

Temple University/National Institutes of Health (NIH)
MARC at Temple University T34 GM136494

MARC@TU 2024 PROGRAM APPLICATION FORM

Students wishing to apply for this program must **complete and submit this Application Form**, along with all related materials **BY APRIL 15, 2024** to: E-mail: tumarc@temple.edu Attention: Dr Liz Russell McKenzie If you have any questions, please either email or send a text to Tel: 610-888-5518.

A faculty panel will review applications and interview shortlisted applicants. Interviews will take place on a rolling basis during April. Students will be notified shortly after about decisions made and whether your application was successful. **There will be an Orientation session for successful scholars during the first week of June.** Your 2024 summer research internship will begin in early June and last until mid-August. There will be weekly workshops (in-person and Zoom).

We hope you will discuss this opportunity with your family and communicate any concerns or questions to us directly. You can email Dr. Elisabeth Russell McKenzie [Dr. Liz], Program co-Director/Coordinator at tumarc@temple.edu.

Applicants must be planning to attend graduate school i.e. planning to pursue a Ph.D. Students interested in MD/PhD or other joint PhD programs will be considered but not students interested solely in health professions. These requirements are stipulated by the NIH. THIS IS A ONE to THREE YEAR COMMITMENT.

I. **Eligibility:** applicants must:

- qualify for minority ethnic/racial status under the NIH guidelines (African American, Hispanic, native American, Hawaiian or other Pacific Islander)

AND/OR

- qualify based on disability status [see application for details]
- qualify by disadvantaged background (2 or more categories) [see application for details]

ALSO

- be entering their junior year in Fall 2024 (or have at least 2 years to graduation)
- have a GPA of 3.00 or higher (preferred)
- be interested in **non-clinical** graduate research in biomedical sciences, public health or psychology
- be citizens or permanent residents of the US.

II. **Requirements:**

- Majors in the following disciplines: **CST** - biology, biochemistry, biophysics, chemistry, computer and information sciences, mathematical biology, cellular and molecular neuroscience; **CLA** -neuroscience, cognitive neuroscience, non-clinical psychology, developmental psychology; **CEng** -bioengineering - cellular track; **CPH** - public health - nutrition, epidemiology and biostatistics, kinesiology.
- Interest in research areas including but not limited to biomedical sciences, biomedical informatics, biomedical engineering, biochemistry, data analytics and bioinformatics, genomics, computer applications which intersect with public health and disease management, neuroscience: systems, behavior and plasticity, cognitive neuroscience, developmental psychology, translational research - leading to application to graduate programs in biomedical science, integrative/translational research, non-clinical psychology or public health.
- Awardees will work with a faculty mentor at Temple University and engage in research-related activities full-time in-person or remotely each week during the summer of 2024. (35 hours a week)
- Agree to work with the research group during the 2024–2025 academic year for approximately 12 - 15 hours each week.

- Awardees will apply to work with a research group at a high research intensive university, or medical school for summer 2025, or remain with the research group at Temple University working on publishable research. This will be a full-time appointment. Placements must be approved by MARC administrative team.
- Continue to work with an approved research group during the 2025–2026 academic year for approximately 12-15 hours each week
- Maintain good academic standing and full-time student status (minimum 12 credit hours per semester).
- Attend weekly group and individual meetings and other required MARC activities.

III. Selection: Members of the MARC Selection Committee will assess each applicant, based on the following criteria:

- personal and academic goals
- potential for leadership in the academy or in industry
- interpersonal and communication skills
- letters of recommendation from faculty mentors
- individual plans for incorporating the scholarship experience into specific career goals

IV. Awards:

Students selected for the program will receive partial tuition each year [per year approx. \$12,750 in-state and \$17,500 out-of-state]

Each student will receive a stipend of \$14,340 for the year contingent upon successful progress in the research project and upon recommendation of the mentor (\$1,195.00 monthly)

Housing and reimbursable travel allowance as necessary for summer 2025 research at other universities and conference presentations (travel subject to COVID-19 guidelines).

V. Application

1. A packet from the applicant containing:

- application form
- your resume or CV
- a current Temple University transcript

2. Faculty Recommendations:

Recommendation letters + recommendation form from two faculty members (not Teaching Assistants):

Letters of recommendation and completed evaluation form from **two faculty members in your major**. *Download Faculty Recommendation Forms and email to faculty AFTER you have contacted them and they have agreed to supply recommendation.*

PLEASE NOTE: Names and email addresses of your recommenders should be included in your application form. Recommendation letters from faculty should be emailed directly to Dr. Liz Russell McKenzie at tumarac@temple.edu.

Some General Advice on Recommendation Letter and Forms:

1. **Do not allow shyness or hesitation about an application prevent you from participating in these programs.** If you are strongly motivated to pursue a career in research and are having trouble with recommendation forms or other parts of your application, contact MARC@TU coDirector, Dr Liz for advice. If a doctoral degree in biomedical sciences is your goal, our programs will benefit you greatly, both in the present by allowing you to obtain valuable research experience, and in the future with admission to special off-campus undergraduate summer research programs and doctoral (Ph.D.) programs.
2. The MARC application requires two faculty recommendations, to be completed on the MARC Recommendations form. We advise you to provide these to the people from whom you will obtain a recommendation, and make sure they have the correct email address.
3. Obtain recommendations preferably from faculty members in your major. TAs **are not** recommended. **If you have worked/are working with a research group, get one from your research mentor.**
4. The better you know someone, the better your recommendation is likely to be. **If you have any doubts if a person will evaluate you well, ask them whether they “know you well enough to write a good recommendation for you.”** People don’t like writing bad recommendations and this way, you give them an easy way to turn you down rather than write a bad or very scanty recommendation. Realize, however, that even a scanty recommendation is better than not turning one in at all or not applying.
5. **If a faculty member doesn’t know you very well but will work with you, you may assist them by helping them to get to know you better. Set up an appointment and provide them with a letter detailing your future goals and the program to which you are applying, your personal statement to the program, as well as a copy of your resume/CV.**
6. Ask your recommender as far in advance as possible. Usually a minimum of 2 weeks notice. Good recommendations take some consideration and take a good bit of time to put together and your professors are very busy.
7. Follow up with your recommenders to make sure that the recommendations are actually sent.

Questions and enquiries should be addressed to Dr. Elisabeth Russell McKenzie at tumarc@temple.edu



Application Form

How to Apply

- (1) Complete this application and submit to tumarc@temple.edu
- (2) Have **2 letters of recommendation** submitted to tumarc@temple.edu

Please provide ALL of the following information.

Contact Information

- Name (Last, First, Middle): _____
- Email (primary contact): _____ Phone: _____
- TUID#: _____ Date of Birth: _____

Demographic/Eligibility

- US Citizen, Resident, or Visa? Check **ONE** of these:
 - I'm a **US Citizen** or a **Permanent Resident** (provide copy of green card)
 - I'm **NOT** a US Citizen or Permanent Resident
- Ethnicity/Race – Select **ALL** of the following groups with which you identify as part of your cultural or family heritage. You may choose more than one.
 - Black/African American
 - Hispanic/Latino
 - American Indian or Alaska Native
 - Native Hawaiians or Other Pacific Islander
 - Asian
 - White/Caucasian
 - Other: _____
- Individual with disabilities? Do you have a physical or mental impairment that substantially limits one or more major life activities, as described in the [American with Disabilities Act of 1990](#), as amended?
 - Yes
 - No
 - Prefer Not to Say
- Gender Identification:
 - Female
 - Male
 - Trans-gender Male or Female
 - Some other gender not mentioned previously

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- **Individual from disadvantaged background?** Do you identify with two or more of the following categories?

Yes, I identify with 2 or more of the categories*

- Were or currently are homeless, as defined by the McKinney-Vento Homeless Assistance Act
Definition: <https://nche.ed.gov/mckinney-vento/>
- Were or currently are in the foster care system, as defined by the Administration for Children and Families
Definition: <https://www.acf.hhs.gov/cb/focus-areas/foster-care>
- Were eligible for the Federal Free and Reduced Lunch Program for two or more years
Definition: <https://www.fns.usda.gov/school-meals/income-eligibility-guidelines>
- Have/had no parents or legal guardians who completed a bachelor’s degree
see <https://nces.ed.gov/pubs2018/2018009.pdf>
- Were or currently are eligible for Federal Pell grants
Definition: <https://www2.ed.gov/programs/fpg/eligibility.html>
- Received support from the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) as a parent or child
Definition: <https://www.fns.usda.gov/wic/wic-eligibility-requirements>
- Grew up in one of the following areas: a) a U.S. rural area, as designated by the Health Resources and Services Administration (HRSA) Rural Health Grants Eligibility Analyzer (<https://data.hrsa.gov/tools/rural-health>), or b) a <https://data.hrsa.gov/tools/shortage-area/by-address> (qualifying zip codes are included in the file).
Only one of the two possibilities here can be used as a criterion for the disadvantaged background definition.

No, I don’t identify with 2 or more of the categories

Prefer Not to Say

* Please note that in order to qualify as an individual from a disadvantaged background you will need to identify 2 or more categories and provide supporting information (e.g. Pell Grant Documentation).

Academic Info

Undergraduate Education

College Enrollment: _____

Degree Program: _____

BS

BA

○ **Major:** _____ 2nd Major, if applicable: _____

○ **Minor:** _____ 2nd Minor, if applicable: _____

Fall 2023 overall GPA (on a 4.0 scale): _____ **Fall 2023 major GPA (on a 4.0 scale):** _____

Expected Graduation (MM/YYYY): _____

Other Academic Information:

We will be looking at your **academic record** since you started your degree program at Temple University. Download your **academic history** and also **relevant advising notes** from tuportal. **These must be submitted as an attachment with this application.** If there is anything important that you want us to know regarding your academic history (e.g. you switched major after your freshman year, or you transferred from a community college, or you had poor grades because of a serious illness or other personal hardship), please address it in the space provided at the end of this application form.

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College Admissions Exams

College admission exams (e.g., SAT, ACT, other), please enter the details below. TYPE N/A if you didn't do SAT or ACT.

Date Taken	Exam (SAT, ACT etc.)	Total/Composite Score	Individual Scores

Academic and Career Goals

Do you plan to continue to a graduate research degree after you complete your bachelor's degree?

- Yes, that's my plan
- I've thought about it, but I'm not sure
- No

• **YES or MAYBE:**

○ Which of the following types of programs are you interested in entering? *Check all that apply.*

- PhD
- MD (*medical school*)
- MD/PhD (*joint program in medicine and research*)
- Pharm.D (*pharmacy school*)
- Another master's or doctoral program
- Other: _____

- What fields of study are you most considering pursuing for further education (e.g. *Structural Biology, Biochemistry, Biomedical Engineering, Pharmacology, Cancer Biology, Immunology, Developmental Psychology, Bioinformatics, Neuromotor Science*)? List up to 5 fields of interest to you, in order of preference. (For help identifying different fields, see <https://psbr.org/animal-research/careers-in-research>)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

- What do you want to do when you complete your graduate education?

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Current Financial Aid (check all that apply)

Grant

Student Loan

Work Study

Scholarship

No financial aid

Extracurricular Activities/Student Organizations

List any extracurricular activities, awards, special recognition, achievements in sports/athletics, special interests, hobbies, etc. _____

Recommendations

Two academic references you have asked to write recommendation letters: professors in your major, academic advisors, research mentors, lab faculty etc.

Name: _____

Email: _____

Street Address: _____

City: _____ **State:** _____ **Zip:** _____

Telephone: _____

Name: _____

Email: _____

Street Address: _____

City: _____ **State:** _____ **Zip:** _____

Telephone: _____

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Personal Statement: Complete a personal statement which **includes ALL the following:** *(on the next page)*

- ❖ Brief summary of any research experiences (in or outside of the classroom); this can also include science conferences/fairs, presentations, and awards received.
 - ❖ Background information- your family, education, and community background.
 - ❖ Share an example of a challenge which you have experienced, and what steps you took to overcome that challenge.
 - ❖ Reason(s) that made you decide to pursue your current major. What have been your most challenging courses since starting this degree program?
 - ❖ Why are you interested in biomedical research? What are your career objectives? Explain how you think you will contribute to the MARC objectives of increasing the nation's pool of students from underrepresented groups who have the research experience and science preparation to matriculate and succeed in biomedically related Ph.D. programs, and for you to become a role model and leader giving back to your community.
 - ❖ Indicate how the MARC program will contribute to providing experience in your desired area of research interest, your career development, and your personal growth. Why do you think you should be offered this opportunity?

 - ❖ **I understand the scope of the NIH-MARC program and agree to participate fully in the required curricular and research activities during each semester.**
 - ❖ **I fully understand it is expected of me to continue my graduate education in biomedically related research in STEM, basic Behavioral Sciences or Public Health.**
- This is to certify that all information provided in this application is accurate and complete.**

Student Signature: _____ **Date:** _____

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PERSONAL STATEMENT :

Please **HIGHLIGHT** one or more possible major fields of study that you might pursue in graduate school:

- Biochemical Mechanisms of Medicine
- Biochemistry
- Biochemistry and Molecular Biology
- Bioinformatics
- Biomathematics and Biostatistics
- Biophysics
- Brain & Cognitive Sciences
- Cancer Biology
- Cell Biology
- Cell and Regulatory Biology
- Cognitive Neuroscience
- Communication Sciences & Disorders
- Computational Biology
- Developmental Psychology
- Epidemiology & Biostatistics
- Genes and Development
- Genetics and Molecular Medicine
- Genomics
- Health Informatics
- Human and Molecular Immunology
- Immunology and Microbiology
- Integrative Biology
- Kinesiology (non clinical)
- Molecular Carcinogenesis
- Medical Physics
- Microbiology and Molecular Genetics
- Molecular Biology
- Molecular Pathology
- Neuromotor Science
- Neurosciences
- Nutritional Sciences
- Oral Biomaterials
- Physiology & Pharmacology
- Public Health
- Radiological Sciences
- Regulatory Biology
- Reproductive Biology
- Toxicology
- Translational Science
- Virology and Gene therapy
-
- Medical Scientist Training Program

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Anything else? (this is optional)

Is there anything else you want the MARC selection committee to know when evaluating your application? (optional)
Feel free to add it below. **Please include your CV with your application materials.**

Type your response, or cut and paste to here (if more space is needed attach additional text document application email):

After submission of application materials, you should receive an acknowledgment shortly. If you do not, check that the email address was correct, and follow up with us.



**Temple University MARC Program is funded by the NIH through the T34
MARC Undergraduate Student Training in Academic Research**