IMHOTEP S LEGACY ACADEMY FACULTY OF DENTISTRY

SUMMER RESEARCH SCHOLARSHIP AWARD

Purpose

The goal of the Imhotep's Legacy Academy (ILA) is to increase the number of African Nova Scotians pursuing post-secondary education in the fields of science, technology, engineering and mathematics (STEM). The ILA offers weekly interactive STEM enrichment activities and homework help for junior high students, an on-line tutoring program for high school students and summer research internships for post-secondary students. The ILA has partnered with the Dalhousie University Faculty of Dentistry (FoD) to create this scholarship for Blacks who have an **interest in research**, **dentistry**, **or dental hygiene** in Nova Scotia. Its purpose is to increase the number of African Nova Scotian, Black, or persons of African heritage in the field of **Oral Health** by providing related research experience.

Eligibility

Any Black student currently enrolled in undergraduate post-secondary STEM studies, e.g., science, engineering, health, in Nova Scotia is eligible to apply. Preference will be given to applicants who have participated, or intend to participate, in the Imhotep's Legacy Academy.

Description

One scholarship valued at \$6,500 is available for the summer, with equal contribution from the ILA and the FoD. This award may supplement any other award. The award is tenable at Dalhousie University under the guidance of a faculty member whose primary appointment is in the Faculty of Dentistry. In advance of their application, students are expected to identify and communicate with the prospective FoD faculty member(s), whose research is in an area of interest to the applicant.

Selection procedure

Selection is based on a combination of academic performance (50%), research ability (30%) and leadership/community involvement (20%). A cumulative GPA at the time of application in a science program of study of at least 3.0 is required.

Selection committee

The selection committee is composed of members of the ILA's Board of Directors and a representative of the Faculty of Dentistry.

Deadline: March 24, 2025

Submit completed application form (Part I), applicant's statement (Part II), and reference letter (must come from your supervising professor), along with most recent transcripts via email to:

ILA-FoD Summer Research Scholarship Selection Committee Dalhousie University

Email: board.imhotep@dal.ca

IMHOTEP'S LEGACY ACADEMY - FACULTY OF DENTISTRY APPLICATION FOR SUMMER RESEARCH AWARD

PART I: Personal Data

Date									
Family Name			Given Name	Initials					
ADDRESSES	(Changes to co	ntact informa	ntion must be sent	to admin.imhotep	@dal.ca)				
Current Address			Permanent Mailing address						
Telephone number			Email Address						
CITIZENSHIP									
Canadian Citizen Cana			adian Permanent Resident International						
ETHNICITY									
I am African Nova Scotian, African Canadian or person of African heritage.									
ACADEMIC BACKGROUND (Including ongoing postsecondary degree)									
Degree	Institution		Department	Month and year started	Month and year awarded/expected				
Indicate if you are attending university at the time of application.									
Atten	ding full time	Atten	ling part time Not attending						
How many academic terms will you have completed towards your degree program when this award is held?									
Are you currently enrolled in an undergraduate STEM program?									
YES NO									

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PART I: Personal Data

Family Name			Given Name				Initials				
ACADEMIC, RESEARCH AND OTHER RELEVANT WORK EXPERIENCE											
Position held and nature Full time/Part time (begin	Organization and Department		Supervisor		Period (mm/yyyy- mm/yyyy)						
SCHOLARSHIPS AND OTHER AWARDS OFFERED (Start with most recent)											
Name of Award	Value \$ (If any)	Res	oe ademic, search, dership)	Level (Institutional, Provincial, National, International)		Location of tenure	Period held (yyyy/mm- yyyy/mm)				
SIGNATURE											
By signing this document you confirm that all information given is correct and you agree to abide by regulations governing the summer research award.											
Signature Date											

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PART II: Applicant's Statement

When preparing PART II use the following guidelines. Pages must be 8 $\frac{1}{2}$ " x 11" (216mm x 279mm); Pages must be single-spaced and one sided; All text must be in 12 point Times New Roman font; Margins must be set at a minimum of $\frac{3}{4}$ " (1.87 cm); Your name must appear at the top right corner of every page; Pages must be numbered sequentially; **Maximum number of pages allowed is two (2)**; PART II must be submitted along with PART I and all other required documentation.

A. Research Experience

Describe the scientific or engineering abilities that you have gained through your past research experience. For example experience gained from special projects, honours thesis or co-op reports. If you have relevant work experience (e.g. summer research position) discuss the relevance of that experience and any benefits you gained from it.

Also in this section, provide a brief overview of your research topic and provide the name of the Dalhousie University faculty member who will be supervising your research.*

Note: The research topic and faculty supervisor must be identified and confirmed before an offer letter can be issued to the selected scholar.

*(Please see the attached list of Dentistry faculty supervisors and their areas of research - To be updated soon)

B. Relevant Activities

Describe your professional and extracurricular activities that most demonstrate your communication, interpersonal, and leadership skills. Examples of these include presentations (oral or poster); mentoring; teaching; project management; committees; supervisory experience; elected positions held and volunteer work.

C. Special Circumstances

Describe any special considerations that have had an effect on your performance or productivity, including health problems, family responsibilities, disabilities or other circumstances. The selection committee will take these circumstances into consideration when evaluating your application.

Research Project(s) for 2025 (More to be added, Stay Tuned)

Project title: "Controlling surface chemistry of bio-sourced nanoparticles for controlled release of drugs"

Supervisor: Vahid Adibnia, Department of Biomaterials & Applied Oral Sciences, Faculty of

Dentistry

E-mail: adibnia@dal.ca Website: www.adiblab.com

Project Description:

Nanoparticles are attractive candidates for drug delivery due to their versatile surface properties. They have been used extensively for drug delivery applications for cancer treatment, immunomodulation, and infection prevention. In this project, we aim at developing novel nanoparticles from natural polymeric components that are capable of drug loading and release in a controlled manner.

The trainees will gain skills in polymer synthesis, nanoparticle preparation and characterization, drug loading, and release kinetics and will be engaged with a collaborative research team to conduct this research.

Project title: "Does the Participation in Service-Learning Activities Impact the Sense of Social Responsibility Among Oral Health Care Providers?"

Supervisor: Abdulrahman Ghoneim

Supervisors: Violet D'Souza and Shauna Hachey

E-mail: abdulrahman.ghoneim@dal.ca

Project Description:

Social responsibility (SR) is a critical attribute in healthcare, emphasizing trust, dependability, and the commitment to improving societal health. Engaging in service-learning activities (S-L)—an educational approach combining academic learning with community service—has been shown to

foster altruistic values and an appreciation among healthcare providers towards the needs of marginalized populations. Despite its importance, little is known about how S-L influences SR among oral healthcare providers. This project investigates the relationship between the exposure to S-L activities and the sense of SR among dentists, dental hygienists, and denturists. The trainee will gain experience in questionnaire development, participant recruitment, data analysis, and academic communication.