

The Cardiovascular Translational Dream Team Initiative: **Call for Proposals**

Rationale and Overview

We are witnessing a period of unprecedented opportunity in translational research and experimental medicine. The rate of breakthrough biomedical discoveries has never been higher. “Big Pharma” and the biotech sector increasingly seek to outsource discovery and validation efforts by partnering with academic scientists. Venture investment is on the rise in selected areas, driving new company spinouts from academic laboratories. The Penn Medicine leadership is highly supportive of crossing the academic-private sector divide, and the lay public is increasingly passionate about efforts to prevent and treat the dread diseases of our time.

The opportunity for translational impact is particularly evident in the broad area of cardiovascular diseases. The Penn Cardiovascular Institute (CVI) is well-positioned for success in this new environment. To this end, we seek to promote the development of Cardiovascular Translational “Dream Teams” focused on well-defined areas of opportunity and unmet clinical needs. It is envisioned that the teams will assemble around highly focused projects with significant potential for translational breakthroughs across the broad spectrum of heart and vascular diseases including novel therapeutics (e.g. small molecules, biologicals), human diagnostic phenotyping tools (e.g. molecular/genetic profiling, imaging, informatics), and devices. Such teams will typically be assembled under the guidance of two or more faculty scientists who collectively contribute expertise across the spectrum of discovery and clinical research. We encourage participation by a wide array of disciplines in addition to medicine, including but not limited to engineering, physics, chemistry, and business. To this end, we are soliciting proposals for new Dream Team projects from across the entire Penn community. *A unique feature of this initiative is the ultimate goal of clinical validation and development in partnership with the private sector which may involve formation of a new company or joint ventures with industry partners, non-profit foundations, and/or committed donors with the common goal of developing first in human trials.*

Prospective teams will compete for seed funding provided by a CVI-based *Translational Dream Team Innovation Fund*. Applications will be reviewed and selected by an Executive Steering Committee (ESC) comprised of senior Penn scientists and ad hoc experts as needed. The funding will be keyed to specific steps or milestones en route to successful launching of a company or academic-private partnership. Successful projects will receive up to \$200,000 per annum (for up to two years based on reaching stated milestones and subject to approval by ESC; any additional years of support to be determined by progress and funds available) for competitive applications. We anticipate the level of annual funding to vary significantly as determined by project needs and the stage of project development. An important final milestone is to accomplish or show convincing progress towards the development of a company or an academic-private



partnership. Teams that successfully achieve the stated milestones will have the opportunity to enter a second phase of fundraising. This stage will involve development of a business plan and securing new investment funding from a variety of potential sources including: private partners involved in the project, new venture capital sources, and federal small business grants. The CVI will assist in this second phase in several ways. First, the ESC will endeavor to link the project teams to investment opportunities in the biotech and pharma sector by assembling an external advisory board network comprised of industry and venture investment participants. Secondly, the CVI leadership will introduce successful teams to a pool of potential donors with interest in this mission including members of the CVI Leadership Council which is comprised of grateful patients and community leaders with a passion for the prevention and treatment of cardiovascular diseases. Lastly, it is envisioned that successful teams will be competitive for emerging U. Penn and UPHS-supported initiatives to promote the development of biotech companies by Penn faculty.

Anticipated Success Metrics and Deliverables for the Dream Team Initiative

- Highly visible and impactful translation of discoveries made by Penn scientists
- Novel therapeutic approaches for a broad array of diseases including heart failure, vascular disease, and cardiac rhythm disorders
- New predictive and therapy-guiding diagnostics for heart and vascular diseases
- Increased Penn scientist-private sector partnerships
- First-in-human trials
- New small business spinouts
- New intellectual property in the cardiovascular space
- Licensing opportunities

For more information and to apply:

<https://www.med.upenn.edu/cvi/funding-opportunities.html>