# University of Puerto Rico – Medical Sciences Campus School of Health Professions & School of Medicine POST-DOCTORAL MASTER OF SCIENCE IN CLINICAL AND TRANSLATIONAL RESEARCH PROGRAM

#### PROGRAM'S CURRICULUM

The specialized competency-based curriculum consists of 30 semester credits to be completed in two years, including two summers. The didactic core component has 24 semester credits, and the research component consists of 6 semester credits equivalent to a one-year research project.

### **DIDACTIC COMPONENT**

The didactic core component consists of 24 semester credits and has been transformed with the addition of technology as a tool to facilitate class participation and discussion across the distance. It has been able to change from 100% of the courses face to face to at present: 69% online, 6% hybrid and only 25% face-to-face (web-enhanced) (n=16).

The curriculum also includes the Research Education and Career Development Seminars (RECDES), which consist of local and national invited lecturers and visiting professor to participate, giving lectures, journal clubs and workshops as well as scholars presentations. These seminars allow Scholars to enhance their communication skills and receive critiques of their research projects from experts internal and external to the program.

## RESEARCH COMPONENT

### A. MENTORED CLINICAL AND TRANSLATIONAL RESEARCH Project

An essential component of the MSc Program is the completion of an original research project under the direction and supervision of a research mentor and a research committee. The research project must address a question that meets the NIH definition of clinical and translational research as stated below and should address health disparities focusing in one of the areas of interest of the program. Completion of the research project is expected during the second year's research component course (6 semester credits). **Progress of the proposed research will be carefully monitored to reduce the risk that a Scholar may be delayed from making timely progress.** 

The finalized research project must demonstrate the following scholar's clinical and translational research competencies:

- 1. Develop and carry out a primarily independent work
- 2. Communicate research findings to different groups of individuals
- 3. Assess the strengths and weaknesses of different study designs for a given research question
- 4. Evaluate data results of statistical procedures and graphics
- 5. Adhere to the basic rules and regulation of responsible conduct of research with human subjects
- 6. Demonstrate effective organization of a research team.

DIDACTIC COMPONENT (24 CREDITS)	COURSE CODE	OFFICIAL MODALITY	SEMESTER CREDITS
First Year/First Semester			
Introduction to Clinical and Translational Research	INCL 6005	Online	1
Epidemiology in Clinical and Translational Research	INCL 6047	Hybrid	3
Clinical and Translational Research Protocol Development	INCL 6056	Online	2
Biostatistics in Clinical and Translational Research I	INCL 6041	Face-to-Face	2
Biostatistics in Clinical and Translational Research II	INCL 6042	Face-to-Face	2
Research Career Development Seminar Series		Hybrid	0
First Year/Second Semester			
Bioethics and Regulatory Issues in Clinical and		Online	
Translational Research	INCL 6025		2
Informatics Application in Clinical Research	INCL 6016	Face-to-Face	1
Introduction to Bioinformatics and Medical Genomics	INCL 6045	Online	1
Health Disparities: A Translational Research Approach	INCL 6008	Online	2
Clinical Trials in Clinical and Translational Research	INCL 6055	Online	1
Bioanalytical Methods in Clinical and Translational	INCL 6075	Online	2
Research			
Research Career Development Seminar Series			0
Second Year/First Semester			
Introduction to Biomedical Informatics	INCL 6017	Online	1
Introduction to Health Services Research (Elective)	INCL 6006	Online	1
New Frontiers in Clinical and Translational Research	INCL 6085	Face-to-Face	1
Research Career Development Seminar Series			0
Research Component	INCL 6095	Online	6
Second Year/Second Semester			
Scientific Communication in Clinical and Translational	INCL 6009	Online	2
Research			
New Frontiers in Clinical and Translational Research	INCL 6085		Cont.
Research Career Development Seminar Series			0
Research Component	INCL 6095		Cont.
One semester credit is equivalent to 18 contact hours			