Pilot Project Funding Opportunities

Nathaniel Hafer

*University of Massachusetts Medical School*

*Et al.*

Let us know how access to this document benefits you.

Follow this and additional works at: [https://escholarship.umassmed.edu/umccts_seminars](https://escholarship.umassmed.edu/umccts_seminars)

Part of the Maternal and Child Health Commons, Mental Disorders Commons, Obstetrics and Gynecology Commons, Psychiatry Commons, Translational Medical Research Commons, and the Women's Health Commons

**Repository Citation**

Hafer N, Deligiannidis KM. (2013). Pilot Project Funding Opportunities. UMass Center for Clinical and Translational Science Seminars. [https://doi.org/10.13028/7vyx-f665](https://doi.org/10.13028/7vyx-f665). Retrieved from [https://escholarship.umassmed.edu/umccts_seminars/2013/seminars/3](https://escholarship.umassmed.edu/umccts_seminars/2013/seminars/3)

**Creative Commons License**

This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

This material is brought to you by eScholarship@UMassChan. It has been accepted for inclusion in UMass Center for Clinical and Translational Science Seminars by an authorized administrator of eScholarship@UMassChan. For more information, please contact Lisa.Palmer@umassmed.edu.
Pilot Project Funding Opportunities

September 26, 2013

Nate Hafer, PhD
Director of Operations
UMCCTS
Pilot & Collaborative Clinical & Translational Studies

Programs

- Next Hundred Million Pilot Projects (NHMPP)
- K Scholars Program
- Pilot Project Program (PPP)
- Life Sciences Moment Fund (LSMF)
- Community Engagement Pilots
- Small Conference Grants
UMCCTS-MassBiologics Collaboration
The Next Hundred Million Pilot Projects

• Inter-campus collaborative projects, involving at least one faculty member from MassBiologics & one faculty member from any other UMass campus.
• Collaborative projects must be oriented towards clinical and translational research.

Individual Proposals
$75,000 maximum for 1 year
$125,000 maximum for 2 years

2 Stages
Letter of Intent (2 pages)
Full Proposal (Abbreviated NIH-style 10 pages with presentation)
The Following Division Leaders (all are UMMS faculty) should serve as initial points of contact for expertise at MassBiologics:

• For discovery research, Dr. Bill Thomas, william.thomas@umassmed.edu
• For in vivo pre-clinical research, Dr. Keith Reimann, keith.reimann@umassmed.edu
• For clinical research, Dr. Deb Molrine, deborah.molrine@umassmed.edu
• For process development and manufacturing research, Dr. Sadettin Ozturk, sadettin.ozturk@umassmed.edu
• For quality assessment, regulatory or business process proposals, Dr. Mark Leney, mark.leney@umassmed.edu
UMCCTS-MassBiologics Collaboration
The Next Hundred Million Pilot Projects

2012 Solicitation

20 letters of intent
8 full proposals
4 funded projects
## 2013 NHMPP Recipients

<table>
<thead>
<tr>
<th>UMMS Collaborator(s)</th>
<th>MBL Collaborator</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack Leonard, PhD</td>
<td>Bill Thomas, PhD</td>
<td>Production and validation of a membrane-permeant DKK3b anti-cancer therapeutic</td>
</tr>
<tr>
<td>Dale Greiner, PhD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karl Simin, PhD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peter Newberger, MD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bill Thomas, PhD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhiping Weng, PhD</td>
<td>Greg Babcock, PhD</td>
<td>Structure-based design of an HCV vaccine and broadly neutralizing antibody</td>
</tr>
<tr>
<td>Brian Pierce, PhD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhiping Weng, PhD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chris Sassetti, PhD</td>
<td>Colby Souders, PhD</td>
<td>Therapeutic monoclonal antibodies to prevent <em>Mycobacterium tuberculosis</em> infection</td>
</tr>
<tr>
<td>Celia Schiffer, PhD</td>
<td>Leila Sevigny, PhD</td>
<td>Structure-based drug design to provide passive protection from Lyme Disease induced by a broad range of <em>Borrelia</em></td>
</tr>
</tbody>
</table>
The Next Hundred Million Pilot Projects

<table>
<thead>
<tr>
<th>Tentative Timeline:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request for Letters of Intent</td>
</tr>
<tr>
<td>Letters of Intent Due</td>
</tr>
<tr>
<td>LOI Finalists Notified</td>
</tr>
<tr>
<td>Full Proposals Due</td>
</tr>
<tr>
<td>Full Proposal Review</td>
</tr>
<tr>
<td>Project Start Date</td>
</tr>
</tbody>
</table>
K Scholars Program

Designed to train investigators who will make a career of innovative, hypothesis-driven clinical and translational research.

Training program combines coursework, seminars, and mentored research.
**K Scholars Program**

<table>
<thead>
<tr>
<th>Tentative Timeline:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Request for Letters of Intent</td>
<td>Thursday, September 26, 2013</td>
</tr>
<tr>
<td>Letters of Intent Due</td>
<td>Friday, November 1, 2013</td>
</tr>
<tr>
<td>LOI Finalists Notified</td>
<td>Friday, November 15, 2013</td>
</tr>
<tr>
<td>Full Proposals Due</td>
<td>Monday, December 16, 2013</td>
</tr>
<tr>
<td>Full Proposal Review</td>
<td>January 2014</td>
</tr>
<tr>
<td>Project Start Date</td>
<td>Friday, January 31, 2014</td>
</tr>
</tbody>
</table>
Pilot Project Program

Specific Aims:

1. Stimulate the development of new clinical and translational inter- and multi-disciplinary teams
2. Provide novel support mechanisms for junior investigators
3. Increase the emphasis on pilot funding for community-based research
4. Develop new methodologies to leverage institutional strengths and new initiatives
5. Pursue high-risk, high reward studies
6. Support projects utilizing the unique core facilities at the medical school and throughout the University
7. Encourage collaboration across the five UMass campuses
Pilot Project Program

Individual Proposals
$75,000 max for 1 year
$125,000 max for 2 years

Projects span the translational spectrum, T1 – T4+

2 Stages
Letter of Intent (2 pages)
Full Proposal (Abbreviated NIH-style 10 pages)
NEW THIS YEAR
CCTS-Office of Global Health Collaboration

• Catalyze development of translational research projects with firm scientific basis for clinical practice and public health policy in global settings.
• Projects should be innovative, interdisciplinary, capitalize on UMMS programmatic strengths, have potential for future growth and directly relevant to global health.
• Encourage faculty PIs from all UMMS departments and programs
• Up to 3 awards of up to $35k each for 1 year.
Pilot Project Program – success rate

# of proposals

2007 2008 2009 2010 2012 2013

year

LOI
full application
funded
## 2013 Pilot Program Project Recipients

<table>
<thead>
<tr>
<th>UMMS Collaborator(s)/Dept</th>
<th>UMass Collaborator/Dept</th>
<th>Project Title</th>
</tr>
</thead>
</table>
| Jeffrey Bailey, MD, PhD  
Department of Medicine      |                         | Endemic Burkitt Lymphoma transcriptome and genome profiles associated with clinical presentation, treatment response, relapse, and survival |
| Ann Moormann, PhD, MPH    
Department of Pediatrics   |                         |               |
| Michael Green, MD, PhD    
Program in Gene Function and Expression | Sanchita Bhatnagar, PhD  
Program in Gene Function and Expression | Reactivation of the inactive X-linked MECP2 gene as a therapeutic strategy in Rett Syndrome |
| Andrei Korostelev, PhD    
Biochemistry and Molecular Pharmacology |                         | Novel therapeutic routes against premature termination diseases |
| Wenjun Li, PhD            
Department of Medicine     | Robert Goldberg, PhD    
Department of QHS          | Health care reform and accessibility, quality, and outcomes of AMI-related care |
|                           | Joel Gore, MD           
Department of Medicine     |               |
# 2013 Pilot Program Project Recipients

<table>
<thead>
<tr>
<th>UMMS Collaborator(s)/Dept</th>
<th>UMass Collaborator/Dept</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joel Richter, PhD</td>
<td>Jean King, PhD</td>
<td>Amelioration of the Fragile X Syndrome by targeting the translational apparatus</td>
</tr>
<tr>
<td>Program in Molecular Medicine</td>
<td>Department of Psychiatry</td>
<td></td>
</tr>
<tr>
<td>Jean Frazier, MD</td>
<td>Futai Kensuke, PhD</td>
<td></td>
</tr>
<tr>
<td>Department of Psychiatry</td>
<td>Department of Psychiatry</td>
<td></td>
</tr>
<tr>
<td>David McManus, MD</td>
<td>Kiefe, Goldberg, Keaney, Floyd</td>
<td>Cognitive and psychosocial characteristics in patients undergoing treatment for atrial fibrillation: relation to 6-month clinical outcomes</td>
</tr>
<tr>
<td>Department of Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jane Saczynski, PhD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molly Waring, PhD</td>
<td>Moore Simas, Pagoto, Olendzki</td>
<td>Impulsivity and weight gain during pregnancy: the roles of excess energy intake, food reward sensitivity, and the food environment</td>
</tr>
<tr>
<td>Department of QHS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Pilot Project Program (PPP)

<table>
<thead>
<tr>
<th>Tentative Timeline:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Request for Letters of Intent</td>
<td>Monday, November 18, 2013</td>
</tr>
<tr>
<td>Letters of Intent Due</td>
<td>Friday, December 20, 2013</td>
</tr>
<tr>
<td>LOI Finalists Notified</td>
<td>Friday, January 10, 2014</td>
</tr>
<tr>
<td>Full Proposals Due</td>
<td>Friday, February 14, 2014</td>
</tr>
<tr>
<td>Full Proposal Finalists Notified</td>
<td>Friday, March 7, 2014</td>
</tr>
<tr>
<td>Project Start Date</td>
<td>Tuesday, April 1, 2014</td>
</tr>
</tbody>
</table>
UMass Life Sciences Moment Fund

Funds dedicated to multi-investigator pilot projects identified as key strategy to incentivize collaborative partnerships across campuses.

• Inter-campus collaborative projects, involving at least one faculty member from the Worcester campus & one faculty member from another UMass campus.
• Collaborative projects must be oriented towards clinical and translational research.
• Funding levels and application review process same as PPP.
LSMF – success rate

![Bar chart showing the number of proposals for LOI, full application, and funded in years 2009a, 2009b, 2010, 2012, and 2013.]

- # of proposals
- LOI
- Full application
- Funded

Legend:
- LOI
- Full application
- Funded
## 2012 Life Sciences Moment Fund Recipients

<table>
<thead>
<tr>
<th>UMMS Collaborator(s)/Dept</th>
<th>UMass Collaborator/Dept</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Doug Golenbock, MD</strong>&lt;br&gt;Department of Medicine</td>
<td><strong>Garth Hall, PhD</strong>&lt;br&gt;Department of Biological Science, Lowell Campus</td>
<td>The role of Tau in inflammasome activation in Alzheimer’s disease</td>
</tr>
<tr>
<td><strong>Phil Gona, PhD</strong>&lt;br&gt;Department of QHS</td>
<td><strong>Andrea Foulkes, ScD</strong>&lt;br&gt;Department of Biostatistics, Amherst campus</td>
<td>Genetic and genomic determinants of hypertension in Black and Caucasian South Africans- a pilot-study nested in the African-PREDICT study</td>
</tr>
<tr>
<td><strong>Tony Ip, PhD</strong>&lt;br&gt;Program in Molecular Medicine</td>
<td><strong>Michele Markstein, PhD</strong>&lt;br&gt;Department of Biology, Amherst campus</td>
<td>Establishment of Rab11-regulated inflammation as therapeutic targets in cancer progression</td>
</tr>
<tr>
<td><strong>Paul Kaufman, PhD</strong>&lt;br&gt;Program in Molecular Medicine</td>
<td><strong>Daniel Schmidt, PhD</strong>&lt;br&gt;Department of Plastics Engineering, Lowell campus</td>
<td>Active plastics as a novel strategy to combat fungal infections</td>
</tr>
</tbody>
</table>
## Tentative Timeline:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request for Letters of Intent</td>
<td>Tuesday, February 18, 2014</td>
</tr>
<tr>
<td>Letters of Intent Due</td>
<td>Friday, March 14, 2014</td>
</tr>
<tr>
<td>LOI Finalists Notified</td>
<td>Friday, April 4, 2014</td>
</tr>
<tr>
<td>Full Proposals Due</td>
<td>Friday, May 2, 2014</td>
</tr>
<tr>
<td>Full Proposal Finalists Notified</td>
<td>Monday, June 2, 2014</td>
</tr>
<tr>
<td>Project Start Date</td>
<td>Monday, July 1, 2014</td>
</tr>
</tbody>
</table>
Community Engagement Pilot Awards

Funds pilot projects in the area of community translational research

• Intend to fund up to three $12,000 awards
• More details will be available in early 2014
Small Conference Grant Awards

Designed to create new, multidisciplinary teams to address a pressing health need

- Awards of up to $1000 can be requested
- Applications are accepted on a rolling basis
- Decisions will be made 2-3 weeks post submission
- We are looking for concrete deliverables (collaborative grants, centers, programs) rather than exploration
- Key question- what added value will our limited funding provide?
- Complete details available on the UMCCTS website
Questions?
Neuroendocrine & neuroimaging endophenotypes in perinatal depression

Kristina M. Deligiannidis, M.D.
Assistant Professor of Psychiatry and Obstetrics & Gynecology
University of Massachusetts Medical School
Director, Depression Specialty Clinic
Psychiatrist, Women’s Mental Health Program
UMass Memorial Medical Center
Depression is the leading cause of disease burden and years lost to disability for women in their childbearing years.

Postpartum depression affects 1 in 8 women. Many women start to develop symptoms in pregnancy.

Our lab investigates the interaction of mood/anxiety, neuroactive steroids, the main inhibitory neurotransmitter of the brain, γ-aminobutyric acid (GABA) and the effect on neurocircuitry in the female brain.

Our research goals:
- understand the pathophysiology of perinatal depression
- identify biological markers & endophenotypes
- develop early identification & treatment
Neuroendocrine and neurochemical biosignature in late pregnancy and its association with the development of PPD (“stress in pregnancy study”)

- quantify basal HPA axis function as measured by plasma cortisol, deoxycorticosterone and GABA in late pregnancy and the postpartum in women at low or high risk for developing PPD
- quantify dynamic HPA functioning (cortisol stress reactivity) with an acute psychosocial stress test (TSST) in 3rd trimester women and evaluate its association with the development of PPD
- exploratory aims (cord blood (neuroendocrine); DNA)
IMPACT CCTS PPP

CCTS PPP 2011-2013
Published Abstracts: 6
Manuscripts 6 published 3 in prep
Grant funding $1M
NIH K23 (2013-2018)

– investigate potential biological markers in pregnant women at high risk of developing PPD
– train in reproductive and behavioral endocrinology research design (NIMH, MGH)
– train in neuroimaging to study interactions of the reproductive endocrine system on neural circuitry in depression (UMMS, Harvard)
– acquire training in biostatistics and scientific writing (UMMS GSBS)
THANK YOU FOR YOUR ATTENTION!