SUMMER COMPONENT

The summer component will be facilitated in person at Jacobs and assigned locally affiliated sites. The 6 (six) week session will expose high school students (grades 9-12) to health care and health professional careers by working with dental, medical and technology students/staff. Only students who have completed one or more terms (fall/spring) of the academic year session are eligible to participate. A 4-6 (four-six) week summer enrichment program for middle school students (grades 7-8) will be facilitated during this period as well. All students will report in person (or logon through ZOOM if predetermined) five days a week for enrichment sessions with faculty and health care professionals. Students must complete a research project in an area of interest under the mentorship of faculty/medical students on an individual basis or as part of a team. The projects will be presented before faculty, staff, students and parents at the conclusion of the summer program.



HOSPITAL EXPERIENCE

Students will gain exposure to health professionals such as doctors, nurses, dentists, technologists, and gain hands-on experience designed to increase awareness of responsibilities, sensitivity to health care environments, and enhance oral, written, and interpersonal skills. Dental, medical and engineering assignments will be given to enhance and develop students' individual academic and career desires. Students receive instruction and guidance on their projects from the Medical STEP Summer Coordinators and are required to maintain a daily journal of their activities and learning experiences.

Applications for each session and all grade levels can be obtained by contacting the Program Coordinator at:

Rmapp2@buffalo.edu

Medical Science and Technology Entry Program
State University of New York at Buffalo
Jacobs School of Medicine and Biomedical Sciences
955 Main Street
Suite 1200, Room 1206
Buffalo, NY 14203-1121

Tel: 716-829-2812 Fax: 716-829-2798

Program Coordinator Renee Mapp, M.S. Rmapp2@buffalo.edu

Program Director
David A. Milling, M.D.



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Elite Scholars
Science & Technology
Entry Program

Jacobs School of Medicine and Biomedical Sciences 955 Main Street Suite 1200, Room 1206 Buffalo, NY 14203-1121 The goal of the Elite Scholars Science and Technology Entry Program at the University at Buffalo (Jacobs School of Medicine and Biomedical Sciences—Medical STEP Elite Scholars) is to increase opportunities for historically underrepresented and disadvantaged students to enter college and acquire the prerequisite skills necessary to pursue pre-professional and professional education programs in scientific, technical, and health-related fields. The program is offered to high school students in grades 9-12 who have an interest in medicine and health related professions and engineering, and who have demonstrated strengths in science and math. (Summer and Middle School information is listed separately.)

ACADEMIC COMPONENT

The academic component is designed to provide academic enrichment in science, mathematics and technology to assist students in acquiring the skills necessary to pursue postsecondary education leading to careers in scientific, technical, health related fields or licensed professions such as medicine, medical technology, nursing, dentistry, etc. Its objectives are:

- 1. to provide a program of instruction and educational activities to enhance performance for entry in health related professions;
- 2. to provide enrichment activities in key academic areas:
- to provide personal and vocational counseling by qualified staff members;
- 4. to enhance skills in the comprehension, understanding and delivery of scientific and scientifically related information;
- 5. to introduce students to the operation of basic instruments utilized in the medical field, (i.e., stethoscopes, microscopes, etc.);
- 6. to introduce students to the fundamentals of computer operation and word processing;
- 7. to introduce students to practical laboratory activities.

During the academic year session the core courses offered are Biochemistry and Biophysics (with coordinated laboratory experience), Applied Math, and Computer Math. The intent of this integrated curriculum is to enhance and increase high school students' mathematical skills, experiences in laboratory sciences, and understanding of fundamental concepts in mathematics and science. The courses and labs are grouped relative to students' current levels of coursework, which allow for small group assignments, more individualized instruction, and opportunity to identify academic areas that might lean toward tutorial assistance and/or counseling.

Classroom instruction will be conducted in person. If change, students and parents will be notified by email. Classes are held on Saturdays from 10:00 a.m. to 2:30 p.m. A limited number of bus passes will be issued to students in need of transportation assistance.

PROGRAM FACILITATORS

Since the aim of this program is to assist students with career preparation and selection,



medical students and health professionals representing various career fields are invited to speak to share their work experiences, job qualifications and preparation, to facilitate the important link among students, college, and the working world. Wherever possible, hands-on experience is integrated into guest speaker series or academic enrichment sessions.

TUTORIAL COMPONENT

A tutorial program is available for students' experiencing difficulty in school subjects.



This component is designed

to develop mastery of the subject matter, self-confidence, and foster a sense of achievement. Tutorial instruction is required of all students whose grades begin to slip below their abilities. Report cards are collected and reviewed every twelve weeks in order to identify areas where students' academic strengthening might benefit from assistance. Upon advance request, tutoring sessions are held Tuesdays through Thursdays at varied hours, and Saturday mornings before program.

INSTRUCTORS

First and second year medical students and graduate level students provide classroom instruction and tutoring, serving as an excellent source of role models for the students. This also provides a forum by which both medical and STEP students can sharpen their skills, stimulate healthy competition and foster self-confidence.

COUNSELING

Vocational, college readiness and personal counseling are extremely helpful and effective tools offered to all of our students. Seniors receive assistance with college selection, completion of college applications, financial aid form completion, personal statements (college essays) and local and national scholarship applications. Letters of recommendation are written on behalf of students beginning in their junior year for college admission, honor societies, scholarships and employment.