

**Autophagy, Inflammation, and Metabolism (AIM)
Center of Biomedical Research Excellence (CoBRE)
Pilot Program Request for Applications
January 19, 2021**

The Autophagy, Inflammation, and Metabolism (AIM) CoBRE Center is offering pilot awards in support of its mission to advance investigation into the role of autophagy in disease.

AIM's Pilot Program provides grants to investigators with the intention that they will use the funds to generate preliminary data to apply for external funding (preferably through a variety of NIH mechanisms, but also through other funding sources). AIM is currently accepting grant applications for the 2020-2021 funding period. Proposals must be received by 5:00PM MST on **February 10, 2021**, and the funding period is anticipated to be March 1, 2021 through July 31, 2021.

For these awards, proposals should incorporate a basic science approach and should address the topic of autophagy, inflammation, or metabolism in any disease context. Applications are welcome if their science is aligned with autophagy, inflammation, or metabolism. If there are no animal or human subjects, please indicate so. If animal studies are proposed, an IACUC approval must be obtained. IRB is required for human studies.

One of AIM's goals is to increase the autophagy based as well as inflammation and metabolism research community at UNM and within New Mexico. Use of AIM's scientific core facilities is strongly encouraged for AIM-supported pilot projects. AIM supports the following scientific core facilities and capabilities:

Scientific cores:

(Director: Judy Cannon, PhD, Larry Sklar, Ph.D.)

Autophagy core

1. Animal resource: Breeding pairs of autophagy and autophagy-related gene transgenic mice for research in pilot, mPI and main personnel laboratories (IACUC approval needed)
2. Cellomics high content microscopy: Quantitative microscopy for autophagy and lipid droplets as well as other intracellular profiles/organelles (e.g. lysosomes, peroxisomes, potentially mitochondria, nuclear translocation, etc.). Data generated are based on unbiased data collection and represent various numerical parameters (number/cell; area/cell, percent overlap, etc.), as well as statistics on large number of cells.
3. Amnis: as above (autophagy measures) for non-adherent cells.

Inflammation and Metabolism core Seahorse: Oxidative phosphorylation vs glycolysis on adherent and non-adherent (special gel embedded) cells.

1. Amnis: flow cytometry for intracellular cytokines, and other profiles in inflammatory and immune cells, etc.

FUNDING

It is anticipated that up to two pilot awards will be funded in this cycle (contingent on the availability of funds), with an award date of approximately **March 1, 2021**. Awards will be made for five months of support (through July 31, 2021) for amounts up to \$20,000 for the duration of the project (direct cost award; indirect costs are covered from P20 automatically). Budgets may include lab supplies and salary support for graduate students or other personnel as needed to complete the proposed work. The AIM CoBRE may recoup unspent moneys at

the end of the six-month award period.

ELIGIBILITY

We welcome faculty applicants from the University of New Mexico Health Sciences Center. To be eligible for funding, applicants must be **PI-eligible employees** of the University of New Mexico. One of the AIM CoBRE's primary goals is to mentor and support junior investigators, so funding priority will be given to researchers who have not received research funding as a PI on a federally funded grant. Senior investigators will also be considered if they can demonstrate that their application represents a significant change in the scope of their current research program. HSC research faculty are encouraged to apply. If so, a letter of support from mentor will be required.

Important: If applicable, IRB and/or IACUC approval must be secured prior to submission of the pilot award application and notice of such approval should be included with the proposal. If no (i) human specimens and/or subjects involved (per NIH definitions) (ii) animal work (per NIH definitions) please explicitly state so at the end of the application.

DEADLINE FOR SUBMISSION

Deadline for this submission cycle is 5:00PM MST Friday, February 10, 2021.

MENTORING AND THE AIM PILOT PROGRAM

An important part of AIM is to provide mentoring services to junior, unfunded, and to more senior investigators who feel they need mentoring advice. As part of the AIM pilot award program, each applicant at the Assistant Professor level or lower is expected to name a formal mentor with whom regular mentoring interactions will occur, and to create a mentoring plan. The mentor may be any qualified senior investigator at UNM HSC.

APPLICATION GUIDELINES

Applications should be prepared in general accord with the NIH PHS 398 application guidelines (PHS 398 Revised 1/2018) available from <https://grants.nih.gov/grants/funding/phs398/phs398.html>

Applications must be submitted electronically as a signed pdf document by **5:00PM** on the deadline date. **Applications received after this time will not be reviewed.**

Please include the following sections in your application:

1. Form page 1: Face Page (<https://grants.nih.gov/grants/funding/phs398/fp1.pdf>). **YOU DO NOT NEED TO OBTAIN OSP SIGNATURE;**
2. Form page 2: Project Summary/Abstract (<https://grants.nih.gov/grants/funding/phs398/fp2.pdf>). **FOR THE PURPOSES OF THIS CALL, YOU MAY LEAVE THE "RELEVANCE" SECTION BLANK;**
3. Form page 4: Detailed Budget for Initial Budget Period (<https://grants.nih.gov/grants/funding/phs398/fp4.pdf>).
4. A detailed budget justification
5. A research proposal of no more than three pages (Specific Aims + 2 additional pages) that contains the following sections. **Each section must be addressed separately with its own heading:**
 - a. Specific Aims
 - b. Research Strategy
 - i. Significance
 - ii. Innovation

iii. Approach

- c. A statement to indicate how the project will use AIM core facilities. If core facilities are not relevant to the project, please explain.
- d. A mentoring plan that lists a formal mentor (if applicable).
- e. Grant submission plan to include a description of planned NIH or other funding agency submissions
- f. Literature cited (not included in the page limit)

Please use 11-point Arial font with one-inch margins on all four sides. Write concisely and limit the amount of general background to the essentials that reviewers will need to be aware of and appreciate the proposed research. A list of current and pending support. Provide a listing of all current research support from all sources. For each source listed, please provide the following information: Name of funding source, title of project, project start/end dates, and amount of direct costs available (or available to you if a multi-PI grant), and percent effort. If you are a junior faculty member, please include the following details of your startup package in this list: amount initially provided, current unspent balance, and expiration date or other restrictions if any. An NIH style biosketch (<https://grants.nih.gov/grants/forms/biosketch.htm>) must also be included.

REVIEW PROCESS

Given that an important goal of the AIM CoBRE is to enhance the odds of investigators obtaining NIH funding for their project(s), NIH review criteria and procedures will be used. Each proposal will be scored according to the five NIH criteria: Significance, Investigator, Innovation, Approach and Environment. For information on these criteria and procedures see NIH notices **NOT-OD-09-024** and **NOT-OD-09-025**.

It is anticipated that at least two reviewers who will be selected to avoid conflict of interest will review each proposal.

Final decisions regarding awards will be made by AIM CoBRE Executive Committees and the AIM CoBRE PI (Vojo Deretic, PhD) based on the reviews provided with the approval of its Steering Committee and External Advisory Committee. Representatives of NIH/NIGMS must also approve all pilot award proposals prior to funding and commencement.

CONDITIONS OF AWARD

IACUC or IRB applications must be submitted well in advance of the submission deadline, and approvals must be in-hand by the time of proposal submission. Awardees will be required to sign a memorandum of agreement as a condition of project funding. This memorandum will serve to indicate the recipient's willingness to:

1. Attend AIM functions,
2. Take advantage of AIM's mentoring and support activities,
3. Participate in annual External Advisory Committee (EAC) meetings and program review,
4. Cite AIM and NIGMS in any publications stemming from their pilot project, Acknowledge CoBRE support: [P20GM121176](#) in publications
5. Present their work at any local or national meeting as requested, and Submitting a Research Performance Progress Report (RPPR) NIH style will be required at the completion of the pilot.

QUESTIONS

All questions on the AIM CoBRE pilot program or related to this announcement should be directed to Shaina Aguirre (svaguirre@salud.unm.edu) in the AIM program office (505-272-0166) or to Graham Timmins, Ph.D. (gtimmins@salud.unm.edu), (phone: 505-272-4103).