Offered Services cont'd:

- *In-vivo* **functional activity / infectivity assays for screening new viral inhibitors NEW 2019**

We are BSL3 certified and maintain an inventory of HIV and other viral clones to support cellular screening projects for new HIV inhibitors.

- *In-vitro* **enzyme activity assays NEW 2019**

A wide variety of activity / inhibitor screening assays targeting viral and host enzymes can be made available and co-developed with our expertise in protein purification, activity-based protein profiling, mass spectrometry, and automation equipment.

Offered Services cont'd:

- **Technical hands-on seminars for BioPlex users NEW 2019**

Learn about BioPlex sample preparation, assay design, running the experiment, and data analysis using DataPro.

- **Hands-on training for mass spectrometry sample preparation NEW 2019**

Learn MS sample preparation at our core including for PTM scans, TMT-multiplexing, in-gel digestion, and on obtaining high quality SILAC samples.

Get in touch with us.

Physical: Immunology-115/116 at the TSRI main campus

Online: https://cfar.ucsd.edu/en/core-services/protein-expression-proteomics-pep//

Email: cheideker@scripps.edu

Phone: 858-717-4756

CFAR
SAN DIEGO | CENTER FOR AIDS RESEARCH

Spotlight:

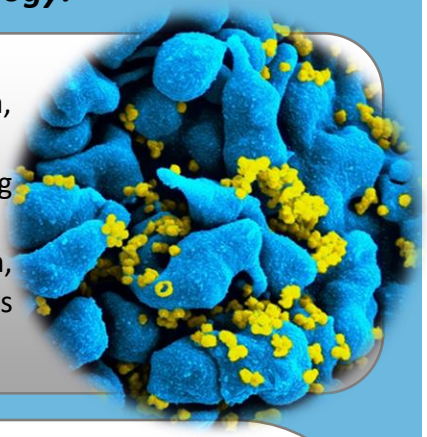
The Protein Expression and Proteomics (PEP) Core at CFAR

Your protein research and proteomics support at CFAR

- **Express, purify and analyze**
- **Complex sample or PTM analysis (mass spectrometry and BioPlex)**
- **Crystal growth condition screening**
- ***In vitro* activity assays +/- viral inhibitors**
- ***In vivo* infectivity / activity assays (custom viral systems (BSL3) available)**
- **Request viral proteins or plasmids from our inventory**

PEP Core Overview

Supporting your immunology protein needs to enable new insights into HIV biology!



About:

- The Protein Expression and Proteomics (PEP) Core is based at The Scripps Research Institute (TSRI) in La Jolla, California. TSRI is a member institution of the San Diego Center for AIDS Research.
- PEP Core services are non-overlapping and complementary with the San Diego CFAR Genomics and Sequencing Core and are seamlessly integrated with all established San Diego CFAR cores.
- PEP Core personnel are always available to provide advice on protein production, purification and identification, complex sample analysis and on inhibitor screening assays. We strongly recommend that all investigators discuss their experimental design before utilizing PEP Core services.

Offered Services:

- **Protein production**
  - *All aspects of protein and protein complex production including cloning, expression in eukaryotic or prokaryotic hosts, and structural-biology grade purification are offered at the PEP core. Endotoxin-free protein purification available upon request.*
- **CFAR sample analysis**
  - *Including proteomic mass spectrometry, protein 1D and 2D, Western blot, and Luminex (BioPlex- 200) -based analyses.*
- **Protein posttranslational modification analysis NEW 2019**
  - *Analysis will be performed via mass spectrometry and or gel analysis including identification of phosphorylation and acetylation sites, analysis of chain- specific ubiquitination, and neddylation.*
- **Crystallography support NEW 2019**
  - *In addition to providing structural biology-grade proteins we will provide automated crystal screening and data collection service at the Stanford beamline (SSRL).*
- *In-vivo* **functional activity / infectivity assays for screening new viral inhibitors NEW 2019**
  - *We are BSL3 certified and maintain an inventory of HIV and other viral clones to support cellular screening projects for new HIV inhibitors.*

For questions and project support contact Johanna Heideker at cheideker@scripps.edu.