Brief Description of the facility:

The Translational Proteomics Center provides training, resources, and tools for investigators seeking to use innovative approaches of proteomics to their research, as well as to undergraduate and graduate students in the biomedical field. The Center has been successful in fostering collaborations and partnerships among researchers aiming to reduce health disparities, including HIV and other infectious diseases, cancer, and neurological/neurodegenerative diseases as well as basic research in support of these fields.

Visits are Welcome...

Visiting hours are Monday through Friday from 9:00 AM to 4:00 PM. Instruments operate 24 hours a day, 7 days a week, and access can be provided outside visiting hours by previous appointment, under the supervision of Yadira M. Cantres. Since special access permits are required to visit the facilities and the use of equipment must be registered by the RCMI Ticket System, visitors and investigators need to contact Center Staff in advance. Applications for sample analysis are accepted one month in advance. Investigators with interests in our services are required to contact Dr. Loyda Melendez for consultation prior to sample analysis, and fill an Official Registration Form provided by the Staff.

For more information, visit our Webpage: http://rcmi.rcm.upr.edu/?q=proteomic-page



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Translational Proteomics Center



Loyda M. Meléndez , Ph.D . (PI)

Our Specialized Instrumentation

BioRad Electrophoresis Station and Trans Blot Transfer System - For Western Blotting





BioRad Gel Doc XR+ - For Western Blot Documentation



Varioskan Flash Spectral Reader - For ELISA microplate reading



Open for Students. The center provides training prior to use for the Western Blotting and ELISA reading Instrumentation.

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Our Services

Service Provided	Fee
Initial Consultation	Free
Depletion of most abundant proteins *	\$35/sample
Protein fractionation*	\$35/sample
Immunoprecipitation	\$150
>>Investigators provide antibodies.	\$130
Sample Preparation:	
One-dimensional SDS PAGE	\$50/gel
Gel staining (Coomasie or Silver)	
Sample Processing for Mass Spectrometry:	
Reduction and Alkylation	\$15/Sample
Enzymatic digestion (in-gel)	
Peptide Extractions	
Protein Identification:	
LC-MS/MS Analysis (Easy-nLC/LTQ XL)	\$20/Sample
Proteome Discoverer 1.4 Data Search	
Quantitative Proteomics:	
Peptide tagging (TMT11plex)	\$1,050/Kit
LC-MS/MS Analysis (Easy-nLC/Q-Exactive Plus)	
Proteome Discoverer 2.5 Data Search	
Consulting and Final Report	Free
Proteomics Abstract and Manuscripts Revision	Free

Contact TPC staff for details about <u>sample submission requirements</u> or for more details about Fees.

*Services offered in collaboration with Dr. Horacio Serrano.

Protein Identification



A top notch **Easy-nLC 1000** couple to **LTQ XL** mass spectrometer from Thermo Scientific is available and configured for maximum coverage in protein identification. Nanoflow LC is optimized for separating peptides at ultrahigh pressures.

Protein Quantitation



Differences in abundance of certain proteins at a given time can give insights into what changes are occurring at a molecular level that may explain diseases and symptoms. The TPC has incorporated TMT Labeling for Protein Quantitation, using our recently acquired High resolution Mass Spectrometer **Q-Exactive Plus** coupled to an **Easy nLC 1200**.