# THE HALMOS COLLEGE OF ARTS AND SCIENCES AT NOVA SOUTHEASTERN UNIVERSITY AND MD ANDERSON CANCER CENTER, HOUSTON, TEXAS

#### SUMMER 2022 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 (ELECTRONIC COPIES) MUST BE RECEIVED NO LATER THAN November 12, 2021!

Submit ALL MATERIALS to: Aarti Raja, Ph.D.; Office: Parker 125; TEL: (954) 262-7975; Email: araja@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 of MD Anderson Cancer Center.

At the MD Anderson Cancer Center, students are matched with a mentor from MD Anderson's research or clinical faculty. Participants work alongside the mentor in a lab or clinic on projects designed by faculty to reflect current research. Workshops and lectures provide opportunities to connect with faculty, residents, postdoctoral and clinical fellows, and other participants. Through the program, students assess goals related to careers in oncology research and patient care. The program culminates with a symposium in which participants present talks and posters on their research projects to peers and faculty.

The **Biology Student Internship Program** is a <u>unique</u> collaboration between NSU and the MD Anderson Cancer Center, which allows for intercampus and institutional interaction in multiple medical 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 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 2022. 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, 2021**. The timeline follows below.

## **Timeline Summary**

| Monday, October 11, 2021      | Summer 2022 Application Process Begins   |
|-------------------------------|--|
| Friday, November 12, 2021     | Summer 2022 Application Deadline   |
| November 13-November 17, 2021 | BSIPC reviews applications and qualifies applicants for an interview                                       |
| Nov 18-Nov 30, 2021           | BSIPC interviews the qualified candidates and selects up to four finalists                                 |
| November 30, 2021             | The BSIPC committee will present proposed recommendations to the Dean and                                  |
|                               | to the biology department chair and await confirmation   |
| November 30, 2021             | The confirmed Awardees and the alternates will be informed of their selection by the BSIPC.                |
| December 11, 2021             | Awardees deadline to notify the BSIPC in writing accepting their internship program by signing a contract. |
| Monday, January 3, 2022       | Awardees begin preparation training for their internship by the committee members.                         |

| Wednesday April 15, 2022 | Awardees must satisfactorily complete all requirements including travel         |
|--------------------------|---|
|                          | documents in preparation for the summer internship.                             |
| Monday, May 23, 2022     | Summer Internship begins. Student interns communicate regularly with their      |
|                          | NSU faculty mentor  |
| Friday, August 12, 2022  | 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, 2022               | 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 eight 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 ten-week internship positions available for summer 2022 (June 6-August 12, 2022) at the MD Anderson Cancer Center. In the event that the original internship Awardees to the internship, 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. MD Anderson Cancer Center.** The purpose of the Program is for student to gain experience in various research techniques. Activities during this program will include performing molecular biological experiments and possible animal studies, conduct molecular biology and model organism experiments, western blot and northern blot, operate laboratory apparatus and equipment, analyze experiments and tissue culture techniques. The intern's primary responsibility includes conducting research on challenging basic research and clinical projects. Students learn lab safety practices and techniques for gathering, analyzing and presenting scientific data.
- 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 2022 and summer 2022. A\The awardee must maintain a "daily journal"; write a summary paper and turn in all required assignments by August 2022. The paper will be critically reviewed and commented by the supervisors at NSU and graded by their assigned NSU Faculty Mentor for a final assignment of course grade.

The Awardee <u>shall</u> be required to give a presentation of their internship/research experience to faculty and students at Nova Southeastern University upon their return to campus in the fall of 2022.

MD Anderson Cancer Center SECTION II: PERSONAL IDENTIFICATION INFORMATION Prefix: Mr. Mrs. Ms. Miss. Please, attach your photograph here (required). Name: (last) (first) (middle) Address: (number) (street) (city) (zip code) (state) Date of Birth: Age: Telephone: Telephone: (primary) (cell) (area code) (number) (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,

Check below Your Choice Of program for The Summer 2022 Biology Student Internship Program

including Central America, and who maintain tribal affiliation or community attachment.)

|                                      | Asian (1 | incl           | origins in any of th<br>uding, for example,<br>iland, and Vietnam. | Cambodia   |   |              |                   |                 |                     |
|--------------------------------------|----------|----------------|--|------------|---|--------------|-------------------|-----------------|---------------------|
|                                      | African  | American/B     | lack (A person havi  | ng origins | in the black                            | racial group | os of Africa.)    |                 |                     |
|                                      | Hispani  |                | Persons of Cuban, N<br>in, regardless of rac                       |            | uerto Rican,                            | South or Co  | entral American   | , or other Spar | nish culture of     |
|                                      | Native 1 | Hawaiian or (  | Other Pacific Islan  |            | ns having or<br>a, or other P           |              |                   | peoples of Ha   | waii, Guam,         |
|                                      | White/C  | Caucasian of 1 | Non-Hispanic Orig  |            | s having ori<br>Africa.)                | gins in any  | of the original p | eoples of Euro  | ope, Middle Ease or |
|                                      | Multira  | cial/Other     |  |            |   |              | ber (specify:     |                 | )                   |
| I was m                              | ıade av  | vare of this   | opportunity fron   | ı:         | □ ai | prior partic | -                 |                 | )                   |
| I have p                             | previou  | sly particip   | ated in the Biolo  | gy Stude   | nt Internsl                             | ip Progra    | am:               |                 |                     |
|                                      |          | YES.           |  | NO.        |   |              |                   |                 |                     |
|                                      |          | If yes, please | specify all dates:   |            |   |              |                   |                 |                     |
|                                      |          |                | SECTION IV   | : EMERGE   | NCY CONT.                               | ACT INFO     | RMATION           |                 |                     |
| In the e<br>order:<br><u>First</u> : | event of | an injury o    | r emergency, co  | ntact the  | individual                              | s (2 are r   | equired) liste    | d below in t    | he following        |
| Prefix:                              |          | Dr.            | Mr.  | ☐ Mr       | s.                                      | Ms.          | Miss.             |                 |                     |
| Name:                                |          |                |  |            |   |              |                   |                 |                     |
|                                      |          | (last)         |  |            | (first)                                 |              |                   | (middle)        |                     |
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|                                      |          | (city)         |  | -          | (state)                                 |              | (zip code)        |                 | _                   |
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| Relatio                              | nship:   |                |  |            |   |              |                   |                 |                     |

| <u>Second</u> :  |                                      |  |                        |             |               |                  |                            |  |
|--|--------------------------------------|--|------------------------|-------------|---------------|------------------|----------------------------|--|
| Prefix:  | ☐ Dr.                                | ☐ Mr.  | Mrs.                   |             | s.            | Miss.            |                            |  |
| Name:  |                                      |  |                        |             |               |                  |                            |  |
| Name.  | (last)                               |  | (firs                  | st)         |               | (middl           | e)                         |  |
| Address:   |                                      |  |                        |             |               |                  |                            |  |
|  | (number)                             | (  | (street)               |             |               |                  |                            |  |
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| Telephone:   |                                      |  | Tel                    | ephone:     |               |                  |                            |  |
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| Relationship:  |                                      |  |                        |             |               |                  |                            |  |
|  |                                      |  | SECTION V: BRIEF       | MEDICAL     | HISTORY       |                  |                            |  |
| Check all that   | apply.                               |  |                        |             |               |                  |                            |  |
| Allergy to L Other Allerg Dermatitis Psoriasis Hypertension Heart Diseas Renal Diseas Liver Diseas Eye Glasses Contact Len: Eye Disease Pregnant (cu Tobacco Use Medications Other (speci: MED Alert | ratory Disorder atex  raty (specify: | pressure) orders)  ng to become proggi tion (specify:ecify (vegetarian | , food allergy, etc.): | )           | )             | reat you if inju | ) red during this program. |  |
|  |                                      |  | SECTION VI: ME         | EDICAL INSU | JRANCE        |                  |                            |  |
| You will be rea  | quested to s                         | show proof of  | insurance at the       | time of yo  | our participa | tion in this p   | program.                   |  |
| Insurance Carr   | rier:                                | (c   | ompany name)           |             |               |                  |                            |  |
| Policy No. or  | Group I.D.                           | No   |                        |             |               |                  |                            |  |

| Address:  |                                |                                 |                       |                                |
|---|--------------------------------|---------------------------------|-----------------------|--------------------------------|
| Telephone:  | (area code)                    | (number)                        |                       |                                |
|   | (area code)                    | (number)                        |                       |                                |
| By placing an "X" in the box at the r   | •                              | <u> </u>                        |                       |                                |
| your medical (i.e., health) insurance   | coverage is o                  | current.                        |                       | My Coverage is Current.        |
| This information will be kept confidential an   | nd only released               | d to medical personnel w        | rho would treat you i | f injured during this program. |
| Section   | ON VII: CERTI                  | IFICATION OF TETANUS            | VACCINATION           |                                |
| By placing your signature in the spa<br>current, and that if injured during th<br>insurance carrier will cover the cost<br>Signature: | e course of a<br>of said treat | lissection requiring t<br>ment. | •                     |                                |
|   | SECT                           | ION VIII: EDUCATION             |                       |                                |
| Please, begin with baccalaureate postdoctoral training (most recent fi  |                                | 2 0                             |                       | as nursing, and include        |
| INSTITUTION AND LOCATIO   | ON                             | DEGREE<br>(if applicable)       | YEAR(s)               | FIELD OF STUDY & GPA           |
|   |                                |                                 |                       |                                |
|   |                                |                                 |                       |                                |
| A. Awards and Honors. List in re  |                                | ological order previo           | us positions, any     | honors, certifications,        |

awards, recognitions or memberships.

| B. Selected publications, abstracts and/or presensubmitted or in preparation. | ntations (most recent   | <b>first).</b> Do | not include publications |
|---|-------------------------|-------------------|--------------------------|
| C. Unique Experiences that you feel make you qu                               | ualified for this progr | ram.              |                          |
| D. Have you ever spent time abroad in another c                               | ulture? Explain.        |                   |                          |
| SECTION IX: 1   | EMPLOYMENT HISTORY      |                   |                          |
| Please, list most recent first.   |                         |                   |                          |
| INSTITUTION AND LOCATION  | POSITION<br>(title)     | YEAR(s)           | RESPONSIBILITIES         |
|   |                         |                   |                          |

# 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)      |          | (firs   | st)        |              | (middle) |  |
| Title:     |             |          | Rel     | ationship: |              |          |  |
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| Second:    | _           | _        |         | _          | _            |          |  |
| Prefix:    | ☐ Dr.       | ☐ Mr.    | ☐ Mrs.  | ☐ Ms.      | Miss.        |          |  |
| Name:      |             |          |         |            |              |          |  |
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| Prefix:    | ☐ Dr.       | ☐ Mr.    | Mrs.    | Ms.        | Miss.        |          |  |
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|            | (area code) | (number) |         |            |              |          |  |

| <u>Additional 1</u> : |             |          |          |         |           |            |          |
|-----------------------|-------------|----------|----------|---------|-----------|------------|----------|
| Prefix:               | ☐ Dr.       | ☐ Mr.    | □ N      | Irs.    | ☐ Ms.     | Miss.      |          |
| Name:                 |             |          |          |         |           |            |          |
|                       | (last)      |          |          | (first) | )         |            | (middle) |
| Title:                |             |          | <u> </u> | Rela    | tionship: |            |          |
| Address:              |             |          |          |         |           |            |          |
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| Telephone:            | (area code) | (number) | _        |         |           |            |          |
| Additional 2:         |             |          |          |         |           |            |          |
| Prefix:               | ☐ Dr.       | ☐ Mr.    |          | Irs.    | ☐ Ms.     | Miss.      |          |
| Name:                 |             |          |          |         |           |            |          |
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## 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.]

**END OF FORM**