CTSAs: Informatics Resources for an Age of Translation

July 29, 2010

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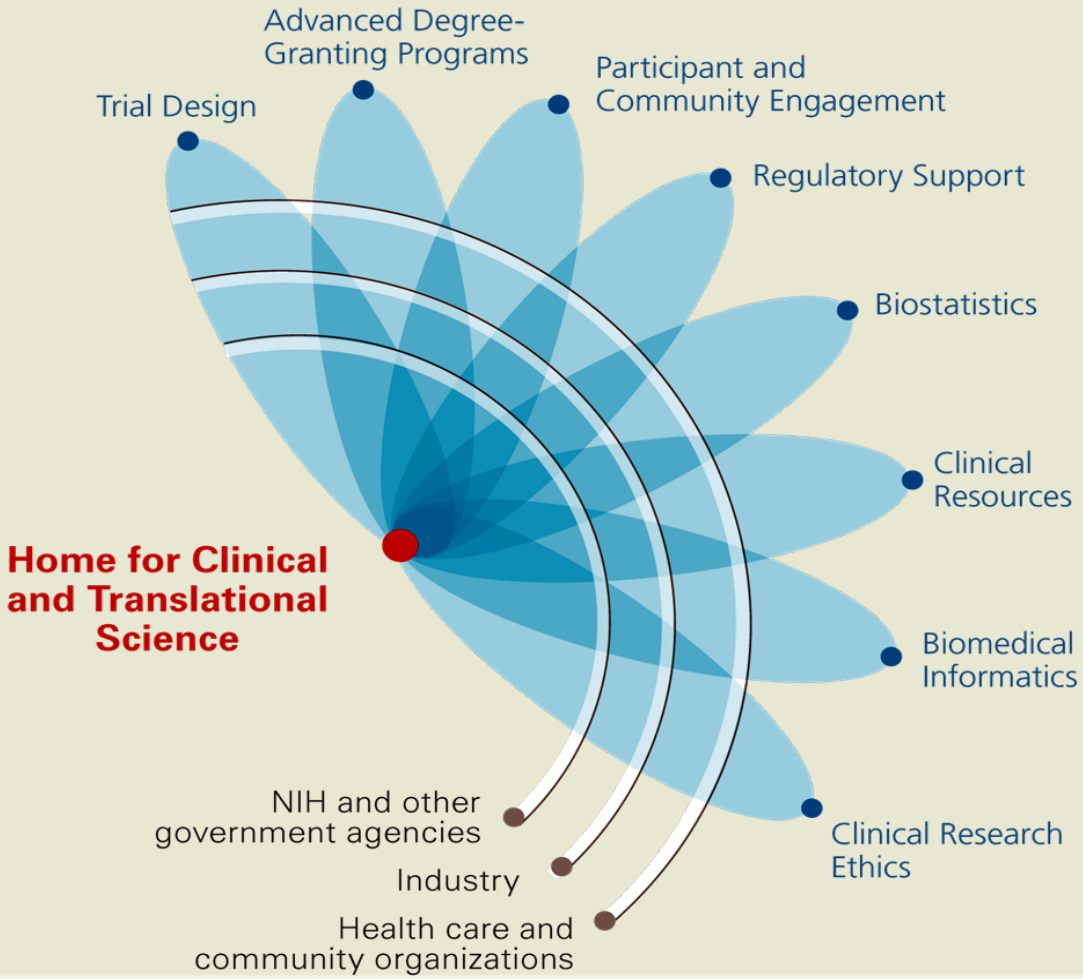
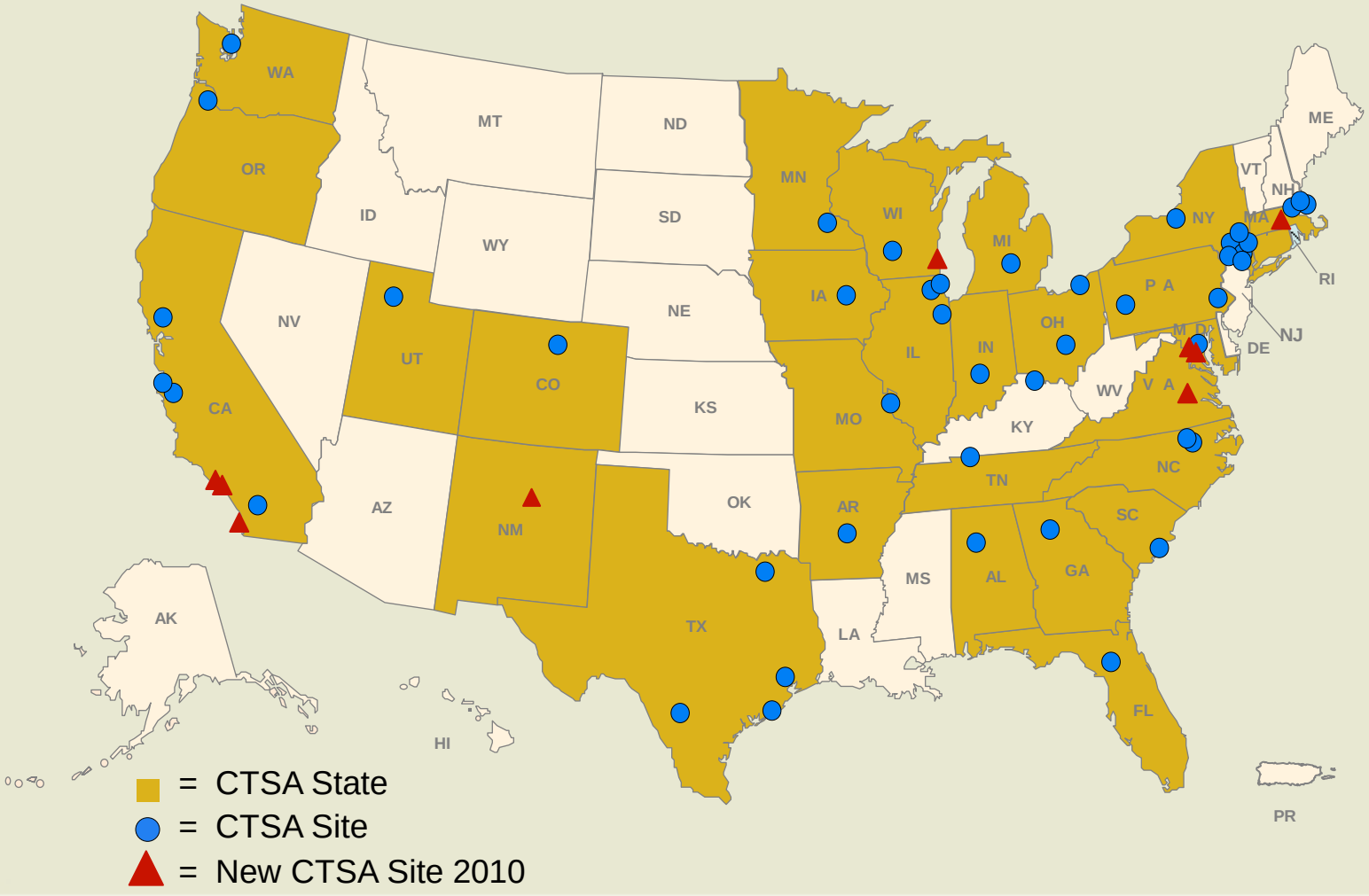
CTSAs Create Academic Homes for Clinical and Translational Science



NCRR

Building a National CTSA Consortium

55 CTSA sites in 28 states; 60 sites when fully implemented



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Five Strategic Goals for a National Consortium:

1. Build national clinical and translational research capability
2. Train and foster career development of clinical and translational scientists
3. Enhance consortium-wide collaborations
4. Enhance the health of our communities and the Nation
5. Encourage T1 translational research

www.ctsaweb.org

Translation requires a national clinical and translational research capability

Through the CTSA program, researchers were quickly able to mobilize and implement clinical trials for the 2009 H1N1 influenza vaccine

- In support of the NIAID Vaccine and Treatment Evaluation Units, several CTSA sites rapidly allocated clinical resources for the trials and promptly conducted IRB meetings to approve vaccine trial protocols.

The CTSA program is collecting metrics on the time required to approve clinical research protocols through IRBs and the time taken to put research contracts in place

Translation requires information: creating Resource Directories

- the eagle-i Consortium, was founded with a $15 million American Recovery and Reinvestment Act (ARRA) grant from the National Center for Research Resources (NCRR; part of the NIH) and supports an NCRR goal to establish a national network for research resource discovery.

- "With the eagle-i network, we want to help researchers rapidly find the materials and technologies they need and use their funding for research, not for developing resources that already exist.“ – Lee Nadler

VIVO to identify researchers

- **VIVO leverages work done over the past five years by Cornell University, supporting researchers and findings of researchers by representing data about them and their activities including publications, awards, presentations and partners.**

- **“The goal in the next 18 months is to make VIVO an indispensible tool for scientists,” says Mike Conlon, University of Florida. “And for VIVO to be indispensible, it needs to be creating value for not only the scientists, but the institutions and the funding organizations as well.”**

Enhance Consortium-Wide Collaborations

Web Resources for Research Collaborations

CTSpedia

- Wiki structure
- Identifies and shares resources across the national consortium and community researchers world-wide

www.CTSpedia.org

ResearchMatch

- National recruitment Registry
- Centralized, disease-neutral Web portal to connect researchers to research volunteers
- Includes over 37 CTSAs

www.ResearchMatch.org

REDCap

- Web-based tools
- Supports data capture and dissemination for clinical and translational research

www.project-redcap.org

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Fostering Interdisciplinary Research: Investigators, Scholars and Trainees

(Based on 2010 Annual Progress Reports from 46 CTSAs)

Specialty	Investigators	Scholars	Trainees
Clinical Disciplines	7630	229	100
Pediatric Disciplines	1130	26	7
Public Health	793	28	30
Statistics, Research Methods, Informatics	392	8	4
Genetics	381	14	11
Bioengineering	370	9	22
Immunology	349	11	16
Neuroscience	334	9	24
Allied Health	302	10	21
Psychology, Non-Clinical	263	10	2
Cell & Developmental Biology	250	2	14
Microbiology & Infectious Diseases	227	5	11
Physiology	223	5	11
Nursing	212	16	12
Pharmacology	178	3	14
Other	1032	18	56
Total	14066	403	355

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Translation in less familiar spheres: community research generates data too

Ihuoma Eneli, M.D., M.S.
Ohio State University
Associate Professor of
Clinical Pediatrics and
Associate Director of the
Center for Healthy Weight

Studying Childhood Obesity and Maternal-Child Feeding

- Supported by The Ohio State University CTSA
- A pilot project for community engagement research
- Partnership with OSU Extension and the YMCA
- Will study feeding dynamics between mothers and their children to better understand the prevalence of childhood obesity
- Will help build a sustainable community infrastructure for obesity prevention

Comparative Effectiveness Research will generate complex data

Device Trial Utilizing Digital Augmentative Alternative Communication Technology on Underserved Elementary-School-Aged Children With Down/Fragile X Syndrome

- Multi-site CTSA clinical study comparing effectiveness of two Augmentative Alternative Communication Technology Devices on measures of learning in neurodevelopmentally disabled children
  - Colorado University (lead)
  - UC Davis
  - University of Rochester
- The trial will also secondarily compare the impact of these devices on a panel of exploratory neurotrophic biomarkers and cognitive functional tests

Encourage T1 Translational Research

Scripps Translational Science Institute

Dr. Eric Topol (left), director of the Scripps CTSA and Gary West, a philanthropist

Pioneers Wireless Health Care Research

- Scripps Translational Science Institute has partnered with wireless telecommunications company Qualcomm to use wireless technology to decrease health care cost
- CTSA program served as the catalyst that connected Scripps to Qualcomm and other technology firms
- Scripps and other CTSAs are conducting a 1,200-patient randomized clinical trial to evaluate a wireless monitor (size of large adhesive bandage) that monitors heart and breathing rates, fluid status, posture and activity data in patients

Bench to animals to man: translation in Mental Health Treatments

- Indiana University created project development teams to reduce implementation time and improve success rates for protocols
- CTSA pilot project grant funded protocol using rat panic model
- 2nd pilot project grant funded clinical imaging in patients
- Collaboration with U of Lund, Sweden to measure orexin levels in cerebrospinal fluid (CSF) samples of patients with panic disorder
- Holds promise for new generation of anti-anxiety treatments

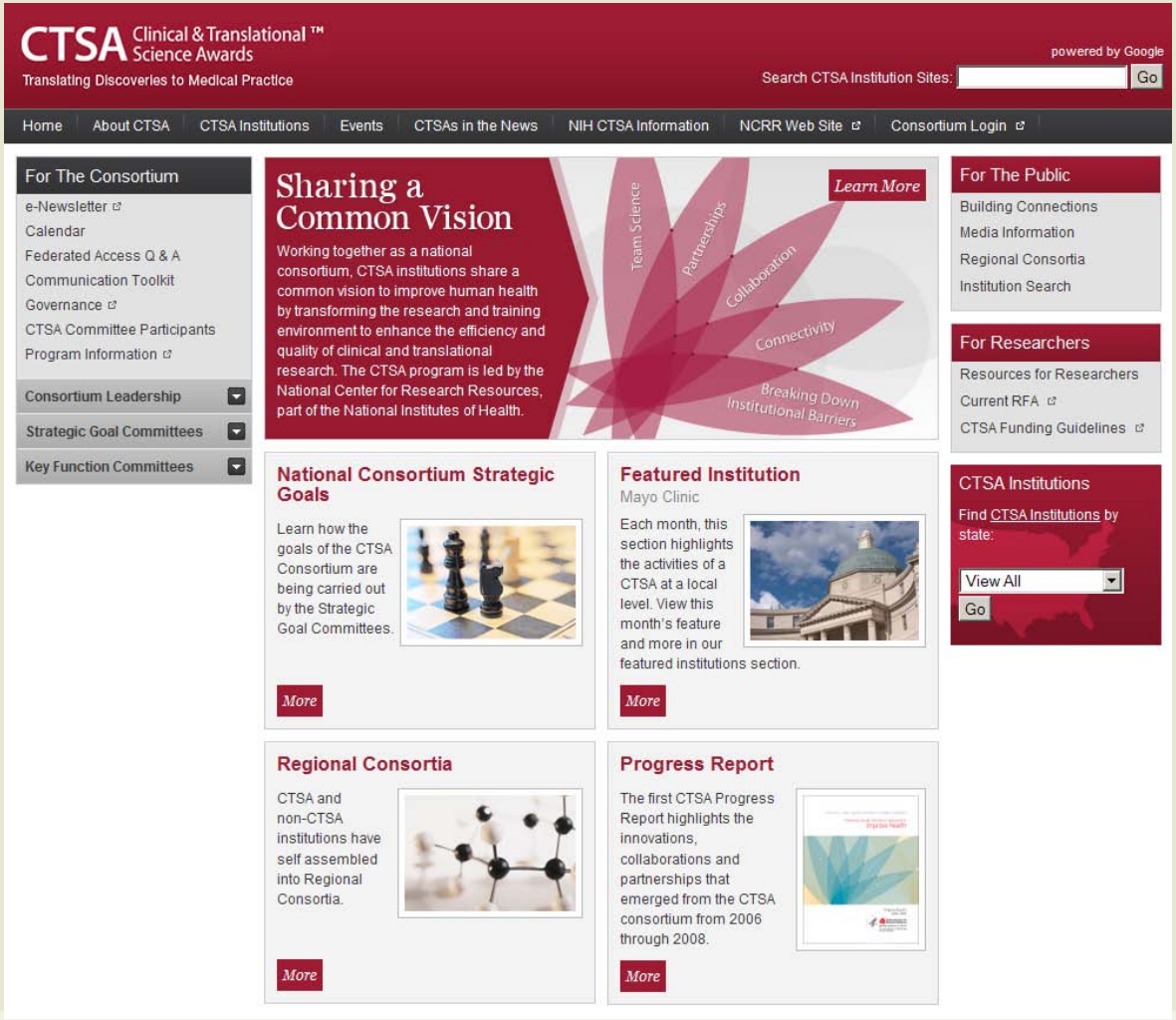
National CTSA and Related Conferences

- VA-CTSA Opportunities for Collaborative Clinical and Translational Science, September 28, 2010
- CTSA Consortium Steering Committee, October 6-7, 2010
- The Second NIH Conference on the Efficient Management and Use of Core Facilities, November 15 – 16, 2010
  - Maximizing the use and efficiency of existing NIH-funded research core facilities
  - Developing effective training programs for core facility directors
  - Exploring software options for enhancing administrative management of core facilities
  - Creating a national registry of core resources
  - Standardizing compliance with OMB Circular A21

Common Themes

- An environment that favors collaboration and cooperation
- Funds for Pilot Projects
- Resources for data acquisition, storage and retrieval
- Expensive resources made feasible by sharing
- New emphasis on resources:
  - Animal models
  - Bioengineering
  - High throughput

For More Information: Visit CTSAweb.org



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