

Maximizing the Goals of CAN to Accelerate the Development of New Drugs and Diagnostics

## **Session II: Approaches to Accelerating Translational Science**

Key Themes: CAN as the key NCATS catalyst for innovation

### Overall

- Hurdles in both science and process.
- Bi-directional flow of translational science information.

### Innovation

- Create new knowledge via interactions among diverse groups.
- Foster better interactions of academic and industry talent pools.
- Open source model of innovation. Novel approaches: crowdsourcing, prize and other incentives.
- Develop a more effective/efficient regulatory process *de novo*.

## Session II: Approaches to Accelerating Translational Science (2)

### Collaboration

- De-risk efforts via private-public (?pre-competitive) partnerships.
- Create trusting, sustainable, effective partnerships.
- Transcend traditional technology transfer academic model.
- Share drug discovery and development data.
- Use CTSA Consortium to achieve educational mission: training of clinical investigators; other mutual goals--clinical trial network, etc.

### Organization

- Foster team of passionate investigators.
- Decentralize therapeutic discovery.
- Streamline decision-making; reduce bureaucracy. Flexibility.
- Effect programmatic planning and effective project prioritization.
- Employ quality project management.
- Empower drug discovery “recidivists.”

## Session II: Approaches to Accelerating Translational Science (3)

### Tools

- Learn how technology will positively affect the translational process.
- Key areas of science: better animal models; stem cell biology; and systems/pathways/networks.
- “Cool tools:” systems/quantitative pharmacology, chemical biology, regulatory science, informatics (big data), molecular libraries, clinical trial design, etc.

### Target validation

- Accelerate translation through human clinical trials.
- Create a novel development and regulatory pathway for more rapid approach to P1b PoC studies.
- Use virtual model of drug discovery.