

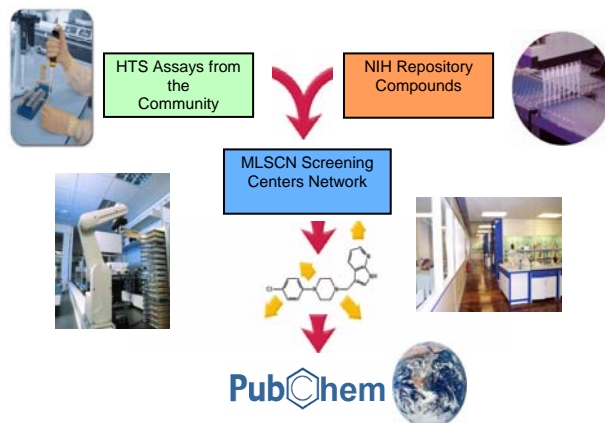


NIH Roadmap Molecular Libraries Screening Centers Network: A Resource for the Research Community

April 6, 2008 1:00—5:00 pm
Room 264 at the America's Center

The Molecular Libraries Screening Centers Network (MLSCN) offers the research community an opportunity to leverage biology and chemistry resources to identify small molecule probes for innovative or challenging targets with the potential for insight into biological pathways that impact public health. The MLSCN performs high-throughput screening (HTS) of biochemical or cell-based assays solicited from the scientific community against a high quality library of >240,000 compounds maintained in a shared repository. The network provides synthetic chemistry to optimize "hits" identified in the initial screening to produce chemical probes that can be used for in vitro studies to interrogate the targets or phenotypes studied in the assays. The MLSCN, along with PubChem and the Molecular Libraries Small Molecule Repository (MLSMR), offers a new dimension in research opportunities for pharmacologists, chemists and biologists in the academic and non-profit sector. The sharing of small molecules, biological assays, and screening data with the larger scientific community represents a new public sector paradigm that promises to facilitate the understanding of basic biological mechanisms and shorten the timeline for drug development, with resulting benefits to public health, especially for rare and neglected disorders.

The MLSCN is a Multidisciplinary Team Effort



Speakers Include:

"Small Molecule Discovery to Create Strategic Value in your Research Program" - *Ray Dingledine*, Emory University School of Medicine

"Isogenic Cell Based Screens for Brain Cancer – Targeting PTEN" - *Todd A. Waldman*, Georgetown University

"High-throughput Screening Fluorescence Polarization Assay for Tumor-Specific Heat Shock Protein 90" - *Gabriela Chiosis*, Memorial Sloan-Kettering Cancer Center

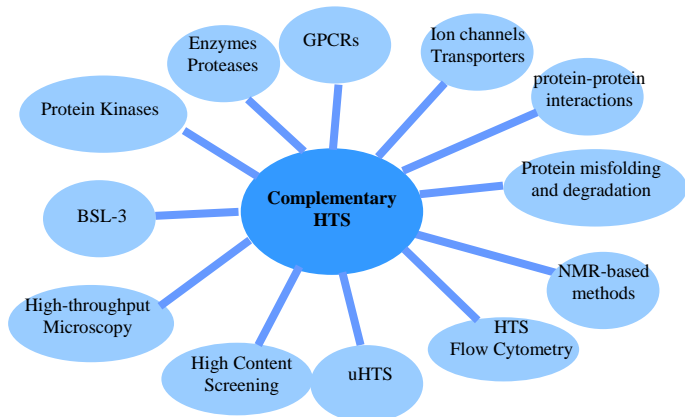
"Modulation of a K channel by Targeting its Associated Beta Subunit" - *Ming Zhou*, Columbia University

"Identification of New Drug Leads for the Control of Schistosomiasis, a Neglected Tropical Disease" - *David Lee Williams*, Illinois State University

"Probing Diversity Space with Novel Pilot-Scale Libraries" - *Paul R. Hanson*, University of Kansas

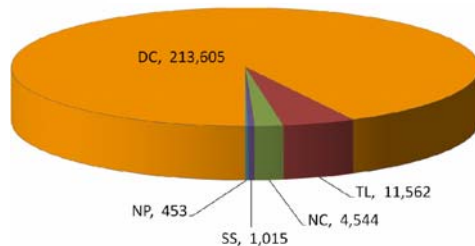
"Poisons, Peptides and Polyethers: Complex and Diverse Compound Libraries from Marine Microalgae" - *Jeffrey L.C. Wright*, University of North Carolina, Wilmington

Overall Capabilities of the Screening Centers Network



NIH Small Molecule Repository

http://mlsmr.glp.gov/MLSMR_HomePage/



DC: Diverse Compound Set
SS: Specialty Compound Set
TL: Targeted Compound Library
NP: Natural Products
NC: Non-Commercial

Please visit our website <http://mli.nih.gov> for more information.



Molecular Libraries Initiatives: Funding Opportunities

Molecular Libraries Probe Production Centers Network RFA (U54) – limited competition:

<http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-08-005.html>

Solicitation of Assays for High Throughput Screening (HTS) in the Molecular Libraries Probe Production Centers Network (MLPCN) (R03) – PAR-08-035 : <http://grants.nih.gov/grants/guide/pa-files/PA-RM-08-035.html>

Solicitation of Assays for High Throughput Screening (HTS) in the Molecular Libraries Probe Production Centers Network (MLPCN) (X01) – PAR-08-034: <http://grants.nih.gov/grants/guide/pa-files/PA-RM-08-034.html>

Assay Development for High Throughput Molecular Screening (R21) – PAR-08-024: <http://grants.nih.gov/grants/guide/pa-files/PA-RM-08-024.html>

Solicitation of Compounds for High Throughput Screening (HTS) in the Molecular Libraries Screening Centers Network: <http://grants.nih.gov/grants/guide/notice-files/NOT-RM-07-005.html>

New Methodologies for Natural Product Chemistry (R01) – RFA-RM-08-004: <http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-08-004.html>

Pilot-Scale Libraries for High-Throughput Screening (P41) – RFA-RM-08-003: <http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-08-003.html>

Molecular Libraries Screening Instrumentation – SBIR/STTR – PA-05-014: <http://grants.nih.gov/grants/guide/pa-files/PA-05-014.html>

Notice of Opportunity for Fast Track Entry of Assay Development Projects into the Roadmap Molecular Libraries Screening Centers Network – NOT-RM-07-012: <http://grants.nih.gov/grants/guide/notice-files/NOT-RM-07-012.html>