Fibrosis = Scarring

Laceration

Wound Healing (Scar = Fibrosis)

Healthy Liver
Fibrotic Liver

Healthy Lungs
Fibrotic Lungs
Why Fibrosis?

• Contributes to ~45% of Deaths in Western World

• 2 FDA-Approved Drugs – Poor Efficacy
- Major Unmet Need

• >300 Companies Worldwide Targeting Fibrosis

• Significant Strength at the AMC, but Not Unified
CFReT: Concept

Academic Science/ Patient Care

Biotechnology/ Drug Discovery

CFReT

- Highly Collaborative
- Team Approach
- Basic and Clinician-Scientists
  - Innovative
  - Nimble
  - Transparent
  - Data Driven
- Focused on Improving Human Health

Internationally Recognized Center of Excellence
CFReT: What Will the Science Do?

Discover Molecular Regulators of Fibrosis

Discover Blockers of Pro-Fibrotic Regulators

Develop Novel Anti-Fibrotic Therapies
CFReT: Structure – First of Its Kind

Fueled by Internal Pilot Grants
- First awards begin July 1
CFReT: External Funding Opportunities

1. Pre-Clinical Discovery Group
2. Clinical Discovery Group
3. Fibrosis Innovation Group (FIG)
4. Clinical Efficacy
CFReT: Other Unique Components

- Scientific Advisory Board (Internal & External)
- Fibrosis Fellows Program; External Applicants
- Graduate Student Awards
  - First 2 awards begin July 1
- Fibrosis Seminar Series
  - Many excellent speakers have committed
- CFReT Retreat
CFReT: Recruitment

• 3 Faculty
  - “Traditional”
  - Excellence in Fibrosis Research
  - High Energy; Collaborative

• 1 FIG Director

  PhD – University of Michigan – Biochemistry
  Postdoc – UC Berkeley – Enzymology

  • Triad Therapeutics, San Diego – p38 Kinase Inhibitors
  • Gilead – ASK Kinase Inhibitors; HTS; Project Management
  • Cytoskeleton – Assay Development; Contract Research

Keith Koch, Ph.D.
CFReT: 5-Year Goals

• New Internal Collaborations
  -Enhanced Extramural Funding
  -NIH P50 Specialized Center Grant

• Unique Industry Partnerships & Philanthropy
  -Sponsored Research Agreements and Alliances

• Exciting and Productive Training Environment
  -High Energy and Passion

• At Least 1 Novel, Nodal Effector of Fibrosis
  -Phase IIa Proof-of-Concept in Humans
CFReT: Questions?

Fibrosis

- Inflammatory & Epigenetic Cues
- Organ Regeneration
- Standardized Experimental Methods
- Nodal Pathways
- Novel Therapies
- Cardiac
- Renal
- Pulmonary
- Hepatic