



UC DAVIS
Biotechnology Program

DEB - Cellular Agriculture Research Award (CARA)

The UC Davis Biotechnology Program Cellular Agriculture Research Award (CARA) is awarded to Designated Emphasis in Biotechnology (DEB) doctoral students having demonstrated interest in and ability to carry out research projects that will inform the development, deployment and consumer acceptance of cellular ag fermentation products (e.g. meat, milk, fish, eggs, alternative proteins). We expect ~3-4 awards to be made in 2021, sponsored by the [UC Davis Biotechnology Program](#) with support from [New Harvest](#).

Research areas that may be supported by this award include, but are not limited to:

- Optimization of media components and fermentation processes
- Selection, genetic characterization and potential genetic engineering of stock cell lines
- Design of new bioreactors and investigation of production platforms
- Technoeconomic modeling of upstream and downstream bioprocesses, related supply chains, marketplace dynamics and consumer behavior impacting the commercial potential of cellular ag products

Eligibility requirements for this application:

- Applicant must be a currently enrolled DEB doctoral student in good academic standing
- Applicant's proposed cellular ag research project must be conducted with the mentorship and guidance of one or more DEB faculty mentors
- Applicant must submit a complete research proposal for review by the application due date and abide by fund use restrictions, as described below

Award Details

Up to \$3,000 may be awarded for direct research costs, including:

- Research supplies (consumables, reagents and equipment)
- Data analysis software or services
- Awardee training directly related to the research project (e.g. course or workshop on related research or data analysis methods)
- Publication or poster-printing costs for research project dissemination

No part of this funding may be used for political campaigning or lobbying activity. Furthermore, funds may not be used for general use laptops/computer hardware or IT support, purchase of books, travel to conferences, conference registration or other items not significantly related to the support of the research project. Awardees will be asked to work with their major professors and department financial staff to set up an appropriate campus account to hold the transferred award funds and will be responsible for abiding by campus policies related to their research expenditures.



DEB-CARA Application Components – Due May 19, 2021

Please submit the research proposal sections listed below to biotechprogram@ucdavis.edu by 11:59pm on Wed, May 19, 2021. The proposal should be formatted as a 5-page pdf (1" margins, 1.08 minimum line spacing, 11pt Calibri or Arial font) and have a file name that includes the applicant's surname.

- **Proposal Title**
- **Executive Summary (200 words or less, ~1/2 page)**
 - In a nutshell, tell us what you are aiming to do, how much funding will make it possible and the significance of the data you expect to collect.
- **Project Introduction (~1 - 1-1/2 pages)**
 - Describe your interest in cellular agriculture.
 - What is known about your research topic and what critical information might your research project add?
- **Specific Objectives and Planned Research Methods (~1 – 1-1/2 pages)**
 - Outline your research project plans and include enough experimental detail to assess project feasibility and your qualifications to do the research.
 - Describe any preliminary results from your work (optional) – figures or tables may be included.
 - Briefly describe any key resources or equipment available in your lab that will be used for the project.
- **Project Timeline (~1/4 page)**
 - Starting in summer 2021, how long will your proposed project take? Describe your projected timeline in quarterly blocks (Summer, Fall, Winter, Spring).
- **Project Budget (~1/2 page)**
 - Include a table with the proposed itemized expenses and costs. Label each expense in relation to your specific research objectives.
- **References (~4-5) (~1/2 page)**
 - Cite a few recent references in your narrative sections (Executive Summary and Background and Rationale). Feel free to use any appropriate scientific citation method/style (e.g. APA, CSE).