



U. S. Department of Energy Computational Science Graduate Fellowship (DOE CSGF) Terms of Appointment

2022– 2023 TERMS OF APPOINTMENT

The United States Department of Energy funds the Computational Science Graduate Fellowship through The Krell Institute (KRELL) for U.S. citizens and legal permanent residents to pursue graduate study at a U.S. university leading to a Ph.D. in fields that use high-performance computing to solve complex science and engineering problems.

PERIOD OF APPOINTMENT

The appointment period of this fellowship year is from September 1, 2022 to August 31, 2023, dependent on the release of DOE funding to KRELL. Based on the availability of appropriated future funding and successful completion of fellowship requirements, the appointment may be renewed by KRELL, in its own discretion, for additional periods. Total fellowship tenure, including the initial twelve-month appointment, is limited to 48 months.

PROGRAM OF STUDY

A central element in the DOE Computational Science Graduate Fellowship (DOE CSGF) Program is a requirement of breadth in the coursework leading to the doctoral degree. The fellow is required to fulfill a Program of Study (POS) that includes graduate coursework in four areas: a scientific or engineering discipline, computer science, high-performance computing, and applied mathematics. All courses must be graduate level courses or accepted for graduate credit by the fellow's major department. The POS is a formal agreement between the student and the DOE CSGF program that is ratified by the fellow's advisor.

Acceptance of this fellowship constitutes an explicit commitment by the fellow and his/her advisor to follow an approved Program of Study leading to a doctoral degree that meets these minimum requirements:

For a Science/Engineering Major

- In addition to graduate courses in the major field;
- 1 year of computer science courses
- 1 year of applied mathematics courses
- 1 high-performance computing course

Computer Science Major

- In addition to graduate courses in computer science;
- 1 year of science/engineering courses
- 1 year of applied mathematics courses
- 1 high-performance computing course

Mathematics Major

- In addition to graduate courses in mathematics;
- 1 year of science/engineering courses
- 1 year of computer science courses
- 1 high-performance computing course

(1 year = 2 courses if the university is on a semester system; 3 courses if the university is on a quarter system)

POS courses MUST be taken for a grade when permitted by the university; auditing or taking a course Pass/Fail is not acceptable. A grade of B– or better must be achieved in courses designated to fulfill the Program of Study requirement.

Appropriate courses from the computer science department include data structure, compilers, visualization/graphics, architectures, parallel computing, software engineering, networking, databases, and theory of algorithms. The computer science requirement is not satisfied by courses in numerical analysis, numerical linear algebra, etc., even if they are offered in the Computer Science Department. Such courses may satisfy the applied mathematics requirement if they have appropriate content and are approved in advance.

Appropriate courses from the mathematics department include: numerical analysis, modeling, applied analysis, differential equations, asymptotics, linear algebra, Monte Carlo methods, statistics and/or probability, and stochastics. Mathematics-related courses offered in departments other than Mathematics (for example, in the Computer Science or an applications area) will satisfy this requirement only if approved in advance by the fellowship committee.

Fellows should complete the approved Program of Study by the end of the second year of the fellowship. Fellows who begin their doctoral study at the same time as the fellowship have an additional year to complete this obligation.

All changes in the Program of Study must be approved in advance by the DOE CSGF committee. Unapproved changes to the Program of Study may jeopardize renewal of the fellowship.



Fellows must continue to make satisfactory progress toward a doctoral degree to remain in the program.

PRACTICUM

Fellows are required to complete a practicum at a DOE laboratory. The practicum is intended to broaden the fellow's experience outside of the main thesis path and to allow the fellow to apply skills to new problems in computational science. **Generally, the practicum is planned for the summer following the first year of support and should be completed prior to the beginning of the third year of the fellowship.** However, it is not required that the practicum be during a summer. The length of the practicum is negotiable, but, generally, it is for a continuous period of not less than twelve weeks during which the fellow is in residence at the practicum site. **Any requests outside of these guidelines, must be approved in advance by KRELL.**

Additional research experience at a participating facility beyond the first practicum may be arranged by agreement among the fellow, the faculty adviser, the university and practicum coordinators involved, and KRELL. Additional supported experiences are dependent on available funding and may be limited in length.

As part of the renewal process, all proposed practicum assignments will be reviewed to ensure that they fall within the spirit of the program. Guidelines for submitting the practicum request are found on the fellow secure site. Arrangements for security clearances, if necessary, shall be worked out between the fellow and the host site.

OBLIGATIONS

By acceptance of a fellowship appointment, fellow agrees to:

1. Not vacate the appointment during the fellowship period, unless an official leave of absence has been approved in which the fellow will forfeit financial support during the leave timeframe. A deferral of the fellowship is not permissible.
2. Make satisfactory progress toward a doctoral degree while registered as a full-time student;
3. Request approval from KRELL for all revisions to the Program of Study in advance of making changes
4. Pursue and complete the approved Program of Study within the specified period of time (by the end of the 2nd or 3rd year of the fellowship, depending upon when the fellowship is awarded (see earlier discussion on Pg. 2);
5. Complete a Practicum before the beginning of the third year of the fellowship;
6. Attend the DOE CSGF Annual Program Review and vest KRELL with rights to publish fellows' presentation materials and remarks on the Annual Meeting website;
7. Represent the DOE CSGF program in a professional manner in public venues, including, without limitation, professional society meetings, conferences, and fellowship events, and participate fully in scheduled fellowship conference events and activities, showing respect for other fellows, invited guests and other attendees.
8. Accept and comply with KRELL's Statement of Privacy Practices regarding confidential information;
9. Notify KRELL of any and all changes affecting fellow status in the program; and



10. Keep KRELL informed of fellow's current address for a period of five years after the fellowship ends and promptly respond to questionnaires sent by KRELL.

Acceptance of this appointment involves no specific commitments with regard to future employment on the part of the fellow, KRELL, the Department of Energy or its contractors. KRELL encourages each fellow, upon receiving his/her academic degree, to give serious consideration to employment with DOE or its contractors.

FULL-TIME STUDY

The fellow must be enrolled as a full-time student pursuing a doctoral degree in a computational science academic program that is approved by the fellowship. Normally this will involve on-campus study and research for approximately nine months of the year, along with additional research or a practicum assignment for the remaining three months of the year. The fellow will be devoted to study and research except for vacation periods that will be in accordance with the practice of the university in which the fellow is enrolled. Under normal circumstances a fellow may not engage in work for remuneration during the school term. **If the university requires the fellow to assume certain responsibilities ordinarily required of all students working for the degree, such as teaching for a limited period, KRELL must be informed in advance by the fellow. The fellow must request prior approval for any work, remunerated or voluntary.** The amount of work shall be such as not to interfere with the enrollment of the fellow in a full-time academic program and is subject to recommendation from the university coordinator and approval of KRELL. By prior agreement with their departments, fellows will not be required to perform department services beyond one term (e.g., teaching, grading, etc.) during their fellowship tenure. Any teaching or other departmental duties performed during the fellowship period must be approved in advance and the stipend and tuition payments will be decremented accordingly.

OFF-CAMPUS THESIS/DISSERTATION RESEARCH

In the event a fellow chooses, with the approval of the university, to perform thesis or dissertation research at a DOE participating facility, the following provisions will apply:

1. KRELL will pay only required tuition and fees to the university.
2. The thesis or dissertation research will normally be on an unclassified topic and will be conducted under joint supervision by a university faculty adviser and a staff member of the participating facility. The participating facility staff member shall be appointed by the university to the fellow's graduate research committee.
3. **When approved in advance by KRELL**, the fellow may be reimbursed for one round trip per year from the center to the university to consult with his/her graduate research committee and to present a seminar on results of the thesis/dissertation research.

PAYMENTS

As administrator of the DOE CSGF Program, KRELL shall make payments, as discussed below, to and for the benefit of fellows participating in the program. All payments shall be made in accordance with the policies and procedures established by KRELL to comply with legal requirements established by DOE and other governmental entities. No payments will be made until a signed copy of the Terms of Appointment Acceptance Form has been received by KRELL.



All payments and benefits described in this document are dependent on the availability of appropriated funding from DOE. If changes in available funding occur, fellows will be notified as soon as possible regarding the impact on fellowship payments and benefits.

STIPENDS

KRELL will pay a stipend of \$45,000 per year for the September 1, 2022 to August 31, 2023 appointment period. \$3,750 will be paid each month through the final month of the term in which all graduation requirements are completed. Acceptance of employment ends the fellowship appointment and all applicable benefits. A supplemental allowance and certain travel support may be provided during the practicum period. For students performing required teaching assignments, the program will eliminate or decrement stipend payments to the fellow during the teaching assignment

TUITION & FEES

KRELL will pay, directly to the university, the tuition and fees, including basic health insurance, required for any full-time graduate student enrolled in the same or equivalent programs. Summer tuition and fees will also be paid if the fellow is enrolled as a full-time student and if required by the university.

ACADEMIC ALLOWANCE

KRELL will reimburse fellows up to \$1,000 each academic year for academic allowance expenses. This benefit must be used annually and any balances do not roll over from year to year. These funds can be used for expenses to support the fellow's research and professional development such as books, membership dues, registration and travel to meetings/conferences, or travel to present research. The Krell Institute reserves the right to recoup any funds inappropriately distributed. These funds must be requested from and approved by KRELL before distributed to the fellow.

REQUIRED TRAVEL

KRELL will reimburse fellows for required program travel, including travel for both the annual program review meeting and practicum activities, in accordance with its established travel policy and procedures. For the practicum, one round trip will be allowed for travel between the home university and the practicum site. Krell will also pay for one trip to visit prospective practicum laboratories prior to the actual practicum dates. This normally means a pre-practicum visit to one laboratory, but visits to multiple laboratories may be allowed, depending on cost. This reimbursement will only be made if approved **in advance** by KRELL.

DUPLICATION OF BENEFITS

KRELL will not duplicate financial aid a fellow may receive from a federal fellowship, scholarship, or another similar federal grant during the period of this appointment. Veterans Administration benefits to the fellow are excluded from this restriction. Acceptance of any other fellowship or award may be allowed provided it is approved **in advance**.

OTHER WORK OR PROGRAMS

DOE CSGF Fellows are prohibited from participating in any foreign sponsored talent programs during the fellowship tenure. Fellows cannot accept any compensation from foreign institutions



while a participant in the DOE CSGF fellowship. Failure to report involvement in or compensation from foreign institutions or programs will result in termination of the fellowship.

A talent recruitment program is defined as “any foreign-state-sponsored attempt to acquire US scientific-funded research or technology through foreign government-run or funded recruitment programs that target scientists, engineers, academics, researchers, and entrepreneurs of all nationalities working or educated in the United States.”

(<https://www.directives.doe.gov/directives-documents/400-series/0486.1-border/@@images/file>)

TAXABILITY OF STIPENDS AND OTHER PAYMENTS

Stipend payments may be taxable to the fellow in full or in part. KRELL does not withhold taxes from these payments. KRELL does not provide tax advice.

The statement above regarding the taxable status of stipends is provided as information only. It is not intended as legal or tax advice, or as a definitive interpretation of the law. Each fellow is personally responsible for individual tax preparation and payment. Specific questions regarding the tax treatment of this award should be directed to a tax advisor.

REPORTS AND PUBLICATIONS

DOE and KRELL encourage fellows to publish reports and articles in professional journals. All publications will acknowledge DOE CSGF support, and, if appropriate, will show a joint affiliation of the fellow with the DOE Laboratory in which the research was conducted. The grant number that must be acknowledged is: DE-SC0020347. This signed document is an agreement that the fellow will acknowledge this support in appropriate reports and publications. Fellows will be provided with the appropriate grant number at the beginning of their fellowship and will sign an addendum to these Terms at that time. Fellows should alert KRELL to any and all publications published during their tenure in the fellowship program. An electronic copy of or link to the fellows’ thesis or dissertation must be sent to KRELL upon receiving a degree.

RESERVATIONS

This Terms of Appointment (“TERMS”) agreement is not a contract of employment and nothing contained herein shall be construed as to infer a contract of employment.

Appointments are accepted subject to the OBLIGATIONS stated above, as well as other conditions set forth in these TERMS. KRELL reserves the right to cancel or terminate an appointment at any point in time if KRELL, in its sole discretion, determines that a fellow has failed to comply with the OBLIGATIONS or other conditions of these TERMS. If, at any time, a fellow becomes unable to adequately carry out these TERMS, KRELL, in its sole discretion, may withdraw or terminate the appointment upon such basis as it deems proper.

KRELL reserves the right to make appropriate changes in the statement of these TERMS as the result of new legislation or experience in administering the program, and to cancel or terminate an appointment that was made as a result of misinformation given by the fellow, or any



reference, or as a result of withholding information that would have prevented the appointment.

DEBARMENT

By acceptance of this agreement, the fellow confirms that the fellow is not listed in the List of Parties Excluded from Federal Procurement or Nonprocurement Programs (<http://www.sam.gov>) issued by the U.S. General Services Administration. Fellow will provide immediate written notification to KRELL if, at any time prior to award, fellow learns that this certification was erroneous when submitted or has become erroneous by reason of changed circumstances. This certification is a material representation of fact upon which reliance will be placed. If it is later determined that the fellow knowingly rendered an erroneous certification, KRELL may terminate the appointment for default by the fellow.

RESTRICTED DATA AND OTHER CLASSIFIED INFORMATION

During this fellowship the fellow may participate in or observe work that involves information that must be safeguarded against disclosure to inappropriate parties. The fellow agrees to protect such information against disclosure to persons not entitled to receive it. Disclosure of such information to any person not entitled to receive it, or failure to safeguard any restricted data or any Top Secret, Secret or Confidential Information, may subject the fellow to criminal liability under the laws of the United States.

DISCLAIMER OF LIABILITY

Neither DOE, KRELL, the host facility, nor persons acting on their behalf will be responsible for:

1. Any alleged or actual liability, cost or expense incurred as a result of personal injury to or death of persons including the fellow, or damage to or destruction of property, or for any other loss or damage, or injury of any kind whatsoever, except where such death, injury, loss, or damage is the result of willful negligence or intentional misconduct of an officer, agent, or employee of DOE, KRELL, or the host facility.
2. Any claims, losses, expenses (except as otherwise provided in these TERMS) or damages, including but not limited to bodily injury, death, or property damage, caused by the negligence or misconduct of the fellow.
3. Any claims, losses, expenses, or damages, including, but not limited to, bodily injury, death, or property damage, arising out of, or resulting in any way from, the use or misuse of information acquired by the fellow during the appointment under these TERMS.

Neither DOE, KRELL, the host facility, nor persons acting on their behalf, make any warranty, express or implied, (i) with respect to the accuracy, completeness, or usefulness of any information acquired by the fellow under these Terms of Appointment, (ii) that the use of any such information may not infringe upon privately owned rights, (iii) that the information acquired by the fellow under these Terms of Appointment will not result in injury or damage when used for any purpose, or (iv) that information acquired by the fellow under these Terms of Appointment will accomplish any particular results or are safe for any purpose, including the intended purpose.



INVENTIONS AND DISCOVERIES

In recognition of the statutory intent set forth in Title 35 United States Code Section 212, the fellow acknowledges that this appointment is considered to be in the nature of a scholarship, fellowship, training grant, or other funding agreement made on behalf of a Federal agency primarily to an awardee for educational purposes, and therefore, no provision shall be contained herein, nor shall any section be construed as permitting or authorizing, the Federal agency to assert any rights to inventions made by the awardee. This fellowship policy does not preclude a university or participating center from asserting rights to a fellow's inventions.





KRELL Institute
DOE Computational Science Graduate Fellowship Program
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515-956-3696

TERMS OF APPOINTMENT ACCEPTANCE FORM

I have carefully read the above Terms of Appointment for the period September 1, 2022 to August 31, 2023 with full knowledge that this appointment is granted subject to said Terms. By accepting the appointment, I am bound by said Terms of Appointment, and I do hereby accept the appointment. If legally a minor, a parent or legal guardian, by the signature below, accepts the terms of this appointment on my behalf.

Your signature should be witnessed and signed by someone with whom you are well acquainted, but to whom you are not related.

Signature of Fellow

Typed or Printed Name of Fellow/Date

Signature of Witness

Typed or Printed Name of Witness/Date

Signature of Parent/Guardian
(If a minor)

Typed or Printed Name of Parent/Guardian/Date

Please have all required parties sign and return this form via email to: csgf@krellinst.org

