

Pfizer's Centers for Therapeutic Innovation (CTI) for NIH Researchers

APRIL 2015

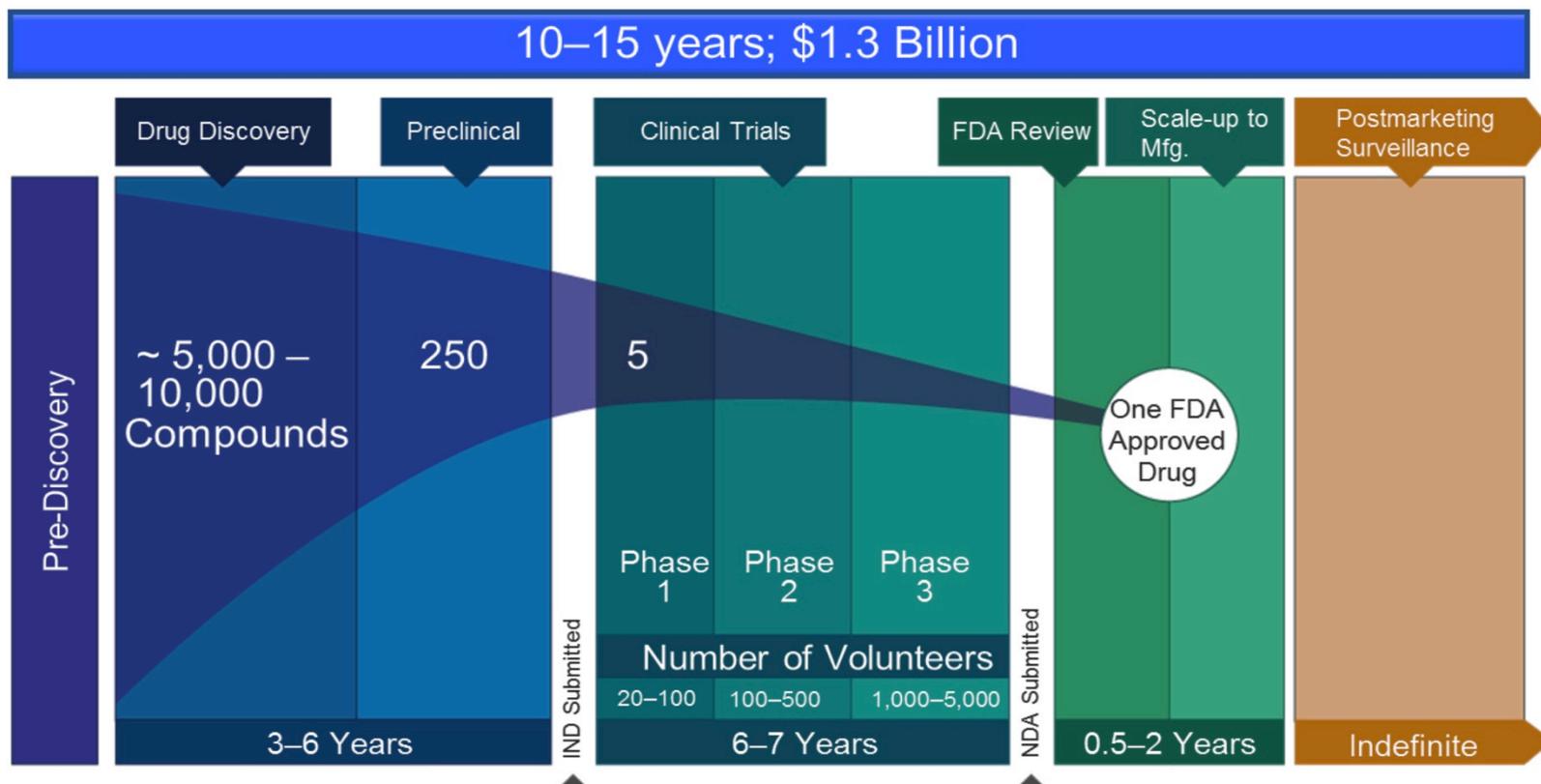
NCATS

What We Will Cover

- What is CTI?
- Details on the NCATS-hosted Pfizer CTI seminar for NIH intramural researchers, April 13, 2015



Pharmaceutical R&D Is a High-Risk Process



Sources:

- Pharmaceutical Research and Manufacturers of America, *Drug Discovery and Development: Understanding the R&D Process*, www.innovation.org
- DiMasi, JA and Grabowski, HG (2007), The Cost of Biopharmaceutical R&D: Is Biotech Different?, *Managerial and Decision Economics* 28 : 469-479

NIH's Mission

...is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

Translational Research

Basic Research

Clinic



Improved Health



CTI Model for Biologics Collaboration



- Founded in 2010
- A pioneering R&D network initiated by pharma that uses a **collaborative model** to bring great ideas to fruition.
- CTI is an entrepreneurial group that partners with academic medical centers, foundations and now NIH to translate promising science into clinical candidates.



Pfizer's work is based on authentic collaboration, reflected in shared decision making and aligned incentives.



Bringing together some of the world's best resources — including NIH scientists, patients, academic researchers, foundations and Pfizer's own scientists — to develop medicines faster and more efficiently.



Challenges to Pharmaceutical Industry and NIH

Industry

Slow progression of pipeline

- Increased cost of drug discovery and development
- Decreased productivity

Pressure from stakeholders, investors, physicians, legislators, regulators and patients

NIH

- Increased focus on translational medicine
- Funding pressures
- Investigators' challenges: to translate discoveries to the clinic while maintaining "control"

CTI

New partnership seeking to deliver on the promise of innovative discoveries to treat diseases of high unmet medical need with differentiated new medicines

CTI Collaboration for NIH Scientists



The collaboration is designed to engage the NIH Intramural Research Program to create protein biologic therapeutic candidates directed at targets/pathways that lead to Phase 1 clinical trials and demonstrate proof-of-mechanism.

CTI Collaboration for NIH Scientists

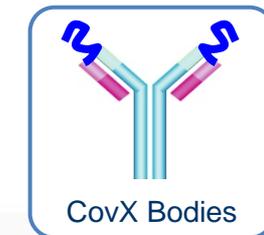
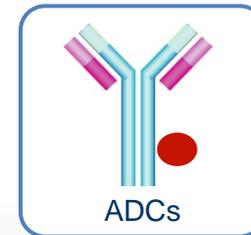
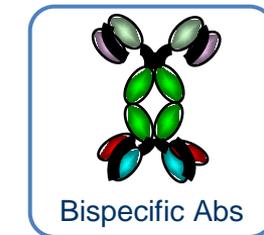
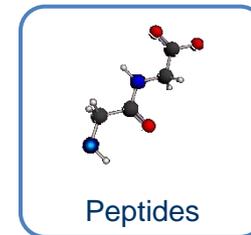
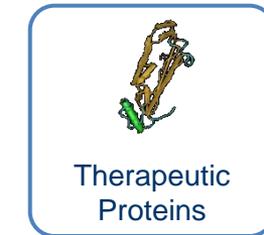
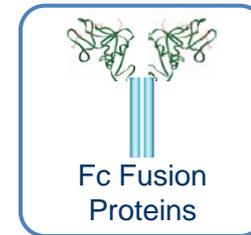
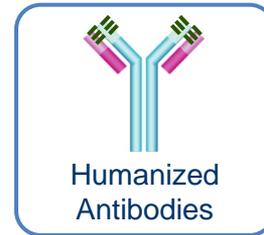
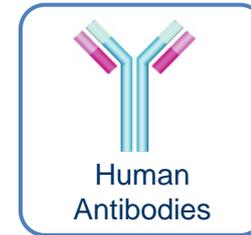
- Through this collaboration:
 - NIH scientists can potentially advance research projects from the lab into the clinic using Pfizer resources to pursue scientific and, ultimately, clinical breakthroughs.
 - NIH has negotiated a master Cooperative Research and Development Agreement
 - Contact your Technology Transfer Office for more information



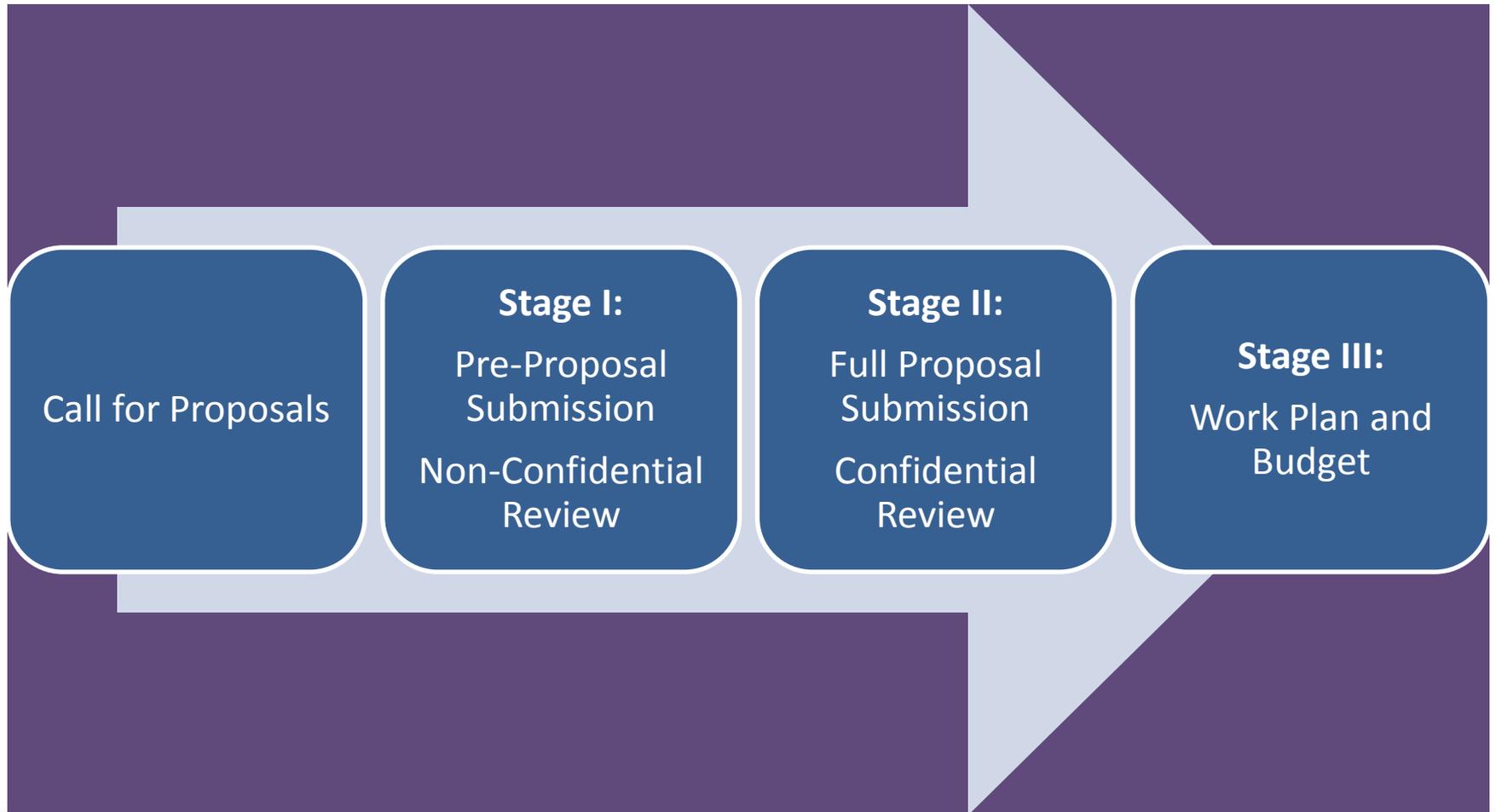
Focus on Monoclonal Antibodies

Antibody Modes of Action

- Neutralizing Antagonist
 - Antibodies that bind to a target and block an interaction
- Agonist
 - Antibodies that bind to a receptor and stimulate a downstream process
- Effector Function (Cell Killing Mechanisms)
 - ADCC: Antibody-Dependent Cell-Mediated Cytotoxicity
 - Recruits macrophages, monocytes or NK cells
 - CDC: Complement-Dependent Cytotoxicity
 - Recruits complement serum proteins



Project Proposals, Selection & Execution



Joint Steering Committee

	NIH	Pfizer
Co-Chairs	Anton Simeonov, Ph.D. Acting Scientific Director, NCATS	Anthony J. Coyle, Ph.D. Sr. V.P. and Chief Scientific Officer, CTI
JSC Members	Raffit Hassan, M.D. Co-Chief, Thoracic and Gastrointestinal Oncology Branch, Center for Cancer Research, NCI	Santiago Arroyo, M.D. Sr. V.P. and Head of PharmaTherapeutics Clinical Research; Chief Medical Officer
	John J. O'Shea, M.D. Scientific Director, NIAMS	Will Somers, Ph.D. V.P. and Head of Global BioTherapeutics
	Kathryn C. Zoon, Ph.D. Director of Intramural Research, NIAID	Charlotte Allerton, M.Phil. V.P. and Head of PharmaTherapeutics, PK/PD and Metabolism
Non-Voting Liaisons	Lili Portilla, M.P.A. Director of Strategic Alliances, NCATS	Samantha O'Connor, M.B.A. Executive Director and Head of Strategy and Business Planning

Seminar Details

Who: NIH and Pfizer CTI representatives

What: Learn more about how to collaborate with Pfizer's CTI

When: April 13, 2015, 2-5 p.m.
(Also April 14, 2015, one-on-one meetings by appointment)

Where: Lister Hill Auditorium, Building 38A, NIH

Why: To deliver on the promise of innovative discoveries to treat diseases of high unmet medical needs with differentiated new medicines

*For more information and to register,
e-mail NIH-CTIPfizer@mail.nih.gov.*



For More Information

Visit the NCATS Web page about the NIH-Pfizer CTI collaboration:

www.ncats.nih.gov/cti

