

VinUni-Illinois Smart Health Center

Call for Proposals

Due: November 19, 2021

Introduction

VinUniversity (vinuni.edu.vn) and the Grainger College of Engineering - University of Illinois at Urbana-Champaign (grainger.illinois.edu) agree to form a joint VinUni-Illinois Smart Health Center (VISHC) to conduct research on **novel sensing and informatics to provide widely accessible health monitoring, screening, and diagnostics for people all over the world.**

Vingroup, the largest conglomerate of Vietnam focusing on technology, industry, and service, has committed to provide up to \$14 millions in funding to VISHC over 10 years, in the form of **full scholarships (including stipends) to 50 Masters students, 50 PhD students (25 with degrees granted by VinUni and 25 with degrees granted by Illinois), and 10 postdoctoral scholars from Vietnam** to study and conduct research in VISHC at both institutions. VISHC will be formed by about 10 selected projects, each led by at least one faculty member from VinUni and one faculty member from Illinois. Each selected project will include the faculty from VinUni and Illinois jointly recruiting and advising about 5 PhD students, 1 postdoc, and some Masters students from the VISHC scholarship pool. Multiple faculty from both institutions per project are encouraged.

To facilitate the collaboration between VinUni and Illinois, each VISHC PhD student will be co-advised by faculty PIs at both institutions. Typically, the PhD student will be admitted and spend the first 2 years at the degree-granting (home) institution, then the next 2 years at the other (host) institution, and then the final year back at the home institution to defense the thesis. In addition to the scholarships, \$20K will be made available when each PhD student enrolls at the home institution, and then another \$20K when the student visits the other institution. These funding may be used by the faculty advisors to support the research of the PhD student and the project, and seed funding for obtaining external funding.

VISHC aims to foster a long-term academic and research collaboration between VinUni and Illinois by leveraging the following complementary strengths from two institutions:

VinUni	Illinois
<ul style="list-style-type: none">• Access to a large pool of pre-screened, top quality, and funded graduate students from Vietnam in STEM areas.• Growing faculty in Engineering and Computer Science, in which all faculty members have PhDs from, or have worked at top universities in the world.• Innovative translational medical education and research in VinUni Health Sciences degree programs (MD, GME, and Nursing) and its partner Vinmec Healthcare System (with 12 hospitals and clinics throughout Vietnam).• Access to large patient population for clinical studies.• Connection to Vingroup electronics and biotech manufacturing for translating research into products for mass and emerging markets.	<ul style="list-style-type: none">• Global leader for engineering education and research across every discipline.• Rich history of discovery and technological invention, ranging from the first web browser to the LED.• Top ranked graduate engineering programs, including #4 in Computer Engineering, #5 in Computer Science, #5 in Electrical / Electronics / Communications, #5 in Mechanical by <i>US News & World Report</i>.• State-of-the-art instrumentation facilities and interdisciplinary labs to enable cutting-edge research on smart health.• Commitment to corporate and external partnerships to translate research, advance society, improve the human condition, drive economic growth, and positively impact the world.

We invite faculty from both institutions to submit three-page collaborative proposals are due on **November 19, 2021, with the intent to start recruiting PhD students and postdocs from January 2022**. The project selection and reporting will be managed jointly by the Illinois Grainger College of Engineering and VinUniversity.

Proposal Guidelines

1. The proposal should not exceed three pages. The PI team must include at least one faculty from each university. For each PI, please include a web link to public profile (on university website, Google Scholar, or ORCID).
2. The proposal should identify unmet challenges in providing the best possible healthcare that is accessible for everyone, and how the proposed technologies in sensing and informatics could address these challenges globally.
3. The proposal should include a plan to recruit and co-advise PhD students that leverage the strengths of the two universities. A main part of VISHC funding is for scholarships for graduate students from Vietnam (<https://scholarships.vinuni.edu.vn/>) enrolling at VinUni or Illinois., where PhD students would receive their final degree at either VinUni or Illinois and spend two years at the other institution during their PhD study.

The timeline for an awarded project includes recruiting and enrolling PhD students during the first 5 years of the project. These PhD students are to finish within 10 years from the start the project. Therefore, an awarded project is for 10 years maximum.

4. When a PhD student enrolls under VISHC, \$20K will be made available to the faculty advisor at the home institution, and then when the PhD student visit the other (host) institution, another \$20K will be made available to the faculty co-advisor at the host institution. These funding may be used at the faculty's discretion to support the research of the PhD student and the project. Some examples include travel for conferences, equipment, supplies, instrument/lab/facility fees, clinical data collection. It can also be used as seed funding for obtaining external funding. Please include a brief plan on how these funds will be used.
5. Expected outcomes: Project success will be evaluated on the promise and progress in numbers of co-advised PhD students, publications, patents, clinical studies, external funding proposals, and technology transfer activities.
6. An individual faculty member can serve as a PI on multiple proposals to VISHC. PIs will need to have the ability to be the main thesis advisor for the PhD students in VISHC.

General Review Criteria

1. Intellectual merit and quality of research plan.
2. Potential impact on the wellness and health of people all over the world.
3. Number and quality of PhD students and their theses that would be recruited and graduated with VISHC scholarships as a result of the UIUC faculty – VinUni faculty partnership.
4. Pathway for a sustainable research collaboration between VinUni and Illinois with strong future external funding potential.

Submission and Contact Information

A single PDF file should be submitted by November 19, 2021, using the following link:

<https://specialprograms.research.illinois.edu/Program.aspx?ProgramGuid=FFCD3F2C-8EEB-403C-94E8-199606873459>

For questions about the proposal process, please contact Don Takehara (dtakehar@illinois.edu). For questions about VinUni-Illinois Smart Health Center, please contact Prof. Minh Do (minhdo@illinois.edu).