

70th

**PLATINUM
ANNIVERSARY**

WHAT DOES NSF DO?

In 2020, the National Science Foundation (NSF) celebrates its 70th anniversary, also known as the "platinum anniversary." As platinum is a catalyst in chemical reactions, NSF is a catalyst for scientific innovation as it is the **only federal agency** to support fundamental research in all fields of science and engineering.

Since its founding in 1950, the independent federal agency has promoted the progress of science, advanced the country's prosperity, welfare, and health, and secured the nation. The agency's focus to **advance knowledge and unearth discoveries for the benefit of society** has charted the course of American innovation.

NSF invests in the studies that underpin our economy, including "**high-risk, high pay-off**" ideas, novel collaborations, and numerous projects that may seem like science fiction today, but will shape our future in meaningful ways.

WHY DOES NSF MATTER?

Since its inception, NSF has been a unique federal agency in the way it operates from the bottom up. Officials work closely with the research community to identify cutting-edge opportunities and monitor the areas of research most likely to result in progress.

WHAT SCIENCE DOES NSF FUND AT UNIVERSITY OF OREGON?

PREVENTING SPREAD OF DISEASE

Isolating non-biting mosquito genes to prevent spread of diseases

FISH ADAPTATION

Discovering genomic regions that allow ocean-dwelling fish to adapt to fresh water environments

HUMAN CREATIVITY

Understanding human creativity through capturing how the brain builds complex sequences from a small set of basic elements

NEURO IMAGING

Using neuro imaging to measure and improve mathematics interventions for at risk learners

DEEP OCEAN

Discovering how giant gutless worms colonize hydro thermal vents on the deep ocean floor in volcanic environments

MATHEMATICAL MODELING

Mathematical modeling and NSF-shared computing resources help identify key variables required to make consistently tasty coffee

EARLY EVIDENCE OF HUMANS

DNA from human coprolites (dried feces) shows earliest evidence of humans in North America

GLACIAL MELTING

Discovering glaciers are potentially melting as much as 100 times faster than predicted

INNOVATION PIPELINE

Preparing 3,500 teachers to deliver nationally-scaled intro to computer science curriculum that has attracted and retained diverse set of high school students

BIOLOGICAL IMAGING

Creation of new fluorescent dyes for use in biological imaging

