IMHOTEP S LEGACY ACADEMY FACULTY OF DENTISTRY

SUMMER STUDENT RESEARCH SCHOLARSHIP

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 is available for the summer **2026**, with 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: February 23, 2026. 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 (in one combined PDF) **via email** to:

ILA-FoD Summer Research Scholarship Selection Committee,
Dalhousie University

Email: ***board.imhotep@dal.ca***

Information: Imhotep's Legacy Academy
Phone: (902)494-2400 Toll Free: 1-866-996-9452 Email: ilaprg@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 contact information must be sent to admin.imhotep@dal.ca)

Current Address	Permanent Mailing address
Telephone number	Email Address

CITIZENSHIP

☐ Canadian Citizen ☐ Canadian 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.

☐ Attending full time ☐ Attending 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

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

PART I: Personal Data

Family Name	Given Name	Initials

ACADEMIC, RESEARCH AND OTHER RELEVANT WORK EXPERIENCE

Position held and nature of work Full time/Part time (begin with current)	**Organization and Department**	**Supervisor**	**Period** ***(mm/yyyy-mm/yyyy)***

SCHOLARSHIPS AND OTHER AWARDS OFFERED (Start with most recent)

Name of Award	**Value $** (***If any***)	**Type** ***(Academic, Research, Leadership)***	**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

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

PART II: Applicant's Statement

When preparing PART II use the following guidelines. Pages must be 8 ½" 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 ¾" (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.

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: "Fabrication of degradable immunomodulatory polyesters for biomaterial applications"

Supervisor: Dr. Locke Davenport Huyer, Department of Biomaterials & Applied Oral Sciences, Faculty of Dentistry

Contact:
www.davenporthuyerlab.com
l.davenporthuyer@dal.ca

Research Program:
Polymer based biomaterials are foundational to successful medical advances, forming devices used in implantable applications ranging from joint replacement, sutures that resorb over time, to support tissue remodelling as surgical mesh supports, and to deliver drugs in a controlled fashion. While impactful, complications associated with these devices often arise due to non-optimized interaction of material chemistries with the human immune system that often cause prolonged inflammation and alteration of desired medical device use or required removal. Our lab is focused on an improved understanding of how immune cells interact with these material surfaces, and are focused on designing degradable polymer materials that can manipulate inflammation.

Student Role/ Potential Projects
1) Testing a library of electrospun immune-modulatory degradable nanofibre polymer materials based from regulatory metabolites. *The student would perform fabrication*

of novel materials into nanofibre meshes using electrospinning techniques, and characterize their degradative properties (mass loss, metabolite release) according to variation in monomer selection (metabolite and linker).

2) Immunophenotyping of temporal host response to resorbable polymeric materials polyglycolic acid (PGA), polylactic acid (PLA), and polylactic-co-glycolic acid (PLGA) polymers into implants. *The student would investigate the feasibility and reproducibility of polymer fabrication of resorbable materials, and changes in material properties following different implantation timelines.*

Requirements and Relevant Background:
We are open to application from diverse backgrounds. Knowledge in areas including immunology, cell culture techniques, polymer materials, and/or organic chemistry is an asset; but lack of research or technical experience in these areas should not prevent students from inquiring about a potential fit with projects if interested.