emerge from the background provided/ research gap identified. Limit aims to those which can be reasonably answered within the scope of the project, considering the available resources and limited timeline.
- c. **Participants/ Recruitment Strategy:** This should include number of participants corresponding with adequate power analysis to achieve a minimum 80% power, assuming a 5% chance of a type 1 error. If power analysis is not appropriate for the project (for example, in case of a pilot study), include explanation on why it is not included.
  - i. Applicants are encouraged to meet with Jonathan Baldwin ([Jonathan-D-Baldwin@ouhsc.edu](mailto:Jonathan-D-Baldwin@ouhsc.edu)) to discuss power/statistical analyses prior to submitting their proposal.
- d. **Methods:** Include a detailed record of measurement strategies which will adequately answer the primary and subsequent aims. In addition, include a detailed statistical analysis plan indicating the proper inferential tests and margins of error.
- e. **Timeline:** Include a table organized with each month of funding as a column. For rows, include only broad categories of research activity (for example, 'participant enrollment,' 'data cleaning'). **See attached template.**
- f. **Expected Outcomes/ Future Use of Data (1/2 page limit)**
4. **References (1 page limit):** Follow accepted format of the primary journals in your field.
5. **Budget and Budget Justification (2 page limit): Use the budget pages provided.** Include sufficient detail in your justification for each expenditure outlined in your budget. Organize your justification using headings taken from the rows on the budget form (for example, 'Equipment'). Describe the role of all personnel who will receive support, and also any who will donate their effort. Budget cannot exceed the maximum amount provided by the award.
6. **Biosketch (3 page limit):** Follow current NIH guidelines, ***with the exception of adhering to a 3-page limit*** for this proposal. Be sure to write a customized personal statement specific to your proposed role as PI on this project. This information will be reviewed under 'investigator' and 'environment' scoring criteria. ***For the student PI only, publications may include abstracts that have been presented nationally or locally, or publications that were not peer reviewed, however please clearly note the citation as such [abstract presented at. . . ] or [no peer review].***
7. **Mentor Biosketch:** The mentor biosketch has a 5-page limit and should be updated for the role of mentor on this proposal.
8. **Mentor Letter of Support:** The mentor's letter of support should describe his or her willingness to support the student investigator however needed to complete the project. If the project is funded, the mentor is responsible for seeing that the project is completed. The letter should address the significance of the project, and describe its innovative qualities, the strength of its research approach, the qualifications of the student investigator, and the capacity of the research environment to support the proposed work. It is expected that project outcomes will contribute to the College of Allied Health's mission of excellence in professional education, scholarship, and/or clinical care.
9. **Other Letters of Support (optional – the student applicant may include 1 additional letter of support).** This is recommended if a co-investigator will act as a secondary mentor. For example, a co-investigator should include a letter of support detailing their expected contribution if they are to provide expertise with a technology you have proposed and with which your primary mentor has no experience).

**SCORING:** Applications will be scored according to the National Institute of Health (NIH) current peer review scoring system. (See [http://grants.nih.gov/grants/peer\\_review\\_process.htm](http://grants.nih.gov/grants/peer_review_process.htm)) In accordance with this system, each application will be scored using a 9-point scale (1= exceptional, 9=poor; 5 = good, medium-impact application). This scale is used to score each individual review criterion, and also when establishing the summary (or 'impact') score, which is NOT merely an average of the criterion scores. The grading rubric is attached to guide you in preparation of a competitive proposal.

## Tier I Research and Creativity Grant Scoring Template

Student: \_\_\_\_\_ Degree \_\_\_\_\_ Department: \_\_\_\_\_

Faculty Mentor: \_\_\_\_\_ Title of Project: \_\_\_\_\_

**Checklist of Enclosed Grant Components:** To be considered complete, each of the following components must be present **and adequate** (as judged by the reviewers). A component is inadequate if directions (format, content) were not followed, or if the quality is poor (corresponding to 8 or 9 on the 1-9 NIH scale). Applications with one or more 'inadequate' components will be considered incomplete, and will not undergo full review.

	Adequate		Adequate
Cover page		Budget	
Abstract		Budget Justification	
Narrative with all components (Aims, Timeline, Analysis Plan, Future Use of Data, etc)		Biosketch <ul style="list-style-type: none"> <li>• Student</li> <li>• Mentor</li> </ul>	
References		Mentor Letter of Support	

### Reviewer Instructions:

1. Evaluate each proposal on the following **5 criteria** using the NIH 1-9 rating scale. For each criterion, write your choice as a whole number from 1-9 in the appropriate column. **Include summary comments of strengths and weaknesses to support each score.** Refer to the following link for guidance on scoring: [http://grants.nih.gov/grants/peer/guidelines\\_general/scoring\\_system\\_and\\_procedure.pdf](http://grants.nih.gov/grants/peer/guidelines_general/scoring_system_and_procedure.pdf) When scoring each criterion, consider the following descriptions, as modified from those provided to NIH reviewers:
  - a. **Significance:** Does the project address an important problem or a critical barrier to progress in an Allied Health field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive related Allied Health field(s)? ***If short-term national impact is limited, consider immediate local significance*** (future use of data may support ongoing work at CAH, candidate development, advancement of a lab, new collaborations, extramural applications).
  - b. **Investigator(s):** Consider both the student and mentor biosketches and any letters of support in this rating. It is understood that as a student, the PI may have little or no research experience, but based on biosketches and letters of support, ***is the team well suited to execute the project and use results for future studies or clinical application***(as described? Is the mentor's experience (possibly with expertise of an identified co-I) sufficient to guide the student PI in conduct of the planned research?
  - c. **Innovation:** Does the application challenge and seek to shift current research or clinical practice paradigms in an Allied Health field by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?
  - d. **Approach:** Is execution of the project feasible ***with the proposed resources (considering budget and budget justification) and within the 1-year funding period (considering methods, timeline)***? Are the overall strategy, methodology, and statistical analyses well-reasoned and appropriate to accomplish the specific aims? Are potential problems recognized, and alternative strategies presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed? If clinical research, consider feasibility of recruitment, the degree of participant and investigator burden posed by the

planned study procedures. If animal research, consider necessity of the proposed animal model (number of animals, experimental exposures) in light of potential knowledge to be gained.

- e. **Environment:** Will the scientific environment contribute to the probability of success? Are institutional support, equipment and other physical resources available to the PI/mentor adequate? Will the project benefit from unique features of the lab(s), clinics, or community settings, subject populations, collaborative arrangements?

2. Provide an **overall ‘impact’ score**, keeping in mind that this is NOT an average of your criterion scores, but is your answer to the question **‘How likely is this project to exert a sustained, powerful influence on the field?’** Note that a proposed project may not be particularly innovative, but may be necessary to advance the field. **Provide summary comments to support your score.** Refer to the following link for guidance.

[http://grants.nih.gov/grants/peer/guidelines\\_general/scoring\\_guidance\\_research.pdf](http://grants.nih.gov/grants/peer/guidelines_general/scoring_guidance_research.pdf)

CRITERIA	High (1, 2, or 3)	Medium (4, 5, or 6)	Low (7, 8, or 9)	Strengths	Weaknesses
Significance	—	—	—		
Innovation	—	—	—		
Approach	—	—	—		
Investigator	—	—	—		
Environment	—	—	—		
<b>SUMMARY IMPACT SCORE</b>	—	—	—		

**OTHER COMMENTS:**