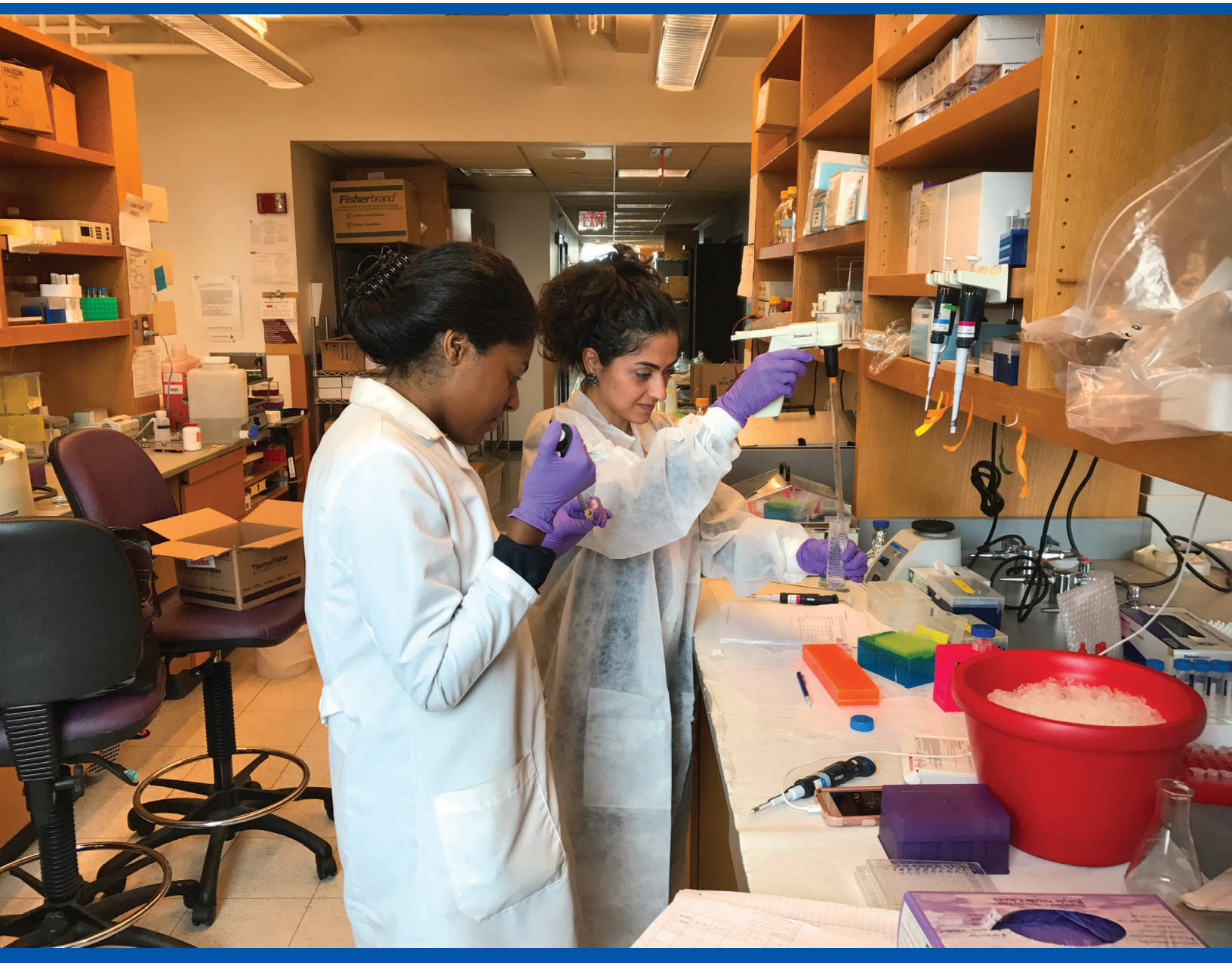
Boston University School of Medicine
Graduate Medical Sciences



MASTER OF SCIENCE
NUTRITION AND METABOLISM

MASTER OF SCIENCE IN NUTRITION AND METABOLISM

Program Overview

Nutrition and metabolism is a field of biomedical science that applies knowledge of basic biology and chemistry to enhancing our understanding of how the body uses energy and nutrients in food, and how this affects health and disease.

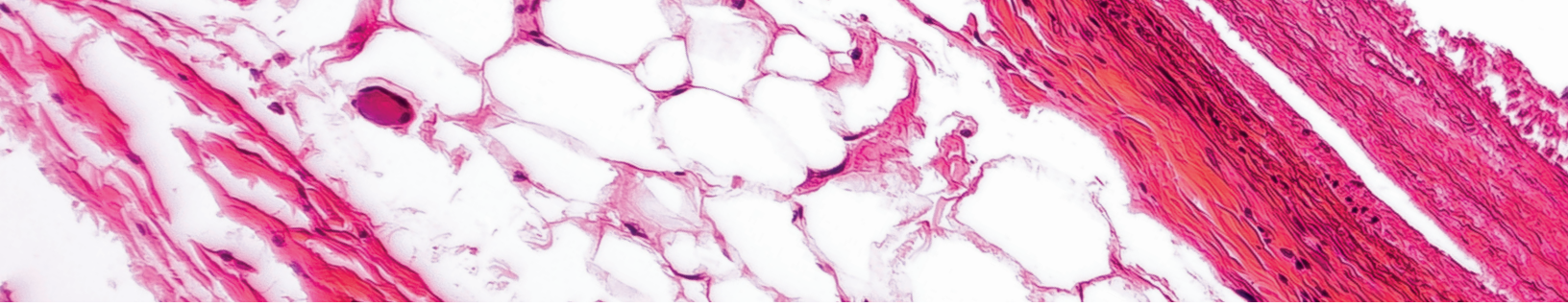
The M.S. in Nutrition and Metabolism prepares students for a wide range of careers in basic, clinical, translational, and epidemiologic research, and also provides an exceptional background for future professional studies in medicine and dentistry, as well as doctoral studies. The program's interdisciplinary curriculum, which includes physiology, biochemistry, molecular biology, genetics, clinical nutrition research, and epidemiology, provides students with a broad knowledge of the biomedical sciences. This knowledge is critical given the rapid pace at which science is currently advancing. In addition to learning essential principles of nutrition and metabolism, students develop critical thinking skills needed to understand and evaluate biomedical research literature and to participate in carrying out that research. Future career paths include foundation work, lab management, medicine, dentistry, medical writing, coordinating or directing of nutrition-related clinical or epidemiologic studies in academic settings, or in the pharmaceutical industry, food or nutriceutical industries, and local and federal government programs.

Program Highlights

- Learn from nationally and internationally recognized faculty who study nutritional and metabolic aspects of obesity, diabetes, heart disease, cancer, and bone health
- Benefit from small class sizes and high levels of mentoring and advising to support each student's success
- Conduct research under the guidance of a faculty mentor
- Write and defend a thesis and co-author scientific papers
- Access world-class resources including the NIH-funded Nutrition Obesity Research Center (bnorc.org) and the Clinical and Translational Sciences Institute
- Receive a graduate degree from the renowned Graduate Medical Sciences at Boston University School of Medicine

Program Description

- 32-credit program (28 course credits and a minimum of 4 research credits)
- Research thesis required
- Program can be completed in one or two years depending on learning goals
- Part-time enrollment is available
- Can begin the program in the Fall or Spring semester



Curriculum Outcomes

- The curriculum emphasizes the development of critical and integrative thinking skills needed to understand the science of nutrition and published biomedical literature
- Coursework prepares students to understand and write scientific papers, as well as design observational and experimental studies
- Students have the opportunity to deepen their knowledge of biosciences, epidemiologic research and clinical research by taking courses offered through the Graduate Medical Sciences, as well as courses offered at Boston University School of Public Health

Curriculum Courses

*Molecular, Biochemical and Physiologic Bases of Nutrition I: Energy Balance and Micronutrients	(4 credits)
*Molecular, Biochemical and Physiologic Bases of Nutrition II: Macronutrients	(4 credits)
*Research Design and Statistical Methods for Biomedical Sciences	(3 credits)
*Clinical Nutrition Research	(3 credits)
*Nutrition & Metabolism Seminar	(2 credits)
*Nutrition & Metabolism Research (Thesis Work)	(4 credits)
Directed Study (by arrangement)	
Elective Coursework (selected according to interests)	(12 credits)

**Indicates required course*

MASTER OF SCIENCE IN NUTRITION AND METABOLISM

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Admissions

Admissions decisions are made on a rolling basis for both the spring and fall semesters. Early applications are encouraged. Later applications will be considered on a space-available basis.

Admissions Requirements

- Completion of standard pre-med science classes (i.e., one year each of biology and general chemistry, and at least one semester of organic chemistry are required; biochemistry and/or other advanced biology classes are beneficial)
- Prior research experience in the form of courses or an independent project, while not mandatory, is preferred
- Only online applications for admission are accepted and must include the following:
  - Official transcripts from each college or university attended - while the most competitive applicants earn grades of B or higher in upper level sciences, the admissions committee considers each candidate's whole application in making a decision
  - Three letters of recommendation from faculty who know you well, especially those with whom you have worked in a research setting or laboratory
  - A written personal statement that describes your qualifications, objectives for the program and experiences/interests in research
- International students must provide TOEFL test results*, unless they hold a degree from a school that teaches all classes in English
- To apply to the program, please visit bu.edu/gms and click on Admissions

**International applicants are encouraged to use the internet-based version of the TOEFL test.*

Tuition, Financial Aid and Student Resources

- For current tuition and fees, please visit our website: www.bumc.bu.edu/gms/gateway/prospective/financial-aid
- Students will incur additional costs for room and board, fees, personal and transportation expenses, books and supplies
- The Financial Aid Office at School of Medicine is available to assist students in identifying sources of financial support including subsidized and unsubsidized student loans
- Provost scholarships are also available to qualified students
- The BU Office of Housing Resources provides information regarding housing, transportation, and Boston neighborhoods. For more details, visit www.bumc.bu.edu/ohr

For more information about the M.S. in Nutrition and Metabolism program please contact:

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