

THE HALMOS COLLEGE OF NATURAL SCIENCES AND OCEANOGRAPHY AT NOVA SOUTHEASTERN  
UNIVERSITY AND  
THE MEDICAL UNIVERSITY OF GRAZ – AUSTRIA  
**SUMMER 2019 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 **October 26, 2018!****

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 Natural Sciences and Oceanography 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 2019. 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 **October 26, 2018**. The time line follows below.

**Time Line Summary**

|                             |  |
|-----------------------------|--|
| Monday, September 10, 2018  | Summer 2019 Application Process Begins   |
| Friday, October 26, 2018    | Summer 2019 Application Deadline   |
| October 26-November 2, 2018 | BSIPC reviews applications and qualifies applicants for an interview   |
| Nov 2-Nov 9, 2018           | BSIPC interviews the qualified candidates and selects up to four finalists   |
| November 9-12, 2018         | The BSIPC committee will present proposed recommendations to the Dean and to the biology department chair and await confirmation |
| November 12, 2018           | The confirmed Awardees and the alternates will be informed of their selection by the BSIPC.                                      |
| December 3, 2018            | Awardees deadline to notify the BSIPC in writing accepting their internship program by signing a contract.                       |
| Monday, January 7, 2019     | Awardees begin preparation training for their internship by the committee members.   |

|                            |   |
|----------------------------|---|
| Monday April 15, 2019      | Awardees must satisfactorily complete all requirements including travel documents in preparation for the summer internship. |
| Monday, May 13 OR 20, 2019 | Summer Internship begins. Student interns communicate regularly with their NSU faculty mentor                               |
| Friday, July 5, 2019       | Summer Internships End (unless extended 1-2 additional week(s))   |
| July 13, 2019              | Summer Interns complete all requirements and turn in assignments for grading to their NSU Faculty Mentor                    |
| Fall, 2019                 | 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 2019 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 between Winter 2019 and Summer 2019.** A) The awardee must maintain a "daily lab notebook"; develop a manuscript based upon a research topic and turn in all required assignments by July, 2019. The manuscript 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 2019.

Check below Your Choice Of program for The Summer 2019 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).*





**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<br>(if applicable) | YEAR(s) | FIELD OF STUDY & GPA |
|--------------------------|---------------------------|---------|----------------------|
|                          |                           |         |                      |
|                          |                           |         |                      |
|                          |                           |         |                      |
|                          |                           |         |                      |
|                          |                           |         |                      |
|                          |                           |         |                      |

**A. Awards and Honors.** List in reverse chronological order previous positions, any honors, certifications, awards, recognitions or memberships.

**B. Selected publications, abstracts and/or presentations (most recent first).** Do not include publications submitted or in preparation.

**C. Unique Experiences that you feel make you qualified for this program.**

**D. Have you ever spent time abroad in another culture? Explain.**

**SECTION IX: EMPLOYMENT HISTORY**

*Please, list most recent first.*

| INSTITUTION AND LOCATION | POSITION<br><i>(title)</i> | YEAR(s) | RESPONSIBILITIES |
|--------------------------|----------------------------|---------|------------------|
|                          |                            |         |                  |
|                          |                            |         |                  |
|                          |                            |         |                  |
|                          |                            |         |                  |
|                          |                            |         |                  |





\_\_\_\_\_  
(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 2019 semester.*

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**END OF FORM**