Concept Clearance
FY2024

INITIATIVE 1 TITLE: NIH Research Software Engineer (RSE) Award (R50 Clinical Trials Not Allowed)
INITIATIVE TYPE: New
ACTIVITY CODE: R50

OBJECTIVE: Funding opportunity inviting applications to seek salary support for Research Software Engineers (RSE) supporting collaborative projects for building sustainable, open software and tools in biomedical and behavioral science.

DESCRIPTION: The Research Software Engineer (RSE) Award is intended to provide salary support for exceptional software engineers involved in biomedical and behavioral research or positioned to make outstanding contributions to the biomedical and behavioral research fields but who are not in a traditional independent investigator career path. It is intended to provide incentives to participate in a research career path, with some level of autonomy so that the individuals are not solely dependent on grants held by others for their career continuity.

The application must identify and describe the research projects engaging the RSE and define their specific role in the project(s). Applicants must demonstrate clear evidence of skills, experience, productivity, and research ability to advance an existing NIH-supported research project by supporting best practices in software development and the RSE must document their accomplishments that support their career level. The RSE must have a full-time, non-tenure track position. Two types of letters will be required, one letter of support from an NIH-funded project PI with whom the RSE will collaborate, and three letters of recommendation from key personnel of other projects who can attest to the RSE's expertise and experience as relevant to the project. Once awarded, a change of PD/PI will not be allowed. Other specific eligibility criteria and terms of award will apply to ensure appropriate use of this funding mechanism and program. Applications will be reviewed by a CSR special emphasis panel.

Key Aspects of the Solicitation Include:

Budgets may request salary support for the RSE commensurate with the level of funded effort (at least 6 person-months per year) on NIH-funded research grants. Travel expenses will be allowed up to $2,500/year. No other research expenses will be covered under this award. A set aside of $6 million for FY 2024 is planned, with an expectation to fund 20-24 awards in the first year (exact number contingent upon appropriations and number of highly meritorious applications.) ODSS requests approval of this proposed concept for a 3-year cycle with 2 receipt dates each year.

IMPORTANCE: Software engineers working in research are an increasingly vital part of the research enterprise. This grant is expected to give the RSE protected time to make a transformative impact in developing well-engineered, sustainable software in the context of an existing NIH-funded biomedical or behavioral research project and to help retain these skilled individuals in academic settings by enhancing professional standing and recognition.

HISTORY: This initiative aligns with complementary efforts from other funding agencies and non-profit efforts to support professional software engineers to develop dynamic, scalable, open software to facilitate accelerated scientific discovery across fields, including Chan-Zuckerberg Initiative, Schmidt Futures, Engineering and Physical Sciences Research Council of Britain, National Science Foundation, and the Department of Energy. The proposed RSE Award is specifically modeled after the successful NCI Research Specialist Award program that provides salary support and autonomy so that individuals are not dependent on NCI grants held by others or other sources of support for cancer research career continuity. Under the program, NCI has funded 121 awards over 7 years from FY 2016 - 2022.

CONCEPT CLEARANCE DATE:
COUNCIL REMARKS: