

# Overall session goal

Achieve agreement on the principles that will allow initiation of consortium-wide protocols, with the assumption that some non-critical issues will be settled as we progress.

# General points to cover during session

1. The potential advantages of conducting consortium projects – including NIH and industry sponsored
2. Why it's essential for the CTSA consortium to partner with industry to play a role in the development of drugs, devices, and diagnostics.
3. Discuss a process to allow real projects to be initiated and that will “test” the consortium infrastructure.

# Potential advantages of starting to conduct consortium projects (both industry and CTSA sponsored)

- Do exciting, impactful science
- Demonstrate the potential power of the consortium
- We must start to succeed. By engaging in consortium projects that are currently possible (low hanging fruit) we can begin and refine our methodologies in the process.
- What are possible projects?
  - PI project champion
  - Project study plan well developed
  - Funding available
  - Not requiring extensive CTSA based resources

## **Potential advantages of starting to conduct consortium projects (both NIH sponsored and industry partnered)**

- Greater opportunity for getting new developments to the public (e.g. speed the science by increasing site identification, participant recruitment and study completion)
- Opportunity to add scientific input to studies from consortium investigators
- Creating inter-CTSA project performance goals could accelerate the refinement of study startup processes (e.g. regulatory, contractual)
- Consortium metrics would be generated by these projects to demonstrate value-added of working with CTSA infrastructure

# Why should the CTSA consortium partner with industry to play a role in the development of drugs, devices, and diagnostics?

1. It's discussed and encouraged in the RFA

***“...integrate translational and clinical science by fostering collaboration between departments and schools of an institution and between institutions and industry.”***

2. It's important to work on pressing health issues and improvements in human health that usually have an phase in concert with industry
3. It will allow gathering metrics to demonstrate the efficiency in utilizing the CTSA consortium sites and answer the question “What is the value added of working within the CTSA consortium structure?”

# How could this work? Proposed process.

- Minimize administrative burden!
- Projects should be nominated by CTSA PIs – those that represent particularly compelling scientific and public health opportunities. Limiting nominations to PIs would create a triage step.
- The lead CTSA site would be responsible for the process of ensuring the study is organized, coordinated, and funded.
- Each CTSA site would determine if they wish to participate. Participation in the project or study will be on a voluntary basis.
  - Does the site have faculty interest and expertise?
- The role of CTSA PIs at participating site:
  - As a member of the consortium, contribute to projects that will develop consortium success
  - Recognize potential scientific synergisms at their sites and contact/recruit potential investigators.
  - Add local CTSA resources as possible

# How could this work? Proposed process

- Site identification could be an active process for the lead CTSA site. Also, develop a CTSA Bulletin Board to post projects.
- Conflict of interest issues, IRB approval and agreement negotiation will be handled on a “local” level, not by consortium.
- CTSA SCGs and KFCs can be utilized to facilitate cross-CTSA site efforts, i.e. IRB reciprocity, standardized agreements, etc.

# Potential issues or concerns

## **1. Conflict of Interest**

COI would be handled and vetted at a local level by each CTSA participating in a trial.

## **2. Fair access issues with industry sponsored projects**

Participating CTSA sites would follow their own institutional policies and procedures on interactions with industry.

# Potential issues or concerns

## **3. Consortium being overwhelmed by too many proposed studies**

Begin with a few “pilot” studies and then reassess how the studies are going and whether improvements should be introduced.

## **4. To what extent should CTSA investigators be involved or in control of study design and conduct?**

No specific requirements - it would depend on the study

## **5. Is there a need for any Consortium project review or approval (e.g. by Steering Committee)? Is no an acceptable answer?**

# Presentation of Projects

- Eric Orwoll, Gordon Bernard, Eric Topol and Bonnie Ramsey

# Virtual breast biopsy project

- **Problem:** Over 40 million women per year (U.S.) undergo mammography screening for breast cancer and another 1 million (and growing) are screened with magnetic resonance imaging (MRI). Of the estimated 750,000 women then referred for biopsy, about 500,000 – over 60 percent – are found to have benign lesions (high sensitivity with low specificity)
- **Science:** Refined pharmacokinetic algorithms for DCE-MRI data analysis that account for the finite inter-compartmental water exchange kinetics that occur in malignant tumors (the vessels of which are more porous to contrast reagent). Breast cancer discrimination with almost perfect sensitivity and specificity. NIH-funded. Li et al; Huang et al PNAS, Nov 2008.
- **Study:** *Currently in design phase.* At ~ 10 clinical sites women scheduled for MRI-guided breast biopsy would have a brief additional MRI scan (conventional gadolinium)
- **Object:** Validate and bring to clinical care. Commercialization/funding partner DeltaPoint.
- **Consortium contribution:**
  - Speed
  - Scientific input (study design, interpretation and reporting (including new design approaches with an eye on public health applicability))

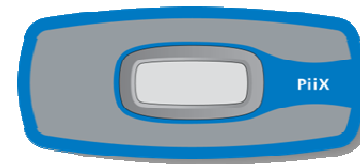
# Statin Treatment for Influenza Patients (STIP) Trial

- Large simple trial design
- ICU admits with suspected flu and serious oxygenation defect (+/- ventilator)
- Randomized to rosuvastatin or placebo 21 days or ICU D/C
- Target population n = 2400, Bayesian design with futility and efficacy early stopping rules
- Primary endpoint: mortality or ventilator free days
- 6-page CRF, REDCap remote data capture
- 30 institutions and ~48 ICUs (Peds and Adult) committed

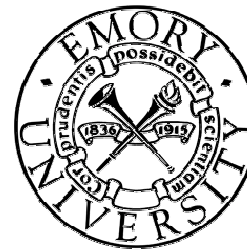
# Randomized Trial of Remote Monitoring in Heart Failure

**1200 Patients With CHF**

**Standard of Care Follow Up**



**1° Endpoint: Re-hospitalization at 60 days**



# How Can CTSA Consortium Support Rare Disease Multi-Center Trials?

- Provide culture of collaboration
  - Incentives for facilitation of data sharing, biobanking
  - Centralized resource for patient recruitment (e.g., Vanderbilt program)
  - Links to industry partners
- Provide research resources
  - Regulatory support (e.g., IND/IDE application)
  - IP expertise
  - Shared or centralized laboratory cores
  - Biostatistical and informatics support
  - Research Coordinators
- Provide education
  - Training of clinical research staff
  - Mentoring programs for staff and junior PI's
- Provide scientific expertise
  - Cross-disease specialty communication on optimal research designs, endpoints, etc.
- Early successes from CC-CHOC
  - Distributed Biobanks for Rare Diseases (<https://www.ctsawiki.org/wiki/display/Peds/Rare+Diseases+Workgroup>)
  - BPCA Awards promoting cross-CTSA collaboration

# Action Item to CCSC:

- Discussion
- Vote on proposed process to initiate projects