Vice President’s Clinical and Translational (VPCAT) Research Scholars Program

-- Summary Statement --

2021 VPCAT Cohort

Applicant Name: Michelle Debbink, MD, PhD
Project Title: Place matters for maternal morbidity: Evaluating neighborhood and geographic drivers of racial/ethnic disparities of severe maternal morbidity in Utah

CRITIQUE 1

1. Career Plan: 1
2. Scientific Mentoring Plan: 1
3. Research Plan: 4
4. Institutional Support: 1
5. Applicant's Overall Potential: 2

1. Career Plan

Strengths

- Her career plan is exceptionally well-developed. She plans to complete the GIS Graduate Level Certificate, which she has already started, to expand her skills in geographic analysis and neighborhood assessment. She also has a well-developed plan to develop leadership and mentorship skills, along with cultural competence, by completing coursework with the Center for American Indian Health, by attending meetings of special section on American Indian & Pacific Islander Health at the annual meeting of the American Public Health Association, and working to develop a research partnership with the groups comprising Community Faces of Utah. These elements are essential, as part of her research plan involves collecting qualitative data in focus groups in communities differentially affected by severe maternal morbidity.

- Her application clearly establishes an important research niche in the geospatial analysis of severe maternal morbidity and a corresponding focus on the development of interventions to improve neighborhood-level pregnancy outcomes and thereby reduce racial/ethnic disparities.

Weaknesses


2. Scientific Mentoring Plan

Strengths

- Mike Varner is an outstanding mentor, and his letter shows a clear commitment to and excitement about her career. The applicant clearly has established a strong working relationship with Dr. Varner, with multiple manuscripts and to funded grants.
*The plan to continue work with Neng Wan, Director of the Utah GU-Health Lab, and Louisa Stark, Director of the Community Collaboration & Engagement Team at the CCTS, is wholly appropriate and excellent, given the multidisciplinary nature of her proposed work.*

**Weaknesses**
- Regular meetings are specified, but there does not appear to be a plan for evaluating progress.

### 3. Research Plan

**Strengths**
- The research plan clearly establishes the importance of the research question.
- The research plan is closely connected to the applicant’s career goals.

**Weaknesses**
- The proposal describes neighborhood characteristics as “potentially modifiable” risk factors for disparities in severe maternal morbidity. It would strengthen the proposal to provide some examples of factors that may be amenable to intervention at this level of analysis.
- Some of the examples presented – for example, ones that implicate hospital quality in spatial disparities in maternal outcomes – seem to argue against modifiable or individual factors. It would strengthen the proposal to highlight examples that are more clearly linked to potential interventions.
- The proposal mentions in several places that more data are needed to understand racial/ethnic disparities in severe maternal morbidity, but does not specify what kinds of data will be collected in Aim I and used to develop quantitative models of neighborhood risks.
- There are few details presented about the focus groups mentioned in Aim 1, so it is unclear what kinds of topics will be discussed and for what reason.
- The plan in Aim 2 to build partnerships with Native communities in Utah is important, but similarly underspecified.

### 4. Institutional Support

**Strengths**
- Applicant is in the first year of a five-year Reproductive Scientist Development Program K12, so she has 75% protected research time. Additionally, her clinical and administrative responsibilities are aligned with her research goals – for example, her clinical responsibilities include the Substance Use, Pregnancy, Recovery & Addiction clinic, she is co-chair of her department’s Diversity, Equity, and Inclusion Task Force, and she serves on the Maternal Safety and Quality Review Committee.
- Letters of support for protecting her time and advancing her career are unequivocally strong.

**Weaknesses**
- None

### 5. Applicant’s Overall Potential

**Strengths**
- The applicant holds both an MD and a PhD from the University of Michigan. She has won both outstanding paper awards and teaching awards. She is currently funded by the Reproductive Scientist Development Program Scholars K12 physician scientist award.
- She is clearly both professionally active (relevant board memberships) and has a history of community engagement related to her topic of research.
- Letters of support speak to her clear potential for national leadership in perinatal health disparities research.

**Weaknesses**

- Her publication record is not as strong as it could be and likely will be (especially given the protected time afforded by the K12). She currently has 2 first-authored publications, plus one additional paper under review, and describes three additional manuscripts nearing completion. This profile may not be unusual among those doing challenging multidisciplinary work. However, the application says relatively little about focusing on manuscripts as outcomes of her work.

**Reviewer Comments**

**CRITIQUE 2**

1. **Career Plan:** 2
2. **Scientific Mentoring Plan:** 1
3. **Research Plan:** 4
4. **Institutional Support:** 1
5. **Applicant’s Overall Potential:** 3

### 1. Career Plan

**Strengths**

- Very well laid out overall with appropriate emphasis on educational activities essential to achieve career goals
- Excellent clarity around long term career goals of reducing disparities in maternal and perinatal health outcomes
- Focus on research, leadership and advocacy all combined

**Weaknesses**

- Ambitious training when also combined with need for research productivity
- Needs more clarity on the milestones for becoming an independent investigator

### 2. Scientific Mentoring Plan

**Strengths**

- Outstanding mentor with track record of successful mentees
- Already established relationship with mentoring team

**Weaknesses**

- Could benefit from more clearly articulated plans to evaluate benchmarks along the way
## 3. Research Plan

**Strengths**
- There is a very nice and clearly evident demonstration of why this work is important and how it blends with prior work and where the applicant intends to head
- Aim 1 is strong and innovative

**Weaknesses**
- Aim 2 is not really a scholarly aim in a traditional sense. It is nonetheless very important but feels more like foundational work. I would encourage crafting more of a hypothesis driven or evaluative part for Aim 2

## 4. Institutional Support

**Strengths**
- This seems well laid out and there is plenty of reason to be confident that the department is genuinely intending to support the applicant. There is 75% protected time.

**Weaknesses**
- Only concern here is the possibility of too many additional commitments including clinical work. Just need to be mindful of this in first few years

## 5. Applicant’s Overall Potential

**Strengths**
- This applicant seems to be an excellent fit for VPCAT. Strong research environment and mentor, clearly defined path for career and research and adequate support for career development
- Has an impressive research background and experience overall including PhD
- Makes a strong case for how research, leadership and advocacy can combine to be an impactful investigator

**Weaknesses**
- 

### Reviewer Comments

### CRITIQUE 3

1. **Career Plan:** 2
2. **Scientific Mentoring Plan:** 2
3. **Research Plan:** 3
4. **Institutional Support:** 1
5. **Applicant’s Overall Potential:** 2
1. Career Plan

**Strengths**
- Has a goal to become an independent physician scientist focused on reducing racial and ethnic disparities in perinatal outcomes (clearly defined career vision and research niche)
- Plans to complete the GIS Graduate Certificate to support geographical analyses—has already completed 2 courses and is enrolled in another 2 this semester
- Plans to complete coursework on working with Indigenous populations through the Center for American Indian Health at Johns Hopkins
- Clear objectives and plans for each year outlined in Table 1

**Weaknesses**
- A plan for evaluating progress toward independence is not clear

2. Scientific Mentoring Plan

**Strengths**
- Scientific mentor is a highly productive scholar with a strong track-record of mentorship, and with well-aligned expertise for the candidate
- Monthly mentoring meetings are ongoing, and evidence of co-authorship with mentor
- Mentor has already facilitated connections with other researchers on campus

**Weaknesses**
- Plans for evaluating progress are not clear

3. Research Plan

**Strengths**
- Significance and innovation of the project are convincing and exciting

**Weaknesses**
- Aim 2 wasn’t fully clear—it seemed the language varied between “build partnerships” and “conduct focus groups/collect qualitative data” (when those things are not the same), so the exact plan and focus for stakeholder engagement was a bit lost throughout the proposal.

4. Institutional Support

**Strengths**
- Institutional support is very clearly articulated (75% time based aligned with current K12 funding)

**Weaknesses**
- No weaknesses noted

5. Applicant’s Overall Potential

**Strengths**
- Applicant’s potential for success is clear
- 14 peer-reviewed publications (2 first-authored), and the applicant received the American Public Health Association’s Maternal & Child Health Outstanding paper award, demonstrating strengths and potential in publishing
- Also received the Society for Maternal-Fetal Medicine-AMAG Pharmaceuticals Health Policy Award, and just received a Reproductive Scientist Development K12 award

**Weaknesses**
- As mentioned in other sections, some small weaknesses
- Some lack of clarity about current funding (K12 was mentioned in letters, but was not clear on the provided CV)

**Reviewer Comments**
Overall, this candidate presents an exciting program of research and has current mentored funding (K12) to support their development. Candidate’s senior mentor is excellent and well-aligned for the candidate’s area of research.