

# RESEARCH IN MEDICINE (RMED)

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## **RMED 0100 - Introduction to Research**

2 Credits (Repeatable up to 6 credits)

The course provides first-year medical students an overview to the research enterprise. Topics include the fundamentals of research in evidence-based medicine, basic principles of clinical research, regulatory and compliance requirements, and research ethics.

## **RMED 0101 - Bench to Bedside**

1-10 Credits (Repeatable for credit)

Small groups of students will read and present a classic or recent high-impact, primary paper embodying translational / clinical research. Papers will be pre-selected from 2-Minute Medicine or other sources, and will correspond with course topic (e.g. metabolic disorder in CMB). Groups will be 10 students, one group presenting every other week starting in week 6 of Yr 1, and every week starting in week 4 of Yr 2 (except summative exam weeks).

## **RMED 0102 - Applied Family Med Research**

1-12 Credits (Repeatable for credit)

This elective offers medical students direct hands-on experience in primary care research. Experiences could include working with analyses of study data and interpreting results and writing a white paper and abstract on a study question you develop. Biostatistical staff will conduct analyses for you. Experiences may also include subject recruitment, data entry, telephone surveys, in-person data collection, consenting patients, summarizing literature and participating in research team meetings. Students will be matched with a faculty member who is the principal investigator of a primary care research oriented study.

## **RMED 0103 - Rhinology & Sinus Surgery: Office, OR and Research**

1-12 Credits (Repeatable for credit)

Exposure to the Rhinology portion of Otorhinolaryngology. Students will spend time in the operating room observing nasal surgeries and will attend clinic to observe office diagnosis and treatment. Students will also be expected to take part in ENT interest group online training for research. Discussion will be undertaken with each student to determine specific areas of interest and research will then be tailored as necessary.

## **RMED 0105 - Research Laboratory Orientation**

1-12 Credits (Repeatable for credit)

Students will read primary and review literature to prepare themselves for a summer research experience into the molecular virology of Hepatitis B and antiviral drug discovery. Students will become proficient in the Tavis lab's laboratory safety and operating procedures. Students will be trained in basic laboratory skills.

## **RMED 0106 - HCV (Hepatitis C Virus)**

1-4 Credits (Repeatable for credit)

HCV mediated pathogenesis, liver cancer Role of bitter melon in cancer growth, and cancer stem like cells Non-coding RNA and oral cancer.

## **RMED 0107 - Tumor Immunology**

1-6 Credits (Repeatable for credit)

Students will learn about the natural killer (NK) cells and evaluate their mechanisms of anti-tumor activity. Students will work in the laboratory and perform a variety of tumor killing assays which measure cell death by apoptosis and necrosis. Students will learn how to do these experiments and be responsible for understanding these pathways.

## **RMED 0111 - Research on Lysosomal Storage Diseases**

1-12 Credits (Repeatable for credit)

Study of lysosomal storage disorders (Mucopolysaccharidoses). Enzyme replacement therapy, stem cell therapy, study of phenotype (cardiomyopathy, bone disease, etc.)

## **RMED 0201 - Bench to Bedside**

1-2 Credits (Repeatable for credit)

Small groups of students will read and present a classic or recent high-impact, primary paper embodying translational / clinical research. Papers will be pre-selected from 2-Minute Medicine or other sources, and will correspond with course topic (e.g. metabolic disorder in CMB). Groups will be 10 students, one group presenting every other week starting in week 6 of Yr 1, and every week starting in week 4 of Yr 2 (except summative exam weeks).