MULTIDISCIPLINARY TRANSLATIONAL TEAM DEVELOPMENT WORKSHOP

AGENDA

- How to Develop a Translational Question  WJ Calhoun MD
- Essential Components of the MTT  BT Ameredes PhD
- Taking Advantage of CTSA Key Resources  E Volpi MD
- Team Development Approaches  R Rose MD
- MTT Evaluation and Review  K Wooten PhD
HOW TO DEVELOP A
TRANSLATIONAL QUESTION

William J Calhoun MD
Henry Renfert Jr MD Professor and Vice Chair for Research
Director, Coordination Key Resource
UTMB CTSA

FOCUS ON MTT

- Translational science ever more requires many sets of expertise – rarely does a single investigator have all the requisite skills
- MTT projects are expected to result in extramural funding
  - R01 applications may result, but..
  - P01 and P50 applications will have a head-start due to the team’s productivity
- Publication strategy can take advantage of the varied expertise in the team, resulting in more papers from a given body of work
WHAT IS TRANSLATION?

• Human oriented research
  • Direct patient contact
  • Research with human samples
• Application of basic sciences to understanding or mitigating human disease

• Generally animal studies, *per se*, will not be strictly translational

THE TRANSLATIONAL SPECTRUM

Relatively Inexpensive

T1

Basic science discovery → candidate health application

T2

Effectiveness → Assess value for Health Practice

Expensive

T3

Implementation → Health impact of Evidence based application

T4

REALLY Expensive

Real-World Health impact in Population health
TRANSLATIONAL QUESTION CHARACTERISTICS

- Important – can you put your question in a conceptual framework that could stand the scrutiny of a study section evaluating your ‘Significance’ section?
- Has potential to impact human health *in the foreseeable future*
- Feasible in the context of your proposed MTT
  - Expertise
  - Time frame
  - Resources
- Innovation – does the project your MTT will conduct break new ground? Will novelty stand the scrutiny of a study section?

CURRENT CTSA MULTIDISCIPLINARY TRANSLATIONAL TEAMS

- Phenotypes of Severe Asthma
- Aging Muscle & Sarcopenia
- Obesity & Its Metabolic Complications
- Reproductive Women’s Health
- Pediatric Respiratory Infections - Ear, Nose and Virus (ENV) Study Group
- Pediatric Respiratory Infections – Bronchiolitis Group
- Hepatitis C-Hepatocellular Carcinoma
- Burns Injury & Hypermetabolic Response
- Clinical Epidemiology of Estrogens in Asthma
- Maternal Fetal Medicine
- Development of Novel Therapeutics for *Clostridial difficile* Infection
- Novel Biomarkers and Therapeutics in Addictions and Impulse Control Disorders
MTT MAY EXECUTE SEVERAL PROJECTS
CTSA RESOURCES SUPPORT PROJECTS

HINT
Start with ONE Project!

WHO SHOULD BE ON THE TEAM?

- Develop a feasible translational project
- What expertise do YOU and existing collaborators have?
- What expertise is required for INNOVATION and SIGNIFICANCE?
  - In CTSA KRs
  - On campus
  - Off campus
- Trainee
- Ethics
- Biostatistics
Multi-disciplinary Translational Team [MTT] Project Flow

<table>
<thead>
<tr>
<th>Phase</th>
<th>Concept</th>
<th>Design</th>
<th>Implementation</th>
<th>Outcomes</th>
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<tr>
<td></td>
<td>Concept</td>
<td>Design</td>
<td>Implementation</td>
<td>Outcomes</td>
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<td></td>
<td>Investigator-initiated / ICSTA-identified opportunity</td>
<td>Cost-Efficiency Feasibility</td>
<td>Data Quality OnTime OnBudget</td>
<td>Commercialization New Funding</td>
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<td>Innovation</td>
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<td>ICTSA Resources</td>
<td>Technology (new approaches)</td>
<td>Feasibility</td>
<td>Data Quality OnTime OnBudget</td>
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<td></td>
<td>Novel Methodology (innovative analytics)</td>
<td>Feasibility</td>
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<td>Commercialization New Funding</td>
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<td>Data Quality OnTime OnBudget</td>
<td>Commercialization New Funding</td>
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<td>OnBudget</td>
<td>Data Quality OnTime OnBudget</td>
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<td>Writing Resource (document preparation)</td>
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<td>Data Quality OnTime OnBudget</td>
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<td>ICTSA Resources</td>
<td>Reg. (IRB, PCR interface)</td>
<td>OnBudget</td>
<td>Data Quality OnTime OnBudget</td>
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<td>Ethics (consent forms)</td>
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<td>Trans Technology (Implementation)</td>
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<td>Bioinformatics (data sources)</td>
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<td>Data Quality OnTime OnBudget</td>
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<td>Novel Methodologies (analytics)</td>
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<td>Data Quality OnTime OnBudget</td>
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<td>Evaluation (metrics)</td>
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<tr>
<td></td>
<td>Resources Released for New Projects</td>
<td>OnBudget</td>
<td>Data Quality OnTime OnBudget</td>
<td>Commercialization New Funding</td>
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STEPS TO SUCCESS FOR AN MTT

- MTT Initiation Meeting [Plans, Concepts]
- MTT Workgroup [Internal clarifications for Project]
- MTT Follow-up Meeting [Operations, Resources, Metrics, Timelines, Deliverables]
- CTSA Operations Committee Meeting [Formal request for CTSA Resources for Project]
- CTSA Resource Allocation [Fiscal, logistical, technologic, human resources]
- Project Initiation [IRB, role assignments, space, timing of resource delivery]
- Project Execution [Data collection, interim and final analyses, mid-course corrections]
- Project Completion [Manuscript, funded grant application, patent, commercial product]

Measurement, Feedback, Resources
QUESTIONS AND COMMENTS