

GENERAL INFORMATION

Purpose

Catalyst for Discovery Program Grants are intended to support fundamental chemical research at institutions in Texas aimed at solving significant problems for the benefit of humankind. The level of support is calibrated to reduce barriers to discovery and provide flexibility in the manner of experimentation with minimal administrative burden.

Consonant with other research grants funded by the Welch Foundation, chemical research includes all subfields of Chemistry (organic, inorganic, physical, analytical, quantum, surface, theoretical, medicinal, catalysis, earth, space, and electrochemistry), and the allied fields of Biochemistry, Chemical Biology, Chemical Physics, Chemical Engineering, Materials, and Nanoscience (including photonics and plasmonics).

Chemical research does not include (not an exhaustive list): Medical research, clinical research, biology, physiology, molecular genetics, evolution, epidemiology, etc. However, experimental paradigms and technologies from those fields can be employed if the goal is to illuminate fundamental principles of chemistry. For instance, molecular genetic techniques could be used to investigate enzymatic catalysis.

Eligibility

Applications are restricted to eligible universities located within the state of Texas as determined by The Foundation. Invitations to submit proposals will be issued annually to institutions with substantial chemical research programs (external research funding in chemistry, Welch research grants, Welch endowed chairs, and PhD programs in chemistry and/or related fields).

A Program Director (PD) applying for a Catalyst grant must be a full-time regular faculty member with tenure or on the tenure track. Up to four additional tenured or tenure-track faculty members can participate as Co-Investigators (Co-I). Any Co-I must meet the same eligibility standards as the PD.

Each year the number of applications is limited to the specifications indicated in the invitation sent by The Foundation to the eligible institutions.

Grant Applications

Applications must be submitted between April 1 and April 30 to be considered for the grant year, August 1 - July 31.

The Foundation will respond to all grant applications. Awards will require formal acceptance by the grantee institution of the conditions set forth in the Foundation's award letter and all terms and conditions stated in these "Catalyst for Discovery Program Grants Guidelines and Procedures".

Applicants must use the official online application portal in ProposalCentral. All information requested in the online application and attachments must be supplied and a failure to do so will disqualify the application.

Proposals should describe work that encompasses a five-year period.

Proposal Review

The Scientific Advisory Board reviews all proposals and makes funding recommendations to the Board of Directors. The Board of Directors make the final decision on which proposals will be funded. All applicants will be notified of the decision on their proposal by August.

APPLICATION INSTRUCTIONS

APPLICATIONS ARE DUE BY 12:00 PM CST ON APRIL 30

Proposal Central Website:

<https://proposalcentral.com/>

Proposal Central Customer Support:

Contact if you have any difficulties registering, logging in, or creating your application.

1-800-875-2562

pcsupport@altum.com

8:30am – 5:00pm EST (M-F)

Getting Started in Proposal Central

1. New Users of Proposal Central
 - a. Create an account by using the “Need an Account?” link.
 - b. Complete the registration process using your institution-issued email address. After you register, complete your Professional Profile before starting an application.
2. Registered Users of Proposal Central
 - a. Login with your username and password.

Start an Application

1. Select the “Grant Opportunities” tab.
2. A list of applications will be displayed. From the filter drop down menu, select “Welch Foundation.”
3. The Catalyst for Discovery Program Grant application will appear. Click the “Apply Now” button to begin your application.

Application Format

The following information is required to submit a complete application. *Please read the instructions carefully. Any proposals that do not adhere to the instructions will be unsubmitted and subject to in-eligibility.* If you have questions, please reach out to grants@welch1.org before submitting. Numbers correspond to the application sections that appear on the left side of the online application.

1. **Title Page.** Enter the title of the project. Click “New” or “Renewal” in the appropriate circle. If your proposal is a renewal, list your current grant number in the next field. Click “Yes” or “No” for the remainder of questions. When this page is complete, either click “Save” or “Next.”
2. **Enable Other Users to Access this Proposal.** This section allows you to give other users access to your grant application at varying levels of permissions. This is where you would add Sponsored Projects personnel, an institution representative who has signature authority, or a Co-I to give them the necessary access to your application.
3. **Program Director.** Provide the required information for the applicant who will serve as Program Director (PD) and be responsible for all interactions with the foundation. Your profile should have most or all of the required data pre-filled, however, you can edit your Professional Profile from here to complete or edit any required fields. Make sure the academic rank is listed as one of the following: Professor, Assistant Professor or Associate Professor.
4. **Institution and Institution Officials.** Either select your institution or be sure the correct institution has been populated. Enter information for the required Signing Official for your institution.
5. **Co-I.** Enter information regarding any Co-Is on this project.
6. **Project Abstract.** Enter a brief scientific summary of the proposed project. If you go past the allotted characters, it will be truncated, so please make sure the complete abstract is shown.
7. **Budget Period Detail.** At the top, you will see a blue box with each period’s dates already set. The dates are automatically entered for each grant period (August 1 – July 31 of each cycle). You must complete all five periods for the budget. These are shown as Period 1, Period 2, Period 3, Period 4, and Period 5 and are separated into different windows. If your budget for periods 2, 3, 4 and 5

are the same as period 1, you can click “Copy Period 1 Forward” and from period 2, “Copy Period 2 Forward”, etc. so you don’t have to enter the information manually for the following year(s). Proposals should contain a completed five-year budget for \$1,000,000 per year. Funds may be utilized for direct expenditures in accordance with the following:

- a. Personnel Costs — Research personnel salaries for all those who are actively involved in the program. Salary and fringe benefits for the PD and Co-I’s must not exceed 20% of the annual grant amount not including carryover. Postdoctoral appointments should be for 12 months, or in accordance with your institution’s guidelines, but certainly not less than three consecutive months. Graduate student appointments must cover a meaningful period and certainly not less than three consecutive months. Undergraduate student appointments must also cover a meaningful period such as an academic year, semester, or a minimum of two (2) consecutive months during the summer. Administrative salary support is limited to the lesser of \$40,000 or 0.5 FTE.
- b. Non-Personnel Costs – For the proposal budget, specifics are not required. Ignore all “Sub-Category” entries as you do not need to input any information.
 - i. Permanent Scientific Equipment — Items with at least one-year useful life expectancy and costing a minimum of \$10,000. Total expenditures may not exceed \$500,000 for the term of the grant.
 - ii. Expendable Items and Services — Enter a brief “Description” for each group of line items. Add line items by clicking the blue “+” icon. *The grantee institution must maintain a record of actual expenditures, by category, for inclusion in the financial statements.*
 - A. Grant funds for direct expenditures may be utilized for any proper purpose, beneficial to the research and not specifically excluded by the Foundation. Any expenditure made outside of these guidelines may result in a request for refund. *The following are excluded as direct expenditures:*
 1. General office supplies, equipment or expenses
 2. Building construction, alteration, renovation, rent or utilities
 3. Personnel expenses other than appointments detailed above
 4. Consultant fees and/or related expenditures
 5. Student tuition, fees, or scholarships
 6. Membership dues and subscriptions
 7. Overhead
 - iii. Publication Expenses — Expenses for publishing the results of research accomplished with the grant. Total expenditures may not exceed \$20,000 per grant year.
 - iv. Travel — Foreign or domestic travel expenses, including registration fees by the program director and current personnel under the grant. This can also include scientist recruitment travel-related expenditures (excluding advertising). Travel must be relevant to the research. Total expenditures may not exceed \$50,000 per grant year.
 - v. Other Expenses – Other expenses directly related to the program research.
8. **Budget Summary.** A summary of the proposed budget appears here (fields are auto populated per the data entered in Section 8). Make sure each period adds up to \$1,000,000.00
9. **Active and Pending Research Support.** Any other active and pending research support must be added from the Professional Profile of the PD or any Co-Is. If you have not added the listings already, it can be done from within the application by clicking the blue ‘plus sign’ on the screen for that section and a pop-up screen will appear. Any “Other Support” already loaded into your profile will display on the screen and can be checked to add to your application. However, if you have new entries, click the “Create New Other Support” link and another pop-up screen will appear where the information can be entered. Once complete, click “Save and Close” and this entry will be added to your application as well as your profile. If you do not have any additional support, check the box on the original page of this section that says, “No Other Support to Report”.
10. **Application Attachments.** Prepare and upload the following documents into your application in PDF format:
 - a. Program Description – This document should include a ‘program summary’ (up to 3 pages) and a detailed ‘program description’ (up to 15 pages) that covers the background

and the approach of the research to be performed. This section should be no more than 18 pages total, including any low-res figures/images. References should follow the program description and are not included in the 18-page limit. The program summary and description must utilize a font size of 11 points or larger, line spacing must be at least 1.5 spaced, and margins must be at least an inch in all directions.

- b. High-resolution Images – This optional attachment should include any necessary high-res images related to the program description. Maximum file size is 10MB.
 - c. Program Director's Biosketch – An NIH-style biosketch should be provided and is limited to five (5) pages. (An eRA commons username is not required.) Under "Contributions to Science", list up to four (4) publications under each contribution. An NIH-style biosketch must also be uploaded for all Co-Is.
 - d. Tenure Letter(s) – A letter from the grantee institution stating that the program director is *A) a full-time faculty member and B) has tenure or is on tenure track*. The letter must clearly state both items. Letters must also be provided for all Co-I's as well.
11. *PI Data Sheet*. This section contains items from the PD's professional profile and lists a small amount of demographic information. The information provided is not part of the grant application nor will it be used in the review process or considered when making funding decisions.
 12. *Validate*. Validate the application on Proposal Central. This is an essential step and checks for required data and attachments. You will not be able to submit your application if all the required information has not been provided. An application that has not been validated cannot be submitted.
 13. *Electronic Signatures*. Signatures on applications will be handled digitally within the application. Signatures are required from the PD and the authorized university representative (signing official). We will not accept someone signing someone else's name. Once completed, either signatory can submit the report.
 14. *Submit*. After you click the "Submit" button, an email will be sent to you confirming your submission. At this point you can no longer edit any portion of your application without contacting The Foundation and having your application "unsubmitted" back to you.

POST AWARD GUIDELINES & PROCEDURES

Control of Research

The conduct and supervision of all research performed under a Foundation grant shall be within the exclusive control of the grantee institution. In accepting a grant, the grantee institution agrees to assume the entire responsibility for the research, for taking any necessary precautions for protection of persons and property, for proper operation and maintenance of all equipment in research activities and for safe disposal of any hazardous waste materials.

Appointments

An individual's appointment can be supported in combination with non-Welch funding. Allowable appointments include staff scientists, administrative staff, students, fellows, and faculty. Graduate students can receive funding from a grant through the time they are awarded a terminal degree and must cover a meaningful period, certainly not less than three consecutive months. Limits on the terms of postdoctoral fellows funded from Welch grants should follow the grantee institution's policies on postdoctoral appointments and should be for 12 months or in accordance with your institution's guidelines, but not less than three consecutive months. Undergraduate student appointments must also cover a meaningful period such as an academic year, semester, or a minimum of two (2) consecutive months during the summer.

There shall not be any employer-employee relationship between the Foundation and the program directors or recipients of appointments under Foundation grants.

Attribution Rights

Any publication in scientific media shall include an acknowledgement referencing the Welch grant number and stating that the research was funded in part by a grant from The Welch Foundation. In addition, the

background section of any patent application filed on an invention made with the assistance of a Welch Foundation grant shall include an acknowledgement referencing the Welch grant number and stating that the development of this invention was funded in part by The Welch Foundation.

Grant Payments

Grant funds normally will be paid by the Foundation on an annual basis in August for the current grant year. There may be circumstances when the Foundation will remit grant payments for future time periods. If this occurs, the PD cannot utilize these future funds until the grant year they are allocated for is in effect.

Re-Budgeting

Grant recipients are allowed the latitude to re-budget within and between budget categories to meet unanticipated needs and to make other types of post-award changes. Changes may be made at the PD's discretion if they are within the limits established in the award letter and the guidelines for this grant.

Absence of Program Director

If a program director expects to be away from the grantee institution for an appreciable period, the Foundation must be informed in advance. The grant will become inactive unless the grantee institution submits a written request acceptable to the Foundation demonstrating that the grant will remain under the full control of the grantee institution.

Transfer of Program Director

If a program director or co-investigator transfers out of the grantee institution to another eligible institution in Texas, the status of the PD or Co-I concerning their participation on this grant will be considered on a case-by-case basis. If a program director or co-investigator transfers out of the grantee institution to an institution outside of Texas, the continuation of this grant will be considered on a case-by-case basis.

Deliverables (Year-End Reports) (must be submitted through Proposal Central by 12 P.M. CST on September 30 of each year):

1. *Progress Report* (Proposal Central Webform). Report the progress of the research and list publications authored and submitted during the grant year (August 1 – July 31). This report is a webform with the following elements:
 - a. Research Objective – Enter your brief research objective in the block provided.
 - b. Overall Progress – Enter the progress you made on your research during the grant year in the block provided.
 - c. Alterations to Original Research Plan – Describe any alterations you may have made to the original research plan during the grant year.
 - d. Personnel Changes – Explain any significant changes to personnel that took place during the grant year.
 - e. Program Administration – Describe the overall administration of the program (i.e. Did the team have regular meetings to discuss program status, how often did you meet, did you meet in person or virtually).
 - f. Major Equipment Purchases – List any major equipment purchased. How much of the grant funds were spent on this cycle?
 - g. Non-Welch Grant Applications – List any new (non-Welch) grant applications that have been or will be submitted because of this program grant, along with any awarded funding.
 - h. Uploads – Upload the following two items:
 - i. Report in detail the progress made on the research during the grant year. This document is limited to 25 pages.
 - ii. Download the Deliverable Template titled “Catalyst Program Grant Personnel Template.” Once you download and save to your computer, you will be able to type in the boxes and select from the drop-down menus. Once you have completed and saved the form, upload into this section. **Personnel listed on the Progress Report must correspond exactly to personnel supported as reflected in the Financial**

Statement (Expenditures). Discrepancies between personnel listed on the Progress Report and those reported on the Financial Statement may delay review.

- i. **Publications** – For all sections in this area, the publications listed will only be those that have been published in a peer-reviewed publication during the grant year of this report (August 1 – July 31). This section is completed by adding publication entries from your ProposalCentral profile or by adding the publication directly from the publication section on the report. The information should be entered in the same format as it appears on the article or reprint (ie. all names in same order, article title, journal title/volume/page/date, doi). These entries must be filled out as completely as possible prior to adding them to the progress report webform. This includes making sure the digital reprint file is uploaded to the Welch Supported-Published articles. Do not report publications that have already been reported in this section in a previous progress report. If, after you’ve added a publication record to your report, you need to make changes to the entry, you can select the edit action to the right of the publication and edit the entry. Once saved, it will update your report as well as your profile.

The publication categories are as follows:

- a. **Welch Lead Source Supported-Published Collaborative** - articles that include at least 2 Co-I's/PD from this grant and list the Welch catalyst grant first in the acknowledgements.
- b. **Welch Lead Source Supported-Published Individual** - articles that include one Co-I/PD and list the Welch catalyst grant first in the acknowledgements.
- c. **Welch Non-Lead Source Supported-Published Collaborative** is for articles that include at least 2 Co-I's/PD from this grant and list other funding sources before the Welch catalyst grant in the acknowledgements.
- d. **Welch Non-Lead Source Supported-Published Individual** is for articles that include one Co-I/PD and list other funding sources before the Welch catalyst grant in the acknowledgements.

- j. **Inventions** – This section is completed by adding any patents or inventions from your Proposal Central profile or by adding a new entry that will also update your profile. These entries must be filled out as completely as possible prior to adding them to the progress report webform. You should only list patents or inventions that came about because of either partial or full support from your Welch funding. If you do not have any patents or inventions, click “No Inventions to Report.”

- k. **Electronic Signatures** – Both the program director and a university authorized representative should independently sign this document. Both individuals must be logged into ProposalCentral as themselves before entering their electronic signature. We will not accept someone signing someone else’s name. Once completed, the report can be submitted by either signatory.

2. **Expenditures (Proposal Central Award Budget Webform).** Report on expenditures during the most recent grant year (August 1 - July 31). All amounts should be reported on a cash basis. Deficit spending is not allowed. The award budget expenditures include the following items:

- a. **Personnel Cost** – For year-end reporting, you must only enter expenditures and descriptions in the “expenditure” column. If your personnel are unidentified in the budget column, you must add a new line, name the personnel and fill in the appropriate information only in the expenditure column (must fill out all fields: Appt Type, Appt Months, Appt Dates, Effort, Salary, Fringe). Do not change anything in the budget column and do not add an expenditure on a line that has not identified the name of the personnel. If the personnel were not supported for the minimum time allowable, make a note in the “Appt Date” line. (i.e. 6/1/2025-6/31/2025 cont. from last period). **Personnel listed on the Progress Report must correspond exactly to personnel supported as reflected in the Financial Statement (Expenditures).** Discrepancies between personnel listed on the Progress Report and those reported on the Financial Statement may delay review.

- b. **Permanent Scientific Equipment** – If permanent equipment was purchased (*cost of \$10,000 or more*), add a line in this category to identify the specific equipment purchased and load exact expenditures. Total expenditures may not exceed \$500,000 for the term of the grant.

- c. Expendable Scientific Items – Enter a brief “Description” for each group of line items. Add line items by clicking the blue “+” icon. *The grantee institution must maintain a record of actual expenditures, by category, for inclusion in the financial statements.*
 - i. Grant funds for direct expenditures may be utilized for any proper purpose, beneficial to the research and not specifically excluded by the Foundation. Any expenditure made outside of these guidelines may result in a request for refund. *The following are excluded as direct expenditures:*
 - a. General office supplies, equipment or expenses
 - b. Building construction, alteration, renovation, rent or utilities
 - c. Personnel expenses other than appointments detailed above
 - d. Consultant fees and/or related expenditures
 - e. Student tuition, fees, or scholarships
 - f. Membership dues and subscriptions
 - g. Overhead
- d. Publication Expenses – If publication expenses were budgeted, list the expenditure in the same line. If they were not budgeted, add a line showing just the expenditure. Total expenditures may not exceed \$20,000 per grant year.
- e. Travel – If travel expenses were budgeted, including registration fees and scientist recruitment (excluding advertising), list the expenditure on the same line. If they were not budgeted, you will need to add a line showing just the expenditure. Total expenditures may not exceed \$50,000 per grant year.
- f. Other Changes- Welch Internal Use Only – Do not use this line.
- g. Carry Forward - Welch Internal Use Only – Do not use this line.
- h. Electronic Signatures – Both the principal investigator and an institution authorized representative should independently sign this document. Any Co-PIs and their respective institution authorized representative should also sign this document. Both individuals must be logged into Proposal Central as themselves before entering their electronic signature. We will not accept someone signing someone else’s name. Once completed, either signatory can submit the report.

Note: The “Proposed,” “Awarded” and “Carry Forward” columns should not be altered in any way from what was approved previously by The Welch Foundation. At year-end reporting time, program directors and institution officials should be entering only expenditures into the next grant year.

- 3. *Carry Forward.* An unexpended balance of more than \$100,000 must have a letter submitted from the grantee institution explaining the circumstances for the carry forward and the plans to use those funds in the following year. If the carry forward balance equals or exceeds the annual award amount at the end of the grant period, the Foundation reserves the right to put future grant payments on hold for the remainder of the grant term or to enact a fourth-year no-cost extension (no additional funds) to allow the grantee to spend out the funds prior to receiving additional funding.

Note: Input for expenditures are found in the “Budget” area of Proposal Central grant record. Populating approved carry-forward amounts will be managed by Welch when the expenditures are approved.

Termination of Grants

A grant may be cancelled for cause if The Foundation determines that progress toward the objective of the grant is not being made satisfactorily or if the grantee institution or the program director is not in compliance with the terms and conditions of the award letter or these guidelines.

If the grantee institution, or the program director, or any of the co-investigators are not in compliance with the terms and conditions of the award letter or these guidelines, the Foundation reserves the right to terminate the grant and cancel grant payments for the remainder of the grant term.

If scientific progress toward the objectives of the grant is deemed unsatisfactory, as reported in the year one and two progress reports, or if concerns arise as to the reasonable advancement of the research program,

a comprehensive external review will be conducted that will include members of the Foundation's Scientific Advisory Board. If the review results in a determination of unsatisfactory progress the Foundation reserves the right to terminate the grant and cancel grant payments for the remainder of the grant term.

The program director should notify the Foundation if they are unable to fulfill the terms of the award for any reason, such as sabbatical, retirement, transferring out-of-state, or death. The institution's senior research officer (vice provost/president for research) can request a continuation of the grant with a change of program director, with a justification of the suitability of the proposed PD for carrying out the original objectives of the research program. The Foundation reserves the right to grant a continuation of the grant under the direction of a new PD or to terminate the grant and cancel grant payments for the remainder of the grant term.

Once the program director or grantee institution is aware the grant will terminate, expenditures may no longer be made for permanent scientific equipment or for expendable scientific items that cannot be utilized during the remainder of the grant term. In addition, no new appointments may be made to the grant. Standard closeout procedures will be carried out at the grantee institution with respect to the grant. The following shall be forwarded to the Foundation within 60 days after the termination of a grant for any reason:

1. Final Progress Report.
2. Final Financial Statement.

A refund of any unexpended balance will be requested after the Final Financial Statement has been approved and will be due to The Foundation within 30 days.

No-Cost Extensions

Program Directors may request a no-cost extension for a program grant for up to 12 months. Requests must be submitted to The Welch Foundation prior to the current termination date using the 'deliverable template' for no-cost extensions and submitted via the correspondence section in ProposalCentral. The request must explain the need for the extension beyond the established end date, include an estimate of the unexpended balance at the grant's end date, and describe how the balance will be used. Anticipating an unexpended balance when the grant expires is not a sufficient justification for an extension. The Foundation, in its sole discretion, will ascertain the need and length for an extension based on the details provided in the request.

The rules for terminating grants apply to any granted extension. Expenditures may no longer be made for permanent scientific equipment or expendable scientific items that cannot be utilized during the remainder of the grant, and no new trainee appointments may be made to the grant. If part of the justification for the extension is to support postdoctoral fellows, graduate students, or undergraduate students, these individuals must already be appointed and receiving support by the Welch grant. Extension requests will NOT be considered after the grant has expired.

Documentation

As a condition of a grant, all documents in connection with a grant (e.g. original proposal, award acceptance, and year-end reports) must be submitted through Proposal Central and signed by the program director and persons authorized by the institution to sign such documents (e.g., Research Dean or Signing Official). Scanned original signatures and digital signatures are considered original signatures.