

# Establishing a Center of Excellence for Multi-Disciplinary Cardiovascular Research

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## Abstract

**Background and Significance:** Cardiovascular research is a major focus at Drexel University College of Medicine. Faculty members engaged in this area of research are spread across various departments and divisions across all campuses at the College of Medicine, thus creating silos and physical separations. Silos hamper collaboration and team science; they also suppress the awareness of expertise and tools available in the institution for leveraging in grant applications and performing research. Creating a center for cardiovascular research could serve as a stepping stone to harnessing the strengths in other areas of research excellence within the College of Medicine.

**Project Objectives:** The primary objectives of my Faculty Launch Impact Project (FLIP) are to i) create a center of excellence bringing together investigators with common interests in cardiovascular physiology and disease; and ii) foster collaboration and the generation of innovative research ideas that are trans-disciplinary and complementary across Drexel College of Medicine.

**Methods and Approach:** The following strategy will be employed: Identify candidate faculty throughout Drexel University College of Medicine with research focus directly or broadly related to the cardiovascular system; Have face-to-face conversations with all candidate faculty and stakeholders to identify potential hurdles and opportunities for the success of breaking down silos and forging regular interactions and long-lasting collaborations; to form a working group for cardiovascular research initiative. At the meeting of the working group, students and postdocs will be given the opportunity to present their work and stimulate discussion and suggestions for future directions for their projects. Invitations will also be extended faculty pursuing research in other disciplines to present to the group, with the ultimate purpose of identifying potential synergy for trans-disciplinary collaborations.

**Expected Outcomes:** In the short term, I plan to establish a cardiovascular research working group starting with a core group of 3-5 faculty in the Department of Pharmacology and Physiology that will meet periodically to discuss research progress in various laboratories. This effort will be expanded to involve faculty members and research groups from other departments including, Neurobiology and Anatomy, Medicine (Divisions of Nephrology and Cardiology), and Department of Cardiothoracic surgery.

**Impact:** In the long term, the goal will be to develop inter-disciplinary collaborations centered on approaching scientific questions from quite different perspectives. The success of this effort could serve as a blueprint for a much broader plan for the entire University.

## Background and Significance

Cardiovascular research is a major focus at Drexel University College of Medicine. Faculty members engaged in this area of research are spread across various departments and divisions across all campuses at the College of Medicine, thus creating silos and physical separations. Silos hamper collaboration and team science; they also suppress the awareness of expertise and tools available in the institution for leveraging in grant applications and performing research. Creating a center for cardiovascular research could serve as a stepping stone to harnessing the strengths in other areas of research excellence within the College of Medicine.

## Goal

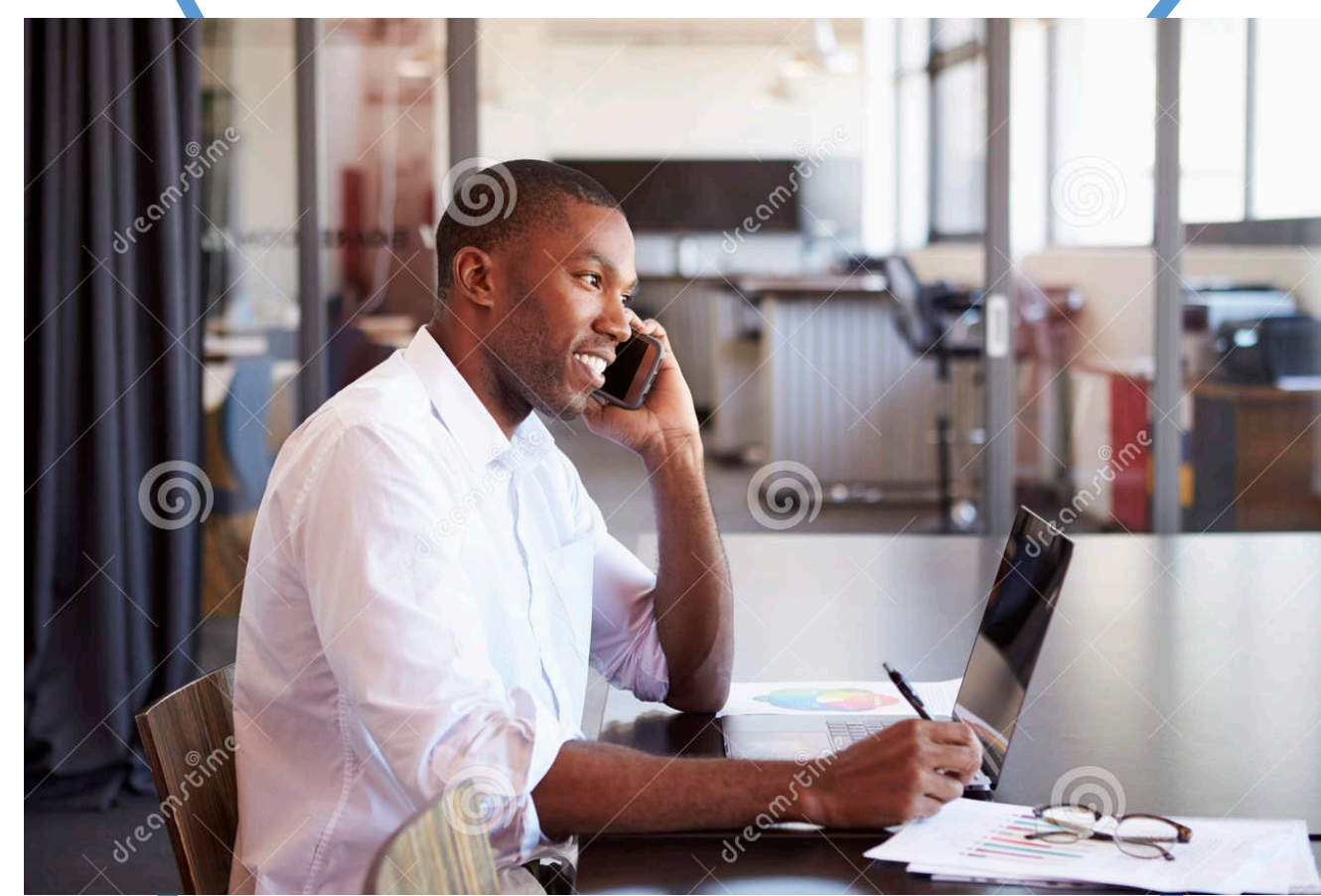
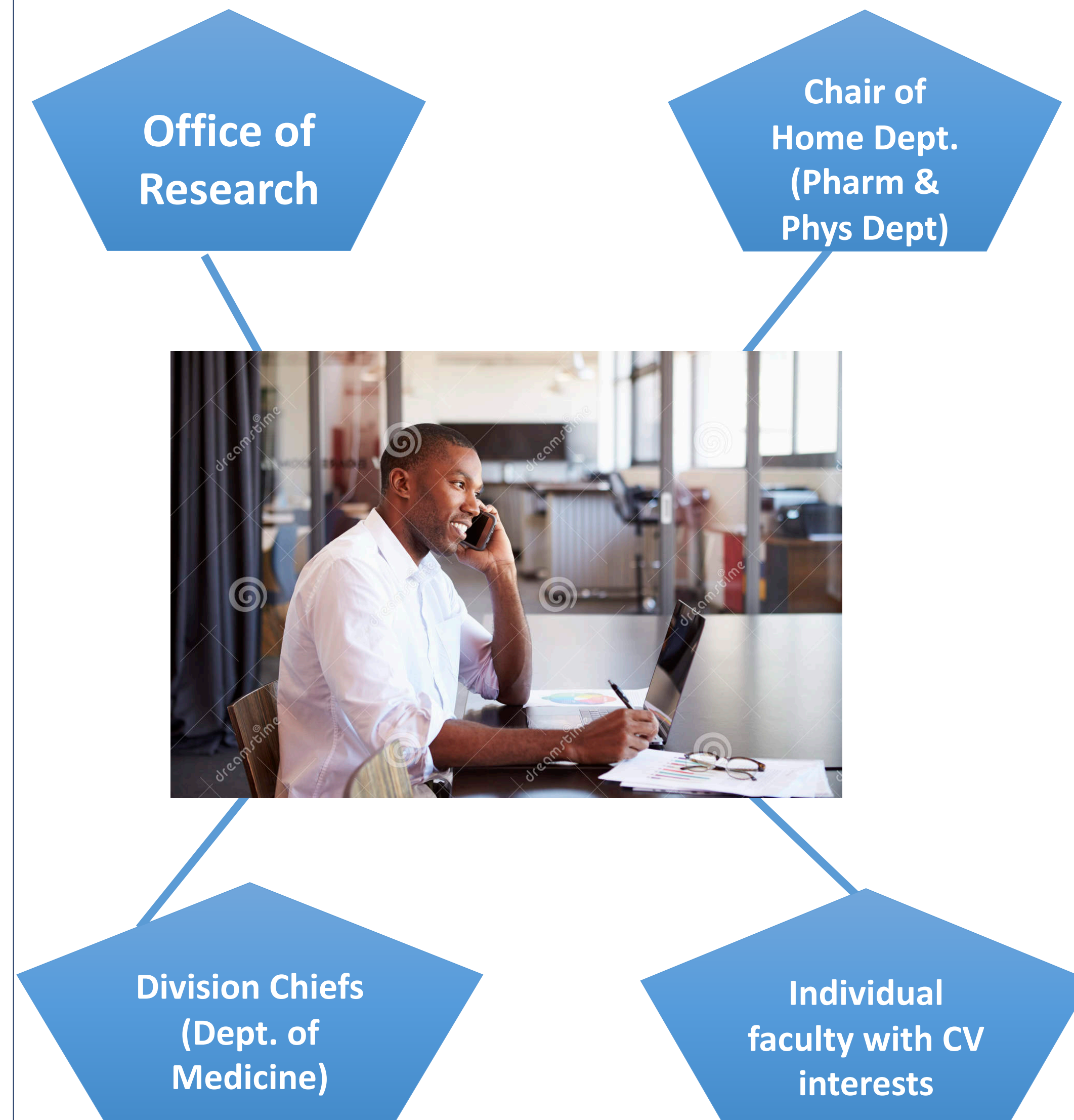
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- create a center of excellence bringing together investigators with common interests in cardiovascular physiology and disease that
  - fosters collaboration and the generation of innovative research ideas that are trans-disciplinary and complementary across Drexel College of Medicine.

## Objectives

- The primary objectives of my Faculty Launch Impact Project (FLIP) are to
- i) create a Center of Excellence for Cardiovascular Research that will bring together investigators with common interests in cardiovascular physiology and disease; and
  - ii) foster collaboration and the generation of innovative research ideas that are trans-disciplinary and complementary across Drexel College of Medicine.

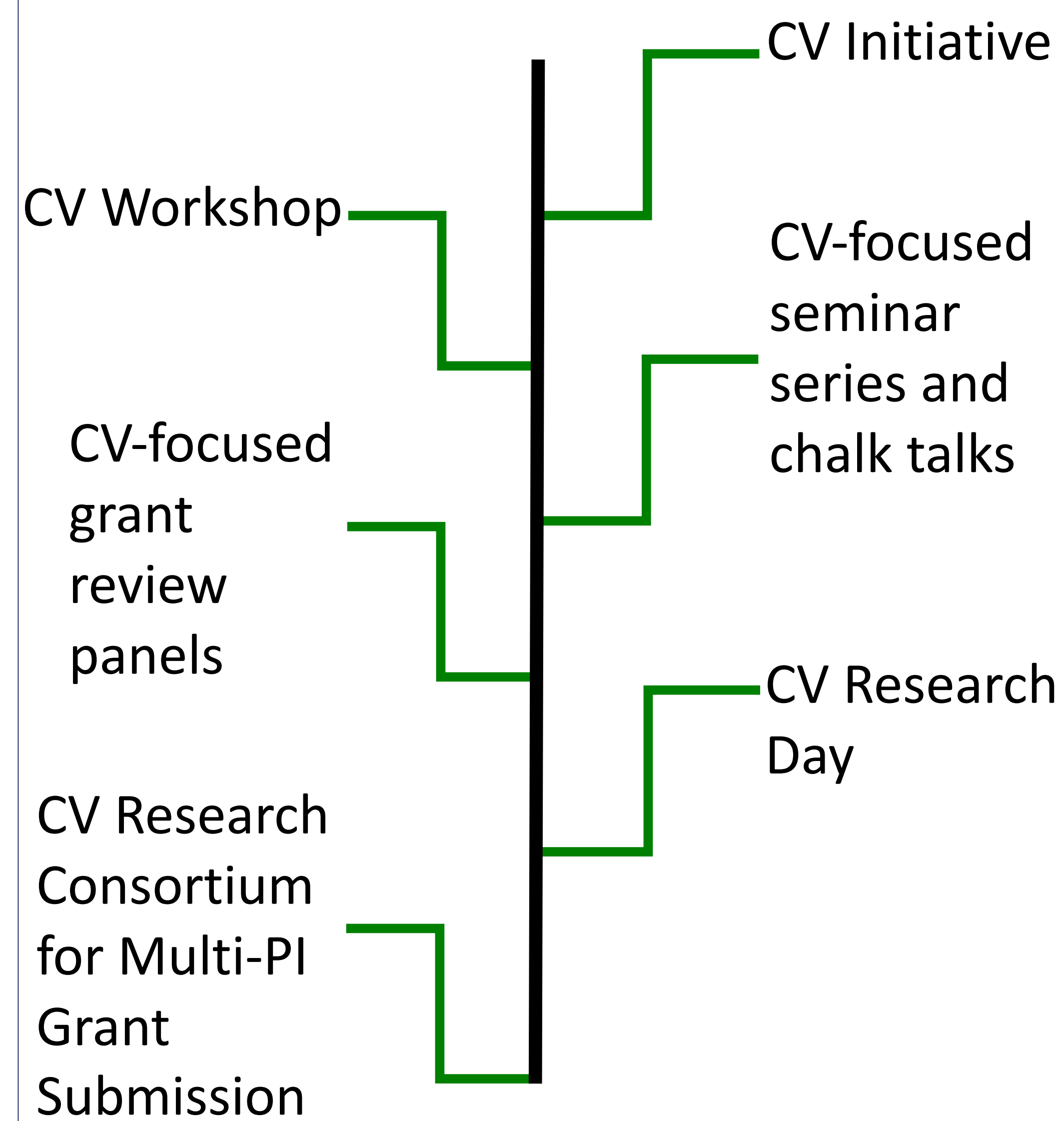
## Methods and Approach

- Develop a 90-second pitch to get a buy-in through one-on-one meetings with stakeholders in person, via phone conversations, or email exchanges.
- Consult with mentors and chair of home department for advice, resources and financial commitment.



## Short Term and Long Term Outcomes

### Benchmarks/Timeline for Short-term to Long-term outcomes/expectations



## Challenges

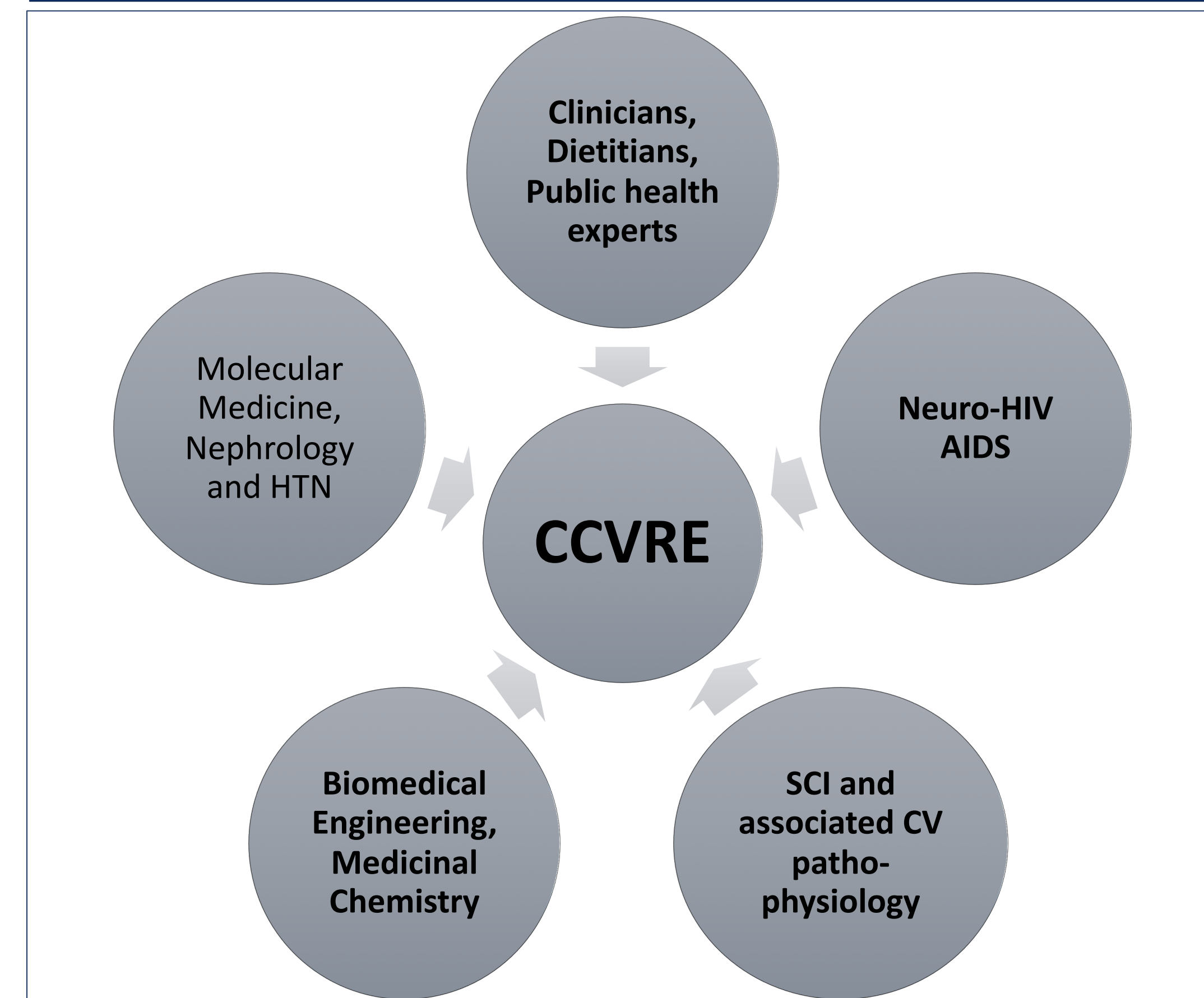
Silos stifle collaboration and resource awareness

Real threat to establishing long-standing translational research collabs

## Evaluation and Assessment Strategies

- ❖ Establishment of multi-disciplinary CV Research Consortium comprising faculty from basic science and clinical departments, and supported by a consolidated core facility and dedicated support staff
- ❖ Submission of NIH Multi-PI and Center Grants

## Discussion and Impact



**Impact:** In the long term, the CCVRE will serve as a hub for developing inter-disciplinary collaborations centered on the strengths and opportunities that already exist in the college and at Drexel University. The success of this effort could serve as a blueprint for a much broader plan for the entire University.

## Acknowledgements

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