

UMBC MARC U*STAR PROGRAM

Application for 2019-2020

UMBC TRAINING PROGRAM FOR UNDERGRADUATES PURSUING RESEARCH CAREERS IN THE BIOMEDICAL, BEHAVIORAL OR MATHEMATICAL SCIENCES

Application Deadline: Wednesday, February 13, 2019

Dear MARC Applicant:

The following pages contain introductory information about the MARC U*STAR Program at UMBC, the MARC U*STAR Program application, a letter regarding the program evaluation, and two informed consent forms.

The application is **FILLABLE ONLINE**. It will open with Adobe® Acrobat Reader®. Please fill it out online, if possible. After it is completed, please print the entire application, give the two recommendation forms to professors in your declared major and/or research mentors, and ask them to return the recommendations to you in a sealed envelope for submission with your signed application.

Note: When filling in the application with Acrobat Reader® you may not be able to save it. You will need to fill it out completely and print it.

If you cannot fill out the application online, you may print it and fill it out with a typewriter or print neatly in pen.

For Questions please contact:

Jackie King, Ph.D.
jking3@umbc.edu
410-455-2634

**UMBC TRAINING PROGRAM FOR UNDERGRADUATES PURSUING
RESEARCH CAREERS IN THE BIOMEDICAL, BEHAVIORAL OR MATHEMATICAL SCIENCES**

The MARC U*STAR Program at UMBC is a grant-funded training program sponsored by the National Institute of General Medical Sciences and National Institutes of Health (NIGMS/NIH). MARC supports talented undergraduate students from underrepresented groups who plan to pursue a Ph.D. and a research career in biomedical, behavioral or mathematical sciences research, and who have a demonstrated interest in diversification of the biomedical research workforce. As the preeminent undergraduate research opportunity, this residential program supports full-time juniors and seniors who intend to pursue a Ph.D. The program is not intended to support students who plan to pursue a MD only. NIH defines underrepresented groups in the biomedical, clinical, behavioral and social sciences, such as:

- A. Individuals from racial and ethnic groups that have been shown by the National Science Foundation to be underrepresented in health-related sciences on a national basis. (Blacks or African Americans, Hispanics or Latinos, American Indians or Alaska Natives, Native Hawaiians and other Pacific Islanders.)
- B. Individuals with disabilities, who are defined as those with a physical or mental impairment that substantially limits one or more major life activities.
- C. Individuals from disadvantaged backgrounds, defined as:
 1. Individuals who come from a family with an annual income below established low-income thresholds. (Pell Grant Eligible)
 2. Individuals who come from an educational environment such as that found in certain rural or inner-city environments that has demonstrably and directly inhibited the individual from obtaining the knowledge, skills, and abilities necessary to develop and participate in a research career.

If funding continues from NIGMS/NIH and Trainees remain eligible for the program, their appointment will be renewed for a second year of undergraduate study. Trainees are limited to two years of financial support.

Trainees must maintain a cumulative 3.2 GPA each semester to remain eligible for participation in the program. Guided by the MARC Scholarship Program staff, all Trainees must meet all requirements for program activities, course work, and various group meetings. Each Trainee will do a sustained research project with an area faculty researcher selected according to his or her interests. Research usually begins the summer prior to the Trainee's junior year, and continues as a part-time experience during the Trainee's junior year. The research training will expand to a more in-depth experience usually during the summer between their junior and senior years. Training will continue part-time into the Trainee's senior year unless a special exception is granted. Trainees may also do off-campus research with the program's approval. Trainees must successfully complete a Research Conduct and Ethics course and a two-credit scientific writing course.

Recruitment targets highly able sophomores from UMBC and eligible students who have transferred or plan to transfer to UMBC from community colleges and other higher education institutions. Members of the MARC U*STAR Steering Committee will review eligible applications to select students for interviews. Members of this committee will make the final selection of Trainees and decisions about renewal and/or dismissal of Trainees.

For consideration, eligible applicants must meet the following criteria:

- ◆ Be a citizen, noncitizen national, or permanent resident of the United States.
- ◆ Have a minimum of 60 university or college credits at the time of entrance into the program.
- ◆ Ability to earn an undergraduate degree from UMBC in a declared major in two years upon entering the MARC Program, unless the MARC Steering Committee grants an exception.
- ◆ Have a 3.2 cumulative GPA with a major related to biomedical, behavioral or mathematical sciences (Biological Sciences, Chemistry, Biochemistry & Molecular Biology, Psychology, Biopsychology, Bioinformatics & Computational Biology, Environmental Science, Mathematics and Statistics, Engineering, or approved interdepartmental studies.)
- ◆ Plan to pursue a Ph.D. and a career in biomedical, behavioral or mathematical sciences. (Students who plan to pursue MD/Ph.D. will be considered.)
- ◆ Have outstanding SAT scores with a math score of about 600 or ACT of about 23.
- ◆ Submit letters of recommendation from two or more professors who taught one of your classes in the Sciences, Psychology, Mathematics, or Engineering or with whom you have conducted research, who are able and willing to comment on your potential as a biomedical, behavioral or mathematical sciences researcher.
- ◆ Clearly demonstrate an interest in the value of a diversified biomedical, behavioral or mathematical sciences research workforce.

HIGHLIGHTS

Individuals who meet the eligibility requirements are encouraged to apply to the MARC U*STAR Program at UMBC. This residential program has been designed to enable highly able undergraduates to pursue their Ph.D. and careers in biomedical, behavioral or mathematical sciences, through financial, academic, and administrative support. Support is intended to allow students to devote full attention to their studies. Students must agree not be employed in any manner during their participation in the program. Continued participation requires each participant to earn a minimum 3.2 GPA each semester during his or her appointment period, and maintain their intention to pursue a Ph.D. and a career in biomedical, behavioral or mathematical sciences. Trainees must reside in campus housing at UMBC, as assigned.

EDUCATIONAL SUPPORT

- ◆ Monitoring of academic progress
- ◆ Personal advising and counseling to foster outstanding academic achievement
- ◆ Individual or group tutoring sessions for upper-level SEM (Science, Engineering, and Math) courses, as needed
- ◆ Assistance with preparation for and application to graduate school

ACTIVITIES

- ◆ Orientation and regular group meetings with the MARC U*STAR Program staff
- ◆ Travel to one off-campus scientific conference per year during the Trainee's participation in the MARC Program
- ◆ Attend monthly MARC research seminars
- ◆ Graduate School preparation workshops
- ◆ Mandatory, one-credit course in research conduct and ethics
- ◆ Mandatory, two-credit course in scientific writing
- ◆ Present research at the UMBC Undergraduate Research & Creative Achievement Day (URCAD)

MENTOR PROGRAM

A Sustained Independent Research Experience with a UMBC Faculty Mentor. Some summer research experiences may be off campus. The intention of the project is to familiarize students with research methodology and enhance their ability to be accepted into top graduate programs.

ACCOMMODATIONS

UMBC is committed to eliminating discriminatory obstacles that may disadvantage students based on disability. Services for students with disabilities are provided for all students qualified under the Americans with Disabilities Act (ADA) of 1990, the ADAAA of 2009, and Section 504 of the Rehabilitation Act who request and are eligible for accommodations. The Office of Student Disability Services (SDS) is the UMBC department designated to coordinate accommodations that would allow for students to have equal access and inclusion in all courses, programs, and activities at the University.

APPLICATION INSTRUCTIONS

1. Please read all directions carefully.
2. Complete the UMBC MARC U*STAR Application. **Please fill it out online, print, and submit per instructions below.** Your essays must be typed with text confined to the space provided by the form. Please be concise.
3. Complete the UMBC Admissions Application, if necessary.
4. Give the Recommendation Forms to two professors or research mentors in the Sciences, Engineering, or Mathematics who can give insight to the potential success of the applicant in pursuit of a Ph.D. You must allow adequate time for each recommender to complete the form and return it in sealed envelope with their signature across the flap.
5. If you agree to help UMBC track your future success, please complete, sign, and return the two research consent forms (three pages total) along with your application.
6. All application materials should be submitted to the Associate Director, Dr. Jackie King. Please see checklist below.

Checklist

- MARC U*STAR Application (four pages)
- Statement of Educational Goals and Research Interests
- Recommendation Form #1 and Recommendation Form #2 (sealed envelopes with signature on flap)**
- Official Transcript(s) from all colleges attended before enrolling at UMBC.** Also, please provide unofficial UMBC transcripts.
- The two signed Research Consent Forms, if you are willing to participate in the program evaluation.
- Citizenship documentation
- Resume or CV

**may be mailed to the Associate Director
Jackie King, Ph.D.
MARC U*STAR Program
UMBC
1000 Hilltop Circle
Sherman Hall, Room 218 H
Baltimore, MD 21250

PLEASE NOTE: You will be notified by a representative of the MARC U*STAR Steering Committee regarding the outcome of your application. Top applicants will be interviewed and MARC U*STAR Trainee decisions will be announced after final interviews. Successful applicants must complete and sign a Scholarship Agreement. Proof of citizenship (copy of a United States birth certificate) or permanent residency (copy of “green card”) is required prior to official acceptance into the program. Official appointments are completed on the NIH website, with the assistance of the MARC U*STAR staff.

UMBC MARC U*STAR PROGRAM

TRAINEE APPLICATION

Please type or print neatly

Last Name _____ First Name _____ Middle Initial _____
 UMBC Student ID Number _____ Male _____ Female _____ Date of Birth _____
 Campus Address _____
 Campus Phone # _____ Cell Phone # _____
 Permanent Address _____
 Permanent Phone Number _____ E-mail _____

Year of Graduation	Name/Address of High School	County

UMBC Graduation Date ____ / ____ (mm/yy) SAT Scores: Highest Verbal ____ Highest Math ____

List all SAT exam dates _____

List all colleges and universities attended:

College/University	Major	Cum GPA	GPA in Major

Are you currently enrolled at UMBC? Yes No

If No, have you submitted a UMBC Admission application? Yes No

Do you have UMBC campus housing secured for Fall 2019? Yes No

Do you currently receive support from the Meyerhoff Scholarship Program? Yes No

If Yes, please describe this support:

Premier Distinguished Fellow NSA Affiliate Other

Are you eligible for a Pell Grant? Yes No

Are you the first member of your family to attend college? Yes No

Do you have a disability? Yes No

If yes, give a brief description (e.g., vision, hearing, etc.)

Racial Background: (check one or more)

American Indian or Alaskan Native Black or African American
 Native Hawaiian or other Pacific Islander White
 Asian Asian/Indian
 Other: _____

Are you Hispanic (or Latino)? Yes No

Citizenship Information

a. Are you a citizen of the United States of America? Yes No
(A photographic copy of your birth certificate or passport with a state-issued photo identification card is required with this application.)

b. If you are not a U.S. Citizen, are you a Permanent Resident with a Permanent Residency card?
 Yes No **Photographic copies of both sides of your card are required.**

c. I believe that I am a U.S. Citizen or Permanent Resident of the United States, but I cannot provide the required documentation. Yes No
 This situation (c) will require additional investigation. You must provide a written explanation of your U.S. Citizenship Status and permission from you, the student, and your guardian, if applicable, and any legal counsel for UMBC to look into your status. Please note that there are a limited number of appointments available to the MARC U*STAR Program at UMBC and any delay in proving your citizenship status may negatively impact your acceptance into the MARC U*STAR Program at UMBC. Therefore, UMBC and its staff take no responsibility for the loss of any student’s potential program support because of related delays.

I require self-only medical insurance if appointed as a MARC Trainee. (Only available if Trainee cannot be covered by a family insurance policy.) Yes No

Name, address and telephone number of Parent/Guardian _____

Please list the name, address, and telephone number (other than the address listed above) of a relative, or other person who can be used as a secondary contact for you:

Do you have outstanding federal student loans? Yes No If yes, please explain:

Are you responsible for any other federal debt, such as delinquent taxes? Yes No

If yes, please explain: _____

Have you received any prior NRSA funding? Yes No

If Yes, name program and dates of participation (MARC, MIRT, etc.). _____

Do you plan to pursue a Ph.D. after earning a B.S./B.A. degree? Yes No

Do you plan to pursue a career in Biomedical Research or Mathematics after earning a Ph.D.? Yes No

PLEASE ANSWER THE ESSAY QUESTIONS IN THE SPACE PROVIDED

1. Why do you believe that a career in biomedical or behavioral sciences research or mathematics is right for you?

2. How will the MARC U*STAR Program assist in your development as a future research scientist?

3. Describe a challenge you faced (personal, group, academic or other) related to diversity and how you approached it.

STATEMENT OF EDUCATIONAL GOALS AND RESEARCH INTERESTS

Date _____ UMBC Student ID Number _____

Last Name _____ First Name _____ Middle Initial _____

PLEASE TYPE YOUR ESSAY

Please write a brief statement, (1) describing your educational goals, (2) reasons and motivation for pursuing these goals.

RECOMMENDATION

(Please note: Two recommendations are needed.)

To be completed by a professor or research mentor in the Sciences, Engineering, or Mathematics who can give insight to the potential success of the applicant in pursuit of a Ph.D. and biomedical research career.

Please return this recommendation in a sealed envelope with your signature across the flap of the envelope to Dr. Jackie King, Associate Director, MARC U*STAR Program Office, Room #218H, Sherman Hall, 1000 Hilltop Circle, Baltimore, MD 21250. If you like, you may email your recommendation to jking3@umbc.edu

Applicant's Name: _____

1. How do you know the applicant?

2. Please describe the characteristics which make this student an outstanding candidate for the MARC U*STAR Program - a program dedicated to the preparation of underrepresented undergraduates for Ph.D. programs and research careers in the Biomedical Sciences. **(If you wish, you may attach the evaluation on your stationery.)**

Application Deadline: February 13, 2019

Your Name: _____ Title: _____
Department: _____ Institution: _____
Address: _____
Signature: _____ Telephone Number: _____

THANK YOU FOR YOUR SUPPORT OF THE MARC U*STAR PROGRAM AT UMBC.



AN HONORS UNIVERSITY IN MARYLAND

UMBC MARC U*STAR Program
University of Maryland, Baltimore County
1000 Hilltop Circle
Baltimore, MD 21250
PHONE: 410-455-2634

Dear MARC U*STAR Program Applicant:

We invite you to take part in an important research project as part of the Maximizing Access to Research Careers (MARC)/Undergraduate Student Training in Academic Research (U*STAR) Program at UMBC, which is funded by the National Institute of General Medical Sciences (NIGMS)/National Institutes of Health (NIH) and UMBC. This research will track the future academic success of high-achieving students in the biomedical sciences and mathematics who apply to this program.

We would appreciate your participation in this NIGMS-sponsored research. All information obtained will be strictly confidential, and the results of the research will be reported in-group form (i.e., individual results will not be reported). If you agree to participate, please complete the two enclosed consent forms, one of which will allow us to obtain your future college undergraduate and graduate school transcripts.

As a talented student yourself, you can make an important contribution to future generations of talented students by returning the two signed consent forms (a total of three pages) along with your completed application to the MARC U*STAR Program.

If you have any questions please call Dr. Jackie King, MARC Associate Director, 410-455-2634.

Sincerely,

Phyllis Robinson

Phyllis Robinson, Ph.D.
Director

Kenneth Maton

Kenneth Maton, Ph.D. Program
Principal Evaluator

Keith Harmon

Keith Harmon
Director
Meyerhoff Scholarship Program

Freeman Hrabowski

Freeman Hrabowski, III, Ph.D.
President
UMBC

Principal Investigator: Phyllis Robinson, Ph.D.

Department: Biological Sciences

Telephone: 410-455-2977

INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES

Minority Access to Research Careers (MARC)/Undergraduate Student Training in Academic Research (U*STAR) Program

I. INTRODUCTION/PURPOSE:

I have been asked to participate in this research because I am an applicant to UMBC's MARC U*STAR Program. The purpose of the research is to examine the effectiveness of the MARC U*STAR program, a program to enhance the educational success of underrepresented, minority students in biomedical science majors at UMBC. As part of this research, I understand that my research mentors may be asked to take part in interviews or surveys concerning their experiences and perceptions concerning the Program. My participation in this study is expected to last until I have completed my undergraduate and, if applicable, graduate education.

II. PROCEDURES:

I will be asked to sign a form allowing release of undergraduate and any future graduate transcripts. Also, I may be asked to take part in interviews or complete surveys and questionnaires concerning my college experience.

III. RISKS AND BENEFITS:

My participation in this study does not involve any risks and I have been informed that my participation in this research will not benefit me directly. Potential benefits to others may result from the knowledge gained from my participation in this research study.

IV. CONFIDENTIALITY:

All academic transcript information, and information provided through questionnaire or interview, will be fully confidential. Only the investigator and members of the research team will have access to these records. If information learned from this study is published, I will not be identified by name. By signing this form, however, I allow the research study investigator to make my records available to the University of Maryland Baltimore County (UMBC) Institutional Review Board (IRB) and regulatory agencies as required to do so by law.

Consenting to participate in this research also indicates my agreement that all information collected from me individually may be used by current and future researchers in such a fashion that my personal identity will be protected. Such use will include sharing anonymous information with other researchers for checking the accuracy of study findings and for future approved research that has the potential for improving human knowledge.

V. SPONSOR OF THE RESEARCH:

The National Institutes of Health is the sponsor of this research study.

VI. CONTACTS AND QUESTIONS:

The principal investigator, Dr. Phyllis Robinson or Dr. Kenneth Maton, the principal evaluator, who are responsible for this research study, have offered to and have answered any and all questions regarding my participation in this research study. If I have any further questions, I can contact Dr. Phyllis Robinson (410) 455-2977, or Dr. Kenneth Maton at (410) 455-2567.

If I have any questions about my rights as a participant in this research study, contact the Office for Research Protections and Compliance at (410) 455-2737 or compliance@umbc.edu.

VII. VOLUNTARY PARTICIPATION

I have been informed that my participation in this research study is voluntary and that I am free to withdraw or discontinue participation at any time. I have been informed that data collected for this study will be retained by the investigator and analyzed even if I choose to withdraw from the research. If I do choose to withdraw, the investigator and I have discussed my withdrawal and the investigator may use my information up to the time I decide to withdraw.

I will be given a copy of this consent form to keep.

VIII. SIGNATURE FOR CONSENT

The above-named investigator has answered my questions and I agree to be a research participant in this study.

Print Subject's Name: _____ Date: _____

Subject's Signature: _____ Date: _____

Investigator's Signature: _____ Date: _____

<p>97a079 exemption consent updated 111616.doc</p>  <p>AN HONORS UNIVERSITY IN MARYLAND</p> <p>Approved by the Institutional Review Board</p>	<p>Permitted for use 11/16/2016</p> <p>UMBC ORPC: 11/16/2016 3:03 PM</p>
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Principal Investigator: Phyllis Robinson, Ph.D.
Department: Biological Sciences
Telephone: 410-455-2977

Date _____

Dear Registrar:

Please send a copy of my current transcript to:

Dr. Kenneth Maton
Principal Evaluator, MARC U*STAR Program
UMBC - Department of Psychology
1000 Hilltop Circle
Baltimore, MD 21250

As I have been informed, this transcript will be used only as part of the National Institutes of Health/National Institute of General Medical Sciences funded research on talented undergraduate and graduate students. Individual students will not be identified in reported findings; only group information will be reported. Each year, Dr. Maton will provide a copy of this form to the registrar's office.

Signature _____ Date _____

Print Name Clearly Below:

NOTE: THIS TRANSCRIPT IS IN ADDITION TO THE TRANSCRIPT
REQUIRED FOR THE APPLICATION. PLEASE RETURN THIS FORM WITH
THE APPLICATION