

**R&D COLLABORATIONS** 



# "I collaborate."

"We are excited to collaborate with Pfizer in our search for better treatments and a cure for cystic fibrosis. The Cystic Fibrosis Foundation has been a pioneer in venture philanthropy — a drug development model that provides funding and scientific resources to allow biopharma research teams to bring full and sustained focus to this disease. We have been impressed with Pfizer's science and their chemistry — and together we expect great things from this relationship, including the next generation of breakthrough drugs. We are still early in the process and there's a long way to go, but this collaboration represents important progress for CF patients and their families."

> **Robert J. Beall, Ph.D.,** President and CEO, Cystic Fibrosis Foundation



#### Partnering on Cystic Fibrosis

Our research collaboration with Cystic Fibrosis Foundation Therapeutics, Inc., the nonprofit drug discovery and development affiliate of the Cystic Fibrosis Foundation, is designed to speed potential therapies that target the most common underlying causes of the disease, and strengthens Pfizer's position in developing therapies that help "correct" the action of mutated proteins.



# Creating an Ecosystem of Innovation

External collaboration is critical to advancing our R&D strategy and expediting new medical breakthroughs. We continue to work with a broad array of organizations to connect the assets and capabilities that have the potential to speed the development of new medicines for patients.

## Working with Patient Groups

Innovative collaborations between industry and patient organizations are seen as increasingly critical in expediting the translation of basic science into potential new treatments. Patients have long been powerful advocates on the care side of the continuum. Now, they are increasingly involved in earlier stages of R&D to provide critical guidance, investment and partnership. At Pfizer, our R&D teams work with patient foundation partners to help de-risk early stages of research, prioritize endpoints, inform clinical trial recruitment and provide insight into disease. Today, we're partnering with groups devoted to a range of patient needs including the Cystic Fibrosis Foundation, CHDI Foundation (Huntington's disease), The Michael J. Fox Foundation for Parkinson's Research, Alliance for Lupus Research, the JDRF and the Melanoma Research Alliance.





## **Examples of Collaborations**

#### CTI Targets Lupus

The Alliance for Lupus Research and Pfizer's Centers for Therapeutic Innovation (CTI) are partnering to discover and develop new therapies for patients living with lupus. As part of this first-of-its-kind collaboration in lupus, we will jointly support novel translational research projects driven by leading academic medical centers within the CTI network.

#### CTI Expands into Small-Molecule Research with UCSF

Pfizer is extending its partnership with University of California, San Francisco (UCSF) through CTI to begin developing small-molecule drug candidates. This partnership provides investigators from UCSF with access to Pfizer's industry-leading small-molecule drug development capabilities, working side-by-side with Pfizer scientists with the goal of jointly translating promising basic research into drug candidates, which have the potential to bring innovative new therapies to patients.

#### Predicting and Treating Kidney Failure in Type 2 Diabetes

Pfizer, Eli Lilly and Company and Joslin Diabetes Center have come together to identify biomarkers for predicting kidney disease in patients with Type 2 diabetes. This is the first time two pharmaceutical companies have joined forces with Joslin, the world's leading diabetes research and clinical care organization, in a co-funded research effort of this kind. The collaboration is designed to accelerate research aimed at predicting kidney failure in patients with Type 2 diabetes and developing potential ways to treat and prevent this complication of the disease.

## Treating Complications of Obesity and Diabetes

We are collaborating with Sanford-Burnham Medical Research Institute to identify new therapeutic targets for preventing and treating complications of obesity and diabetes. The team will utilize novel screening tools including systems biology approaches and technologies developed at Sanford-Burnham with the aim of discovering new therapeutic strategies for reducing insulin resistance in obesity and diabetes. Investigators will utilize Sanford-Burnham's Conrad Prebys Center for Chemical Genomics to screen for new relevant targets using investigational compounds from Pfizer, as well as evaluate compounds previously identified from the National Institute of Health chemical library. in the interest of identifying novel therapeutic targets for the treatment of diabetes.

## Strategic Collaboration in Cancer Immunotherapy

Pfizer entered into a partnership with The University of Texas MD Anderson Cancer Center to develop immune-based approaches to cancer treatment, the first agreement made through MD Anderson's Moon Shots Program immunotherapy platform. The partnership is designed to accelerate the progress of immunebased treatments to cancer patients and to more efficiently identify new combination therapies, as well as biomarkers to guide and monitor treatment.

#### Partnering with Biotech on Novel Technologies

We have entered into a global collaboration with BIND Therapeutics, a clinical-stage biopharmaceutical company developing a new class of highly selective targeted and programmable therapeutics called Accurins™, which have the potential to improve patient outcomes in the areas of oncology, inflammatory diseases and cardiovascular disorders. The collaboration is focused on the development and commercialization of Accurins utilizing select small molecule targeted therapies.

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#### Exploring Innovative Technologies for Neuroscience Research

Pfizer entered into collaboration with Akili Interactive Labs Inc. to test the ability of Akili's mobile video game platform to detect cognitive differences in healthy elderly people at risk of developing Alzheimer's disease. As part of the collaboration. we will conduct a clinical trial that will evaluate approximately 100 healthy elderly subjects with and without the presence of amyloid in their brains, as determined by Positron Emission Tomography (PET) imaging. The goal of the trial is to investigate the Akili game as a biomarker or clinical endpoint for potential use in future Alzheimer's trials. We believe that a tool that enables cognitive monitoring for the selection and assessment of clinical trial patients has the potential to be an important advance in Alzheimer's research and beyond.

## Taking a Novel Approach to Autoimmune Diseases

We have entered into an exclusive worldwide licensing agreement with Gliknik Inc., a privately held biopharmaceutical company, for GL-2045, Gliknik's recombinant stradomer™, a drug candidate that is designed to replace and improve on pooled human intravenous immunoglobulin. GL-2045 has shown promising results in a broad range of preclinical tests and is being developed as a potential treatment for a wide variety of autoimmune diseases and cancer.