Understanding COPD

To understand COPD-related research, reviewing what is COPD can be helpful:

**Chronic:** the disease lasts a long time, is always present

**Obstructive:** the ability to move air in and out of the lungs is obstructed

**Pulmonary:** the disease is in the lungs

**Disease:** the lungs have been damaged

Types of COPD Research

**Defining and Describing COPD**

Some COPD-related research attempts to answer critical questions ...

**Who is at risk of getting COPD?**

- Epidemiology of COPD studies—focused on frequency, patterns, causes, and risks
- New approaches to diagnosis studies—focused on expanding COPD diagnosis criteria
- Non-smoking causes of COPD studies—focused on the individuals with COPD who have never smoked

**What are the different types of COPD?**

- Phenotypes research—focused on common characteristics and disease progression among groups of patients
- Asthma-COPD overlap research—focused on COPD patients who also have a diagnosis of asthma

**What happens to COPD over time?**

- The progression or natural history of COPD studies—focused on how COPD changes from “moderate” to “severe.”

**Treatment-Focused Treatment**

- Oxygen issues studies—focused on how much and when individuals with COPD need oxygen
- New treatment studies—focused on daily, maintenance and rescue medications
- New device studies—focused on developing new devices like bronchial valves

**Molecular and Cellular**

- Studies that examine COPD at the molecular and cellular levels
- Studies that use research on animals and in labs
- Studies that focus on understanding COPD processes, causes, and effects on the lungs

COPD Facts

COPD is caused by—smoking, breathing in fumes/chemicals, dust and/or genetic factors.

3 broad types of COPD: Chronic Bronchitis COPD, Emphysema and Alpha-1 Antitrypsin Deficiency
Implementation Research (applying what has been learned)

- **Screening for COPD in primary care research**—focused ways of identifying undiagnosed COPD individuals
- **Readmissions research**—focused on programs and interventions designed to reduce COPD hospital readmissions.
- **Patient and caregiver perspective**—focused on listening to patients and caregivers about what should be studied and how clinical trials should be planned, implemented, and shared.

Future COPD Research

- **More molecular/cellular work**
- **Women and COPD**
- **Minorities and COPD**
- **New approaches to treatment**
- **New approaches to diagnosis and monitoring**
- **A cure...**

**Current COPD-Related Research Studies**

**COPD Genetic Epidemiology (COPDGene) Study**
One of the **largest and longest studies** devoted to examining the **underlying genetic factors** that cause some smokers to get COPD while others do not

**RELIANCE Study**
A study focused on comparing 2 COPD drugs used to prevent episodes and hospitalization: azithromycin and roflumilast

**COPD Assessment in Primary Care to Identify Undiagnosed Respiratory Disease and Exacerbation Risk (CAPTURE) Study**
A study focused on validating a 5-item questionnaire used for COPD screening in primary care.

**A Unique COPD Network Devoted to Connecting Patients to Researchers**

**COPD Patient-Powered Research Network (PPRN)**
Striving to be **one of the largest networks** of COPD patients and those at risk who have agreed to **share their health information**

- Connects researchers with individuals with COPD
- Created and managed by the COPD Foundation
- Collects and stores information provided by patients that can be used in studies
- Focuses on research **questions and issues important** to people with COPD