



CALL FOR SYNAPSE SMALL RESEARCH PROJECT (SRP) PROPOSALS

I. Introduction

The DS-I Africa NIH-funded UE5 Research Education Program titled “SYNthetic Healthcare Data Platform for Data SciEnce Training (SYNAPSE)” involves a partnership between University of Rwanda (UR), African Institute for Mathematical Sciences (AIMS), Washington University in St. Louis (WUSTL), MDClone (software company with self-service analytics platform generates computationally derived synthetic healthcare data), the DS-I Africa Open Data Science Platform (ODSP) and Coordinating Center (CC), and several DS-I Africa projects. Major gaps in data science training in Low- and Middle-income Countries (LMICs) include limited availability of large data sets for trainee research projects and security issues related to personal health information (PHI). The SYNAPSE program will bridge these gaps by providing courses for skills development and mentored research projects using synthetic healthcare data sets to support trainee-developed “Small Research Projects (SRPs)”.

II. Purpose of the small research project

The objectives of the SYNAPSE SRPs are to provide trainees an opportunity to: a) learn critical writing skills as an initial step towards research independence; b) prepare and compete for SRP that will allow a hands-on immersive experience to conduct research under multidisciplinary mentoring teams; c) obtain funding for their research projects (SRP maximal budget \$5,000/research project). The SRP research studies will be limited to secondary data analysis (i.e., no prospective primary data acquisition) of existing healthcare databases. Studies will focus on Data Science for Health interest area or cross-cutting methodological area. The SRP projects will be evaluated for scientific merit by the SRP Evaluation Committee.

III. Call for applications

The SYNAPSE calls for eligible applicants to submit their applications. The number of awards is very limited.

IV. Funding

SYNAPSE will provide funding to the selected awardees for data collection and research paper presentation in conferences (National and International Conferences).



V. Application requirements

Early-stage investigators, MSc and PhD students, postdoctoral trainees, and other junior trainees participating in the DS-I Africa consortium U2R Research Education Program sites to apply for this small research project proposal.

VI. Application file

Applicant submits a one-page concept note (brief background, project summary, 1-2 aims)
Upon the selection of the concept note, awardee is required to:

1. Develop research proposal: Up to 6-page research proposal, not inclusive of cover page and bibliography.
(Specific Aims 1 page, proposal 5 pages; following NIH formatting style: 0.5-inch margins; size 11 Arial font).
2. Sections: Research proposal to include all the following sections (7 pages for all sections):
 - i. Cover page: Project Title, Principal Investigator and Mentors/collaborators names and titles, institutional affiliations (1 page)
 - ii. Specific Aims (1 page):
 - a. Background/Knowledge gaps.
 - b. Hypothesis &/or Key Questions/Knowledge Gaps/New Methods Addressed.
 - iii. Significance, Impact, and Innovation (1 page for all 3 sections).
 - iv. Approach (2-3 pages: research design, data analysis, methods, statistics).
 - v. Bibliography (2-4 pages; up to 50 references, but not less than 20 references).
3. Budget: Use a table and include a budget justification for each budget line item (1 page; maximum allowed \$5,000).
4. Applicant Career Goals: address how SRP will help achieve career goals &/or research independence (1page).
5. Letter of support (LOS): LOS should come from research mentor/mentoring team or academic supervisor), and should describe mentoring plan, available resources (i.e., equipment, monetary support), willingness to provide regular mentoring (meet at least 2 times/month; work with mentoring team, etc.).
6. Letter of endorsement from Training Program Director (address institutional support &/or relevant issues).



VII. Selection methodology

- ✓ SRP Evaluation Committee discusses the concept note (pros/cons).
- ✓ If the proposal is considered responsive to the call, SYNAPSE team meets with applicant to discuss the project.
- ✓ When invited to do so, applicant submits full proposal.
- ✓ Committee reviews full proposal and makes funding decisions (yes/no). The applicant's institution enters into an agreement with UR.
- ✓ Once the agreement signed, funds transferred from UR to the applicant's institution.

VIII. How to apply and key dates

1. The deadline for submitting SRP proposals is July 25, 2024 at 23:59
2. Applicants are requested to send documents as listed above to the email:
mmugisha@nursph.org and a copy to dktumusiime@gmail.com, the Program Manager and PI respectively
3. Reviews/Evaluations, Selection, Funding and Start Dates: Rolling as SRP proposals received.

For more information, contact:

Program Manager, Dr. Michael Mugisha mmugisha@nursph.org, phone number 0788596947
and PI, Associate Professor David K. Tumusiime dktumusiime@gmail.com, phone number 0788749398.

Done at Kigali. 25.06.2024

Assoc. Prof. KAYIHURA Muganga Didas
Acting Vice Chancellor

