One California: System-ness Across UC Health

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(incoming 10/31/19)
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The Translational Spectrum

T0: BASIC SCIENCE RESEARCH
- Preclinical and animal studies
- Defining mechanisms, targets, and lead molecules

T1: TRANSLATION TO HUMANS
- Proof of concept
- Phase 1 clinical trials
- New methods of diagnosis, treatment, and prevention

T2: TRANSLATION TO PATIENTS
- Phase 2 and 3 clinical trials
- Controlled studies leading to effective care

T3: TRANSLATION TO PRACTICE
- Phase 4 clinical trials and clinical outcomes research
- Delivery of recommended and timely care to the right patient

T4: TRANSLATION TO COMMUNITY
- Population-level outcomes research
- True benefit to society

Translation from basic science to human studies
Translation of new data into the clinic and health decision making

Courtesy of University of Arkansas TRI
BRAID Advances

- Contracting
- Cohort Finding
- Participant Recruitment
- IRB
TMC  Future TMC|3 Innovation Campus
First patient enrolls in South Texas clinical study

A study opened by Texas A&M and Driscoll Children’s Hospital’s Global Institute for Hispanic Health fills gap in Hispanic participation in clinical research

Texas A&M Health Science Center and Driscoll Children’s Hospital have joined forces through the Global Institute for Hispanic Health (GI-HH) to take part in a National Institutes of Health-sponsored observational study, “Chronic Kidney Disease in Children (CKID).”
Drug Regulation in the Era of Individualized Therapies

Janet Woodcock, M.D., and Peter Marks, M.D., Ph.D.
Phage Therapy 2.0:
Personalized medicine for antibiotic-resistant infections

• Requires new phage paradigm:
  • Large pre-characterized libraries
  • Rapid small-scale production and purification
  • Reducing time could save lives!
Personalized medicine from concept to standard of care

Formulation → cGMP manufacturing → CTSA SMART IRB platform → eIND through FDA, n=1 trial

Expand to larger trials
A national opportunity for personalized clinical trials

**Just in Time (JIT) Personalized Clinical Trials**

BRAID as a model

Utilize the **CTSA consortium** to identify eligible patients

Register the study in CTSA Clinical Trials Innovation Center
- Receive trial consultation and support

Work with CTSA Streamlined Multisite Accelerated Resources for Trials (**SMART**) IRB platform and with FDA
- **554** participating health care organizations treating **millions** of patients annually
• Biobanking
• Genomics
• Metagenomics
• Big Data
BRAID Opportunities

- Cohort Finding
- Community Engagement
  - Social Determinants of Health
  - Adverse Childhood Events
- Participant Recruitment
• Extending Capacity
• Developing Specific Skills
• Supporting Diverse Communities
ON THE CLINICAL FRONT LINES

AAMC Building Bridges and Spanning Boundaries Award: Innovations in Research and Research Education--2014
128 Graduates
109 with BS
25 in Graduate Programs
24 in Medical School
33 Employed in Biomedical Research
Matrix Mentoring Model

Byington et al Academic Med 2016
AAMC Building Bridges and Spanning Boundaries Award: Innovations in Research and Research Education--2019
This slide has an interesting photo.