

Title of Proposed Program: Biomedical Technology Product Viability and Translation

Submitting Source: NIH

What is the major obstacle/challenge/opportunity that the Common Fund should address? What would the goals of the program be? Translation of discoveries from basic research to application to improve human health is one of the goals of the NIH. To best identify and nurture those NIH-funded projects aimed at the development of biomedical technologies/devices that have the potential for significant societal health and economic impact, we propose a program that would: 1) enable NIH-funded researchers to determine the readiness of their research for transition to a product; 2) network current investigators with each other and with mentors within the venture, business, and entrepreneur communities; and, 3) provide public-private partnership funds to accelerate new technologies into clinical care.

Why is a trans-NIH strategy needed to achieve these goals? What initiatives might form the strategic plan for this topic? This program will support the NIH research community by providing a new opportunity to assess the readiness of emerging biomedical concepts from funded research for transition into valuable new technology products and provide public/private partnership funds to move new technologies into patient care.

NIH-funded researchers will first apply for administrative supplements. Supplements will be given for a six month period during which each funded team, composed of the principal investigator, a mentor from the NIH mentoring board (see description below), and an entrepreneurial lead, will systematically identify and address knowledge gaps to ascertain the technology disposition. Each team will be part of a network of investigators in a given field who received a supplement. The network will have access to each other for peer to peer mentoring and to the NIH mentoring board to help determine the readiness of their technology for transition. The mentoring board will include the technological, clinical, entrepreneurial, and business know-how to bring discoveries ripe with innovation out of the university lab and into translation. It will include business leaders, venture capitalists, FDA (Critical Path collaboration), CMS, and others from private industry who will serve as nodes to the network to strengthen our national innovation system. Expected outcome during the period of the supplement include the following:

- Identification of what resources will be required to translate the technology to product.
- Identification of the competing technologies.
- Determination of added value to health and the economy.
- Clear go/no go decisions regarding viability of products.
- Should the decision be to move the effort forward, a transition plan to do so will be put in place.
- A technology demonstration for potential partners.

Subsequent to the technology assessment initiative, those projects that receive a “go” decision with respect to product viability will apply for further support through a public-private partnership initiative to translate the technology to product. We anticipate partnerships with Foundations such as the Kauffman Foundation and the Coulter Foundation as well as with private industry.

If a Common Fund program on this topic achieved its objectives, what would be the impact? This program has the potential to do two things: 1) leverage NIH’s current investment in research by giving funded investigators an opportunity to move advances in the development of biomedical technologies out of the laboratory and into products; and, 2) improve the health of the people of this nation and the economy.