THE HALMOS COLLEGE OF ARTS & SCIENCES AT NOVA SOUTHEASTERN UNIVERSITY *AND*

THE MEDICAL UNIVERSITY OF GRAZ – AUSTRIA

# SUMMER 2023 BIOLOGY STUDENT INTERNSHIP PROGRAM APPLICATION

THIS FORM MUST BE NEATLY TYPED. (DO NOT TYPE ON THE REVERSE SIDE OF ANY FORMS).**Note: Save this Word document to your computer first and then complete it. ALL FINAL APPLICATION MATERIALS (PRINT *AND* ELECTRONIC COPIES) MUST BE RECEIVED NO LATER THAN November 11, 2022!**

**Submit ALL MATERIALS to: Mark Jaffe, D.P.M.; Office: Parker 348; TEL: (954) 262-8083; Email:** [**mjaffe@nova.edu**](mailto:mjaffe@nova.edu)

## Section I: Description of Program

The Halmos College of Arts and Sciences at Nova Southeastern University provides foundational study in core and emerging disciplines and technologies to prepare students for graduate and professional study, career development, and responsible citizenship. The College highly values our partnerships with the basic science/clinical researchers and research opportunities exhibited by the Medical University of Graz (MUG).

The Medical University of Graz comprises 40 clinical and non-clinical institutions. It is closely associated with Graz University Hospital, which is amongst the largest Hospitals in Europe (more than 2000 beds).

The **Biology Student Internship Program** is a unique collaboration and joint projects between NSU and the MUG, which allows for intercampus and institutional interaction in multiple scientific research disciplines whereby young scientists gain exposure, direction and guidance during their developing career paths. The benefits of this program are as follows:

* To foster intercampus and inter-institutional collaborative relationships on both a national and international level
* To educate and train young scientists
* To produce high-quality scientific results that are publishable and presentable at scientific meetings
* To produce outcomes that will allow for successful acquisition of extramural support.

This collaborative venture with our partners will contribute to the leadership of all institutions in basic science and medical education and help to meet the needs of our national community through basic science and academic training, high-quality collaborative relationships and gaining the interest and exposure from future basic scientists/clinicians and the community.

**Participant Eligibility.** Any individual desiring to participate must have JUNIOR or SENIOR ranking and be a returning registered student for Fall 2023. Other criteria include: an overall GPA of 3.0 and a GPA of 3.0 in basic sciences. Candidates must submit an application inclusive of a written statement discussing the reason(s) why participation is desired, and an Official University Transcript of Grades or equivalent Capp report. Three letters of recommendation must also be included: 2 from basic science faculty, and 1 other. All application materials must be received by the Biology Student Internship Program Committee (BSIPC) no later than **November 12, 2022**. The timeline follows below.

**Timeline Summary**

Monday, October 10, 2022 Summer 2023 Application Process Begins

Friday, November 11, 2022 Summer 2023 Application Deadline

November 14-November 18, 2022 BSIPC reviews applications and qualifies applicants for an interview

Nov 18-Nov 30, 2022 BSIPC interviews the qualified candidates and selects up to four finalists

November 30, 2022 The BSIPC committee will present proposed recommendations to the Dean and to the biology department chair and await confirmation

December 2, 2022 The confirmed Awardees and the alternates will be informed of their selection by the BSIPC.

December 9, 2022 Awardees deadline to notify the BSIPC in writing accepting their internship program by signing a contract.

Monday, January 9, 2023 Awardees begin preparation training for their internship by the committee members.

Wednesday April 12, 2023 Awardees must satisfactorily complete all requirements including travel documents in preparation for the summer internship.

Monday, May 22, 2023 Summer Internship begins. Student interns communicate regularly with their NSU faculty mentor

Friday, August 11, 2023 Summer Internships End (unless extended 1-2 additional week(s)

August end, 2022 Summer Interns complete all requirements and turn in assignments for grading to their NSU Faculty Mentor

Fall, 2023 Summer Interns do presentations of their summer internship experience to students, faculty and staff

**BSIPC Role.** The Biology Student Internship Program Committee (BSIPC) will qualify and rank candidates and select those who will be granted a face-to-face interview by the committee. Following the BSIPC interviews, up to four finalists will be identified. Additional interviews of the finalists by the respective partner institutions either by phone or face-to-face may also take place.

**Length & Location of Internship.** There are up to two six-week internship positions available for Summer 2023 at the Medical University of Graz, Austria. In the event that one or both of the original internship Awardees to Austria, declines their internship or during their BIOL 4950 course changes his or her mind, one of the alternates may be selected to replace that Awardee.

**Program Outline.**

**A. Austria.** The interns’ primary duty will be to assist a transplant surgical team. They will also assist Dr. Stiegler and his colleagues with their on-going research studies.

Research studies will be designed as “mini projects” in the area of medicine and surgery and the exact format will be at the discretion of the supervisor in Austria. Again, all research studies will include library research for background and current review of literature focusing on the research topic. Each “mini project” shall require a FIELD COMPONENT composed of sample collection and data acquisition. Skills, data collection and experimental methods may include:

* molecular biological techniques (RNA/DNA isolation; RT-PCR, multiplexing PCR; Real-Time PCR; primer design; sequencing; cloning; immunoblotting; protein assays; siRNA technology; gene microarray)
* tissue culture
* immunohistochemistry (antibody-based conjugated to enzymes or fluorescent probes)
* microscopy (light, fluorescent, confocal)
* sample collection (Field Component)

Each awardee will be required to successfully complete on-site training in (1) Universal Precautions and Biohazard Safety and (2) Chemical and Laboratory Safety. IRB and IACCAU protocols and approvals will be the responsibility of the mentor/supervisor.

**B. Course Credit.** Awardees of internships will be required to register for a total of 3 credits of BIOL 4950 (Internship in Biology) at Nova Southeastern University during Winter 2023. A\The awardee must maintain a “daily journal”, write a summary paper and turn in all required assignments by July, 2023. The paper will be critically reviewed and commented by the supervisors at NSU and University of Graz, and then reviewed and graded by their assigned NSU Faculty Mentor for a final assignment of course grade.

The Awardee shall be required to present a presentation of their internship/research experience to faculty and students at Nova Southeastern University upon their return to campus in the fall of 2023.

Check below Your Choice OF program for The Summer 2023 Biology Student Internship Program

AUSTRIA

## Section II: Personal Identification Information

Prefix:   Mr.

Mrs.

Ms.

Miss.

**Please, attach your photograph here (required).**

Name:

(last) (first) (middle)

Address:

(number) (street)

(city) (state) (zip code)

Date of Birth:         Age:

Telephone:         Telephone:

(primary) (area code) (number) (cell) (area code) (number)

Email:

NSU Student N#:

*(Required)*

## Section III: Demographic Information

*This information is kept for statistical reporting and possible reporting in compliance with the EEO/AAA requirements. Your responses are voluntary, and your cooperation in providing this information is appreciated.*

*Race/Ethnicity: (Please choose the category that best describes you).*

**American Indian or Alaska Native** (People having origins in any of the original peoples of North and South America, including Central America, and who maintain tribal affiliation or community attachment.)

**Asian** (Person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.)

**African American/Black** (A person having origins in the black racial groups of Africa.)

**Hispanic or Latino** (Persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture of origin, regardless of race.)

**Native Hawaiian or Other Pacific Islander** (Persons having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.)

**White/Caucasian of Non-Hispanic Origin** (Persons having origins in any of the original peoples of Europe, Middle Ease or North Africa.)

**Multiracial/Other**  faculty member (specify:        )

a promotional flyer

*I was made aware of this opportunity from:*   an advertisement

a physician (specify:        )

a prior participant (specify:        )

Other (specify:        )

*I have previously participated in the Biology Student Internship Program:*

YES.  NO.

If yes, please specify all dates:

## Section IV: Emergency CONTACT INFORMATION

*In the event of an injury or emergency, contact the individuals (2 are required) listed below in the following order:*

***First:***

Prefix:  Dr.  Mr.  Mrs.  Ms.  Miss.

Name:

(last) (first) (middle)

Address:

(number) (street)

(city) (state) (zip code)

Telephone:         Telephone:

(primary) (area code) (number) (cell) (area code) (number)

Relationship:

***Second:***

Prefix:  Dr.  Mr.  Mrs.  Ms.  Miss.

Name:

(last) (first) (middle)

Address:

(number) (street)

(city) (state) (zip code)

Telephone:         Telephone:

(primary) (area code) (number) (cell) (area code) (number)

Relationship:

## Section V: Brief Medical History

*Check all that apply.*

Asthma

Emphysema

Other Respiratory Disorder (specify:        )

Allergy to Latex

Other Allergy (specify:        )

Dermatitis

Psoriasis

Hypertension (high blood pressure)

Heart Disease (specify:        )

Renal Disease (kidney disorders)

Liver Disease (specify:        )

Eye Glasses

Contact Lenses

Eye Disease (specify:        )

Pregnant (currently or trying to become pregnant)

Tobacco Use (i.e., smoking)

Medications (specify:        )

Other (specify:        )

MED Alert Tag/Identification (specify:        )

Dietary Requirements (specify (vegetarian, food allergy, etc.):        )

*All information will be kept confidential and only released to medical personnel who would treat you if injured during this program.*

## Section VI: Medical Insurance

*You will be requested to show proof of insurance at the time of your participation in this program.*

Insurance Carrier:          (company name)

Policy No. or Group I.D. No.

Address:

Telephone:

(area code) (number)

By placing an "X" in the box at the right, you certify that

your medical (i.e., health) insurance coverage is current.  My Coverage is Current.

*This information will be kept confidential and only released to medical personnel who would treat you if injured during this program.*

## Section VII: Certification of Tetanus Vaccination

*By placing your signature in the space provided below, you certify that your tetanus vaccination/booster is current, and that if injured during the course of dissection requiring tetanus booster, you, and/or, your insurance carrier will cover the cost of said treatment.*

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Section VIII: Education

*Please, begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training (most recent first).* **[This information is required.]**

|  |  |  |  |
| --- | --- | --- | --- |
| INSTITUTION AND LOCATION | DEGREE  *(if applicable)* | YEAR(s) | FIELD OF STUDY & GPA |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |
|  |  |  |  |

1. **Awards and Honors.** List in reverse chronological order previous positions, any honors, certifications, awards, recognitions or memberships.
2. **Selected publications, abstracts and/or presentations (most recent first).** Do not include publications submitted or in preparation.
3. **Unique Experiences that you feel make you qualified for this program.**
4. **What is your Major and what are the upper level BIOL classes you have taken thus far?**
5. **Have you ever spent time abroad in another culture? Explain.**

## Section IX: Employment history

*Please, list most recent first.*

|  |  |  |  |
| --- | --- | --- | --- |
| INSTITUTION AND LOCATION | POSITION  *(title)* | YEAR(s) | RESPONSIBILITIES |
|  |  |  |  |
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## Section X: References

*Please, list three (3) individuals from whom letters of recommendation will be received. Two of whom must be Halmos science faculty. You may provide up to two (2) additional references who may be contacted if deemed necessary.*

*Letters will be received from:*

***First:***

Prefix:  Dr.  Mr.  Mrs.  Ms.  Miss.

Name:

(last) (first) (middle)

Title:        Relationship:

Address:

(number) (street)

(city) (state) (zip code)

Telephone:

(area code) (number)

***Second:***

Prefix:  Dr.  Mr.  Mrs.  Ms.  Miss.

Name:

(last) (first) (middle)

Title:        Relationship:

Address:

(number) (street)

(city) (state) (zip code)

Telephone:

(area code) (number)

***Third:***

Prefix:  Dr.  Mr.  Mrs.  Ms.  Miss.

Name:

(last) (first) (middle)

Title:        Relationship:

Address:

(number) (street)

(city) (state) (zip code)

Telephone:

(area code) (number)

***Additional 1:***

Prefix:  Dr.  Mr.  Mrs.  Ms.  Miss.

Name:

(last) (first) (middle)

Title:        Relationship:

Address:

(number) (street)

(city) (state) (zip code)

Telephone:

(area code) (number)

***Additional 2:***

Prefix:  Dr.  Mr.  Mrs.  Ms.  Miss.

Name:

(last) (first) (middle)

Title:        Relationship:

Address:

(number) (street)

(city) (state) (zip code)

Telephone:

(area code) (number)

## Section XI: Personal Statement

*In no more than 500 words, discuss your reasons for participation in the Biology Student Internship Program.* **[Required. This can be attached separately.]**

## Section XII: Check-Off List

GPA requirement met

Transcript or equivalent

3 letters of recommendation

Photograph

Proof of medical insurance

Personal statement

Completion of all pertinent sections

## Section XIII: Final Attestation Statement

*By placing your signature in the space provided below, you certify that all of the information you provided is true and accurate, that you will abide by the Student Handbook and Student Code of Conduct, and that you will be registered for classes for the Fall 2023 semester.*

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Signature Date

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