National Institutes of Health Institutional Development Award (IDeA) Program.

The Institutional Development Award Program (IDeA), established in the National Institutes of Health (NIH) Revitalization Act of 1993, serves biomedical researchers by investing in the building of biomedical infrastructure in Puerto Rico and 23 states that have not historically received significant levels of NIH support. Funding is distributed through merit review process with the expectation that states of recipient institutions expend considerable effort towards developing their biomedical research capacity and research competitiveness.

Nationally IDeA investigators have garnered more than \$1.5 billion in NIH funding that has produced breakthroughs in post-traumatic stress disorder, asthma, stroke, dementia, multiple sclerosis, cancer, and other diseases and disorders affecting human health. In 2010, 405 new R01 and 157 new R21 research grants were awarded to IDeA investigators, representing 8.8% of all NIH designated new investigators. New centers for clinical and basic research have been established in IDeA states and the first optical fiber network in support of research and education was funded by IDeA in the northeastern region.

The Centers of Biomedical Research Excellence (COBRE) programs increase the number of well-trained investigators in IDeA states by expanding research facilities, equipping laboratories with the latest research equipment, providing mentoring for promising investigators, and developing research faculty through support of a targeted multi-disciplinary center, led by an established, senior investigator with expertise in the research focus area of the center.

The Networks of Biomedical Research Excellence (INBRE) increase the pipeline of outstanding students and enhances the quality of science faculty in the IDeA states by research intensive networking at undergraduate institutions.

The INBRE program supports research infrastructure and mentoring of young investigators, and prepares students for graduate and professional schools and careers in the biomedical sciences at participating institutions.

The University of Idaho has two active COBRE project awards and an INBRE network award which have been a catalyst for development of biomedical research capacity at the university and across the state.

Idaho INBRE program.

Awarded in 2001, the program has received cumulative funding of nearly \$44 million to build a statewide biomedical research network and increase Idaho's competitiveness for new biomedical research dollars, mentor faculty and students, and prepare a workforce skilled in science technologies. Idaho INBRE funding has provided research opportunities for nearly 1,000 undergraduate students, 175 graduate students and over 300 faculty from across the state.



COBRE: Center for Research on Processes in Evolution Research.

Awarded in 2002 with cumulative funding of \$21.6 million conducts basic research to better understand how the evolution of pathogens and parasites affects human health through the development and spread of drug resistance, vaccine failures, pathogen host switching, and the emergence of new diseases. The knowledge gained will enhance efforts to design treatment and prevention regimes for these emergent health risks. Over the course of the award, this COBRE has directly funded the work of 20 faculty, 63 students, and employed 35 research staff. To date, we estimate that the University of Idaho has received an additional \$13.5 million in competitive extramural funds to date as a result of the NIH IDeA investment.

COBRE: Center for Molecular and Cellular Basis for Host-pathogen Interactions. Awarded in 2000, with cumulative funding of \$18.9 million, the University of Idaho's first COBRE award supports a core group of researchers with expertise in bacterial pathogenesis and immunology. In Phase 2, the research direction was expanded with an increased focus on virology, parasitology and mycology. The importance of this direction can be translated into increasing our understanding of how pathogens may impact our food supply, animal health and overall human health. Over the course of the award 90% of the junior investigators have graduate to independent status and are now developing competitive research portfolios of their own. The project, which is in its final months, directly supported over 35 faculty, graduate students, undergraduate students and affiliate faculty.

COBRE: Pending Submission

We have just submitted a proposal for a new COBRE, which would provide \$10.8 million in funding over a five-year period for a team of 10 junior faculty, mentored by 3 senior faculty, to develop an interdisciplinary research collaborative focused on mixed viral infection of the lung, tumor progression, neuromuscular disorders, and metabolic disorders. One of four aims of the project will be to establish a collaborative and synergistic modeling core to impel interdisciplinary research and to build institutional research capacity.

Funding Recommendations.

IDeA should keep pace with NIH increases, and ultimately represent at least 1% of NIH funding. In FY 2012, IDeA is budgeted at \$276 million, a \$50 million increase, targeted primarily at COBREs, including the new COBRE CTR (Clinical and Translational Research Initiative).

In FY2013:

- INBRE and COBRE should remain the focus of the IDeA program.
- Increase support for IDeANet, a "cyber" connectivity program to ensure that researchers and students in IDeA states have sufficient broad bandwidth Internet connections to expand opportunities for research training and competitiveness.
- Expand the impact of the IDeA by allowing the programs to be nimble
- Respond to current program needs by adding initiatives focused on cyberinfrastructure, research training, and recruitment and retention of talented researchers.