

UNYTE Translational Research Network
University of Rochester Clinical and Translational Science Institute

#### **Overview**

- The University of Rochester Clinical and Translational Science Institute initiated the UNYTE Translational Research Network.
- A consortium of biomedical and academic research centers performing clinical and translational research within the Upstate New York and surrounding regions.

#### Goals:

- Develop the consortium as a "Regional Home for Translational Research" and foster scientific and economic growth.
- Promote regional research collaborations.
- Promote sharing of research resources.



## **UNYTE Mission and Objectives**

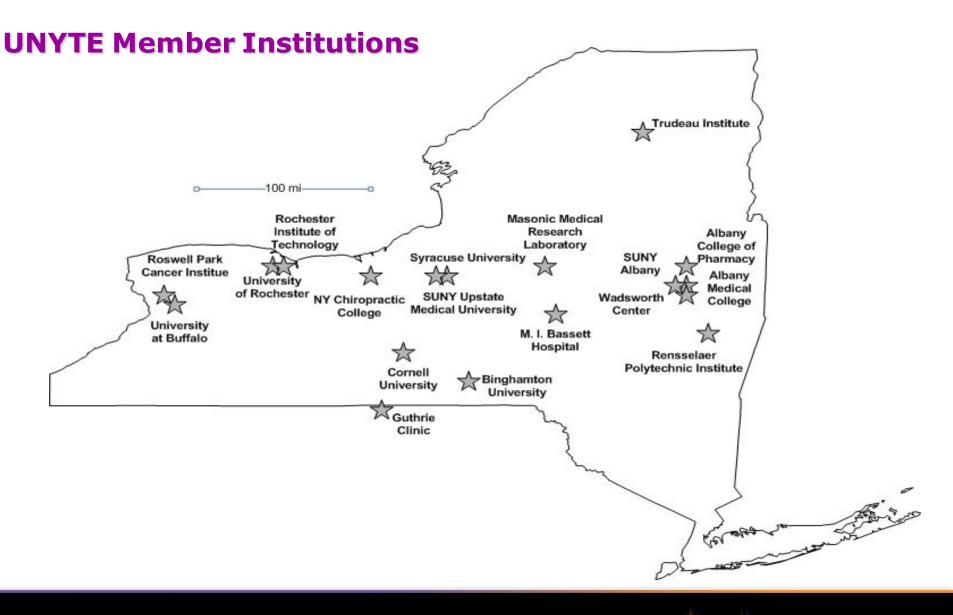
#### Mission:

- To create a community of scientific collaboration across upstate New York
- To assist faculty and trainees from UNYTE research institutions in increasing the quality and quantity of translational research in the Upstate New York region

#### Objectives:

- Assess and access technologies, services, expertise and curricula
- Foster collaborative research
- Reduce resource duplication
- Enhance bidirectional transfer of information between basic and clinical investigators





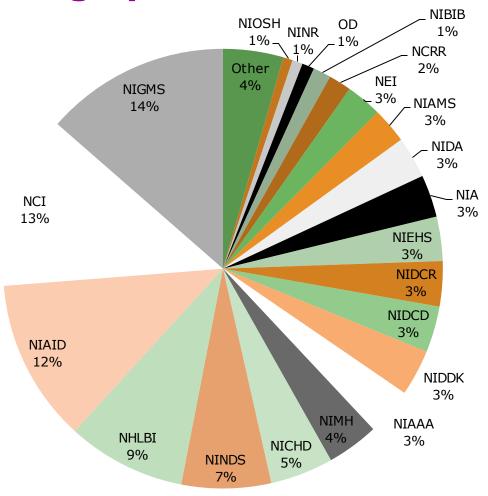


## **UNYTE Member Current Federal HHS Funding**

| UNYTE Member Institutions               | # of Current Federal Grants | Current Funding Amount (\$) |
|---|-----------------------------|-----------------------------|
| Albany College of Pharmacy              | 4                           | \$921,314                   |
| Albany Medical College                  | 55                          | \$25,317,798                |
| Bassett Healthcare Network              | 6                           | \$3,133,079                 |
| University at Binghamton, SUNY          | 31                          | \$10,512,646                |
| Cornell University (Ithaca)             | 254                         | \$89,513,021                |
| Guthrie Health System                   | 0                           | 0                           |
| Masonic Medical Research Laboratory     | 2                           | \$491,442                   |
| NY Chiropractic College                 | 0                           | 0                           |
| Rensselaer Polytechnic Institute        | 30                          | \$9,585,104                 |
| Rochester Institute of Technology (RIT) | 3                           | \$749,635                   |
| Roswell Park Cancer Institute           | 92                          | \$43,381,276                |
| Syracuse University                     | 14                          | \$3,111,511                 |
| Trudeau Institute                       | 10                          | \$6,317,488                 |
| University at Albany, SUNY              | 53                          | \$19,379,844                |
| University at Buffalo, SUNY             | 195                         | \$62,853,895                |
| Upstate Medical University, SUNY        | 82                          | \$24,550,471                |
| University of Rochester                 | 552                         | \$230,135,754               |
| Wadsworth Center (NYSDOH)               | 61                          | \$20,799,003                |
| Totals                                  | 1444                        | \$550,753,281               |

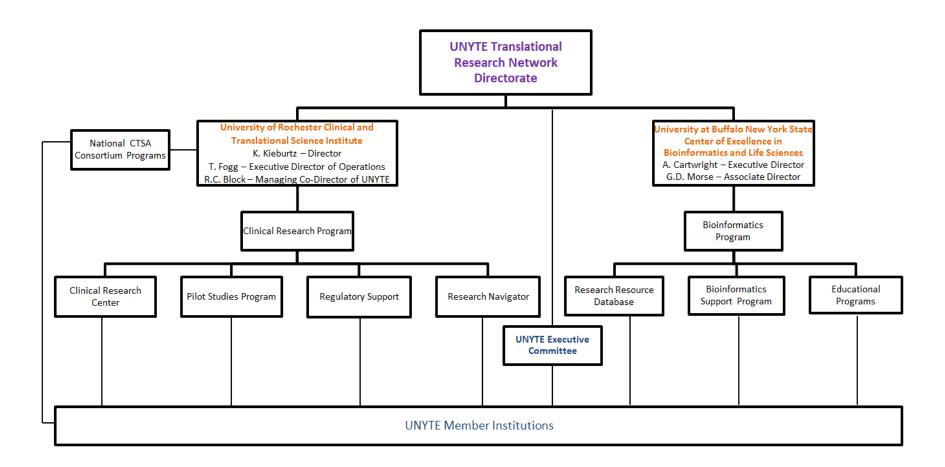


## **UNYTE Funding by Center**





## **Organization**





### **UNYTE and PBRN Collaboration**

UNYTE coordinated a collaborative platform for PBRNs in Upstate New York to meet monthly and discuss ongoing initiatives and plan for collaborative funding opportunities in the spring of 2013.

#### Current PBRNs include:

- **UNYNET** Upstate New York Practice Based Research Network
- •GR-PBRN Greater Rochester Practice-Based Research Network
- **SALT-Net** Studying-Acting-Learning-Teaching Network

Group (led by Chris Morley, PhD, at Upstate Medical Center) prepared an application for a NY State Dept of Health Cancer Prevention RFA which was funded in December, 2013. It provides educational and organizational support to primary care practices to enhance colon cancer screening.



**UNYTE Collaborative Pilot Awards** 

**UNYTE Translational Research Network Awards** (\$50,000, 12 months) – Facilitate collaboration within the UNYTE Translational Research Network.

Proposals feature a collaboration between a University of Rochester principal investigator and a co-principal investigator from at least one other UNYTE member.

| VEAD | DDO IECT TITLE  | DI and INSTITUTION  | CO INVESTIGATOR and INSTITUTION  |
|------|---|---|--|
| YEAR | PROJECT TITLE   | PI and INSTITUTION  | CO-INVESTIGATOR and INSTITUTION  |
| 2010 | The Upstate New York Network for Collaborative Biomedical Imaging   | Axel W.E. Wismueller, MD, PhD (PI) Avice M. O'Connell, MD, (University of Rochester)              | Andrzej Krol, PhD, Wei Lee, PhD<br>(Upstate Medical University)  |
| 2010 | Protein Kinase C Activation and Inhibition of<br>VLDL Triglyceride Export Defines a<br>Mechanism for Development of Non-<br>Alcoholic Fatty Liver Disease | Janet Sparks, PhD (University of<br>Rochester);<br>Michael Greene (Bassett<br>Research Institute) |  |
| 2011 | Regional Stat Tumor Procurement to Support<br>Studies of Lymphoma   | Richard Burack, MD, PhD<br>(University of Rochester)  | Robert Hutchison, MD (SUNY Upstate);<br>Tipu Nazeer, MD (Albany Medical College Consultant)  |
| 2012 | Validity of Self-Reported Data for Studying<br>Cognitive Problems and Depression  | Katia Noyes, PhD, MPH<br>(University of Rochester)  | Ralph Benedict, PhD (University of Buffalo);<br>Bianca Weinstock-Guttman, MD (University at<br>Buffalo); Andrew Goodman, MD (University of<br>Rochester); Barbara Teter, PhD (New York State<br>Multiple Sclerosis Consortium Consultant); |
| 2013 | Regional Ultrasound Wall Strain<br>Measurements to Predict Risk of Abdominal<br>Aortic Aneurysm (AAA) rupture   | Ankur Chandra, MD, RPVI<br>(University of Rochester)  | Karl Schwarz, MD (University of Rochester);<br>Steven Day, PhD (Rochester Institute of<br>Technology); Dan Phillips, PhD (Rochester Institute<br>of Technology)  |
| 2013 | Determining the interplay of lymphoma Cells with its Microenvironment using a Novel In vivo Model   | Steven H. Bernstein, MD,<br>(University of Rochester)   | Richard Burack, MD, PhD(University of Rochester);<br>Shannon Hilchey, PhD (University of Rochester);<br>Richard Bankert, VMD, PhD (University at Buffalo)  |



# **Recent Research Grant Opportunities FUNDED**

| TITLE/FUNDING MECHANISM  | PI and COLLABORATORS   |
|--|--|
| "Rochester Bridges to the Doctorate"<br>NIH R25  | Thomas Pearson, MD, MPH, PhD (co-PI UR)<br>Peter Hauser, Ph.D. (co-PI RIT) |
| "Researcher Resilience through Multidimensional Mentoring-<br>Pathfinder"<br>NIH Director's Office – ARRA Fund   | Vivian Lewis, MD (UR)<br>Collaborators: UB, SUNY Upstate                   |
| "Fish Oil Effects on Cardiovascular Disease Risk in Diabetics"<br>NIH R21  | Robert Block, MD, MPH (UR)<br>Collaborators: ACP, Cornell                  |
| "Genetic Risk of Neurocognitive Disorders in Patients with HIV Infection"<br>NIH K08   | Qing Ma, PhD (UB)<br>Collaborators: UR, Vanderbilt, UCSD                   |
| "CyTOF Mass Cytometer for Western NY "<br>NIH Research Technology U Grant  | Tim Bushnell (UR) Collaborators: UB, Roswell Park, Cornell                 |
| "UR CTSI Center for Experimental Therapeutics" NIH NCATS   | Karl Kieburtz, MD, MPH (UR)<br>Collaborators: UB, ACP                      |
| "Emergency Research Network In the Empire State (ERNIES)"<br>UNYTE Pilot Award Recipient   | Sandra Schneider, MD (UR)<br>Collaborators: Upstate NY Emergency Rooms     |
| "Neonatal hair concentration measurements to evaluate long term in-utero tenofovir exposure and its impact on toxicities in neonates born to HIV-1 infected mothers". NIH UR Center for AIDS Research (CFAR) | Tinashe Mudzviti, MPhil (UZ)<br>Collaborators: UR, UB                      |
| "University of Rochester HIV/AIDS Clinical Trials Unit" (UM1) National Institutes of Health – NIAID/DAIDS AIDS Clinical Trials Group (ACTG)  | Michael Keefer at URMC<br>Collaborators: UB                                |
| "Increasing Cancer Screening through Academic Detailing and<br>Practice Facilitation"<br>Health Research Incorporated from the NYS DOH from a federal<br>grant program                                       | Chris Morley, PhD (Upstate Medical Center) Collaborators: UR, UB           |



# Recent Research Grant Opportunities PENDING REVIEW

**R21** submitted by Bob Block at URMC in collaboration with Tom Brenna at Cornell. Not funded by NIH but will be by a private/corporate source and will expand the expertise and collaboration within UNYTE for preventing traumatic brain injury in college football players.

**R34** submitted by David Strogatz and John May at Bassett with Tom Pearson and Bob Block as consultants/co-investigators. If funded, it will expand cardiovascular disease prevention strategies in rural NY.

**R25** submitted (01/2014) by Gretchen Birbeck at URMC which will, if funded, develop and implement a fellowship curriculum to prepare individuals who have recently completed a doctorate in the neurosciences, post-graduate training in clinical neurology or similar achievement in a neuro-allied field for careers in global neurology. Includes faculty collaboration from UB, Yale, Harvard and international educational institutions.



## **Visiting Professor Program**

In existence since September, 2013. Any UNYTE institution investigators are eligible. The investigator simply contacts Bob Block and an agenda of meetings is arranged at the University of Rochester.

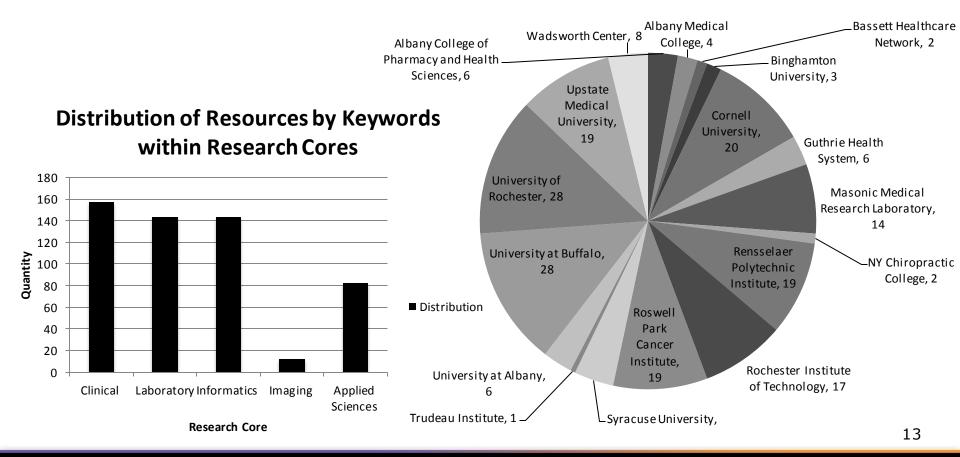
Investigator team visits the University of Rochester, meets with potential collaborative teams, and is informed of CTSI resources

- ■Paul Agris, PhD, Director, RNA Institute, University at Albany, SUNY; September, 2013.
- •Shaker Mousa, PhD, MBA, Director, Pharmaceutical Research Institute, Albany College of Pharmacy and Health Sciences; December, 2013.
- •Jeff Kennedy, MD, Director, Translational Research; Albany Medical College, January, 2014.



#### Research Resource Database

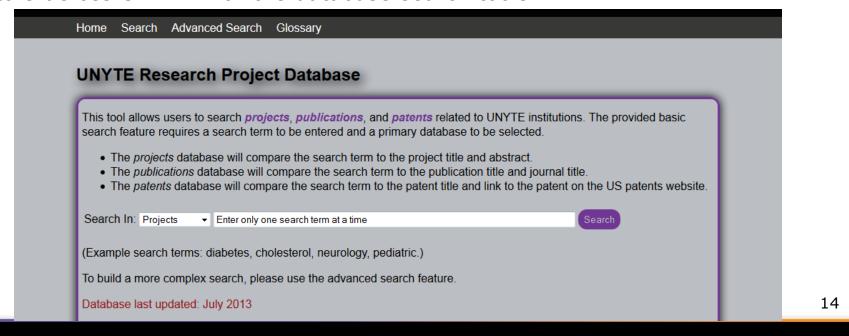
- A web-based inventory of research resources available at each member institution
- Resource Cores: Clinical, Laboratory, Informatics, Imaging, Applied Sciences.
- **Status**: completed with a total of 210 resources available in the database.





#### **Research Project Database**

- □ UNYTE has also developed a custom NIH RePORTER Database of NIH funded grants and contracts awarded to UNYTE institutions.
- The **Research Project Database** is an on-line, searchable inventory of research projects at UNYTE institutions. The information may help users find collaborators or mentors across UNYTE with the database search tools.





#### **Institutional Review Board Reliance Model MOU**

The purpose of this Memorandum of Understanding (MOU) is to outline the division of general responsibilities for Institutional Review Board (IRB) review of human subject research conducted by two or more member institutions belonging to the UNYTE Translational Research Network (UNYTE), a broad consortium of institutions in upstate New York and the surrounding area concerned with promoting collaborations in biomedical research and sharing research resources.

Current number of executed MOUs: 8

Next step: pilot-test the MOU with an actual project.



## **Recent Meetings**

#### **2013 UNYTE Quarterly Meetings**

Purpose: Highlight host institution's areas of expertise and key resources.

- February 14, 2013: Masonic Medical Research Laboratory in Utica, NY
  - Regional Stat Tumor Procurement to Support Studies of Lymphoma
  - Experimental Models of Inherited Cardiac Arrhythmia Diseases
  - Experimental Models of Atrial Fibrillation
  - Genetic Screening and Functional Expression Studies
  - Stem Cell Research
- May 2, 2013: SUNY Albany in Albany, NY
  - Biomedical Sciences, Environmental Health Sciences, and Center for Functional Genomics at the Cancer Research Center
  - Epidemiology and Biostatistics in the School of Public Health
  - Neural Stem Cell Institute
- October 10, 2013: New York Chiropractic College in Seneca Falls, NY
  - Back pain, biomechanics and quantification of physical function
  - Elasticity measurements of skeletal muscle using elastography
  - Community health and the URMC Center for Community Health
  - \*Upcoming Meeting\* Spring 2014 University of Rochester in Rochester, NY



## MedTech/UNYTE Collaborative Meetings

**MedTech** is a non-profit trade association representing Upstate New York's bioscience and medical technology industry. It is an active association of pharmaceutical, biotech and medical technology companies, their suppliers and service providers, and research universities. UNYTE has partnered with MedTech to organize events at UNYTE member institutions based on key resources and expertise available at the site.

#### Recent Program

"Designing Smart Medical Devices for Health Information Systems Integration"

January 24, 2013 - University at Buffalo NYS Center of Excellence in Bioinformatics and Life Sciences

- Linking medical technology to centralized EMR systems:
  - What should component suppliers and the medical device community keep in mind when designing new technologies to operate within HIT systems?
- Initiatives and guidelines/standards from the NYS Department of Health and the US Department of Health and Human Services for integrating HIT with new medical devices
- How future computing and informatics tools will interface with large health systems data networks

#### <u>Future Programs</u>

- May 2014 Albany, NY Rensselaer Polytechnic Institute (RPI)
- TBD Syracuse, NY



#### **UNYTE Neuroscience Scientific Sessions**

May 16, 2014 - Rochester, NY

**TITLE: UNYTE Resources and Projects Relevant to Neuroscience Research** 

#### **AGENDA**

11:00-11:15: Introduction and Overview of UNYTE (Bob Block, Gene Morse, Tom Fogg)

11:15-12:15: Keynote speakers (Jonathan Wolpaw and Gerv Schalk at the Wadsworth Center)

12:15-1:15: Panel Discussion: How UNYTE institutions might collaborate to take advantage of Upstate NY neuroscience research expertise and resources (lunch served)

1:15-3:30 pm: Poster session and collaboration development with planned attendance of

**URMC CTSI Leadership** 

**Section A: Student Research** 

**Section B: Faculty Research** 

Section C: UNYTE Resources (shared resources and cores available at UNYTE institutions)

3:30-4 pm: Student awards presented; Wrap-up



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#### **Current Priorities and Future Direction**

- Continue to foster collaboration in clinical and translational research among UNYTE institutions.
- Identify clinical and translational research training needs among member institutions, and promote programs to meet those needs.
- Foster innovation among UNYTE institutions that will lead to novel clinical and translational research programs that are competitive for federal funding.
- Promote collaboration among diverse organizations within the UNYTE geographic region, including community-based and patient organizations in urban and rural health care settings, and industry.
- •Utilize information technology and communications systems to promote regionalization of scientific research that addresses the needs of patients in our communities.





# Questions?

# TRANSLATIONAL RESEARCH NETWORK

www.UNYTE-network.org

