#### ABSTRACT: 2014 ELAM Institutional Action Project Poster Symposium

**Project Title:** Strategic Planning for the UVM Vaccine Testing Center

Name and Institution: Beth Kirkpatrick, MD. The University of Vermont College of Medicine

Collaborators: Ross Colgate, MPH, Kristen Pierce, MD; Caroline Lyon, MD, MPH; Sean Diehl, PhD

Mentors: Rick Morin, MD and Polly Parsons, MD

**Background:** The University of Vermont Vaccine Testing Center (VTC) was started in 2002 at the UVM College of Medicine and has grown into an academic research unit dedicated to advancing knowledge in vaccine development, global infectious diseases, and human immunology. The strategic planning process was initiated in response to the VTC's sustained growth and anticipated changes in the academic research environment, including declining funding from the National Institutes of Health.

**Purpose:** The strategic planning process concentrated on the following questions:

- What is our long term research agenda and plan for growth and alignment?
- How do we optimize our core systems to support growth?
- How can we enhance educational and scholarship opportunities?
- How do we plan for long-term financial stability?

**Methods/Approach**: Development of the strategic plan included three groups of contributors: a five-person core team of VTC faculty and administrative leaders; the entire VTC staff and faculty; and the broader UVM community, including Dean Morin, department chairs, division leaders, and collaborating faculty. The core team set timelines and goals for the strategic planning process, then reviewed the unit's current research, finances and administration and conducted a SWOT (strengths, weaknesses, opportunities, threats) analysis. A survey of current systems and processes was performed to identify priorities to strengthen our support core (administration, finances, regulatory, immunogenicity lab), and the larger VTC team engaged in brainstorming and consultation throughout this process. A vision of the VTC's future emerged from these interactions. The core team articulated a new five-year vision via detailed objectives, action plan and revised organizational structure. A draft executive summary was prepared and shared with the full team and the Dean for comments, followed by additional review by faculty from the broader UVM community. The final strategic plan was constructed following revisions based on these conversations and will be implemented in May 2014.

**Outcomes and Evaluation Strategy**: We developed four core objectives to guide the VTC's efforts and growth over the next five years. Each objective contains focus areas, milestones and specific timelines that align with the core mission of the UVM College of Medicine.

- **Objective 1**: Refocus research strengths into three areas: US-based clinical trials (vaccines and therapeutics), internationally-based field research, and exploratory human immunology.
- **Objective 2**: Strengthen our core systems to support highest quality research and growth.
- **Objective 3**: Integrate and enhance educational opportunities for students, faculty and collaborators.
- **Objective 4**: Establish systems and models that support fiscally responsible forecasting and planning for long-term sustainability.

Once implemented, our evaluation strategy includes convening a new VTC Advisory Board, annual progress reviews, monthly team and faculty meetings, and transparent communication with senior UVM leadership.



# Strategic Planning for the UVM Vaccine Testing Center

ELAM Fellow: Beth Kirkpatrick, MD Mentors: Rick Morin, MD and Polly Parsons, MD The University of Vermont, College of Medicine



# **Background/Challenge**

- The University of Vermont Vaccine Testing Center (VTC) was started in 2002 at the UVM College of Medicine and has grown into an academic research unit dedicated to advancing knowledge in vaccine development, global infectious diseases, and human immunology.
- The strategic planning process was initiated in response to "good problems to have": challenges of the VTC's sustained growth and expansion.
- The process was also mindful of anticipated changes in the academic research environment, including declining funding from the National Institutes of Health, and the need to think creatively to achieve long term programmatic sustainability.

### **Purpose**

The strategic planning process concentrated on the following questions:

- What is our long term research agenda and plan for growth?
- How do we do the best possible research in the changing research environment?
- How can be better align with faculty and research strengths at the UVM College of Medicine?
- How do we optimize our core systems to support growth?
- How can we enhance educational and scholarship opportunities?
- How do we plan for long-term financial stability?

# **Methods and Approach**

- Development of the strategic plan included three groups of contributors: a five-person core team of VTC faculty and administrative leaders; the entire VTC staff and faculty; and the broader UVM community, including Dean Morin, department chairs, division leaders, and collaborating faculty.
- The core team set timelines and goals for the strategic planning process, reviewed the unit's current research, finances and administration, and conducted a SWOT (strengths, weaknesses, opportunities, threats) analysis (**Table 1**). We also reviewed past growth and identified factors that spurred this growth.
- A survey of current systems and processes was performed to identify priorities for strengthening our support core (administration, finances, regulatory, immunogenicity lab).

20	Strengths	Weaknesses			
Internal	Faculty well-connected in the field	Rapid but unstrategic growth			
	VTC clinic and lab research synergy	Low visibility			
	Attentiveness to regulatory issues	Suboptimal alignment with College			
	Good fiscal management	Size of research group relatively small			
External	Opportunities	Threats			
	360° reseach in vaccines/ID	Feast and famine funding			
	Educational opportunities in clinical research	Health care reform and COM			
	Local interest in global health/ vaccines	Anti-vaccine politics in VT			
	New international sites	Small local population/recruitment pool			

 Table 1. Selected SWOT (strengths, weaknesses, opportunities, threats) analysis for the UVM VTC

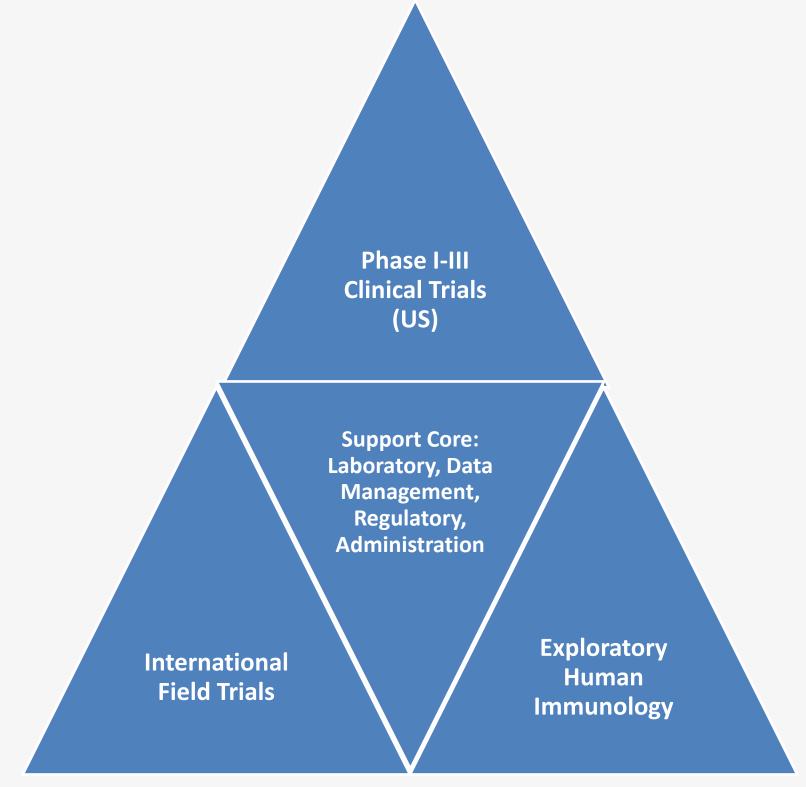


Figure 1. Schematic diagram of the UVM Vaccine Testing Center Components.

#### **Outcomes**

Over a four month period, the core and full teams met regularly to articulate our research vision and design a unit structure to offer core support for all lines of research and future growth.

We first articulated the structure by which VTC research will be supported. As shown in **Figure 1**, the VTC is built around a foundational 'support core' which offers streamlined service for financial, administrative, regulatory and data management throughout the group.

Based on this structure, the team designed and built our five-year strategic plan. We developed four main objectives to guide the VTC's efforts and growth:

- **Objective 1**: Consolidate research strengths into three complimentary "focus areas" in infectious diseases: US-based clinical trials (vaccines and therapeutics), internationally-based field research, and exploratory human immunology.
- **Objective 2**: Strengthen our core systems to support highest quality research and growth.
- **Objective 3**: Integrate and enhance educational opportunities for students, faculty and collaborators.
- **Objective 4**: Establish systems and models that support fiscally responsible forecasting and planning for long-term sustainability.

Based on these objectives, the team developed milestones and specific timelines for each focus area and the Support Core that align with the core missions of the UVM College of Medicine, as shown in **Table 2** (selected).

An executive summary was prepared and reviewed with the full team and the Dean for comments, followed by additional review by engaged faculty from the College of Medicine.

#### Discussion

Interpretation of results and impact of this work:

- The strategic planning process was necessary for the Vaccine Testing Center to focus, manage, and sustain our growth.
- Reviewing and articulating our past growth and our current systems was essential to clarify our focus, re-invigorate our team's enthusiasm for this work, and strengthen the foundations which support our future research.
- The process was an opportunity for us to engage in broader conversations at the College of Medicine and garner faculty and leadership input toward our vision of the VTC as an academic group with high visibility and broad engagement and support across the academic community.
- We determined the VTC was constrained by an outdated (top-down) organizational scheme. A broader delegation of responsibilities and leadership was needed in order to support the complexity of our current work. The new system will encourage growth in leadership and expertise and permit us to more rapidly pursue new opportunities.

# **Summary and Conclusions**

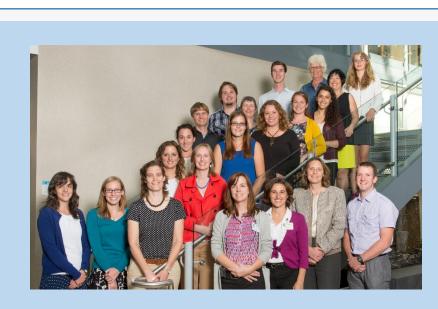
- Next steps for the VTC's strategic planning process include final discussions of the 5-year plan with key faculty and senior leaders, after which priorities and timelines will be finalized in the completed document.
- Implementation of the plan will be staged in May-July 2014, starting with a roll-out of our new organizational structure.
- Our evaluation strategy includes monthly meetings for the entire team and separate faculty meetings to regularly manage new opportunities and to review progress and timelines. A small VTC Advisory Board will be convened and will meet annually as a mechanism to review research progress, revise goals and provide input on the long-term development of the VTC.

Focus Area	Major Milestones		Strategic Planning 2014-2019				
Focus Area			y 2	у 3	y 4	y 5	
	Dengue vaccines-endemic settings						
International Field Trials	Rotavirus correlates of protection					0.	
international Field Irials	Cryptosporidium Rx field trials						
	Hybrid study design and premunition						
Oomestic Clinical Trials	Dengue and West Nile Vaccines						
	Dengue Infection Model					Ö.	
	Cryptosporidium Therapeutics model						
Human Immunology	Gates dengue immunology						
	U19 on emerging viruses						
	Immunodeficiency of malnutrition			1 1			
	Institute Strategic Plan Components						
	Institute financial forecasting						
Support Core	Enhance regulatory infrastructure						
	Expand Data Management Capacity						
	Meet GCLP lab standards						

**Table 2:.** Milestone Based Objectives (selected), by Focus Area.

# Presented at the 2014 ELAM® Leaders Forum

Beth Kirkpatrick, MD
University of Vermont, College of Medicine
Email: Beth.Kirkpatrick@uvm.edu
Phone: 802-656-5822



# Acknowledgements

The Entire VTC Team
Megan Barnes
Ross Colgate, MPH
Sean Diehl, PhD
Caroline Lyon, MD
Kristen Pierce, MD