

# MEDICAL RESEARCH SCHOLARS PROGRAM

<https://medicine.yale.edu/bbs/training/nih-programs/mrsp>

## Directors

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## MEDICAL RESEARCH SCHOLARS PROGRAM GRADUATE CERTIFICATE

The Medical Research Scholars Program (MRSP) bridges barriers between traditional predoctoral and medical training by providing students with both medically oriented coursework and a mentored clinical experience. The coursework provides a grounding in biomedicine, and the clinical experience enables students to interact with patients to learn firsthand about disease symptoms, treatment options, and the limitations of current therapies. This combination of medical knowledge and face-to-face interaction with patients and their doctors provides a new perspective and enhances the rigorous training students receive in the Yale Biological and Biomedical Sciences (BBS) Program.

## *Program Eligibility*

Incoming BBS students are eligible to apply, and five to seven students are admitted per year. Students are invited to apply after accepting Yale's offer of admission to the Graduate School of Arts and Sciences. A separate MRSP application is required, and the MRSP core leadership team will review applications and select students for the program. If admitted, students remain within the BBS Program but participate in the additional MRSP curriculum.

## *The Curriculum*

The MRSP curriculum consists of four full-term courses that focus first on normal human physiology and organ-based cell biology, followed by human pathobiology and then an introduction to drug discovery, validation and clinical trials. Students also take an intensive summer course in biostatistics. Some of these MRSP courses are open to all BBS students at the discretion of the course directors. The centerpiece of the MRSP is an additional two-year Mentored Clinical Experience course during years two and three of the program. This course integrates basic and clinical research while additionally granting students access to patients and patient settings. Exposure to patients and to the practice of medicine will enable graduates to work more confidently at the interface of research and medicine and facilitate future collaborations with clinical researchers. The Mentored Clinical Experience is open only to students formally enrolled as Medical Research Scholars and to students in the Translational Biomedicine Ph.D. program.

## Year One

Fall

C&MP 550

Physiological Systems

|                            |   |   |
|----------------------------|---|---|
| Spring                     |   |   |
| CBIO 604                   | Physiologic Function and Cellular Structure of Organ Systems    | 1 |
| Summer                     |   |   |
| IMED 645                   | Introduction to Biostatistics in Clinical Investigation         | 1 |
| <b>Year Two</b>            |   |   |
| Fall                       |   |   |
| PATH 690                   | Molecular Mechanisms of Disease <sup>1</sup>                    | 1 |
| Spring                     |   |   |
| B&BS 680                   | Topics in Human Investigation                                   | 1 |
| <b>Years Two and Three</b> |   |   |
| C&MP 610                   | Medical Research Scholars Program: Mentored Clinical Experience | 1 |

<sup>1</sup> May be substituted with C&MP 600 and C&MP 601, Medical Physiology Case Conferences

### *Award of the Certificate*

Students who complete the full curriculum and who remain in good academic standing in their graduate programs will be awarded the certificate.