

PI: <b>Lewis, Cara Charissa</b>	Title: Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration	
Received: 01/30/2018	FOA: PA16-453 Clinical Trial:Optional	Council: 10/2018
Competition ID: FORMS-E	FOA Title: AHRQ CONFERENCE GRANT PROGRAMS (R13)	
<b>1 R13 HS025632-01A1</b>	Dual:	Accession Number: 4130758
IPF: 3497005	Organization: KAISER FOUNDATION RESEARCH INSTITUTE	
Former Number:	Department: KPWA Health Research Institute	
IRG/SRG: HEOR	AIDS: N	Expedited: N
<u>Subtotal Direct Costs</u> (excludes consortium F&A) Year 1: 50,000 Year 2: 49,938 Year 3: 49,980	Animals: N Humans: N Clinical Trial: N Current HS Code: 10 HESC: N	New Investigator: N Early Stage Investigator: N

*Senior/Key Personnel:*

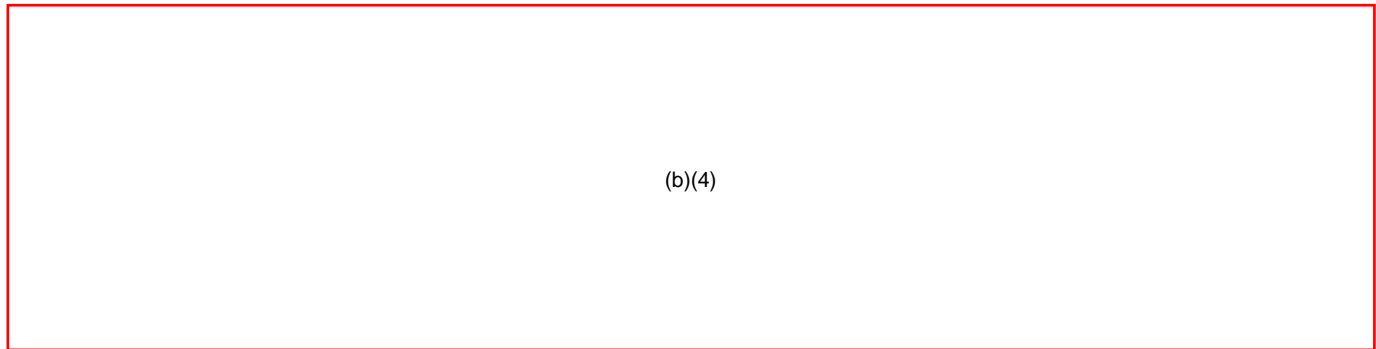
Cara Lewis Ph.D.

*Organization:*

KFRI, a division of Kaiser Foundation  
Hospitals

*Role Category:*

PD/PI



*Appendices*

1245-Appx\_B\_17196\_final,1246-Appx\_C\_17196\_final,1247-Appx\_D\_217196\_final,1244-Appx\_A\_17196\_fina

APPLICATION FOR FEDERAL ASSISTANCE  
**SF 424 (R&R)**

3. DATE RECEIVED BY STATE		State Application Identifier
1. TYPE OF SUBMISSION*		4.a. Federal Identifier <b>HS025632</b>
<input type="radio"/> Pre-application <input checked="" type="radio"/> Application <input type="radio"/> Changed/Corrected Application		b. Agency Routing Number
2. DATE SUBMITTED <b>2018-01-31</b>	Application Identifier <b>CCL_R217.196_SIRC Mechanisms</b>	c. Previous Grants.gov Tracking Number
5. APPLICANT INFORMATION		Organizational DUNS*: <b>1508293490000</b>
Legal Name*: <b>Kaiser Foundation Hospitals</b> Department: <b>KPWA Health Research Institute</b> Division: Street1*: <b>1800 Harrison Street, 16th Floor</b> Street2: City*: <b>Oakland</b> County: <b>Alameda</b> State*: <b>CA: California</b> Province: Country*: <b>USA: UNITED STATES</b> ZIP / Postal Code*: <b>94612-3466</b>		
Person to be contacted on matters involving this application Prefix: <b>Ms.</b> First Name*: <b>Susan</b> Middle Name:    Last Name*: <b>Bennet</b> Suffix: Position/Title: <b>Grants Management Specialist</b> Street1*: <b>1730 Minor Avenue, Suite 1600</b> Street2: City*: <b>Seattle</b> County: <b>King</b> State*: <b>WA: Washington</b> Province: Country*: <b>USA: UNITED STATES</b> ZIP / Postal Code*: <b>98101-1466</b> Phone Number*: <b>206-442-5202</b> Fax Number: <b>206-287-2871</b> Email: <b>ghrigrants@ghc.org</b>		
6. EMPLOYER IDENTIFICATION NUMBER (EIN) or (TIN)*		<b>94-1105628</b>
7. TYPE OF APPLICANT*		<b>M: Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)</b>
Other (Specify): <input checked="" type="radio"/> Small Business Organization Type <input type="radio"/> Women Owned <input type="radio"/> Socially and Economically Disadvantaged		
8. TYPE OF APPLICATION*		If Revision, mark appropriate box(es).
<input type="radio"/> New <input checked="" type="radio"/> Resubmission <input type="radio"/> Renewal <input type="radio"/> Continuation <input type="radio"/> Revision		<input type="radio"/> A. Increase Award <input type="radio"/> B. Decrease Award <input type="radio"/> C. Increase Duration <input type="radio"/> D. Decrease Duration <input type="radio"/> E. Other (specify):
Is this application being submitted to other agencies?* <input type="radio"/> Yes <input checked="" type="radio"/> No     What other Agencies?		
9. NAME OF FEDERAL AGENCY*		10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER
<b>Agency for Health Care Research and Quality</b>		TITLE:
11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT*		
<b>Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration</b>		
12. PROPOSED PROJECT		13. CONGRESSIONAL DISTRICTS OF APPLICANT
Start Date*	Ending Date*	<b>CA-013</b>
<b>02/01/2019</b>	<b>01/31/2022</b>	

<b>14. PROJECT DIRECTOR/PRINCIPAL INVESTIGATOR CONTACT INFORMATION</b>			
Prefix:	First Name*: <b>Cara</b>	Middle Name: <b>Charissa</b>	Last Name*: <b>Lewis</b> Suffix: <b>Ph.D.</b>
Position/Title:	<b>Associate Scientific Investigator</b>		
Organization Name*:	<b>KFRI, a division of Kaiser Foundation Hospitals</b>		
Department:	<b>KPWA Health Research Institute</b>		
Division:			
Street1*:	<b>1730 Minor Avenue, Suite 1600</b>		
Street2:			
City*:	<b>Seattle</b>		
County:	<b>King</b>		
State*:	<b>WA: Washington</b>		
Province:			
Country*:	<b>USA: UNITED STATES</b>		
ZIP / Postal Code*:	<b>98101-1466</b>		
Phone Number*:	<b>206-442-4076</b>	Fax Number: <b>206-287-2871</b>	Email*: <b>lewis.cc@ghc.org</b>
<b>15. ESTIMATED PROJECT FUNDING</b>		<b>16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?*</b>	
a. Total Federal Funds Requested*	\$149,918.00	a. YES	<input type="radio"/> THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:
b. Total Non-Federal Funds*	\$0.00	DATE:	
c. Total Federal & Non-Federal Funds*	\$149,918.00	b. NO	<input checked="" type="radio"/> PROGRAM IS NOT COVERED BY E.O. 12372; OR
d. Estimated Program Income*	\$0.00		<input type="radio"/> PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW
<p><b>17. By signing this application, I certify (1) to the statements contained in the list of certifications* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances * and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)</b></p> <p style="text-align: center;"><input checked="" type="radio"/> I agree*</p> <p style="text-align: center;"><small>* The list of certifications and assurances, or an Internet site where you may obtain this list, is contained in the announcement or agency specific instructions.</small></p>			
<b>18. SFLLL or OTHER EXPLANATORY DOCUMENTATION</b>		File Name:	
<b>19. AUTHORIZED REPRESENTATIVE</b>			
Prefix: <b>Ms.</b>	First Name*: <b>Carol</b>	Middle Name:	Last Name*: <b>Sather</b> Suffix:
Position/Title*:	<b>Director; Grant, Business Systems, &amp; Service</b>		
Organization Name*:	<b>KFRI, a division of Kaiser Foundation Hospitals</b>		
Department:	<b>KPWA Health Research Institute</b>		
Division:			
Street1*:	<b>1730 Minor Avenue, Suite 1600</b>		
Street2:			
City*:	<b>Seattle</b>		
County:	<b>King</b>		
State*:	<b>WA: Washington</b>		
Province:			
Country*:	<b>USA: UNITED STATES</b>		
ZIP / Postal Code*:	<b>98101-1466</b>		
Phone Number*:	<b>206-287-2826</b>	Fax Number: <b>206-287-2871</b>	Email*: <b>sather.cc@ghc.org</b>
Signature of Authorized Representative*		Date Signed*	
<b>Carol Sather</b>		<b>01/30/2018</b>	
<b>20. PRE-APPLICATION</b>		File Name:	
<b>21. COVER LETTER ATTACHMENT</b> File Name: <b>1248-Cover Letter_217196_final.pdf</b>			

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## Project/Performance Site Location(s)

### Project/Performance Site Primary Location

I am submitting an application as an individual, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.

Organization Name: **KFRI, a division of Kaiser Fnd Hospitals, KPWA  
Research Inst**  
Duns Number: **1508293490000**  
Street1\*: **1730 Minor Avenue, Suite 1600**  
Street2:  
City\*: **Seattle**  
County: **King**  
State\*: **WA: Washington**  
Province:  
Country\*: **USA: UNITED STATES**  
Zip / Postal Code\*: **98101-1466**  
Project/Performance Site Congressional District\*: **WA-007**

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**Additional Location(s)**

File Name:

## RESEARCH & RELATED Other Project Information

<b>1. Are Human Subjects Involved?*</b> <input type="radio"/> Yes <input checked="" type="radio"/> No	
1.a. If YES to Human Subjects Is the Project Exempt from Federal regulations? <input type="radio"/> Yes <input type="radio"/> No If YES, check appropriate exemption number:    _1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 If NO, is the IRB review Pending? <input type="radio"/> Yes <input type="radio"/> No IRB Approval Date: Human Subject Assurance Number	
<b>2. Are Vertebrate Animals Used?*</b> <input type="radio"/> Yes <input checked="" type="radio"/> No	
2.a. If YES to Vertebrate Animals Is the IACUC review Pending? <input type="radio"/> Yes <input type="radio"/> No IACUC Approval Date: Animal Welfare Assurance Number	
<b>3. Is proprietary/privileged information included in the application?*</b> <input type="radio"/> Yes <input checked="" type="radio"/> No	
<b>4.a. Does this project have an actual or potential impact - positive or negative - on the environment?*</b> <input type="radio"/> Yes <input checked="" type="radio"/> No	
4.b. If yes, please explain:	
4.c. If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (EIS) been performed? <input type="radio"/> Yes <input type="radio"/> No	
4.d. If yes, please explain:	
<b>5. Is the research performance site designated, or eligible to be designated, as a historic place?*</b> <input type="radio"/> Yes <input checked="" type="radio"/> No	
5.a. If yes, please explain:	
<b>6. Does this project involve activities outside the United States or partnership with international collaborators?*</b> <input type="radio"/> Yes <input checked="" type="radio"/> No	
6.a. If yes, identify countries:	
6.b. Optional Explanation:	
7. Project Summary/Abstract*	Filename <b>1234-Summary_217196_final.pdf</b>
8. Project Narrative*	<b>1235-Narrative_217196_final.pdf</b>
9. Bibliography & References Cited	<b>1236-Bib_217196_final.pdf</b>
10. Facilities & Other Resources	<b>1237-Fac_Res_217196_final.pdf</b>
11. Equipment	
12. Other Attachments	<b>1238-Explanation_KP_Acquisition_217196_final.pdf</b>

## Project Summary

The objective of this 3-year conference series is to develop and disseminate a research agenda for the study of implementation mechanisms to advance the ability of health systems to implement evidence based practices (EBPs) to improve the quality, safety, and efficiency of healthcare for Americans. Mechanisms can be defined as processes that are responsible for change. In the context of implementation science, mechanisms explain *how* or *why* implementation strategies exert their effects. The field of implementation faces its own knowing-doing gap, because researchers have failed to articulate and measure the causal pathway(s) by which strategies are hypothesized to effect change. Consequently, it is extremely difficult to replicate findings outside of a research program, learn from negative studies, or adapt an implementation strategy developed in one clinical setting to another. Moreover, without a fundamental understanding of implementation mechanisms, strategies cannot be tailored to the needs, resources, and barriers of a given context, which may have a disproportionate effect on settings in which priority populations receive their care as they are notoriously under-resourced. A focused, expert-led effort to recommend priorities, methods, and measures is needed to generate guidance and tools to test hypotheses related to strategy, mechanism, and outcome linkages, and whether they vary with respect to target problems, EBPs, priority populations, and context. This conference series is designed to achieve two aims. One, generate research, policy, and practice priorities for a research agenda to guide the study of implementation mechanisms. Two, actively disseminate the research agenda to research, policy, and practice audiences. A 26-member nationally-representative *Mechanisms Network of Expertise* (MNoE) will convene annually in a collaborative and structured “Deep Dive” conference series. This conference series employs innovative methodologies to rapidly achieve this proposal’s aims: concept mapping will reveal a research agenda and Implementation Development Workshops, along with manuscripts, webinars, brief reports, and short videos, will serve as vehicles for dissemination. Conference products will be informed by published literature, coding of recent conference presentations, policy and practice partner interviews, and expert opinion. The research agenda will serve as a guide for how to evaluate implementation mechanisms. In conducting mechanistic implementation science, researchers will be able to ascertain how, why, and under what circumstances implementation strategies work *for whom and in what contexts* to achieve more effective and sustained implementation. The results of the work made possible by the proposed conference series will directly inform policy maker and practice leader decisions for improving healthcare through EBP implementation. Conference products will be disseminated via the nationally representative MNoE networks and internationally via listservs (e.g., *Implementation Science News*) social media (e.g., Twitter, ResearchGate), the Society for Implementation Research Collaboration website, and the VA Health Services Research & Development Cyberseminar series.

## **Project Narrative**

Despite the existence of thousands of evidence-based practices, less than half of Americans receive recommended care for physical disorders, even fewer for behavioral disorders, and AHRQ priority populations are disproportionately impacted by this implementation gap. The proposed 3-year conference series will engage a nationally-representative group of experts to generate research, policy, and practice priorities for a research agenda to guide the study of implementation mechanisms. Conference products will position the field to elucidate how, why, and under what circumstances implementation strategies work for whom, with an emphasis on AHRQ priority populations, to achieve more effective and sustained implementation.



## **FACILITIES AND OTHER RESOURCES**

### Kaiser Permanente Washington Health Research Institute

Kaiser Permanente Washington Health Research Institute (KPWHRI) is the public-interest research arm of Kaiser Permanente Washington, a nonprofit health system. The Institute was established in 1983 with a mission to improve health and health care through high-quality, public-domain research, innovation, and dissemination. This includes epidemiologic, health services, and clinical research on: 1) identifying the best preventive measures, screening tools, and interventions; 2) comparing the effectiveness of different treatments; 3) making health care delivery more efficient while improving health outcomes; and 4) providing health care in practical, patient-centered ways.

KPWHRI investigators focus on the prevention and effective treatment of major health problems. Their research areas include health behavior change; evaluating the efficacy and cost effectiveness of health services and technologies; and population-based surveillance of health status.

KPWHRI, located in Seattle, has more than 300 employees including more than 60 faculty members, most with joint appointments at the University of Washington. KPWHRI includes the MacColl Center for Health Care Innovation, which develops, tests and disseminates strategies that improve health care quality, and the Center for Community Health and Evaluation, which designs and evaluates health-promoting programs across the country. In 2016, the latest year for which complete numbers are available, KPWHRI's total annual revenue was \$51.6 million, with \$36.9 million in grant funding from federal sources, primarily the National Institutes of Health. Substantial grant revenue also comes from private foundations such as the Robert Wood Johnson Foundation, and other agencies such as the Patient-Centered Outcomes Research Institute (PCORI).

### **Communications**

The KPWHRI Communications Unit provides a variety of graphic, editorial, other creative services. Scientific editing and consultation are available to support the development of manuscripts, information graphics, and scientific presentations that convey information clearly and accurately. Creative strategy consultation and full-service writing and design help research projects maximize study enrollment through a targeted or campaign-based approach to recruitment. Recruitment materials and strategies are based on best practices learned from other studies' successes. Creative services include writing, editing, photography, illustration, information graphics, Web, video, and social marketing.

The Communications Unit has nationally recognized expertise in plain language. Researchers have access to consulting and editing that ensures that consent forms and other materials for research participants are culturally appropriate and understandable to a lay audience.

The KPWHRI Program for Readability In Science & Medicine (PRISM) was developed at the Institute with the University of Washington. PRISM editing ensures that study materials are clear and readable to the public, with nearly all edited documents scoring below an 8<sup>th</sup> grade reading level. PRISM also provides plain language training and a public-domain readability toolkit tailored for the research environment.

In addition, the Communications Unit provides dissemination services. The unit disseminates findings to funders, collaborators, policy makers, and research participants. The unit also trains scientists to present their work to the media, develops key messages, and designs and implements plans to disseminate study findings to mainstream and targeted media.

### **Conference planning expertise**

KPWHRI project teams have planned and hosted several large, complex scientific meetings. Typically, such meetings are coordinated by interdisciplinary teams. Faculty members provide scientific leadership, project managers develop and monitor budgets and workplans, grant managers negotiate vendor contracts, and research support specialists coordinate registration, preparation of materials, catering, and other logistical details. KPWHRI's Communications Unit can assist with development of marketing materials, program books, and other print and electronic communications. The Communications Unit has expertise in promoting events through traditional and social media channels. Because of KPWHRI's pooled staffing model and commitment to documentation of processes within functional work units, newly assembled teams can quickly learn from others' experiences.

### **KPWHRI's conference experience includes:**

- Hosting the annual conference of the member-supported Health Care Systems Research Network (then called HMO Research Network) in 2012, at the Washington State Convention Center. More than 500 people attended, representing more than 17 research centers affiliated with health care delivery systems. With support from a conference planning vendor, KPWHRI (then called Group Health Research Institute) managed all scientific and logistical aspects of the conference, including abstract solicitation and review, identification of plenary and keynote speakers, and coordination of several concurrent oral and poster sessions and conversation cafes. Abstracts were subsequently published in the journal *Clinical Medicine & Research*.
- Hosting the National Institute on Minority Health and Health Disparities-supported Hispanic Health Summit in 2013, in collaboration with the University of Washington and the Institute of Translational Health Sciences (ITHS). The Summit was held at the ITHS conference facility on the University of Washington's South Lake Union campus.
- Planning and hosting of an interactive three-day meeting of a Learning Community of more than 100 representatives from 31 exemplary US primary care practices. The 2013 event was funded by the Robert Wood Johnson Foundation and organized and hosted by KPWHRI's MacColl Center for Health Care Innovation. The meeting used a fishbowl format to fully engage all participants. One outcome of the meeting was a web-based guide to implementing team-based primary care. Additional peer-review journal publications are in process.
- Collaboration in 2014 and 2016 with the University of Washington Department of Biostatistics to host the first and second Seattle Symposium on Health Care Data Analytics. Each event was attended by 200 people representing more than 20 US and international research organizations. The 2016 Symposium received additional support from the Reagan-Udall Foundation for the US Food and Drug Administration.
- Organization by KPWHRI's MacColl Center for Health Care Innovation in 2015 of a half-day learning session at the Institute for Health Care Improvement's Annual Office Practice Summit. At this event, a subset of a Learning Community shared their implementation strategies with a primary care community.

The Deep Dive conference series will be held in two different locations in or near Seattle, Washington. This design choice was largely informed by the available budget in that the personnel effort needed to coordinate an event of this nature from afar would greatly exceed that which is allowable. The Friday Harbor Laboratories and University of Washington venues are well-known to the PI and members of the investigative team, making the coordination much more manageable. Moreover, the MNoE is committed to traveling annually to Seattle for this event.

### **University of Washington Seattle Campus**

In Years 1 & 3 of the proposed grant, the MNoE will meet in conjunction with the biennial SIRC conference on the University of Washington's Seattle campus. The SIRC conference will be managed by UW Conference Management, a self-sustaining division of Educational Outreach at the University of Washington serving university faculty, professional associations, government agencies, and private organizations wishing to enlist professional management for their meeting. SIRC has contracted with UW Conference Management to manage registration, attendee communications, campus housing and hotel, meeting facilities, catering, logistical tasks, and general support, as well as abstract management and preparing the detailed and camera-ready conference program booklet. The SIRC conference and MNoE meetings will be held on the UW campus in the Husky Union Building (HUB), which offers flexible meeting rooms, large event spaces, and state-of-the-art audio-visual technology. As past president of SIRC, Dr. Lewis will facilitate the arrangement of the additional meeting space, catering, and campus lodging at UW that will be needed for the MNoE. SIRC will cover the costs of the additional meeting space and catering for the MNoE, while the proposed conference grant will provide travel allowances for the MNoE members to help support their attendance at the pre- and post-conference MNoE meetings.

**University of Washington Friday Harbor Laboratories**

In Year 2 of the proposed grant, the MNoE will convene using an innovative Deep Dive conference format, which engages a smaller workgroup in an intensive 3-day meeting in a retreat-like setting. This meeting will be held at the University of Washington's Friday Harbor Laboratories (FHL), a marine science research and education center north of Seattle, Washington. The FHL facilities are ideal for collaborative conferences, offering onsite lodging, meeting rooms with all necessary technology, and a dining hall. Friday Harbor is easily accessed from the Seattle-Tacoma International airport by shuttle and ferry.

January 24, 2018

Grant & Contract Administration

To: Division of Receipt and Referral  
Center for Scientific Review  
National Institutes of Health  
Bethesda, MD

Subject: *Institute Name Change* - Resubmission of 1 R13 HSO25632; Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration

To Whom it May Concern:

We are resubmitting 1 R13 HSO25632, for which the initial submission was by the Group Health Research Institute (GHRI). GHRI was an operating division of Group Health Cooperative (GHC). On February 1, 2017, GHC was acquired by Kaiser Permanente, a national nonprofit health system. Specifically, GHC entered into a member substitution agreement with Kaiser Foundation Health Plan of Washington (“KFHP-Washington”), whereby KFHP-Washington became the sole corporate member of GHC (the “Transaction”).

As you can see from the below screenshot, the DUNS associated with this previous application, 078198520, now belongs to Kaiser Foundation Health Plan of Washington.



On behalf of Kaiser Foundation Health Plan of Washington, I relinquish rights to any resubmissions of 1 R13 HSO25632, which will now be submitted by Kaiser Foundation Research Institute, a division of Kaiser Foundation Hospitals, Kaiser Permanente Washington Health Research Institute with EIN 94-1105628 and DUNS 1508293490000.

Thank you for being a valued partner in our research program. Please feel free to contact me at [ghrigrants@ghc.org](mailto:ghrigrants@ghc.org) if you have any questions or require further clarification regarding this letter.

Sincerely,



Tim O'Bar  
Senior Consultant Research Finance  
Kaiser Foundation Health Plan of Washington  
1730 Minor Ave, Suite 1600  
Seattle, WA 98101

## RESEARCH & RELATED Senior/Key Person Profile (Expanded)

PROFILE - Project Director/Principal Investigator			
<b>Prefix:</b>	<b>First Name*:</b> Cara	<b>Middle Name:</b> Charissa	<b>Last Name*:</b> Lewis
	<b>Suffix:</b> Ph.D.		
<b>Position/Title*:</b>	<b>Associate Scientific Investigator</b>		
<b>Organization Name*:</b>	<b>KFRI, a division of Kaiser Foundation Hospitals</b>		
<b>Department:</b>	<b>KPWA Health Research Institute</b>		
<b>Division:</b>			
<b>Street1*:</b>	<b>1730 Minor Avenue, Suite 1600</b>		
<b>Street2:</b>			
<b>City*:</b>	<b>Seattle</b>		
<b>County:</b>	<b>King</b>		
<b>State*:</b>	<b>WA: Washington</b>		
<b>Province:</b>			
<b>Country*:</b>	<b>USA: UNITED STATES</b>		
<b>Zip / Postal Code*:</b>	<b>98101-1466</b>		
<b>Phone Number*:</b>	<b>206-442-4076</b>	<b>Fax Number:</b>	<b>206-287-2871</b>
<b>E-Mail*:</b>	<b>lewis.cc@ghc.org</b>		
<b>Credential, e.g., agency login:</b>	(b)(6)		
<b>Project Role*:</b>	<b>PD/PI</b>	<b>Other Project Role Category:</b>	
<b>Degree Type:</b>	<b>Ph.D.</b>	<b>Degree Year:</b>	<b>2011</b>
<b>Attach Biographical Sketch*:</b>	<b>File Name:</b>	<b>1249-Bio_217196_Lewis_final.pdf</b>	
<b>Attach Current &amp; Pending Support:</b>	<b>File Name:</b>		

Pages 14 through 55 redacted for the following reasons:

-----  
(b)(4) and (b)(6) Resumes/Key personal  
(b)(6)

## RESEARCH & RELATED BUDGET - SECTION A & B, Budget Period 1

**ORGANIZATIONAL DUNS\*: 1508293490000**

**Budget Type\*:**     Project     Subaward/Consortium

**Enter name of Organization:** Kaiser Foundation Hospitals

**Start Date\*:** 02-01-2019

**End Date\*:** 01-31-2020

**Budget Period:** 1

**A. Senior/Key Person**

Prefix	First Name*	Middle Name	Last Name*	Suffix	Project Role*	Base Salary (\$)	Calendar Months	Academic Months	Summer Months	Requested Salary (\$)*	Fringe Benefits (\$)*	Funds Requested (\$)*
1.	Cara	Charissa	Lewis	Ph.D.	PD/PI							
<b>Total Funds Requested for all Senior Key Persons in the attached file</b>										(b)(4)		
<b>Additional Senior Key Persons:</b>		File Name:										

**B. Other Personnel**

Number of Personnel*	Project Role*	Calendar Months	Academic Months	Summer Months	Requested Salary (\$)*	Fringe Benefits*	Funds Requested (\$)*
	Post Doctoral Associates						
	Graduate Students						
	Undergraduate Students						
	Secretarial/Clerical						
1	Project Manager						
1	Research Support Specialist						
<b>2</b>	<b>Total Number Other Personnel</b>						
<b>Total Salary, Wages and Fringe Benefits (A+B)</b>						(b)(4)	

RESEARCH & RELATED Budget {A-B} (Funds Requested)

## RESEARCH & RELATED BUDGET - SECTION C, D, & E, Budget Period 1

**ORGANIZATIONAL DUNS\*:** 1508293490000

**Budget Type\*:**     Project     Subaward/Consortium

**Organization:** Kaiser Foundation Hospitals

**Start Date\*:** 02-01-2019

**End Date\*:** 01-31-2020

**Budget Period:** 1

<b>C. Equipment Description</b>		<b>Funds Requested (\$)*</b>
List items and dollar amount for each item exceeding \$5,000		
<b>Equipment Item</b>		
<b>Total funds requested for all equipment listed in the attached file</b>		
	<b>Total Equipment</b>	
<b>Additional Equipment:</b> File Name:		

<b>D. Travel</b>	<b>Funds Requested (\$)*</b>
1. Domestic Travel Costs ( Incl. Canada, Mexico, and U.S. Possessions)	109.00
2. Foreign Travel Costs	
	<b>Total Travel Cost</b>
	<b>109.00</b>

<b>E. Participant/Trainee Support Costs</b>	<b>Funds Requested (\$)*</b>
1. Tuition/Fees/Health Insurance	
2. Stipends	
3. Travel	
4. Subsistence	
5. Other:	
<b>Number of Participants/Trainees</b>	<b>Total Participant Trainee Support Costs</b>

RESEARCH & RELATED Budget (C-E) (Funds Requested)



## RESEARCH & RELATED BUDGET - SECTIONS F-K, Budget Period 1

**ORGANIZATIONAL DUNS\*:** 1508293490000

**Budget Type\*:**     Project     Subaward/Consortium

**Organization:** Kaiser Foundation Hospitals

**Start Date\*:** 02-01-2019

**End Date\*:** 01-31-2020

**Budget Period:** 1

<b>F. Other Direct Costs</b>	<b>Funds Requested (\$)*</b>
1. Materials and Supplies	225.00
2. Publication Costs	
3. Consultant Services	20,384.00
4. ADP/Computer Services	
5. Subawards/Consortium/Contractual Costs	
6. Equipment or Facility Rental/User Fees	
7. Alterations and Renovations	
<b>Total Other Direct Costs</b>	<b>20,609.00</b>

<b>G. Direct Costs</b>	<b>Funds Requested (\$)*</b>
<b>Total Direct Costs (A thru F)</b>	<b>50,000.00</b>

<b>H. Indirect Costs</b>			
Indirect Cost Type	Indirect Cost Rate (%)	Indirect Cost Base (\$)	Funds Requested (\$)*
<b>Total Indirect Costs</b>			
<b>Cognizant Federal Agency</b>			
(Agency Name, POC Name, and POC Phone Number)			

<b>I. Total Direct and Indirect Costs</b>	<b>Funds Requested (\$)*</b>
<b>Total Direct and Indirect Institutional Costs (G + H)</b>	<b>50,000.00</b>

<b>J. Fee</b>	<b>Funds Requested (\$)*</b>

<b>K. Total Costs and Fee</b>	<b>Funds Requested (\$)*</b>
	<b>50,000.00</b>

<b>L. Budget Justification*</b>
File Name: 1239- Budg_Just_217196_final.pdf (Only attach one file.)

RESEARCH & RELATED Budget (F-K) (Funds Requested)

## RESEARCH & RELATED BUDGET - SECTION A & B, Budget Period 2

**ORGANIZATIONAL DUNS\*: 1508293490000**

**Budget Type\*:**  Project  Subaward/Consortium

**Enter name of Organization:** Kaiser Foundation Hospitals

**Start Date\*:** 02-01-2020

**End Date\*:** 01-31-2021

**Budget Period:** 2

**A. Senior/Key Person**

Prefix	First Name*	Middle Name	Last Name*	Suffix	Project Role*	Base Salary (\$)	Calendar Months	Academic Months	Summer Months	Requested Salary (\$)*	Fringe Benefits (\$)*	Funds Requested (\$)*
1.	Cara	Charissa	Lewis		Ph.D. PD/PI							
<b>Total Funds Requested for all Senior Key Persons in the attached file</b>										(b)(4)		
<b>Additional Senior Key Persons:</b>			File Name:									

**B. Other Personnel**

Number of Personnel*	Project Role*	Calendar Months	Academic Months	Summer Months	Requested Salary (\$)*	Fringe Benefits*	Funds Requested (\$)*
	Post Doctoral Associates						
	Graduate Students						
	Undergraduate Students						
	Secretarial/Clerical						
1	Project Manager				(b)(4)		(b)(4)
1	Research Support Specialist						
<b>2</b>	<b>Total Number Other Personnel</b>					<b>Total Other Personnel</b>	<b>(b)(4)</b>
<b>Total Salary, Wages and Fringe Benefits (A+B)</b>							<b>(b)(4)</b>

RESEARCH & RELATED Budget {A-B} (Funds Requested)

## RESEARCH & RELATED BUDGET - SECTION C, D, & E, Budget Period 2

**ORGANIZATIONAL DUNS\*:** 1508293490000

**Budget Type\*:**     Project     Subaward/Consortium

**Organization:** Kaiser Foundation Hospitals

**Start Date\*:** 02-01-2020

**End Date\*:** 01-31-2021

**Budget Period:** 2

<b>C. Equipment Description</b>		<b>Funds Requested (\$)*</b>
List items and dollar amount for each item exceeding \$5,000		
<b>Equipment Item</b>		
<b>Total funds requested for all equipment listed in the attached file</b>		
	<b>Total Equipment</b>	
<b>Additional Equipment:</b> File Name:		

<b>D. Travel</b>	<b>Funds Requested (\$)*</b>
1. Domestic Travel Costs ( Incl. Canada, Mexico, and U.S. Possessions)	573.00
2. Foreign Travel Costs	
	<b>Total Travel Cost</b>
	<b>573.00</b>

<b>E. Participant/Trainee Support Costs</b>	<b>Funds Requested (\$)*</b>
1. Tuition/Fees/Health Insurance	
2. Stipends	
3. Travel	
4. Subsistence	
5. Other:	
<b>Number of Participants/Trainees</b>	<b>Total Participant Trainee Support Costs</b>

RESEARCH & RELATED Budget (C-E) (Funds Requested)

## RESEARCH & RELATED BUDGET - SECTIONS F-K, Budget Period 2

**ORGANIZATIONAL DUNS\*:** 1508293490000

**Budget Type\*:**     Project     Subaward/Consortium

**Organization:** Kaiser Foundation Hospitals

**Start Date\*:** 02-01-2020

**End Date\*:** 01-31-2021

**Budget Period:** 2

<b>F. Other Direct Costs</b>	<b>Funds Requested (\$)*</b>
1. Materials and Supplies	2,032.00
2. Publication Costs	2,436.00
3. Consultant Services	17,750.00
4. ADP/Computer Services	
5. Subawards/Consortium/Contractual Costs	
6. Equipment or Facility Rental/User Fees	
7. Alterations and Renovations	
<b>Total Other Direct Costs</b>	<b>22,218.00</b>

<b>G. Direct Costs</b>	<b>Funds Requested (\$)*</b>
<b>Total Direct Costs (A thru F)</b>	<b>49,938.00</b>

<b>H. Indirect Costs</b>			
Indirect Cost Type	Indirect Cost Rate (%)	Indirect Cost Base (\$)	Funds Requested (\$)*
<b>Total Indirect Costs</b>			
<b>Cognizant Federal Agency</b>			
(Agency Name, POC Name, and POC Phone Number)			

<b>I. Total Direct and Indirect Costs</b>	<b>Funds Requested (\$)*</b>
<b>Total Direct and Indirect Institutional Costs (G + H)</b>	<b>49,938.00</b>

<b>J. Fee</b>	<b>Funds Requested (\$)*</b>

<b>K. Total Costs and Fee</b>	<b>Funds Requested (\$)*</b>
	<b>49,938.00</b>

<b>L. Budget Justification*</b>
File Name: 1239- Budg_Just_217196_final.pdf (Only attach one file.)

RESEARCH & RELATED Budget (F-K) (Funds Requested)

## RESEARCH & RELATED BUDGET - SECTION A & B, Budget Period 3

**ORGANIZATIONAL DUNS\*: 1508293490000**

**Budget Type\*:**     Project     Subaward/Consortium

**Enter name of Organization:** Kaiser Foundation Hospitals

**Start Date\*:** 02-01-2021

**End Date\*:** 01-31-2022

**Budget Period:** 3

**A. Senior/Key Person**

Prefix	First Name*	Middle Name	Last Name*	Suffix	Project Role*	Base Salary (\$)	Calendar Months	Academic Months	Summer Months	Requested Salary (\$)*	Fringe Benefits (\$)*	Funds Requested (\$)*
1.	Cara	Charissa	Lewis	Ph.D.	PD/PI							
<b>Total Funds Requested for all Senior Key Persons in the attached file</b>										(b)(4)		
<b>Additional Senior Key Persons:</b>		File Name:										

**B. Other Personnel**

Number of Personnel*	Project Role*	Calendar Months	Academic Months	Summer Months	Requested Salary (\$)*	Fringe Benefits*	Funds Requested (\$)*
	Post Doctoral Associates						
	Graduate Students						
	Undergraduate Students						
	Secretarial/Clerical						
1	Project Manager				(b)(4)		(b)(4)
1	Research Support Specialist						
<b>2</b>	<b>Total Number Other Personnel</b>					<b>Total Other Personnel</b>	(b)(4)
<b>Total Salary, Wages and Fringe Benefits (A+B)</b>							(b)(4)

RESEARCH & RELATED Budget {A-B} (Funds Requested)

## RESEARCH & RELATED BUDGET - SECTION C, D, & E, Budget Period 3

**ORGANIZATIONAL DUNS\*:** 1508293490000

**Budget Type\*:**     Project     Subaward/Consortium

**Organization:** Kaiser Foundation Hospitals

**Start Date\*:** 02-01-2021

**End Date\*:** 01-31-2022

**Budget Period:** 3

<b>C. Equipment Description</b>		<b>Funds Requested (\$)*</b>
List items and dollar amount for each item exceeding \$5,000		
<b>Equipment Item</b>		
<b>Total funds requested for all equipment listed in the attached file</b>		
<b>Total Equipment</b>		
<b>Additional Equipment:</b> File Name:		

<b>D. Travel</b>	<b>Funds Requested (\$)*</b>
1. Domestic Travel Costs ( Incl. Canada, Mexico, and U.S. Possessions)	116.00
2. Foreign Travel Costs	
<b>Total Travel Cost</b>	<b>116.00</b>

<b>E. Participant/Trainee Support Costs</b>	<b>Funds Requested (\$)*</b>
1. Tuition/Fees/Health Insurance	
2. Stipends	
3. Travel	
4. Subsistence	
5. Other:	
<b>Number of Participants/Trainees</b>	<b>Total Participant Trainee Support Costs</b>

RESEARCH & RELATED Budget (C-E) (Funds Requested)

## RESEARCH & RELATED BUDGET - SECTIONS F-K, Budget Period 3

**ORGANIZATIONAL DUNS\*:** 1508293490000

**Budget Type\*:**  Project  Subaward/Consortium

**Organization:** Kaiser Foundation Hospitals

**Start Date\*:** 02-01-2021

**End Date\*:** 01-31-2022

**Budget Period:** 3

<b>F. Other Direct Costs</b>	<b>Funds Requested (\$)*</b>
1. Materials and Supplies	239.00
2. Publication Costs	2,436.00
3. Consultant Services	20,392.00
4. ADP/Computer Services	
5. Subawards/Consortium/Contractual Costs	
6. Equipment or Facility Rental/User Fees	
7. Alterations and Renovations	
<b>Total Other Direct Costs</b>	<b>23,067.00</b>

<b>G. Direct Costs</b>	<b>Funds Requested (\$)*</b>
<b>Total Direct Costs (A thru F)</b>	<b>49,980.00</b>

<b>H. Indirect Costs</b>			
Indirect Cost Type	Indirect Cost Rate (%)	Indirect Cost Base (\$)	Funds Requested (\$)*
<b>Total Indirect Costs</b>			
<b>Cognizant Federal Agency</b>			
(Agency Name, POC Name, and POC Phone Number)			

<b>I. Total Direct and Indirect Costs</b>	<b>Funds Requested (\$)*</b>
<b>Total Direct and Indirect Institutional Costs (G + H)</b>	<b>49,980.00</b>

<b>J. Fee</b>	<b>Funds Requested (\$)*</b>

<b>K. Total Costs and Fee</b>	<b>Funds Requested (\$)*</b>
	<b>49,980.00</b>

<b>L. Budget Justification*</b>
File Name: 1239- Budg_Just_217196_final.pdf (Only attach one file.)

RESEARCH & RELATED Budget (F-K) (Funds Requested)

## KAISER PERMANENTE WASHINGTON HEALTH RESEARCH INSTITUTE BUDGET JUSTIFICATION

Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration

### SENIOR / KEY PERSONNEL

**Cara Lewis, Ph.D., Principal Investigator** (Years 1–3: 0.60 calendar) is an implementation scientist and licensed clinical psychologist with expertise in measurement and methods to promote rigorous implementation evaluation. Dr. Lewis is an Associate Scientific Investigator at Kaiser Permanente Washington Research Institute (KPWHRI). She is Past President of the international Society for Implementation Research Collaboration (SIRC), which inspired this grant proposal and offers established connections with national experts for participation in this conference series. Moreover, SIRC will provide a savvy membership that will offer inputs to the research agenda in 2019 and to which knowledge and products of this work will be disseminated in 2021. Dr. Lewis will provide overall leadership of the *Mechanisms Network of Expertise (MNoE)*. She will convene and co-lead quarterly web-based teleconferences for the Strategic Workgroups between the in-person Deep Dive conferences. She will coordinate all aspects of the in-person conference meetings, including agenda development and identification of speakers. She will design intellectual activities to engage the MNoE across all three years and the attendees at the SIRC conference in Years 1 & 3 in the service of bidirectional learning (e.g., MNoE will disseminate information to SIRC and solicit feedback on preliminary products to inform final outputs). She will draw upon her experiences hosting three annual Deep Dives with SIRC officers to shape this innovative conference format to maximize its impact. These SIRC-specific Deep Dives culminated in the conceptualization of the society and associated protocols, a proposed journal concept paper, a training initiative grant application, and this R13 proposal. Dr. Lewis will oversee the annual evaluation process, including the feedback to the investigative team and MNoE and any suggested revisions to the Deep Dive process. Finally, she will provide direction and oversight on the development of all dissemination products including the preparation and submission of manuscripts, the short video clips, webinars, short course material, and brief reports.

### OTHER PERSONNEL

(b)(4)



(b)(4)

## TRAVEL

**Local Travel** – Mileage has been budgeted in Years 1 & 3 to allow members of the project team to attend the conference at the University of Washington Seattle Campus. We estimate approximately 200 miles will be driven by the project team in these years for planning meetings in advance of the conference and for the three conference days. Mileage is budgeted at the current federally approved rate of \$0.545 per mile and is increased by 3% in subsequent years. Total estimated costs: Year 1: \$109 (200 miles), Year 3: \$116 (200 miles).

**Distant Travel** – Travel funds have been budgeted in Year 2 to allow Dr. Lewis and Ms. McDonald to attend the MNoE conference that will take place at the University of Washington Friday Harbor Laboratories (FHL) on San Juan Island, Washington. Funds will cover mileage reimbursement and ferry costs from Seattle to the conference site. Other travel-related expenses, such as lodging, meals and facility-related conference fees will be covered by SIRC's operating budget. An additional trip has been budgeted for a pre-conference planning visit with FHL conference staff. Total estimated costs: Year 2: \$573 (3 trips).

*Note: All estimates for travel are based on current costs and are increased by 3% in subsequent years.*

## OTHER DIRECT COSTS

### Materials and Supplies

Anticipated **project-specific supplies** including materials for mailings and meeting supplies have been estimated in Year 1 at \$225/conference and inflated by 3% in subsequent years.

Funds have been budgeted in Year 2 for the purchase of concept mapping software at \$1,800, the current not-for-profit pricing for a single project license. Concept mapping is a method used to provide a visual representation of complex relations among ideas using an integrative qualitative and quantitative method, and this software will be utilized by the MNoE as part of its primary activity in the second year of the conference series.

Total estimated project supply costs are as follows: Year 1: \$225; Year 2: \$2,032; Year 3: \$239.

### Publication Costs

Peer-reviewed publications are an expected output of the *Mechanisms Network of Expertise*. In Years 2 and 3, the Investigative Team will prepare manuscript(s) for submission. We have included funds for one publication in an open access Biomed Central publication for each of those years. Publication costs are based on the current article processing fees charged by *Implementation Science*. Total estimated publication costs: Year 2: \$2,436 (1 unit); Year 3: \$2,436 (1 unit).

### Consultant Services

#### Members of the Mechanisms Network of Expertise (MNoE) – Travel Allowance

The annual MNoE conference will bring together identified content experts to advance the implementation mechanisms research agenda. MNoE members will be active participants at the working conference sessions and workshops. To help support their attendance at the annual meetings, the proposed conference grant and SIRC will jointly contribute to offset travel expenses for the MNoE. In Years 1 & 3, SIRC will be responsible for all catering costs for the meetings held at the University of Washington. In Year 2, SIRC will cover the lodging, meal and conference costs for all attendees at the FHL meeting. SIRC contributions are detailed in the below composite budget.

The proposed conference grant will provide MNoE members with small travel allowances to further help offset costs such as airfare and ground transportation in all years, as well as lodging in Years 1 & 3. With members coming from across the country, we propose providing different allowance levels based on originating location of each MNoE member. For those members local to the Seattle area (of which there are 5), an allowance of \$100 will be provided in Year 2 to help cover a portion of the mileage and ferry costs to travel to the Friday Harbor Laboratories meeting, while in Years 1 & 3, when the conference takes place at the University of Washington Seattle campus, these members will be offered mileage reimbursement. Allowances of \$500 in Years 1 & 3 and \$350 in Year 2 will be available for West Coast attendees (of which there are 7), while subsidies of \$750 in Years 1 & 3 and \$600 in Year 2 will be available for the remaining participants (of which there are 13). We recognize that these allowances will not cover the entirety of travel-related costs associated with members' participation at the annual conferences. However, the invited MNoE members have demonstrated commitment to attend the annual conferences with the knowledge that they may need to contribute some to the travel costs.

Total estimated costs for travel allowances and local mileage: Year 1: \$13,384; Year 2: \$10,750; Year 3: \$13,392.

**Investigative Team Members**

(b)(4)

(b)(4)

**INDIRECT COSTS**

Facilities and administrative costs have not been requested for this project as instructed in the Agency for Healthcare Research and Quality (AHRQ) funding announcement. The Institute’s current federally negotiated rate is (b)(4) of modified total direct costs.

**COMPOSITE CATEGORICAL BUDGET**

**Collaborating Institutional Support**

The Society for Implementation Research Collaboration (SIRC) provides assurance that it is committed to providing its funds and resources to the project, “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration.” An outline of SIRC funding is provided in the below table.

<b>SIRC Income:</b>	<b>Jan 2018</b>	<b>Jan 2019</b>	<b>Jan 2020</b>	<b>Jan 2021</b>	<b>Total</b>
	Year 1	Year 2	Year 3	Year 4	<b>SIRC Funds</b>
Balance as of January 12, 2018	(b)(4)				
Membership Dues					
Conference Registration					
<b>Total Costs</b>					

**Composite Categorical Budget**

The below table shows a composite overview by budget category and funding source in dollars. For this proposal, the funding sources for Kaiser Permanente Washington Research Institute (KPWHRI) would be the AHRQ R13 Conference Grant, while the Society for Implementation Research Collaboration (SIRC) would use its own funding sources (as outlined above) to provide specific contributions to the project as indicated in the following table, Composite Categorical Budget. Please note, year 1 and year 3 Deep Dive conference activities are strategically integrated with the larger biennial SIRC conference series. Accordingly, conference costs reflect the full costs for all SIRC attendees (not simply the R13 MNoE).

Category	Year 1 Costs		Year 2 Costs		Year 3 Costs		Total Costs		Composite Budget
	KPWHRI	SIRC	KPWHRI	SIRC	KPWHRI	SIRC	KPWHRI	SIRC	
Personnel	(b)(4)								
Travel									
Materials & Supplies									
Publication Costs									
Contractual Pers. Svcs.									
Contractual Svcs. Misc.									
Scholarships									
Facility & Equip. Rental									
Conference Mgmt.									
Catering									
<b>Total Costs</b>									

## RESEARCH & RELATED BUDGET - Cumulative Budget

	<b>Totals (\$)</b>
<b>Section A, Senior/Key Person</b>	
<b>Section B, Other Personnel</b>	
<b>Total Number Other Personnel</b>	
<b>Total Salary, Wages and Fringe Benefits (A+B)</b>	
<b>Section C, Equipment</b>	
<b>Section D, Travel</b>	
1. Domestic	
<b>2. Foreign</b>	
<b>Section E, Participant/Trainee Support Costs</b>	
<b>1. Tuition/Fees/Health Insurance</b>	
<b>2. Stipends</b>	
<b>3. Travel</b>	
<b>4. Subsistence</b>	(b)(4)
<b>5. Other</b>	
<b>6. Number of Participants/Trainees</b>	
<b>Section F, Other Direct Costs</b>	
<b>1. Materials and Supplies</b>	
<b>2. Publication Costs</b>	
<b>3. Consultant Services</b>	
<b>4. ADP/Computer Services</b>	
<b>5. Subawards/Consortium/Contractual Costs</b>	
<b>6. Equipment or Facility Rental/User Fees</b>	
<b>7. Alterations and Renovations</b>	
<b>8. Other 1</b>	
<b>9. Other 2</b>	
<b>10. Other 3</b>	
<b>Section G, Direct Costs (A thru F)</b>	<b>149,918.00</b>
<b>Section H, Indirect Costs</b>	
<b>Section I, Total Direct and Indirect Costs (G + H)</b>	<b>149,918.00</b>
<b>Section J, Fee</b>	
<b>Section K, Total Costs and Fee (I + J)</b>	<b>149,918.00</b>

# PHS 398 Cover Page Supplement

OMB Number: 0925-0001

Expiration Date: 03/31/2020

## 1. Vertebrate Animals Section

Are vertebrate animals euthanized?       Yes       No

If "Yes" to euthanasia

Is the method consistent with American Veterinary Medical Association (AVMA) guidelines?

Yes       No

If "No" to AVMA guidelines, describe method and provide scientific justification

.....

## 2. \*Program Income Section

\*Is program income anticipated during the periods for which the grant support is requested?

Yes       No

If you checked "yes" above (indicating that program income is anticipated), then use the format below to reflect the amount and source(s). Otherwise, leave this section blank.

\*Budget Period    \*Anticipated Amount (\$)    \*Source(s)

### PHS 398 Cover Page Supplement

#### 3. Human Embryonic Stem Cells Section

\*Does the proposed project involve human embryonic stem cells?       Yes       No

If the proposed project involves human embryonic stem cells, list below the registration number of the specific cell line(s) from the following list: [http://grants.nih.gov/stem\\_cells/registry/current.htm](http://grants.nih.gov/stem_cells/registry/current.htm). Or, if a specific stem cell line cannot be referenced at this time, check the box indicating that one from the registry will be used:

Specific stem cell line cannot be referenced at this time. One from the registry will be used.

Cell Line(s) (Example: 0004):

#### 4. Inventions and Patents Section (Renewal applications)

\*Inventions and Patents:       Yes       No

If the answer is "Yes" then please answer the following:

\*Previously Reported:       Yes       No

#### 5. Change of Investigator/Change of Institution Section

Change of Project Director/Principal Investigator

Name of former Project Director/Principal Investigator

Prefix:

\*First Name:

Middle Name:

\*Last Name:

Suffix:

Change of Grantee Institution

\*Name of former institution:

## PHS 398 Research Plan

OMB Number:0925-0001

Expiration Date: 03/31/2020

<b>Introduction</b>	
<b>1. Introduction to Application</b> <small>(for Resubmission and Revision applications)</small>	<b>1240-Intro_217196_final.pdf</b>
<b>Research Plan Section</b>	
<b>2. Specific Aims</b>	<b>1241-Spec_Aims_217196_final.pdf</b>
<b>3. Research Strategy*</b>	<b>1242-Res_Strat_217196_final.pdf</b>
<b>4. Progress Report Publication List</b>	
<b>Other Research Plan Section</b>	
<b>5. Vertebrate Animals</b>	
<b>6. Select Agent Research</b>	
<b>7. Multiple PD/PI Leadership Plan</b>	
<b>8. Consortium/Contractual Arrangements</b>	
<b>9. Letters of Support</b>	<b>1243-Letters_217196_final.pdf</b>
<b>10. Resource Sharing Plan(s)</b>	
<b>11. Authentication of Key Biological and/or Chemical Resources</b>	
<b>Appendix</b>	
<b>12. Appendix</b>	<b>1244-Appx_A_17196_final.pdf</b> <b>1245-Appx_B_17196_final.pdf</b> <b>1246-Appx_C_17196_final.pdf</b> <b>1247-Appx_D_217196_final.pdf</b>



R13 HS025632-01 Introduction		Sig	Invest	Innov	Aprrch	Envrn	Notes
	R1	3	3	4	4	4	No weaknesses noted
	R2	1	1	1	1	1	No weaknesses noted
	R3	5	1	1	5	1	Two weaknesses noted

**Strengths:** The reviewers noted numerous strengths in every category, including:

- Addresses issues of priority populations; directly aligned with AHRQ's mission; targets a critical gap in its focus on implementation mechanisms; will increase cumulative knowledge of understudied area.
- Highly qualified, accomplished leading experts in the field.
- Employs innovative methodologies to rapidly achieve proposal aims.
- Conference products to be disseminated locally and internationally.
- Four strategic workgroups; specific to health services research to improve quality, safety, efficiency of care.
- Strong letters of support of leading researchers and meeting support.

**Significance:** *Two reviewers felt the application addressed issues of priority populations; Reviewer 3 felt the specific way in which this application addressed priority populations could be strengthened.*

The field of implementation science is still so young that there is insufficient research to elucidate empirically supported implementation strategies for bringing evidence based practices (EBP) to specific priority populations. Although the number of implementation science-informed studies targeting disparities is growing rapidly (e.g., tailored health messages to patients and their physicians as a means of reducing racial disparities in oncology clinical trials with African American patients<sup>1</sup>; hospital based implementation teams and interprofessional collaborations to advance organizational cultural competence through implementation science<sup>2</sup>), our recent systematic review<sup>3</sup> demonstrated that few have actually specified implementation mechanisms (31 studies) and none have established sufficient evidence for mechanisms. In our revision, we (a) explicitly articulated the significance of advancing mechanistic implementation science for priority populations, (b) clarified the extensive and diverse coverage of our Mechanisms Network of Expertise (MNoE) with respect to work with priority populations, (c) generated a new MNoE activity to synthesize our understanding of implementation research with priority populations, and (d) emphasized our intention to address priority populations in the resulting research agenda. In this revised proposal, we argue that health disparities may be exacerbated in the implementation process if contexts and issues of specific priority populations are not addressed through careful tailoring of strategies based on their mechanisms of action. For example, a clinic may be offering a new EBP with fidelity, but social determinants of health (e.g., access to transportation) might need to be addressed through client-level strategies (e.g., telehealth) to improve outcomes such as "reach." Or, settings serving priority populations might not be amenable to strategies like clinical decision support within the electronic health record because of limited information technology infrastructure. Effective tailoring of strategies to the context demands a fundamental understanding of implementation mechanisms. This conference series and resultant research agenda will provide the guidance and tools needed to test hypotheses related to strategy, mechanism, and outcome linkages and whether they vary with respect to target problems, EBPs, priority populations, and contexts.

**Approach:** *There was no discussion of potential problems, and no alternatives were suggested.*

We now address *Potential Problems and Alternative Solutions* in the application and summarize them below.

- It is possible that mechanism-relevant information is not easily obtained from the abstracts or during the talks at the 2019 SIRC conference. If mechanism information is not explicitly stated (although it should typically be included, given it will be the theme of the conference and will be used as a criterion for review), the MNoE members will be asked to hypothesize the intended mechanism based on available contextual information and evidence, or to ask the authors directly at the conference.
- The brainstorming portion of the concept mapping will generate high level and granular issues/gaps, which could be complex to integrate. Per the logic model in Figure 2, at least 3 data sources will seed the brainstorming (prior to the interviews) and we will complete the activities in phases: (1) systematic reviews; (2) MNoE matrix mapping (3) SIRC coding. The research specialist will report to the MNoE in Q4 meeting to generate the skeletal roadmap and to inform the desired level of information from our interviews. Finally, we will review and refine all information prior to the mapping session to ensure it is easily integrated.
- Concept mapping is a systematic way to reveal conceptually similar information and has been used before to inform a research agenda, but the results are not always easily interpretable. Consistent with our approach to concept mapping in a current R01, we will engage the MNoE in an iterative process of ensuring that the ultimate research agenda reflects the inputs (empirical evidence, MNoE experience, partner interviews, abstract coding), is conceptually meaningful, and is sufficiently actionable.

## A. SPECIFIC AIMS

Ensuring that health services research and healthcare innovations have widespread impact is the hard work of implementation science. Recent estimates suggest that less than half of Americans receive evidence-based practices (EBPs) or recommended care for physical disorders.<sup>4,5</sup> Fewer receive EBPs for behavioral disorders,<sup>6</sup> and AHRQ priority populations (notably racial/ethnic minorities) are disproportionately impacted by this implementation gap.<sup>7</sup> In response, AHRQ and other federal agencies have prioritized the development and testing of implementation strategies designed to improve the adoption, implementation, sustainment, and scale-up of EBPs.<sup>8-12</sup> In short time, the field has identified 73 implementation strategies (e.g., audit and feedback, training, incentives<sup>13</sup>) and 601 determinants of practice<sup>14</sup> (i.e. barriers; e.g., social norms, culture, attitudes) prompting increasingly complex, costly, and often misguided selection of implementation strategies (e.g., individual-level strategies like training used to address organization-level determinants like culture<sup>15</sup>). If we are to enhance health services for priority populations by integrating the most recent research, guidance on how to study implementation mechanisms—*the processes responsible for change*—is needed. By evaluating mechanisms, we can isolate strategies that target critical determinants and streamline EBP implementation to increase effectiveness, efficiency, and quality of care for disadvantaged Americans. Only 2 systematic reviews of implementation mechanisms exist<sup>3,16</sup> evaluating a meager 31 studies, none of which focused on health disparities and only one included priority populations (children in low income schools). If left to single investigator-initiated research disseminated via the traditional conference format, it will be decades before implementation mechanisms are revealed and longer still before EBPs are routinely integrated into healthcare.

Our *long-term goal* is to improve the speed and effectiveness of EBP implementation particularly for priority populations. Our *objective* is to collaboratively generate priorities for research and disseminate the guidance and tools needed to test hypotheses related to strategy, mechanism, and outcome linkages, and whether they vary with respect to target problems, EBPs, priority populations, and context. The *rationale* is that tailoring strategies to the needs, resources, and barriers of a context can only be achieved by matching strategies to determinants via their mechanisms. Our *methods* to generate this research agenda include highly facilitative, structured, and innovative ways of leveraging the collective wisdom of a group of experts across a 3-year annual conference series. We will convene nationally representative implementation experts ( $N=26$ , including researchers, policy, and practice partners), referred to as the *Mechanisms Network of Expertise* (MNoE), using a Deep Dive conference methodology designed to efficiently advance two aims that directly align with AHRQ's #1 priority of "improving healthcare quality by accelerating *implementation* of PCOR." Members of the MNoE work to implement a range of EBPs targeting key outcomes (e.g., quality, efficiency, cost, etc.) in diverse settings that serve AHRQ priority populations, making this conference series an opportunity to breakdown silos, consolidate evidence, reveal a shared agenda, and disseminate the agenda internationally.

**Aim 1: To generate research, policy, and practice priorities for a research agenda to guide the study of implementation mechanisms.** The MNoE will be divided into Strategic Workgroups reflecting major conceptual and methodological areas: Design & Analysis; Measurement; Strategy→Mechanism→Outcome linkages; and Causal Theory & Context. The workgroups will attend to gaps, inconsistencies, and theoretical and methodological issues in their initial brainstorming to yield a matrix mapping extant knowledge of mechanisms across priority populations based on their expertise. The MNoE will code presentations at the first conference for the target problem, EBP, priority population, setting, and implementation strategy (Yr 1) and interview policy and practice partners regarding their priorities to further populate the matrix (Yr 2). The items generated from brainstorming, coding, and interviews will seed the concept mapping, which will identify conceptually distinct categories of research, practice, and policy priorities. The MNoE will finalize and operationalize these priorities at the 2<sup>nd</sup> conference to develop an agenda to advance mechanistic health services implementation research.

**Aim 2: To actively disseminate the research agenda to research, policy, and practice audiences.** The MNoE will deliver plenary sessions and workshops at the 3<sup>rd</sup> conference (open to the public) and share recordings via relevant listservs (e.g., *Implementation Science News*), social media (e.g., Twitter, ResearchGate), and on the website. We will develop an open access special issue of a journal targeting our research audience. We will develop plain language brief reports targeting our policy partners and short videos for our practice audience that will be reviewed by attendees of the 3<sup>rd</sup> conference and revised based on their feedback before disseminating internationally.

This proposal aligns with AHRQ's goal of promoting implementation mechanisms evaluation<sup>17</sup> with the potential to close the quality and access gap for priority populations via an innovative 3-year Deep Dive conference series that interfaces implementation science, health services research, and health disparities research to inform a research agenda for widespread dissemination to research, policy, and practice audiences.

## B. CONFERENCE PLAN: OVERVIEW

The overarching objective of this 3-year conference series is to develop and disseminate a research agenda for the study of implementation mechanisms to advance the ability of health systems to implement evidence-based practices (EBPs) and other healthcare innovations to improve the quality, safety, and efficiency of healthcare for Americans. Mechanisms can be defined as processes that are responsible for change.<sup>19</sup> In the context of implementation science, mechanisms explain *how* or *why* implementation strategies exert their effects. Implementation strategies are defined as methods used to enhance the adoption, implementation, sustainment, and scale-up of an EBP<sup>13</sup> and there are at least 73 expert-defined strategies that fall into 9 categories (e.g., engage consumers, change infrastructure).<sup>20</sup> Despite these ad-

**Implementation Mechanism Example:** It is hypothesized that audit and feedback messages (i.e. implementation strategy) may operate through different mechanisms, depending on characteristics of the feedback recipient and context.<sup>18</sup> A physician who has not previously received objective patient progress data may engage in self-reflection after receiving this information (mechanism=knowledge). Another physician may be motivated to change his practice when presented with a peer's patient outcome data (mechanism=social pressure). However, audit and feedback may have limited impact unless it is technologically enabled, which may not be possible in priority population settings (e.g., rural healthcare). Knowing the context and the mechanism is critical for selecting and tailoring implementation strategies

vances, researchers have failed to carefully articulate the causal pathway(s) by which strategies are hypothesized to effect change.<sup>21,22</sup> Consequently, it is extremely difficult to replicate findings outside of a research program, learn from negative studies, or successfully adapt an implementation strategy developed in one clinical setting to another. A focused, expert-led effort to recommend priorities, methods, and measures is needed. A *Mechanisms Network of Expertise (MNoE)* will be convened annually in an innovative, collaborative and structured Deep Dive conference series to achieve two aims (1) generate a research agenda to advance the study of mechanisms and (2) disseminate the agenda to research, policy, and practice stakeholders.

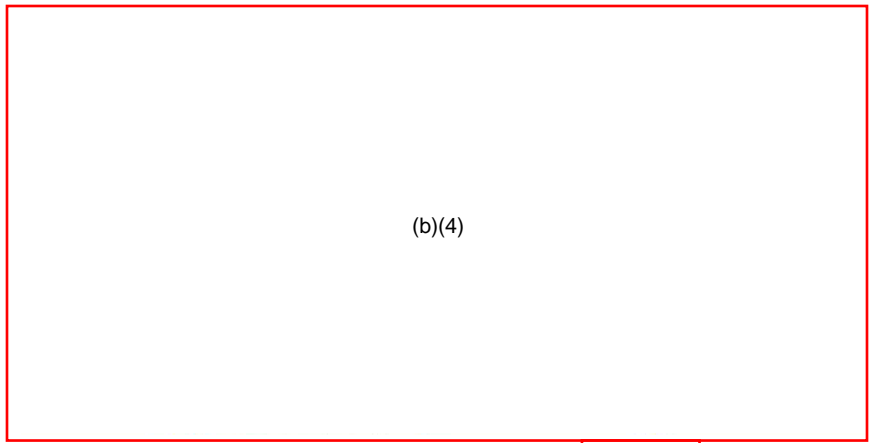
**B1. SIGNIFICANCE.** This proposal is responsive to areas of *significance* noted in the FOA's Review Criteria by: (1) addressing issues of priority populations, (2) advancing AHRQ priorities, (3) promoting technical capabilities, (4) establishing experts, and (5) having an international impact.

**1. Addressing Issues of Priority Populations.** We believe that developing a better understanding of how to identify and test linkages between specific strategies, mechanisms, and outcomes will contribute to improved implementation of EBPs, improved population health outcomes, and reductions in health disparities for priority populations. Recent evidence suggests that variable success in EBP implementation can have a disproportionate effect on priority populations.<sup>7</sup> This might suggest that implementation strategies need to be carefully tailored to address the unique needs of priority populations, and the contexts in which they receive care, in order to reduce health disparities. For example, a clinic may undergo an implementation effort and begin to offer a new EBP with fidelity, but social determinants of health (e.g., access to transportation) might need to be addressed through client-focused implementation strategies (e.g., via telehealth) to improve outcomes such as "reach." Or, contexts serving priority populations might not respond to certain implementation strategies. However, effective tailoring, of this nature, demands a fundamental understanding of implementation mechanisms. This conference series and resultant research agenda will provide the guidance and tools needed to test hypotheses related to strategy, mechanism, and outcome linkages and whether they vary with respect to target problems, EBPs, priority populations, and contexts. The MNoE and the broader SIRC community possess extensive experience across these domains, and we will engage them to articulate research priorities that link the identification and testing of mechanisms to priority populations and health disparities, and ultimately to ensure that the research agenda directly addresses the needs of priority populations.

**2. Research Agenda to Advance AHRQ Implementation Priorities.** AHRQ is mandated to support implementation of evidence into practice. In October 2016, AHRQ revealed an intent to publish two program announcements to fund implementation studies with an explicit focus on "how and why" implementation strategies work. AHRQ indicated that "data on mechanisms of action, moderators, and mediators of implementation strategies will greatly aid decision-making on which strategies work for which interventions, in which settings, and for what populations."<sup>17</sup> This conference series will yield a research agenda including gaps; inconsistencies; theoretical, methodological, and practical issues; and missed opportunities to guide future efforts.

**3. Promoting Technical Capability among Health Services Researchers.** There are 7 criteria for establishing mechanisms: strong association, specificity, consistency, experimental manipulation, timeline, gradient, and plausibility or coherence. No studies have yet met these criteria because of methodological and measurement challenges inherent to doing this work in dynamic, complex settings. Two MNoE workgroups (Design & Analysis; Measurement) will put forth methods and measures recommendations to meet these criteria.

**4. Establishing Content Experts.** The nationally representative MNoE members (see map) were selected because of their (a) contributions to implementation science (e.g., founding editor-in-chief, (b)(4) and current editor, (b)(4) of *Implementation Science*; developer of widely used EPIS model, (b)(4) developer of most highly cited framework, (b)(4) (b) connections with implementation initiatives (e.g., Behavioral Health Quality Enhancement Research Initiative, led by (b)(4) EvidenceNOW Healthy Hearts NYC, led by



(b)(4) PCORI's Engagement, Dissemination, and Implementation Committee member, (b)(4), and (c) their diversity of focus on patient populations (e.g., juvenile-justice involved, disproportionately black and poor children, (b)(4) inner-city, (b)(4) racial and ethnic minorities, (b)(4) (b)(4) EBPs (e.g., colorectal cancer treatment, (b)(4) collaborative chronic care for bipolar disorder, (b)(4) and settings (e.g., rural primary care, (b)(4) children's social services, (b)(4) (b)(4) VA hospitals, (b)(4) community long-term care, (b)(4). The MNoE will map their experience to seed the concept mapping and emerge as experts available for consultation.

**5. Synergizing with Society for Implementation Research Collaboration (SIRC) for International Impact.** SIRC began in 2010 with an NIMH-funded R13 award to bring together researchers and stakeholders to learn from one another, refine science and practice approaches, and develop common measures and methods to improve the frequency and quality with which EBP implementation is evaluated. Now, as a self-sustaining society with ongoing biennial conferences convening researchers and practice partners (policy, intermediary, and practitioner workgroups) around the globe, SIRC presents as an obvious partner for this proposed conference series that also offers a website platform. MNoE will interface with SIRC attendees in 2019 to serve as an evidence input to the research agenda. In 2021, MNoE will disseminate the research agenda to SIRC attendees via co-hosted Implementation Development Workshops (see below)<sup>23</sup> and plenary presentations. SIRC's contributions (e.g., 7 publications,<sup>23-29</sup> funded R01,<sup>26</sup> journal supplements for 2015 & 2017 conference proceedings<sup>28,29</sup>) reflect a strong track record, led by PI Lewis who is SIRC past president, on which we will build.

**B2. INNOVATION.** This proposal uses 4 innovative methodologies: (1) deep dive, (2) convening experts & interfacing with SIRC, (3) concept mapping, (4) Implementation Development Workshops.

**1. Deep Dive Conference Methodology.** Implementation science is rapidly gaining global recognition as evidenced by the growing number of targeted conferences: the Global Implementation Conference biennial series; the Association for Behavioral and Cognitive Therapies annual conference within which lives a Dissemination and Implementation Science Special Interest Group; the Australasian Implementation Conference biennial series; the Academy Health annual conference on Dissemination and Implementation Research in Health, and the SIRC biennial series. These conferences offer the traditional structure that prioritizes presentation of completed studies to a large audience and minimizes opportunities for in-depth discussion and idea generation. Consequently, the field of implementation science is evolving at an unnecessarily slow pace. The Deep Dive methodology offers facilitated and focused (often brainstorming) sessions via rapid immersion of a group or team into a situation for problem solving, idea creation,<sup>30</sup> or development of a research agenda.<sup>31-33</sup> In 2014, SIRC piloted the Deep Dive methodology for its local (Seattle-based) officers under the directorship of PI (Lewis) and began hosting annual meetings. SIRC Deep Dives led to the conceptualization of the society (2014), a proposed journal (2015), a training initiative,<sup>34</sup> and this AHRQ R13 application (2016). The Deep Dive has also been successfully used several times by healthcare teams seeking to transform care<sup>35-37</sup> and was used by the National Institutes of Health in 2014 to replace their annual conference and advance research agendas across measurement,<sup>31</sup> training,<sup>38</sup> and design.<sup>39</sup> AHRQ also funded the Conference on Sustainability of Evidence-Based Healthcare,<sup>33</sup> which reflected a Deep Dive approach and is used as a model for the current proposal. Thus, although several implementation-related conference series exist, the proposed series is needed to advance the field because it (a) has a unique focus on implementation mechanisms, (b) convenes an invited group of experts to conduct focused, efficient work using an innovative Deep Dive methodology, and (c) will engage in active dissemination targeted at research, policy, and practice audiences beyond any single outlet.

**2. Convening Leading Experts & Interfacing with SIRC.** The MNoE brings together a diverse group of experts in structured, intensive multi-day conference activities while also fostering these relationships via quarterly meetings to maximize their productivity. Interfacing the MNoE with SIRC exponentially increases the evidence inputs and dissemination targets. Together, the MNoE and SIRC can do more than either could alone.

**3. Concept Mapping to Generate a Research Agenda.** Concept mapping is a method used to provide a visual representation of complex relations among ideas via an integrative qualitative and quantitative method.<sup>40</sup> Only recently has concept mapping been used to establish a research agenda among a group of experts.<sup>32,33</sup> Concept Mapping will be the primary MNoE conference activity in year 2 to complete Aim 1 (research agenda).

**4. Implementation Development Workshop (IDW) for Evidence Inputs and Active Dissemination.**<sup>23</sup> SIRC developed the IDWs as a platform for leveraging the collective wisdom of a group of experts in the planning stages of a project or proposal to identify creative solutions and increase competitiveness for funding. IDWs are highly structured meetings that begin with a brief presentation using a “zero technology” format, followed by a facilitated discussion to provide presenters with high value and focused feedback.<sup>23</sup> SIRC’s evaluation of the IDW format confirmed its effectiveness among presenters and attendees.<sup>23</sup> By embedding MNoE members in these small groups, MNoE members will learn about pressing issues for the research agenda and SIRC members will learn how to engage in rigorous mechanism evaluation.

**B3. KEY PLAYERS: MULTIPLE LEVELS OF PARTICIPANTS STRATEGICALLY ENGAGED**

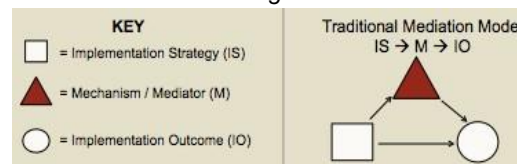
*PI Experience Leading Conferences & Working Groups.* Lewis joined the SIRC team in 2010, became Co-I in 2012, co-director of the conference series in 2013, President in 2015, and co-founding editor-in-chief of SIRC’s journal in 2017. She led the evolution of the biennial NIMH-funded conference series into a self-sustaining society. She edited two supplements to *Implementation Science* featuring the Proceedings of the 2015 and 2017 conferences.<sup>28</sup> She is also PI of an NIMH-funded R01 that grew out of SIRC in which she is developing a measurement-focused research agenda that engages (a) an international researcher advisory board, (b) an international stakeholder panel, and (c) a researcher task force.

*Mechanisms Network of Expertise (MNoE).* The MNoE is composed of 25 nationally representative, diverse content experts who will convene annually in Deep Dives to advance the work of this proposal (see *Letters of Support*). Invited attendance is a design choice to ensure that expert, focused discussions contribute to the knowledge and products that emerge from this conference series. MNoE members were identified via 3 pathways: (a) review of federal funding agency databases; (b) nominations from the investigative team because of their work with priority populations; and (c) our systematic review of implementation mechanisms. The MNoE will be divided into 4 Strategic Workgroups according to the identified Focus Areas (see *B5*).

*SIRC Members.* SIRC attendees and its broader membership include researchers and stakeholders working in health, across settings, sectors, populations, and problem areas.<sup>28</sup> Engagement with the SIRC community will be bidirectional and mutually beneficial. For the research agenda, SIRC members will provide key inputs (via think tanks, coding their presentations) to seed the concept mapping, offer feedback on products, and serve as a dissemination target.

**B4. PRELIMINARY STUDIES:** Our investigative team organically formed after cross-project discussions revealed a shared sense of urgency to advance the study of implementation mechanisms and the impression that little conceptual or empirical literature existed to guide the field. Regular meetings starting in the spring of 2015 led to a systematic review to evaluate mechanisms in health services implementation research. Results revealed 31 empirical studies that evaluated moderators or mediators, none of which identified a mechanism. Nearly all studies met only three or fewer criteria for establishing a mechanism,<sup>19</sup> and the majority of studies were of poor quality. Williams, of our investigative team, published the only review of randomized control trials that included formal tests of mediators—an intervening causal variable between independent and dependent variables—of *mental health* EBP implementation.<sup>16</sup> These 9 studies tested mediators using traditional procedures (see *Figure 1*), but none of these studies demonstrated the empirical links necessary to establish a mediator. These reviews

Figure 1. Mediation Model



revealed methodological and measurement challenges as well as conceptual gaps that serve as the foundation for this proposal and that will seed the brainstorming phase of development of the research agenda.

**B5. STRATEGIC WORKGROUP FOCUS AREAS**

Our investigative team identified 4 areas in need of focused attention to address key issues and advance the study of implementation mechanisms: (1) Design & Analysis; (2) Measurement; (3) the link between Implementation Strategies, Mechanisms, and Outcomes; and (4) Causal Theory & Context (see Box 1 for definitions & key issues). All activities have clear guidance for how to address the intersection of implementation science and priority populations and the workgroup leads will ensure this mapping occurs.

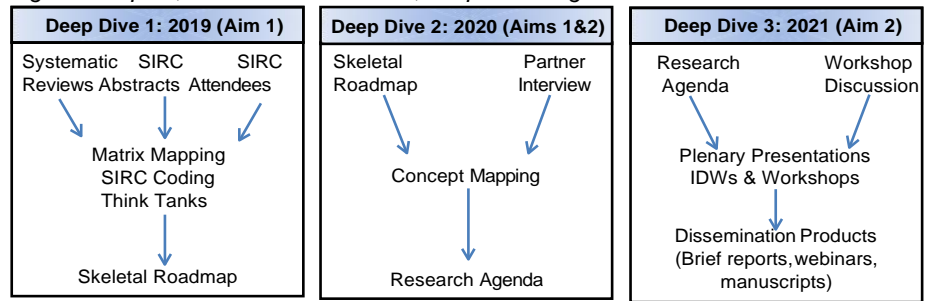
*Box 1. Workgroup Co-Leads & Key Issues*

<p><b>Design &amp; Analysis</b> (b)(4)</p> <p><b>Definition:</b> Research designs and analytic methods (e.g., qualitative, multi-level modeling) for isolating strategies and mechanisms.</p> <ul style="list-style-type: none"> <li>• Constraints of setting prohibit traditional designs (e.g., randomization)</li> <li>• Multi-level nature of implementation strategies and dynamism of the interventions and settings require complex analysis</li> <li>• Lack of control and ability to isolate mechanisms demands innovation to determine if different mechanisms at play with priority populations</li> </ul> <p><b>Strategy→Mechanism→Outcome</b> (b)(4)</p> <p><b>Definition:</b> Implementation strategy, putative mechanism(s) on which it has an effect, and proximal and distal outcomes.</p> <ul style="list-style-type: none"> <li>• Discrete strategies may impact multiple mechanisms, and multiple strategies may impact the same/similar mechanisms</li> <li>• Insufficient articulation of strategy → mechanism → outcome linkages</li> <li>• Both implementation and clinical outcomes must be assessed to determine impact of strategies on social determinants and disparities</li> </ul>	<p><b>Measurement</b> (b)(4)</p> <p><b>Definition:</b> Methods, administration, and qualities of measures used for testing mechanisms.</p> <ul style="list-style-type: none"> <li>• Dearth of high quality measures of putative mechanisms</li> <li>• Methods for measurement that are most appropriate for the target variable are not always feasible with priority populations</li> <li>• Little guidance (either empirical or theoretical) regarding measurement instruments, timing of administration, level of analysis</li> </ul> <p><b>Causal Theory &amp; Context</b> (b)(4)</p> <p><b>Definition:</b> Frameworks, theories, models, and the role of contextual factors as targets for strategy-mechanism pairings</p> <ul style="list-style-type: none"> <li>• 60+ models, unclear which present causal relations</li> <li>• Context might differentiate settings delivering care for priority populations, requiring unique set of strategies</li> <li>• Unclear how to tailor strategies to contextual factors of influence</li> </ul>
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**C. APPROACH (see Conference Series Agenda in Table 1 & Inputs, Activities & Outputs in Figure 2)**

Across all years, the MNoE will convene for quarterly (Q) web-based meetings, either as a full group or in their workgroups, to advance the aims, ensuring their time spent in conference is optimized. They will travel to Seattle each year (summer/fall), with the 1<sup>st</sup> and 3<sup>rd</sup> years strategically integrated with the SIRC conference. SIRC is composed of a large group of implementation-savvy researchers, policy, and practice champions who are uniquely positioned to engage in a bidirectional learning process to contribute to, consume, and advance the research agenda. Given that the PI is also Past President of SIRC, significant infrastructural and financial support (e.g., covering the lodging, meal and conference costs at Friday Harbor Laboratories) will be provided by SIRC to stretch the otherwise modest R13 budget (see *Composite Categorical Budget*). SIRC can cover these costs from its annual membership dues and conference income.

Figure 2. Inputs, Conference Activities, Outputs & Alignment with Aims



Year 1 (Dec 2017-Nov 2018). Year

1 will begin to advance Aim 1: *Generate an implementation mechanisms research agenda*, by completing steps 1 and 2 of the 6 distinct processes of a Concept Mapping (CM) activity: (1) preparation, (2) brainstorming (informed by the literature, MNoE expertise, coding of 2019 SIRC conference abstracts, and partner interviews), (3) sorting, (4) ranking, (5) establishing go-zones (bivariate scatterplot of the importance and feasibility ratings), and (6) action planning. First, Lewis (PI) and Williams (investigative team member) will present results from the only 2 systematic reviews of implementation mechanisms in a publicly available webinar to provide an empirical foundation (Q1, March 2019). Each MNoE member will populate a matrix to map our rich experience implementing EBPs by documenting the target problem, EBP, priority population, context/setting, and implementation strategy (theorizing mechanisms wherever possible) to reveal initial observations about the differential impact of implementation strategies with priority populations, or gaps with respect to our evaluations of implementation mechanisms, for instance (see Appendix A for matrix template). Our research specialist will collate the data to be discussed in the Q2 meeting (June 2019). The MNoE will engage in their first Deep Dive conference in September 2019, which aligns with the 5<sup>th</sup> biennial SIRC conference. To incorporate the latest research, each MNoE member will be assigned 5 abstracts from the SIRC 2019 conference (5\*26 MNoE=130) and asked to extract the following data using the worksheet found in Appendix B: priority population, service (safety, efficiency, quality,

cost) and implementation (acceptability, feasibility, appropriateness, adoption, fidelity, cost, penetration, sustainment) outcomes, study design, measurement method, implementation strategy, and putative mechanisms. MNoE members will participate in the Implementation Development Workshops (IDWs) on the 1<sup>st</sup> day of the conference and host think tanks with SIRC attendees on the 2<sup>nd</sup> day to identify pressing priorities for research in each of the 4 Strategic Workgroup Focus Areas. MNoE members will also attend their assigned talks at SIRC, and then convene as a group on the final day to discuss the state of the science, preliminarily generate items for the developing research agenda, and generate action steps. Our research specialist will collate the SIRC abstract coding for the MNoE to consider in their Q4 brainstorming meeting (Dec, 2019) to discuss gaps, inconsistencies, theoretical and methodological issues, yielding a skeletal roadmap for the research agenda.

Table 1. Quarterly Meeting and Conference Agenda Overview: Years 1, 2, & 3 (NOTE: Q = Quarter; \* = Deep Dive)

Year 1 - 2019		Year 2 - 2020		Year 3 - 2021	
Quarterly Meetings					
March June September December	<ul style="list-style-type: none"> <li>• Q1: Williams &amp; Lewis host webinar</li> <li>• Q2: Matrix Mapping exercise</li> <li>• Q3*: SIRC 2019 coding discussed</li> <li>• Q4: Workgroups discuss gaps and generate skeletal roadmap</li> </ul>	<ul style="list-style-type: none"> <li>• Q1: Review evaluation; Partner interviews discussed</li> <li>• Q2: Cull list of statements for CM</li> <li>• Q3*: Finalize research agenda</li> <li>• Q4: Discuss manuscripts</li> </ul>	<ul style="list-style-type: none"> <li>• Q1: Review evaluation; Assign dissemination products</li> <li>• Q2: Prep workshops &amp; plenaries</li> <li>• Q3*: SIRC 2021 presentations</li> <li>• Q4: Revise disseminate materials</li> </ul>		
In-Person Deep Dive Activities					
Seattle (overlap w SIRC)		Friday Harbor		Seattle (overlap w SIRC)	
Day 1 (Evening)	<ul style="list-style-type: none"> <li>• Review SIRC program and assign MNoE to talks to align with workgroup focus areas</li> </ul>	<ul style="list-style-type: none"> <li>• Powell to present overview of concept mapping analysis &amp; interpretation procedures; Results presented</li> </ul>	<ul style="list-style-type: none"> <li>• MNoE lead workshops</li> </ul>		
Day 2 (Full Day)	<ul style="list-style-type: none"> <li>• MNoE engage w SIRC in IDWs</li> <li>• MNoE engage in coding SIRC talks</li> </ul>	<ul style="list-style-type: none"> <li>• Finalize concept mapping solution</li> <li>• Operationalize priority clusters &amp; items to inform strategic action steps</li> </ul>	<ul style="list-style-type: none"> <li>• MNoE deliver plenary sessions</li> <li>• MNoE engage w SIRC in IDWs</li> </ul>		
Day 3 (Full Day)	<ul style="list-style-type: none"> <li>• MNoE lead think tanks on each focus area</li> <li>• MNoE engage in coding SIRC talks</li> </ul>	<ul style="list-style-type: none"> <li>• Generate strategies for addressing priorities</li> <li>• Develop dissemination plan, including manuscript #1, short course material, policy briefs, &amp; videos</li> </ul>	<ul style="list-style-type: none"> <li>• MNoE present dissemination products and solicit feedback in focused sessions with SIRC members</li> </ul>		

Year 2 (Dec 2018-Nov 2019). Given the importance of ensuring the research agenda addresses policy and practice partner priorities, we will over-represent these stakeholders by having each MNoE member interview one policy and one practice partner prior to the Q1 (March, 2020) meeting (see [Appendix C](#) for interview guide) in which they will report out on their findings; this will conclude the multi-pronged data collection for the CM process. The remainder of the CM activities is modeled after Proctor (MNoE member) et al. who used CM to inform a research agenda in their AHRQ-funded sustainability conference.<sup>33</sup> Each MNoE member will take into consideration all data collected to date (e.g., systematic reviews, SIRC coding, think tanks, practice partner interviews) and complete the online brainstorming task responding to the statement, “In advancing a program of research on implementation mechanisms, an important issue is...” The list of statements will be culled by the MNoE in Q2 (June 2020) to reduce redundancies to ensure a feasible number of unique statements (e.g., 80-120) and ensure that items related to priority populations are reflected in the refined list. Concept Systems Inc.,<sup>49</sup> is an online platform that Lewis (PI) and Powell (investigative team) have used in an R01 and in related studies.<sup>20,42</sup> Between Q2 and Deep Dive #2 the MNoE will use this software to sort, rank, and establish go-zones for the research agenda. Sorting requires MNoE members to move the statements into piles that reflect conceptual similarities and to name the piles. They will then rank the statements on importance and feasibility. The software will use cluster analysis and multidimensional scaling to generate a point map whereby conceptually similar statements are in close proximity. Powell will present the CM results to kick off the Deep Dive. Our investigative team will respond to the go-zone (importance & feasibility rankings) of the statements in a panel discussion. MNoE workgroups will break out to operationalize the clusters and associated statements and generate recommendations for how to address the priorities through high impact research. The MNoE will regroup to synthesize the recommendations in a coherent research agenda, assign leads for manuscripts describing the research agenda, and complete the Deep Dive evaluation. Q4 meeting will consist of reviewing the evaluation to inform revisions to the activities in the final year and discussing manuscript drafts for the journal supplement (Dec, 2020).<sup>19</sup>

Year 3 (Dec 2019-Nov 2020). Year 3 is devoted to Aim 2: *Dissemination of the Research Agenda*. The quarterly calls will be used to assign dissemination products to MNoE members and workgroups (Q1; March 2021), identify plenary and workshop speakers for SIRC/Deep Dive #3 (Q2; June, 2021), and finalize dissemination materials (Q4; Dec 2021). With respect to specific dissemination products, the journal supplement (and conference presentations) will serve the research audience. The MNoE will generate brief reports for the policy audience that leverage KP's Program for Readability in Science and short video clips (in collaboration with KP's Research Communications Team) for the practice audience. The MNoE will develop these products leading up to the Deep Dive where they will be presented to and evaluated by SIRC attendees in working lunches, after which the MNoE will revise materials for final distribution. In addition to plenary sessions that will address what we have learned about implementation mechanisms, the MNoE will deliver workshops addressing each Focus Area: Design & Analysis, Measurement, Strategies→Mechanisms→Outcomes, Causal Theory & Context. MNoE representatives from each workgroup will also join SIRC members in the IDWs. SIRC attendees will complete an evaluation of MNoE activities (e.g., plenary sessions, IDW, workshops, brief reports, videos) to inform changes to our research agenda and products prior to widespread dissemination. All material will live on the SIRC website, and it will be shared via social media, listservs, and via the channels identified below.

#### **D. ADDITIONAL DISSEMINATION TARGETS**

We have identified local and national dissemination outlets (beyond SIRC and the MNoE networks). We have connected with the local Institute of Translational Health Sciences, who has expressed enthusiastic support for this proposal. As noted in their [Letter of Support](#), the knowledge and products generated from this conference series will be of benefit to many of their investigators. Also, one of the five Seattle-based MNoE members will offer a guest lecture in their KL2 seminar. At the national level, our work will be shared in the cross-CTSA Collaboration/Engagement and Workforce Development Domain Task Force: Dissemination, Implementation, and Knowledge Translation Workgroup. We also have the support of Dr. Anne Sales (MNoE member), to host our webinars in the publicly available VA Health Services Research & Development Cyberseminar series, (<http://www.hsrd.research.va.gov/cyberseminars/catalog-upcoming.cfm>). Finally, the nationally-representative MNoE will be named on the SIRC website to invite others to seek them out for consultation.

#### **E. SUMMARY OF CONFERENCE EVALUATION ACTIVITIES**

The conference series process (e.g., timeline, milestones, participant attendance) and outcomes (products associated with aims) will be evaluated annually. MNoE members will complete a satisfaction survey at the end of each Deep Dive (see [Appendix D](#)). The project manager will feed results to the investigative team who will then propose conference procedure revisions to the MNoE in the quarterly calls to inform changes each year. In years 1 and 3, SIRC attendees will complete a survey inquiring about the MNoE-led events/activities (e.g., plenary sessions, IDW, workshops) to ensure that their work is optimized prior to subsequent dissemination. The summative evaluation will focus on the MNoE perceptions of the quality of the research agenda (Aim 1) and dissemination products (Aim 2: 2 manuscripts, videos, webinars, brief reports).

#### **F. POTENTIAL PROBLEMS AND ALTERNATIVE SOLUTIONS**

- It is possible that mechanism-relevant information is not easily obtained from the abstracts or during the talks at the 2019 SIRC conference. If mechanism information is not explicitly stated, MNoE members will hypothesize the intended mechanism or ask the authors directly at the conference.
- The brainstorming portion of the concept mapping will generate high level and granular issues/gaps, which could be complex to integrate. Per the logic model in Figure 2, at least 3 data sources will seed the brainstorming (prior to the interviews) and we will complete the activities in phases: (1) systematic reviews; (2) MNoE matrix mapping (3) SIRC coding. The research specialist will report to the MNoE in Q4 meeting to generate the skeletal roadmap and to inform the desired level of information from our interviews. Finally, we will review and refine all information prior to the brainstorming session to ensure it is easily integrated.
- Concept mapping is a systematic way to reveal conceptually similar information and has been used before to inform a research agenda, but the results are not always easily interpretable. Consistent with our approach to concept mapping in a current R01, we will engage the MNoE in a process of ensuring that the ultimate research agenda (a) reflects the inputs, (b) is conceptually meaningful, and (c) actionable.

#### **E. HEALTH SERVICES IMPACT**

Achieving the aims of this proposal will provide a clear path (i.e., research agenda) for implementation researchers to engage in that accounts for policy maker and practice leader priorities. In focusing future research on implementation mechanisms, strategies for integrating evidence-based practices will be streamlined and most effective, thereby enhancing their likely impact on the delivery of safe, high quality, and efficient care.



## PHS Human Subjects and Clinical Trials Information

OMB Number: 0925-0001 and 0925-0002

Expiration Date: 03/31/2020

Are Human Subjects Involved

Yes  No

Is the Project Exempt from Federal regulations?

Yes  No

Exemption Number

1  2  3  4  5  6  7  8

Does the proposed research involve human specimens and/or data

Yes  No

Other Requested information

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## Letters of Support

### MNoE Investigative Team

(b)(4)

**Expanded MNoE**

(b)(4)

(b)(4)



## **Institutional Support**

### **Institute of Translational Health Sciences (ITHS)**

*ITHS is a partnership between the University of Washington, Seattle Children's Hospital, and Fred Hutchinson Cancer Research Center, and is funded by an NIH Clinical and Translational Science Award. ITHS promotes the translation of science to clinical practice by promoting innovative research, cultivating multi-disciplinary partnerships, and fostering the next generation of researchers through robust educational and career development programs.*

### **School Mental Health Assessment, Research, & Training (SMART) Center**

*The SMART Center at the University of Washington promotes quality improvement of school-based mental/behavioral health services in order to prevent or ameliorate mental health problems more effectively and promote healthy development and success.*

### **Society of Implementation Research Collaboration (SIRC)**

*SIRC is dedicated to facilitating collaboration and communication between implementation researchers and stakeholders. The society has a membership of over 2,000 implementation scientists across the globe and offers a network of experienced scientists well-poised to promote and disseminate advances in implementation research.*

### **University of Washington Department of Health Services**

*The School of Public Health at the University of Washington is widely recognized for the quality of its teaching and research. The Department of Health Services prepares future health researchers, managers, and practitioners to conduct the work of improving the well-being of communities locally, nationally, and internationally and boasts a faculty of experienced and talented scientists from a variety of disciplines.*



DEPARTMENT OF PSYCHIATRY (0812)  
 UCSD School of Medicine  
 9500 Gilman Drive  
 La Jolla, California 92093-0812

January 12, 2018

Dr. Cara C. Lewis  
 1730 Minor Ave Suite #1200  
 Seattle WA 98101

Dear Dr. Lewis,

I am writing to offer my strong and enthusiastic support of your proposed R13 entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration”. This is a much needed focal area for implementation science and for health services research. This work is also consistent with calls for more specificity in the “how and why” of intervention and implementation research. It is not enough to examine only predictors and outcomes, but it is critical to understand the mediating and moderating factors that can impact the success (or failure) of implementation strategies. While investigator initiated studies of such factors are needed, the work proposed here will accelerate our development of theories and applied approaches to testing theories and advancing implementation science. In addition, a more comprehensive understanding of mechanisms will facilitate the tailoring of implementation to improve the public health impact of evidence-based interventions and practices.

I have the expertise, administrative experience, leadership, and training necessary to contribute successfully to the proposed project. For the past 18 years, my USA National Institutes of Health (NIH – Primarily NIMH) and Centers for Disease Control (CDC) funded research has focused on implementation science with emphases on measurement, study design, conceptual frameworks, management and organizational issues, quality of care, policy, and evidence-based practice in public sector mental health, HIV prevention, substance abuse treatment, and social services settings. I am PI of two NIMH studies, one examining mechanisms in system-wide scale of an evidence-based practice (R01MH092950). The other study examines system and organizational factors and mediators and moderators of evidence-based practice across two states, 11 service systems, and 87 counties (R01MH072961). I am also PI of a NIDA cluster randomized controlled trial (R01DA038466) testing cross-level mechanisms of change in a leadership and organizational development intervention to implement evidence-based practices (EBPs) in public sector treatment programs. I am also an investigator on the multi-center NIDA JJ-TRIALS initiative where I am involved in adapting the Exploration, Preparation, Implementation, Sustainment (EPIS) conceptual framework and study design. I have served as an implementation science trainer for the Fogarty International Center/NICHD/PEPFAR PMTCT Alliance focusing on implementation in sub-Saharan Africa. My research has developed highly cited and utilized implementation theoretical frameworks, and associated implementation measures. I have also tested implementation strategies, and identified key factors likely to enhance effective implementation in organizations and health and allied health service system. My work also focuses on developing and testing models of effective leadership and organizational change for implementation of EBP. I also have expertise in implementation science study design and the application of mixed-methods in implementation science. I am faculty for the NIH Training Institutes for Dissemination and Research in Health, am Core Faculty for the NIMH Implementation Research Institute), and the annual Kings College, London Implementation Science Master Class. I have also provided training and consultation for the Norway Center for Child and Adolescent Mental Health, the Norwegian Centre for Violence and Traumatic Stress Studies, and the Karolinska Institutet (Sweden).

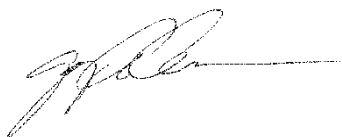
This proposed project and my proposed role focusing on design and analysis is highly consistent with my experience in implementation study design and the identification and study of mechanisms across system and organizational levels. Understanding mechanisms across systems and organizations is a critical area where there is great need for development of testable models with appropriate and pragmatic measures. This role is also consistent with my NIH funded studies and experience utilizing multilevel mixed-methods designs across system and organization levels, examining mediators and moderators, and testing implementation theories and strategies.

This proposed project will build on my previous collaborations with the PI Dr. Lewis. For example, we have worked together as part of the Society for Implementation Research Collaborative, and on advancing and understanding of implementation science measures and methods. We have also collaborated as co-authors on scholarly publication providing guidance to improve selection and tailoring of implementation strategies.

I will actively participate should this project be awarded. Specifically, I agree to attend three annual Deep Dives with fellow Mechanisms Network of Expertise members, and speak at SIRC in 2019 and 2021. I will also participate in quarterly calls with the full network each year of the grant. As a member of the investigative team, I also agree to co-lead 8 hours of web-based meetings each year at the rate of \$125 per hour.

I am fully committed to this project because the SIRC group with the leadership of Dr. Lewis has been consistently advancing implementation dialogue, theory, measures, and research design. This project has great potential to accelerate contributions to implementation science and bring together current and future implementation science researchers, practitioners, and stakeholders to advance the field with a clear focus on mental health.

Sincerely yours,



Gregory A. Aarons, Ph.D.  
Professor: Department of Psychiatry  
Director: Child and Adolescent Services Research Center



Center for Mental Health Policy and Services Research

January 14<sup>th</sup>, 2018

Dr. Cara C. Lewis  
1730 Minor Ave Suite #1200  
Seattle WA 98101

Dear Dr. Lewis,

I am thrilled to provide my full support for your proposal entitled, “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration.” I am very enthusiastic about the proposed project given that mechanisms of implementation science have been understudied to date, and if funded, this proposal will greatly move the field forward, allowing for a substantial public health impact.

My research focuses on the dissemination and implementation of evidence-based practices, such as cognitive-behavioral therapy (CBT), to community settings. This work is very aligned with my current research, as I am MPI on an NIMH funded P-50 to apply principles of behavioral economics to the design of implementation strategies with an eye towards mechanisms. I am also the PI on an R01 (R01 MH 108551) to identify accurate and cost-effective fidelity measurement methods. I have received extensive training and mentorship in implementation science methods as an alumna of NIH-sponsored implementations science fellowships: Training Institute for Dissemination and Implementation Research in Health (TIDIRH) and the Implementation Research Institute (IRI). Much of my work focuses on the relationship between context and implementation efforts, making my role as the Co-Lead for Causal Theory and Context Strategic Focus Area very appealing.

I have collaborated with Dr. Lewis over the past six years around various projects and am confident in the ability of her team to accomplish the tasks delineated in this R13. I agree to serve as Co-Investigator and Lead in the *Mechanisms Network of Expertise*. Specifically, I commit to the following tasks:

- Agree to attend three annual Deep Dives with fellow Mechanisms Network of Expertise members;
- Participate in quarterly full network calls each year of the grant;
- Speak at the 2019 and 2021 SIRC Conferences;
- Lead quarterly 2-hour web-based meetings at a rate of \$125/hour.

I am committed to contributing to this very important project which will undoubtedly have a major impact on the field. Dr. Lewis has put together a team of thought leaders and objectives that are ambitious yet accomplishable that is meritorious.

My best,



Rinad Beidas, PhD

Assistant Professor

Incoming Leader, Association for Behavioral and Cognitive Therapies Dissemination and Implementation Special Interest Group (DIS-SIG)

Director, Penn Implementation Science Working Group

Director, Implementation Research

Center for Mental Health Policy and Services Research

Department of Psychiatry

Perelman School of Medicine

University of Pennsylvania

3535 Market Street

3<sup>rd</sup> floor, 3015

Philadelphia, PA 19104

January 16, 2018

Cara C. Lewis, Ph.D.  
Group Health Research  
Institute 1730 Minor Ave Suite  
#1200  
Seattle WA 98101

Dear Cara,

It is with great enthusiasm that I am writing to support your AHRQ R13 proposal, “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration.” The proposal reflects an innovative conference initiative designed to shape the way the field of implementation science conceptualizes, identifies, and measures the mechanisms through which implementation strategies impact implementation outcomes. The importance and timeliness of this work cannot be overstated, as it takes on a current, vexing issue that field has yet to adequately address.

As Director of the School Mental Health Assessment, Research, and Training (SMART) Center – an implementation science and technical assistance center at the University of Washington – I lead a group of faculty researching the effective implementation of evidence-based behavioral health practices in the in the education sector. Schools reflect the most common setting for the delivery of mental health services to youth and one that substantially reduces barriers to care for historically underserved populations. I have personally conducted extensive, federally-funded quantitative, qualitative, and mixed-methods work surrounding the design of easily implementable intervention protocols, technologies to support implementation of research-based practices in community settings, and measurement of organizational constructs relevant to implementation (e.g., implementation leadership, implementation climate). My most recent work focuses quite explicitly on mechanisms of implementation science, including (1) the mechanisms through which online training and asynchronous consultation affect trainees’ use of evidence- based practices, (2) how mechanisms drawn from the Theory of Planned Behavior explain the effects of a pre-training implementation enhancement intervention for mental health clinicians in the education sector, and (3) the mechanisms through which aspects of school and community mental health organizational contexts impact service quality and implementation. I look forward to applying these experiences in my role as a member of the Mechanisms Network of Expertise. In addition, many of the stakeholders with whom I collaborate in my research (e.g., representatives from school districts, public health entities, behavioral health authorities, and the state department of education) can be easily engaged in SIRC, the mechanism identification process, or as targets for strategic dissemination of the products from this R13 grant.

You and I have previously collaborated on a number of projects, both within and external to the Society for Implementation Research Collaboration (SIRC), where we both serve as officers. Within SIRC, projects include (but are not limited to) planning and executing the SIRC biennial conference series, ongoing development of a behavioral health implementation science journal, and early work on this mechanisms initiative. Beyond SIRC, you and I have collaborated on a comprehensive review of a digital implementation strategy (measurement feedback systems) to support measurement-based care in mental/behavioral health, co-guest edited a special section of the journal *Administration and Policy in Mental Health and Mental Health Services Research*, and co-authored six publications in peer reviewed journals (with at

least another three under review). I have found our work together to be highly collegial, productive, and fun. Given this experience, and knowing the high esteem in which you are held by many of the most influential researchers in the field (your work on implementation measures received the first – and only – standing ovation I have ever witnessed at an academic conference), I have no doubt that you will be able to effectively engage and lead the all-star cast you have assembled for the current project. I look forward to this opportunity to continue our collaborations.

Your proposal reflects a natural extension of the work that we have already conducted conceptualizing and identifying implementation mechanisms, and is an excellent fit with the mission of SIRC. I am excited to serve as a member of the Planning Committee for your R13 project and to help lead the Mechanisms Network of Expertise. I recognize that this will involve co-leading 8 hours of web-based (quarterly, 2-hour meetings) at \$125/hour, participating in quarterly full network calls, speaking at SIRC 2019 and 2021, and attending three annual Deep Dives with fellow Mechanisms Network of Expertise members. These activities promise to be engaging and enriching for the participants and incredibly informative to the field as a whole.

In sum, I am happy to make a strong commitment of support to this innovative and impactful project, as I believe it has potential to greatly accelerate the production of high-quality, mechanistic implementation science. I wish you the best of luck with this important proposal and look forward to our continued work together.

Sincerely,



Aaron R. Lyon, PhD  
Associate Professor  
Psychiatry and Behavioral Sciences  
University of Washington

Director  
School Mental Health Assessment,  
Research, & Training (SMART) Center

Care Improvement Research Team (CIRT)

January 5, 2018

Cara C. Lewis, PhD  
Group Health Research Institute  
1730 Minor Avenue, Suite #1200  
Seattle, WA 98101

Dear Cara:

I am pleased to document my commitment and my enthusiastic support for your funding application entitled *Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration*. The activities you have proposed will strengthen the field of implementation science and significantly enhance its contributions to improved quality and outcomes of medical care and to improved public health and population health outcomes.

My contributions to the activities described in your application will draw upon my prior and current scientific and professional activities focused on further developing and strengthening the field of implementation science in health. My primary institutional affiliations include a position as a Senior Scientist (55% FTE) in the Kaiser Permanente Southern California Department of Research and Evaluation and Senior Scientist (30% FTE) with the VA Quality Enhancement Research Initiative through the VA Greater Los Angeles Healthcare System. I draw additional salary support from UCLA's Clinical and Translational Science Institute (CTSI) as co-lead of the CTSI's Implementation and Improvement Science initiative.

In addition to my local (Los Angeles) activities in implementation science, I have played a leadership or advisory role in a broad range of additional US and international initiatives to strengthen and expand the field of implementation science. I established the planning committee that launched the journal *Implementation Science* and served as co-editor in chief of the journal for its initial six years of publication. I served on the NIH Special Emphasis Panel (ad-hoc study section) on Dissemination and Implementation Research in Health during 2006, and chaired the panel during 2007 and 2010. I have been a recurring member of the planning committee for the annual NIH Conference on the Science and Dissemination and Implementation in Health and core faculty for the NIMH/VA-supported Implementation Research Institute (IRI) conducted by Washington University at St. Louis and core faculty for TIDIRH, the NIH D&I science training program. I have past or current roles advising non-US implementation science research centers, including a past role on the International Advisory Board for Knowledge Translation Canada and current role advising the Kings College London Centre for Implementation Science. I serve as an advisor to many additional US and international research centers and projects in the field of implementation science. I collaborated with colleagues at AHRQ and the Robert Wood Johnson Foundation to establish the *IoM Forum on the Science of Quality Improvement and Implementation*, and currently serve on the Methodology Committee of the *Patient-Centered Outcomes Research Institute* (PCORI), the AAMC Advisory Panel on Research and AcademyHealth Methods Council. My role in each of these committees includes support for continued growth and application of implementation science to improve health. I am member of the SIRC Network of Expertise and work closely with key leaders of SIRC and with key researchers affiliated with Group



Dr. Cara Lewis

- 2 -

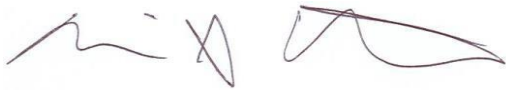
January 5, 2018

Health Research Institute and other large integrated delivery systems across the U.S. in my role as co-lead of the NCI-funded Cancer Research Network (CRN) Communication and Dissemination Scientific Working Group.

I look forward to active and intensive involvement in the proposed R13 activities, including serving as a member of the Planning Committee and as a lead member of the Mechanisms Network of Expertise. As such, I agree to co-lead 8 hours of web-based quarterly meetings each year at the rate of \$125 per hour. I will attend three annual Deep Dives with fellow Mechanisms Network of Expertise members. Additionally, I agree to serve as a speaker at SIRC 2019 and 2021 and participate in quarterly calls with the network. The plan described in the funding application is carefully designed and includes a rich series of interrelated and mutually dependent activities, and I am committed to full and active participation and contributions to assure the successful achievement of the program goals and to assure their impact on the field of implementation science as intended.

The proposed R13 activities address a critical and timely set of issues within the implementation science field and will accelerate the field's ability to contribute to critical policy and practice goals. I appreciate the opportunity to collaborate in shaping the funding application and in contributing to the important work you plan. Best wishes for success in the peer review and funding process.

Sincerely,



Brian S. Mittman, PhD  
Senior Scientist, Kaiser Permanente Southern California Department of Research and Evaluation  
Senior Advisor, VA Center for Healthcare Innovation, Implementation and Policy; and VA Quality Enhancement Research Initiative  
Co-Lead, UCLA Clinical Translational Science Institute (CTSI) Dissemination, Implementation and Improvement Science Initiative



**DEPARTMENT OF HEALTH  
POLICY AND MANAGEMENT**

1101 MCGAVRAN-GREENBERG HALL  
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CHAPEL HILL, NC 27599-7411

T 919.966.7350  
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January 19, 2018

Dr. Lewis,

It is my great pleasure to support your proposed R13 titled, “Advancing a Mechanisms of Implementation Science Research Agenda.” This represents a top priority for the field of implementation science, as improving the public impact of research depends in large part upon our ability to understand where, when, how, and why implementation strategies are effective in integrating effective practices into routine care. It is also quite timely given the increasing emphasis on understanding the underlying mechanisms of interventions in clinical and health services research more broadly. This R13 represents a unique opportunity to address this priority in a focused and intensive manner. I can think of no better leader for this initiative given your extensive work in implementation science, particularly in relation to measurement and testing tailored implementation strategies, as well as your track record of successful leadership as both a principal investigator and as President of the Society for Implementation Research Collaboration (SIRC). You have put together a stellar team of investigators and I have full confidence that this effort will be successful and extremely generative for the fields of implementation science and health services research.

I am well positioned to serve as a Co-Investigator on the proposed R13. I am an Assistant Professor in the Department of Health Policy and Management at the UNC Gillings School of Global Public Health and a Research Fellow at the Sheps Center for Health Services Research and the Frank Porter Graham Child Development. I am also a Core Faculty Member of NC TraCS’ (UNC’s CTSA) Dissemination & Implementation Research Methods Unit, an Implementation Specialist for the NIH-funded Center for Aids Research, and a Core Faculty Member of the UNC-RTI Consortium for Implementation Science. I have extensive training and experience in implementation research, and I am a member of the editorial board for the journal *Implementation Science*. I have a particular interest and commitment to increasing knowledge about the types of implementation strategies that can be used to integrate effective practices into routine care. I have worked to advance the field by developing and refining a compilation of implementation strategies (Powell et al., 2012; Powell et al., 2015), assessing the evidence for implementation strategies (Powell et al., 2014), and proposing guidelines for more carefully specifying implementation strategies (Proctor, Powell, McMillen, 2013). Increasingly, my work is focused on developing better ways of tailoring implementation strategies to specific contexts (Powell, et al., 2017), which will require a more nuanced understanding of the mechanisms by which implementation strategies exert their effects. My work has consistently focused on AHRQ priority populations. For example, I currently have funding from NIMH (K01MH113806) to improve the quality of care for children and youth (including, low-income, minority, rural, and inner-city populations) who experience trauma. This work involves developing and piloting an innovative intervention to help organizations tailor implementation strategies to their specific contexts to better implement and sustain Trauma-Focused Cognitive Behavioral Therapy. This work is being conducted within the context of a state (North Carolina Child Treatment Program) and national (the SAMHSA-funded National Child Traumatic Stress Network) network of organizations providing care for AHRQ priority populations; thus, the products generated from this R13 will directly influence the work in my K01 and can easily be disseminated to these broader networks to improve the quality of care for children, youth, and families who experience emotional and behavioral difficulties due to trauma exposure.

we have been able to form a number of successful collaborations. For example, our first scholarly collaboration resulted in a co-authored manuscript focusing on methods for selecting and tailoring implementation strategies so that they are well-matched to specific contexts. It has also been a privilege to be a Co-Investigator on your NIMH-funded R01 focused on advancing measurement in implementation science. These collaborations have allowed me to witness first hand your research acumen, as well as your clarity of vision and your interpersonal and leadership abilities. Your leadership is consistently evidenced by your ability to obtain “buy-in” from international leaders in the field of implementation science, and to work with co- investigators and research staff in a collaborative, respectful, and decisive manner.

I am happy to contribute to the success of this project in any way that I can. Specifically, I am committed to providing leadership for the *Mechanisms Network of Expertise* and in this position agree to co-lead quarterly web-based meetings each year at the rate of \$125/hour. I am also committed participating in quarterly full network calls during each year of the grant; presenting at the SIRC conferences in 2019 and 2021; and participating in annual invited 3-day Deep Dive meetings with fellow Mechanisms Network of Expertise members. I believe my broad expertise in implementation research and my particular strengths related to research focusing on implementation strategies will make me a valuable member of the investigative team, and contribute to the success of this R13. Moreover, the collective capacity of the investigative team and the Network of Expertise coupled with institutional support from Group Health Research Institute and the Society for Implementation Research Collaboration will undoubtedly contribute to the success of this initiative.

Thank you for including me in this timely and important effort. I have no doubt that this effort will make a meaningful and sustained impact. Please do not hesitate to let me know if I can be of help in any way.

Sincerely,



--

**Byron J. Powell, PhD, LCSW**

Assistant Professor

Department of Health Policy and Management

Gillings School of Global Public Health

University of North Carolina at Chapel Hill

1105C McGavran-Greenberg Hall | Campus Box 7411

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University of Washington

# DEPARTMENT OF GLOBAL HEALTH

December 28, 2017

Dr. Cara C. Lewis  
1730 Minor Ave Suite #1200  
Seattle WA 98101

Dear Dr. Lewis,

I wholeheartedly support your proposal, “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration,” and welcome the opportunity to collaborate with you to identify optimal methods for measurement, evaluate existing measures, and develop new ones that capture the mechanisms through which implementation strategies affect implementation outcomes. The proposed conference could not be timelier. To guide implementation research and practice, we need to open the “black box” of implementation strategies to better understand how they work. Such knowledge will inform the matching of implementation strategies to implementation challenges, increasing the probability of implementation success. In addition, reliable, valid, and practical measures of mechanisms will provide researchers and practitioners with early indicators that implementation strategies are working as well as useful diagnostic information when implementation strategies are not.

I am a Professor in the Departments of Global Health and Health Services at the University of Washington. For two decades, I have conducted research on the adoption, implementation, and sustainment of innovations and evidence-based practices in health care organizations. I have examined a wide range of innovations including quality improvement practices, care management practices, patient safety practices, clinical information systems, and as well evidence-based clinical practices in cancer, diabetes, and cardiovascular disease. Of importance to this proposal, I have sought to advance measurement in the field of implementation science. I have developed and tested new measures of organizational readiness for change and implementation climate. In addition, I have participated with you in a large-scale effort to evaluate the psychometric properties of 420 instruments measuring 37 constructs appearing in the Consolidated Framework for Implementation Research. In other collaborations with you, I have developed and tested new measures of three implementation outcomes: acceptability, appropriateness, and feasibility (NIMH, 1R01MH106510, Cara Lewis, PI). I have also co-authored with you two book chapters on measurement issues in implementation science.

In support of your proposal, I agree to serve as a Planning Committee member and Lead in the *Mechanisms Network of Expertise*. I also agree to:

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Ninth and Jefferson Building Box 359909 325 9<sup>th</sup> Ave Seattle, WA 98104-2499  
TEL 206-543-4278 • FAX 206-543-4818 • EMAIL: gjohn@u.washington.edu  
[www.depts.washington.edu/deptgh](http://www.depts.washington.edu/deptgh)

- Co-lead approximately bimonthly 1-hour web-based meetings in year 1 of the grant to contribute to manuscript development;
- Participate in quarterly full network calls during year 2;
- Serve as keynote speaker at SIRC conference (2019 or 2021), if invited to do so;
- Attend the SIRC conferences in 2019 and 2021, including the pre-conference activities, which may include leading a practical workshop;
- Engage in an invited 3-day Deep Dive in year 2 (2020);

Again, I wish to convey my enthusiastic support for this proposal and look forward to working with the talented and driven group of researchers you are bringing together

Sincerely,

A handwritten signature in black ink, appearing to read "Bryan J. Weiner". The signature is fluid and cursive, with a long horizontal stroke at the end.

Bryan J. Weiner, Ph.D.

Professor, Departments of Global Health and Health Services



**BOISE STATE UNIVERSITY**

**COLLEGE OF HEALTH SCIENCES**

*School of Social Work*

January 19, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I am delighted to write in support of funding for the proposal, “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration” and I wholeheartedly welcome the opportunity to serve on the *Mechanisms Network of Expertise*. As you are aware, I have written that the integration of theory and research on implementation is the best way to advance evidence-based treatment in mental health; it is opportunities like the one you propose which offer constructive forums toward this end.

My research focuses on improving youth outcomes in children’s mental health and child welfare systems through the creation of organizational social contexts and capacities that support innovation implementation and service effectiveness. In particular, I am interested in understanding how organizational culture and climate relate to evidence-based practice implementation and how organizational implementation strategies can be used to support implementation and youth outcomes. Toward this end, my work focuses on conceptualizing and testing multilevel mediators of organization-level implementation strategies in randomized controlled trials. I believe this perspective will be of particular value to the *Mechanisms Network of Expertise* and to advancing the science and practice of implementation. Moreover, I have recently published a systematic review that explores the literature on implementation mechanisms, making me an ideal candidate for contributing to this work.

In addition to my scientific contributions to this work, I also have linkages to a range of community stakeholders here in Idaho’s Treasure Valley who will serve as valuable partners to engage in this work and to ensure that it optimizes its impact among priority populations of children from low-income families and rural areas. Among my contacts are leaders of the Idaho Department of Health and Welfare Division of Behavioral Health, which is currently implementing a statewide system re-design in Idaho, leaders of Optum Idaho, the managed care company that oversees Medicaid-funded behavioral health services in Idaho, and the Idaho Federation of Families for Children’s Mental Health, a family-driven advocacy organization that provides support and education services to families with behavioral health needs.

I am eager to work with you on this conference series to explore a research agenda for implementation science. I can commit to the proposed timeline and I look forward to attending

the SIRC conferences and annual Deep Dives as well as the web-based meetings you have articulated in your proposal. I welcome the opportunity to present at the SIRC conference and contribute to manuscript development throughout the three years. I also agree to co-lead quarterly web-based meetings at the rate of \$125 per hour. These endeavors will no doubt benefit my own work, advance the field at large, and contribute to improved healthcare for Americans.

Sincerely,



Nate Williams, PhD, LCSW  
Assistant Professor  
Boise State University

1910 University Drive, MS-1940, Boise, ID 83725

Phone (208) 426-1568 - Fax (208) 426-4291 - <http://hs.boisestate.edu/socialwork/>

## UW Medicine

DEPARTMENT OF PSYCHIATRY  
AND BEHAVIORAL SCIENCES

January 10, 2018

Dr. Cara C. Lewis 1730  
Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

It is with great enthusiasm that I write this letter of support for your proposal entitled "Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration". This is a timely and important proposal to bring together a group of leading experts in the mechanisms underlying successful implementation strategies, with the aim of providing direction to the field in developing the next generation of implementation science. I am personally excited to be involved in this proposal.

As a professor in psychiatry and behavioral science at University of Washington, and the director of the Creating Innovations in Psychosocial Interventions Center, I bring to the group expertise in the use of big data science, user-centered design and participant action research to develop and streamline behavioral interventions that can be easily deployed and scaled in mental health and primary care settings. My work focuses on increasing access and use of psychosocial treatments by community patients and providers, using participant action research, user-centered design methods, and cognitive neuroscience to simplify psychosocial treatments. Examples of this work include my NIMH funded projects on simplified PST for late life depression, therapeutic video games for depression, mobile apps for mood management, and the Engage Study, which compares a new, stepped psychotherapy program for depression to existing evidence based treatments on the therapist skill drift over time after certification in each intervention. I recently received a strong score on a NIMH sponsored center grant to conduct multidisciplinary research on strategies to engage the reach, usability and quality of psychosocial interventions in primary care medicine. The populations I engage with in research are geriatric, low-income and ethnic minority patients, as well as low-income patients receiving mental health treatment in nontraditional settings (primary care medicine, skilled nursing, and community centers).

This letter serves as acknowledgment to commitment to serve as an invited participant in the *Mechanisms Network of Expertise* and to participate in three annual Deep Dives with fellow Mechanisms Network of Expertise members. I also agree to speak at SIRC in 2019 and 2021 and participate in quarterly calls with the full network each year of the grant.

Again, I am pleased to be a part of this important project and I wish you much luck on your application.

Sincerely,



Patricia A. Areán, PhD  
Professor in Psychiatry and Behavioral Sciences  
Co-Director: BRiTE Center





**Center for Implementation Research**  
Sponsored by the UAMS College of  
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4301 W. Markham, Slot 522-4  
Little Rock, AR 72205-7199  
MAIN: 501-526-4788  
UAMS.edu



Geoffrey M. Curran, Ph.D.  
Professor and Director

January 18, 2018

Cara C. Lewis, PhD  
President, Society for Implementation Research Collaboration - SIRC  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I enthusiastically support your proposal entitled "Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration". The Society for Implementation Research Collaboration (SIRC) has successfully brought together researchers and other stakeholders who are committed to evaluating the implementation of complex evidence-based interventions, beginning with the NIMH-funded conference series in 2011 and on a continuing basis with many innovative and field-driving initiatives (e.g., the instrument review project, which has been extremely helpful to the field). SIRC has provided unique opportunities to connect students and early career investigators with established implementation scientists, and I am proud to serve as an "established implementation research investigator" in your initial Network of Expertise focused on linkages and collaboration. I very much appreciate the invitation to serve on your proposed *Mechanisms Network of Expertise*, and of course, I would be very happy to serve!

I believe that I am qualified to serve based on my experience in the field thus far. I have been conducting mental health services research for 20 years and implementation research well over 15 years. I have studied and published manuscripts primarily on: 1) adaptation and implementation of evidence-based practices in mental health and primary care settings, and 2) the broader area of perceived need, treatment utilization, treatment retention, and outcomes in mental health/substance use disorders. Recently, I have expanded my implementation research activities into areas other than mental health, working collaboratively with other researchers and stakeholders supporting implementation of evidence-based practices in diabetes, cancer, childhood nutrition, and a range of pharmacy practices. As you know, I have also focused on developing formative evaluation methods for implementation intervention development and research designs for hybrid effectiveness-implementation trials. I am PI or Co-PI on current and/or recently completed VA and NIMH grants that are testing implementation strategies to assist both primary care and specialty care settings in adapting and adopting evidence-based mental health practices. I was principal investigator on an NIMH funded IP-RISP (R24) project titled 'Partnership for Implementation of Evidence-Based Practices in Rural Primary Care'. I am also the Director of the UAMS Center for Implementation Research whose foci include: 1) developing and testing implementation strategies in diverse healthcare and community settings to support uptake of evidence-based and promising practices, and 2) building research capacity by training and mentoring students, fellows, and faculty members in the principles and methods of implementation science. I take this latter focus very seriously and I have devoted more than half of my efforts in this area in the last 3 years.

Very much thanks for your invitation to participate on the *Mechanisms Network of Expertise*. I think this is a wonderful idea, and as you and SIRC have been so successful with all of your initiatives, I am sure this will be a great success. I agree to participate in this capacity and will commit to attending three annual Deep Dives with fellow Mechanisms Network of Expertise members, speaking at SIRC in 2019 and 2021, and participating in quarterly calls with full network each year of the grant.



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Geoffrey M. Curran, Ph.D.  
Professor and Director

I am also excited about the opportunity to introduce community practice stakeholders with whom I frequently collaborate to SIRC. For example, as noted above, I work closely with a number of Federally Qualified Healthcare Centers (FQHCs). As well, I work closely with the state oversight agency for the Arkansas FQHCs, Community Health Centers of Arkansas (CHCA), Inc. I know that a number of directors and quality managers from these organizations would be very excited about attending SIRC and engaging with the NoE. I would invite Susan Ward-Jones, MD (Director of the East Arkansas Family Health Center, Inc.), Kellee Farris, PhD, RN (Quality Manager at Lee Country Cooperative Clinic, Inc.) and Joan Diehl, RN (Quality Director, CHCA, Inc.) to represent their agencies at a SIRC meeting. Further, I would invite Duane Jones, PharmD, Clinical Manager for Harps Pharmacies (a large independently-owned group of super market pharmacies) and Carole Baxter, MA, Director of Recovery Centers of Arkansas (the largest substance use treatment program in the state) to attend a SIRC meeting as well. Dr. Jones and Ms. Baxter are key collaborators with my team on implementation research projects and quality improvement initiatives that we support, and both are opinion leaders within the state in terms of adoption of evidence-based practices within their settings. All of these stakeholders would greatly appreciate and benefit from attending a SIRC meeting, and they all would offer key insights to implementation researchers in terms of partnering successfully with community agencies. I could see them participating actively in a panel of community stakeholders at a meeting and continuing to offer support to SIRC over time as recipients of strategies and products to test in their local contexts.

I am so pleased to be able to work with you and your team at SIRC. The work that you have done, and continue to do, has moved the field of implementation research forward and has created collaborations across the country that otherwise may not have existed. The conferences you have supported have been amazing, but your ability to create a new society as a result of the prior R13 funding with such important initiatives has been more impressive. Your plans for the future of SIRC, including developing a training institute, a new journal, and EBP champion task force are "spot on," and the proposed R13 will further the field even more with its focus on mechanisms and the provision of new forums to develop and share knowledge.

I am committed to your cause and happy to provide mentorship to those participating with the SIRC and hope you will continue to receive funding to advance implementation science! The implementation science community is in good hands when SIRC is fully-resourced and creating wonderful opportunities to collaborate, network, and answer important questions.

Sincerely,

A handwritten signature in cursive script that reads "Geoffrey M. Curran".

Geoffrey Curran, Ph.D.  
Professor, Department of Psychiatry and Behavioral Sciences  
Director, Center for Implementation Research  
University of Arkansas for Medical Sciences



## VA CENTER FOR CLINICAL MANAGEMENT RESEARCH

Ann Arbor HSR&D Center of Innovation

Laura J. Damschroder, MS, MPH

Research Investigator

January 10, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I enthusiastically support your proposal entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration”. You and your research team have a track record of being incredibly productive and innovative. I have no doubt that the products from this research project will be seminal for the implementation science field. The aims of this project will address a key knowledge gap: identifying and understanding the role of mechanisms on implementation outcomes. Your approach is especially exciting in its collaborative, team science approach to addressing this gap. This knowledge will help ensure increasingly successful implementations of evidence-based practices in clinical settings for the benefit of targeted patients.

As you know, I am a Research Investigator with the VA Ann Arbor Center for Clinical Management Research and PI of a large-scale implementation trial with the VA’s PROVE QUERI. I am or have been PI/co-PI on many implementation grants targeted toward Veterans and other priority populations, using quantitative, qualitative, and mixed methods. These projects have included closely partnered work which has kept my work rooted in pragmatic considerations encountered in real-world clinical settings. I have over 15 years’ experience conducting quantitative, qualitative, and mixed methods research on a broad range of health service research topics and another combined 12 years’ experience in management consulting in the healthcare sector and use of technologies to improve health. I was the lead developer of the Consolidated Framework for Implementation Research (CFIR), which is now being used to guide many projects and is one of the most “highly accessed” articles in the journal, *Implementation Science*.

I first met you at the first SIRC conference in 2011 and have been an avid supporter of your work ever since. You are truly one of the foremost scientists in implementation. Though you are rooted in mental health services, your work has been seminal in guiding innovation, application, and advancement of science within the much broader spheres of implementation and knowledge translation. I have had the great privilege of collaborating with you as a member of your Advisory Board on the “Advancing Implementation Science through Measure Development and Evaluation” grant (1R01MH106510-01). Your work inspires me. Your collaborative style and intelligent and innovative approaches capture the essence of valuable and transparent science. I have full confidence that you and your team will accomplish the aims of this project with great success.

I agree to serve as an invited participant in the Mechanisms Network of Expertise and commit to: 1) attending three annual Deep Dives with fellow Mechanisms Network of Expertise members; 2) potentially serve as a speaker at SIRC in 2019 and 2021; and 3) participate in quarterly calls with full network each year of the grant. I will also commit to reach out to key contacts at the national level within VA's QUERI program, which specializes in disseminating and implementing innovations nationally and, to points of contact within The Henry Ford Health System in Detroit, MI.

I close this enthusiastic letter of support by restating my unqualified confidence that you and your team will accomplish the aims in this ambitious, milestone project with great skill. The products from this project will most certainly help lead the way for advancing implementation science and be valuable for practitioners who are tasked with implementing evidence-based programs in clinical settings. Thank you for the opportunity to collaborate with you on this important project.

Sincerely,

A handwritten signature in black ink, appearing to read "Laura J. Damschroder". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Laura J. Damschroder, MS, MPH  
Research Investigator  
Center for Clinical Management Research  
Ann Arbor VA HSR&D Center of Excellence (152)  
P.O. Box 130170  
Ann Arbor, MI 48113-0170



School of Public Health

Center for Health Promotion and Prevention Research

January 15, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I am writing to express my enthusiastic support for your proposal entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration.” I applaud your efforts to advance implementation science in this important area. Understanding mechanisms of implementation interventions is critical in moving the field forward and one that requires thoughtful collaboration, discussion, ideas for new research. The proposed conference and activities surrounding it are highly innovative and significant. I am pleased to play a role on this important project.

As you know, I have extensive experience in dissemination and implementation (D&I) research, and am a co-developer of Intervention Mapping and author of the 4th edition of *Planning Health Promotion Programs: An Intervention Mapping Approach* in which we describe a systematic process for developing implementation strategies and interventions. This work draws heavily on the identification of mechanisms of change for influencing determinants of adoption, implementation, and maintenance. I was a member of the NIH Dissemination and Implementation Research in Health Study Section for four years and a member of the PCORI study section of implementation research. As such, I have reviewed many proposals on implementation science topics. This experience has highlighted the gap in understanding of the topics that will be addressed with your proposed activities. My recent contributions to implementation science include studies to better understand factors influencing implementation and sustainability of cancer control practice change in Federally Qualified Health Centers and other community and health care organizations that serve racial/ethnic minorities, low income, and rural populations. I am currently the PI of an NIH Dissemination and Implementation Research in Health R01 to develop and evaluate an online decision support system for health program planners to facilitate adoption, adaptation, and implementation of evidence-based programs. This on-line tool helps planners identify theoretical change methods (mechanisms) linked to important determinants to influence change. Despite advances in the field, there is a long way to go to help researchers and practitioners plan implementation strategies with a clear understanding of the mechanisms of change that are likely to be most effective. Because I am convinced that issues of mechanisms of change are an important topic, I am pleased to be part of the proposed effort and eager to share my expertise toward meeting the critical need addressed by this proposal.

Based on my previous work with you on SIRC, I am confident that you and your team will excel in completing the proposed activities. I am confirming my commitment to serve as an invited participant in the *Mechanisms Network of Expertise* and to participate in quarterly full network calls during the 3 grant years; potentially serving as plenary speaker at SIRC conference; endeavoring to attend SIRC conferences in 2019 and 2021, including pre-conference activities (i.e. 3 days), and invited 3-day Deep Dive meetings.

I appreciate the opportunity to work with you and your team in this project of great importance to effective and efficient implementation of evidence-based practices that improve the quality of healthcare for Americans. Please count on my full and active participation.

Sincerely,

Maria E. Fernandez, PhD  
Lorne Baine Professor of Health and Medicine  
Professor, Health Promotion and Behavioral Sciences  
Director, Center for Health Promotion and Prevention Research  
University of Texas Health Science Center at Houston, School of Public Health



ACCORDS

ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES  
RESEARCH AND DELIVERY SCIENCE

UNIVERSITY OF COLORADO | CHILDREN'S HOSPITAL COLORADO

Dr. Cara C. Lewis 1730  
Minor Ave #1200  
Seattle WA 98101

January 20, 2018

Dear Dr. Lewis,

I am writing to indicate my enthusiastic support of your R13 proposal entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration”. Development of greater understanding of how and why implementation and dissemination strategies work (and when and why they do not) is one of the most important and understudied issues in implementation science. I am particularly excited about the very collaborative, iterative design and process you have outlined for this R13, which I am confident will advance implementation science and produce public health impact.

I hope that my experience and expertise as a senior implementation scientist will contribute to the success of this R13 activity. My colleagues and I have been involved in measurement and evaluation issues in the field of implementation science, and some of our contributions such as the RE-AIM (Reach, Effectiveness, Adoption, Implementation and Maintenance) framework have been widely adopted. I think my experience working across settings including health care systems, medical schools, government (the NCI), research institutes and academia should provide helpful perspective for considering opportunities and future directions to emerge from your R13.

I will be glad to contribute my experience and expertise toward making this R13 as successful as your prior R13, which was one of the most productive such awards I have personally witnessed. I have enjoyed and benefitted from collaboration with you and your colleagues in writing up key results and proceedings of the invited 2013 NIH dissemination and implementation research conference. I also think that you have established a highly talented and committed core team, which will further advance the accomplishments of SIRC.

I agree to serve as an invited participant in the *Mechanisms Network of Expertise*. I understand that this will involve participation in quarterly full network calls each year. I also agree, if asked, to serve as plenary speaker at the 2019 and 2021 SIRC conferences. I am particularly excited about the potential to advance the field during the proposed, invited annual Deep Dives.

In summary, I am excited to participate in this unique R13 opportunity. Your group has been inordinately successful in your current funding, which has fundamentally advanced the field, especially in terms of measurement and study of mechanisms. I am especially enthusiastic about SIRC work on the establishment and validation of pragmatic measures. In summary, I am optimistic that the next R13 project, if funded, will make even more important contributions.

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ACCORDS – ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES RESEARCH AND DELIVERY SCIENCE

University of Colorado | Children's Hospital Colorado | Mail Stop F443 | 13199 E. Montview Blvd, Suite 300 | Aurora, CO 80045  
Phone 303.724.8246 | Fax 303 724 1839 | Email: Russell.Glasgow@ucdenver.edu



ACCORDS

ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES  
RESEARCH AND DELIVERY SCIENCE

UNIVERSITY OF COLORADO | CHILDREN'S HOSPITAL COLORADO

Sincerely,

A handwritten signature in blue ink that reads "Russell E. Glasgow".

Russell E. Glasgow, Ph.D.

Research Professor, Family Medicine

Director, Dissemination and Implementation Science Program of ACCORDS (Adult and Child Consortium for Health Outcomes Research and Delivery Science)

University of Colorado School of Medicine



January 20, 2018

Cara C. Lewis, PhD  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I am writing to express my strong support of your proposal entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration,” and to state my agreement participate on the *Mechanisms Network of Expertise*.

This work is extremely important. The field of dissemination and implementation research faces its own knowing-doing gap, in which we all too frequently do not take the steps that we know as researchers lead to robust, actionable findings: Namely to carefully articulate and measure the causal pathway by which we believe an implementation or dissemination strategy will effect a change. When we fail to do that, it is extremely difficult to replicate findings, learn from negative studies, or successfully adapt an implementation strategy developed in one clinical setting to another.

You have asked me to serve as a participant on the *Mechanisms Network of Expertise*. In this role, I agree to participate in quarterly network calls, attend the Society for Implementation Research Collaboration (SIRC) conferences in 2019 and 2021, and annual three-day Deep Dives. Finally, I agree to contribute to dissemination of the findings from this grant, helping write manuscripts, and potentially serving as a plenary speaker at a SIRC conference.

I believe I will bring useful expertise to this role. I am a core investigator at the Seattle-Denver Center of Innovation for Veteran-Centered and Value-Driven Care, and Research Associate Professor of Health Services at the University of Washington School of Public Health. I have over a decade of experience conducting implementation research, including validating implementation models, and systematically assessing the psychometric validity of implementation measures. Finally, I helped lead a VA-funded effort to systematically review the empirical literature of a specific implementation model, the Promoting Action on Research Implementation in Health Services (PARIHS) framework, in order to understand how constructs in the framework were being operationalized, measured, and used to develop implementation strategies; based on those findings, I subsequently helped author a guide for researchers on how to better apply the model, notably in terms of operationalizing and measuring specific constructs.



I believe that this is exceptionally important work, and you have drafted a superb grant and plan of action. I have an extremely high degree of confidence in you and your team to successfully lead this effort. Thank you for inviting me to participate in this grant. I look forward to collaborating with you on this work.

Yours sincerely,



Christian D. Helfrich, MPH PhD

Core investigator, Seattle-Denver Center of Innovation for Veteran-Centered and Value-Driven Care

Research Associate Professor, Department of Health Services, University of Washington School of Public Health



**Amy M. Kilbourne, PhD, MPH**  
Professor, Department of Psychiatry  
Director, VA Quality Enhancement Research Initiative  
North Campus Research Complex  
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January 17, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I am delighted to support your R13 proposal entitled "Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration". Your efforts to advance implementation science through the development of strategies focused on the behavioral health needs of consumers, coupled with the integration of community and global partners are sorely needed in this emerging field to more rapidly translate research findings into real-world settings. Notably, through your leadership, I have seen how the Society for Implementation Research Collaboration (SIRC) has evolved to become one of the most diverse and dynamic efforts to bring together implementation scientists and foster collaborations and scientific advancement in this emerging field. The role of SIRC is paramount given the dearth of training and collaboration opportunities in implementation science, and your efforts to build this strong coalition is a welcome and important addition.

For the past 15 years, my research has focused on implementation of integrated care to reduce health disparities. In 2006 I published a comprehensive research roadmap focused on health equity and healthcare disparities that highlights new directions in implementation science for priority populations with special healthcare needs. I have also conducted studies applying novel implementation strategies that address health disparities particularly for inner-city and rural adults with serious mental illness (e.g., R01 MH 79994, R34 74509), inner-city and rural youth (R01 MH114203), women veterans (VA CSP #579) and those at risk of homelessness (VA HSR&D 11-232). The implementation strategies used in these studies included CDC's Replicating Effective Programs-REP and Enhanced REP (Facilitation) models which combine principles of community engagement with organizational psychology to promote adoption/adaption of evidence-based collaborative care models (CCMs) to improve physical and mental health outcomes. Most recently I received NIMH funded (R01 MH114203) to study adaptive implementation strategies that promote uptake of cognitive-behavioral therapy for students especially from inner-city and rural settings in Michigan. Through these initiatives I am happy to connect you to a number of stakeholders representing priority populations including community mental health (e.g., Michigan National Alliance for the Mentally Ill, U-M Comprehensive Depression Center), and rural and youth populations (e.g., Michigan Department of Health and Human Services, and Michigan Mental Health Integration Partnership).

As Director of VA's Quality Enhancement Research Initiative (QUERI), I also look forward to participating in this R13's proposed Mechanisms Network of Expertise. Your proposed work through this application is in direct alignment with the mission of QUERI which is to support frontline providers in the more rapid implementation of research findings into real-world practice using implementation strategies. Through my involvement, I also hope to apply my experience in development and testing of implementation strategies (e.g., Adaptive Implementation of Effective Programs Trial-ADEPT; R01 MH 099898, and Adaptive Implementation of Mental Health Interventions in Schools- AIM-HI; R01 MH114203). As the first sequential multiple assignment randomized trials (SMART) testing different implementation strategies, ADEPT and AIM-HI serve as potential models for conducting pragmatic implementation trials in priority populations.

Through this R13, I look forward to working with your outstanding team of behavioral health implementation scientists. I am committed to serve as an invited participant in the Mechanisms Network of Expertise and agree to participate in quarterly calls with other network members; endeavor to attend the SIRC conferences in 2019 and 2021 (potentially serving as plenary speaker), and participate in annual invited 3-day Deep Dives. I am confident that together these activities will lead to important contributions and collaborations for the implementation science field.

I wish you best of luck with your proposal and look forward to working with you on this exciting initiative.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Amy M. Kilbourne'.

Amy M. Kilbourne, PhD., M.P.H.  
Professor of Psychiatry, University of Michigan  
Director, VA Quality Enhancement Research Initiative (QUERI)



DEPARTMENT OF VETERANS AFFAIRS  
Central Arkansas Veterans Healthcare System  
2200 Fort Roots Drive  
North Little Rock, Arkansas 72114

January 20, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle, WA 98101

Dear Dr. Lewis,

This letter outlines my very enthusiastic support for the three-year series on *Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration*. This effort to advance the innovation and rigor of implementation research through bi-directional knowledge exchange will help inform and enhance care provided across disciplines, and I look forward to serving on the Invited Mechanisms Network of Expertise.

A psychiatrist by training, I am currently a Staff Psychiatrist with Central Arkansas Veterans Healthcare System and a Professor at the University of Arkansas for Medical Sciences (UAMS). The primary focus of my research has been in developing strategies that support the implementation of evidence-based practices in the primary care setting. I have had the extraordinary opportunity to see clinical programs that I evaluated early in my career in efficacy and effectiveness trials (e.g., PRISMe, TIDES) become the national standard of care within the Department of Veterans Affairs (VA). In fact, these care delivery models are now becoming a standard of care in non-VA settings as well. Coincidental with the emerging evidence that supported primary care-based mental health programs, Implementation Science was recognized as a critical area of health services research. Thus, I was able to further facilitate the implementation of primary care-based mental health programs by studying their implementation and ultimately developing and evaluating an evidence-based implementation facilitation (IF) strategy. We have been able to transfer this implementation facilitation strategy to the VA Office of Mental Health Operations (OMHO), who is using IF to provide operational support for the implementation of primary care mental health programs, as well as evidence-based psychotherapies.

Having led VA Quality Enhancement Research Initiative (QUERI) programs since 2009, I am committed to promoting more rapid implementation of effective, evidence-based treatments into clinical practice. I currently serve as the Program Director for the VA Quality Enhancement Research Initiative (QUERI) for Team-Based Behavioral Health. My implementation expertise is in the development and study of implementation strategies that support later adopters, partnering with policymakers and clinical managers, and implementation facilitation. In addition, I lead an implementation facilitation learning collaborative that comprises over 70 members within and outside of VA. As the Director of Mental Health QUERI, I led the development of a portfolio of over 100 projects across 56 investigators that addressed the implementation needs of VA mental health. This was accomplished by working closely with investigators with varying

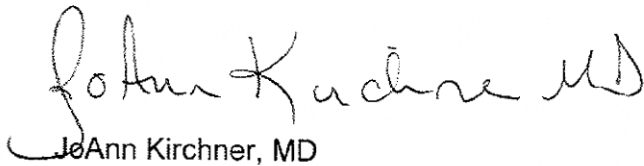
degrees of implementation experience from across the country to educate and guide them in the emerging field of implementation science. I commit to bringing this expertise to the *Mechanisms Network of Expertise*.

I look forward to working with you in your efforts over the next three years to establish the current state of the literature on the study of mechanisms, particularly in the context of implementation science, develop and publish a research agenda for the study of mechanisms in implementation science, and disseminate progress by updating the field on advances aligned with the research agenda.

I agree to participate in quarterly network calls during each year of the grant, to contribute to manuscript development, to potentially serve as plenary speaker at the SIRC conferences in 2019 and 2021, and to attend annual invited three-day Deep Dives.

In sum, I fully support your proposal, and I am committed to working with you and SIRC to better serve the behavioral health needs of the population by identifying rigorous, relevant, and effective strategies that successfully translate research findings to clinical knowledge and ultimately improve the quality and outcomes of care.

Sincerely,

A handwritten signature in black ink that reads "JoAnn Kirchner MD". The signature is written in a cursive, flowing style.

JoAnn Kirchner, MD

Director, VA Behavioral Health Quality Enhancement Research Initiative (QUERI)

Professor, Department of Psychiatry and Behavioral Sciences, College of Medicine University of Arkansas for Medical Sciences (UAMS)



Kaiser Permanente Washington  
Health Research Institute

1730 Minor Avenue  
Suite 1600  
Seattle, WA 98101  
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January 13, 2018

Dr. Cara C. Lewis  
Kaiser Permanente Washington Health Research Institute  
1730 Minor Ave #1200  
Seattle WA 98101  
Dear Dr. Lewis,

It is with great pleasure that I express my full support of your proposal entitled "Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration". It is imperative that those of us in the field of implementation science devote their time and effort to the aims you have outlined in this conference proposal if we are to achieve our ultimate objectives of improved health and outcomes. The approach that you propose is innovative and unique, the collaborators are leading experts in the field both within the U.S. and internationally, and the work proposed over this 3-year grant will without a doubt lead to major advances. It is also extremely relevant to the work of the Agency for Healthcare Research and Quality (AHRQ), especially their focus on dissemination and implementation of PCOR findings into diverse health care settings that serve AHRQ priority populations.

As Director of the MacColl Center for Health Care Innovation within the Kaiser Permanente Washington Health Research Institute (KPWHRI) here in Seattle, I lead a multi-faceted implementation research program focused on primary care and community health, including effective integration of and delivery of mental/behavioral health care. As you know, many mental/behavioral health conditions are chronic conditions that require on-going chronic care, one of AHRQ's priority populations. Much of our work at MacColl over the years has focused on the safety net setting that serves AHRQ priority populations, starting with a HRSA supported national learning collaboratives to improve chronic illness care in federally qualified community health centers (FQHCs). We then led the Safety Net Medical Home Initiative, funded by the Commonwealth Fund across 65 FQHCs in 5 states that serve AHRQ priority populations.

I am currently PI on a comparative effectiveness trial testing the effectiveness of different implementation mechanisms to improve cardiovascular risk factors across more than 200 smaller primary care practices in the Pacific Northwest. Over 45% of these settings serve a rural population, one of AHRQ's priority populations. In addition, I am PI on a study of methods to de-implement chronic opioid therapy across 20 primary care rural health clinics, many of which serve low-income patients. This support includes better integration of behavioral/mental health resources for those with opioid use disorder. Other relevant work includes current funding from the Robert Wood Johnson Foundation to develop mechanisms that support de-implementation of low value care services. One of the key elements of this work is discussions about financial harm to AHRQ priority populations caused by unnecessary use of low-value care tests and treatments.



We first met at the NIH Dissemination & Implementation conference in December of 2015. I am so excited that in the interim you have joined us here at the MacColl Center/KPWHRI here in Seattle. Our face-to-face weekly to biweekly discussions about common research interests in implementation are a delight, and a highlight of my week each time we meet. I am highly committed to this conference grant and will devote any time or resources you need to insure its success. I will bring our depth of experience working with AHRQ priority populations to every discussion in these meetings. I will clear my calendar for all quarterly network calls and attend SIRC 2019 and 2021, serving as a speaker if asked. I am also enthusiastic about the proposed annual 3-day deep dive meetings

Allow me to emphasize again how important this work is to not only the field of implementation science, but the delivery of effective evidence-based health care in every setting, both here in the U.S. and internationally. Without a more rigorous and scientific basis around mechanisms of implementation, we will always struggle with ineffective and sub-optimal health care delivery. You have assembled the most qualified team possible to achieve your proposed aims and I have every confidence that you will succeed. Thank you for this opportunity to contribute to this important effort, I look forward to this productive and exciting collaboration!

Sincerely,

A handwritten signature in black ink that reads "Michael L. Parchman". The signature is fluid and cursive, with a long horizontal flourish at the end.

Michael L. Parchman, MD, MPH  
Director, MacColl Center for Health Care Innovation and Senior Investigator, KPWHRI

 **Washington University in St. Louis**  
GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK

January 15, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I am writing to express my enthusiastic support of your proposal entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration.” I would be pleased to serve on the *Mechanisms Network of Expertise* for the 3-year conference series. Your proposal is both timely and important with great potential for public health impact. Implementation science has experienced incredible advances in recent years, but little has been done to synthesize and push forward our understanding of mechanisms. I think that leveraging this conference series to bring together experts in the field reflects an innovative and efficient method for shaping the science and informing the practice. I have been the fortunate recipient of an AHRQ conference grant that focused on advancing a research agenda regarding the study of sustainment in implementation and found it to be a rich avenue for rapid scholarly development. Expanding your proposal to engage the implementation science community across three years, building off of the Society for Implementation Research Collaboration (SIRC), will undoubtedly yield exciting products and critical new insights.

As you know, I am a distinguished professor and Director of the Center for Mental Health Services Research in the George Warrant Brown School of Social Work at Washington University in St. Louis. I have been conducting implementation science for nearly two decades and now lead one of the only training programs – the Implementation Research Institute -- funded to build capacity and expand our network of scientists engaged in implementation research. I lead several other national initiatives, including the Center for Dissemination and Implementation for the Institute for Public Health and the Dissemination and Implementation Research Core of Washington University’s Institute for Clinical and Translational Science. I therefore have the expertise to contribute to the *Mechanisms Network of Expertise* and the perspective to know how important this work is to truly advance the field.

I have been a SIRC member since its inception in 2011 and I am truly impressed with their progress to date. What SIRC has accomplished on its previous R13 is a testament to the planning committee and investigative team’s commitment to the field and capacity to make a profound impact. For instance, your work developing an implementation science measures repository has benefited not only my work, but also the consulting we do throughout our core, and the field at large. I anticipate the products that emerge from this proposal will be of similar high level impact.

I am excited to join this venture. I very much look forward to participating in the annual Deep Dive meetings and quarterly calls with the other members of the Mechanisms Network of Expertise. I would be delighted to present at the 2019 and 2021 SIRC conferences should the opportunity present itself. In sum, I am very supportive of your proposal and I look forward to collaborating with you on this well-designed conference series.

Sincerely,

A handwritten signature in black ink, appearing to read "Enola K. Proctor". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Enola K. Proctor, Ph.D.  
Shanti K. Khinduka Distinguished Professor  
Director, Center for Mental Health Services Research





January 16, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

It is with great pleasure that I write this letter in support of your proposal entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration.” Your proposal, focused on leveraging the collective knowledge of implementation scientists and the collaborative efforts initiated through SIRC, to continue the advancement of the field is highly significant. I believe that it is imperative for leaders with a common interest in implementation science to have a forum to share knowledge and identify gaps in methodology and knowledge in order to efficiently and effectively move the field forward. Your proposed conference series and gathering of a Mechanisms Network of Expertise has a strong potential to fill this void. The prospect of this opportunity is exciting as it is conceivable that this program will quickly advance knowledge in a pragmatic and engaging way thereby increasing the chance for rapidly creating a public health impact.

Once funded, I will be honored to serve on your *Mechanisms Network of Expertise*. As you know, I have a range of experiences in the young field of implementation science. As co-investigator on one of the first large scale implementation trials, (R01MH076158-01A1; Chamberlain), I took the lead in developing the Stages of Implementation Completion (SIC) as a measure of implementation process and outcomes. We demonstrated that the SIC can accurately predict implementation outcomes. These findings were replicated when the SIC was extended to other evidence-based practices (EBPs) in other service sectors including juvenile justice, child welfare, substance use treatment, and schools (R01MH097748-01A1; PI). The SIC now has been adapted for over 20 practices, and is being utilized across a number of federally funded and state-initiated projects. Through this work, I have learned about the “universal” or common implementation activities that are utilized across EBPs that have demonstrated success in large-scale. Thus, hypotheses regarding the mechanisms of action within the implementation process are being developed.

Additional experience supports my ability to contribute as an expert to this project. As a co-investigator on a translational research center, I have a primary role as evaluator of a large - scale rollout of linked EBPs in a statewide child welfare system (R01 DA032634-01S1; P50 DA035763-01; Chamberlain and Fisher). I also have developed a supervisor-targeted implementation strategy to infuse the use of evidence-based techniques throughout a workforce (R01DA040416; Saldana). I received intensive training in implementation science and methods (2011 NIH Training Institute for Dissemination and Implementation Research in Health; Implementation Research Institute R25MH080916) and was an early career scientist for a Center focused on implementation methods (P30MH074678; Landsverk). I also was asked to participate in the IOM Innovations in Design and Utilization of Measurement Systems to Promote Children’s Cognitive, Affective, and Behavioral Health.



I am particularly thrilled for the opportunity to collaborate with you and your colleagues on this project. I have long admired your dedication to the implementation science field and emphasis on measurement and methodology. I have enjoyed our informal discussions on the topics and welcome the prospect for further rich discussions, with the target of producing tangible materials that can be disseminated to the larger field. As a member of SIRC and an attendee of all years of the conference thus far, I can attest to your ability to successfully convene a fruitful conference, and to gather a relevant and exciting group of individuals to contribute to your efforts. I enthusiastically commit to serve as an invited participant in the *Mechanisms Network of Expertise* and contribute to the project including participation in quarterly full network calls, potentially serving as plenary speaker at the 2019 and 2021 SIRC conferences, and attending three annual Deep Dives with fellow Mechanisms Network of Expertise members.

I am confident that this will be a highly successful and contributory project. Please do not hesitate to call upon me for any additional information. I look forward to hearing the outcome of your funding and working with you on this critical program of research.

Sincerely,

A handwritten signature in black ink that reads 'Lisa Saldana'. The signature is fluid and cursive, with the first name 'Lisa' and last name 'Saldana' clearly legible.

Lisa Saldana, PhD  
Senior Scientist  
Oregon Social Learning Center  
office: 541-485-6207  
email: [lisas@oslc.org](mailto:lisas@oslc.org)



January 15, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I am very enthusiastic about your proposal entitled ““Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration”. As you know, we have a number of reasonably well developed frameworks in implementation research, and a small but growing number of theories specific to implementation, but the mechanism of action of implementation strategies and interventions is not very clear. Initiating a broad discussion of this area will help advance the field significantly.

I am a professor and associate chair in the Department of Learning Health Sciences of the University of Michigan Medical School, and a research scientist at VA Ann Arbor Healthcare System. I am also co-editor in chief of *Implementation Science*, an international journal focused on the field of implementation research in healthcare. I have been conducting implementation research studies for over 18 years, and have had particular experience in the Veterans Health Administration, which has funded the VA Quality Enhancement Research Initiative (QUERI) program for a little over 16 years. While the QUERI program has had a number of important and innovative projects, and is embedded within a large, national health care system, elucidating mechanisms of action of the interventions and strategies we use would speed up the development of the science of implementation. I look forward to participating in the Mechanisms Network of Expertise (MNoE) if the grant is funded. I agree to participate in the activities of the grant, including regular meetings with the MNoE, attending annual Deep Dives in all three years of the grant, and attending the SIRC conference in 2019 and 2021, serving as a speaker if invited to do so, and contributing to manuscripts and dissemination materials.

I am confident your team will fulfill the expectations of the grant, and produce a number of important outputs. In addition to my own participation, I will work to ensure that the work produced from this grant will have an outlet through the Implementation Research Group, funded by the VA QUERI program, with which I have a strong connection. This network of implementation researchers has over 150 members across the United States, and meets monthly for cyberseminars and teleconferences. I am happy to answer any questions.

Sincerely,

Anne E. Sales, PhD RN

<p>Professor Associate Chair for Educational Programs and Health System Innovation Department of Learning Health Sciences Director, Health Infrastructures and Learning Systems Program University of Michigan Medical School</p>	<p>Research Scientist Center for Clinical Management Research VA Ann Arbor Healthcare System Ann Arbor, Michigan</p>
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January 19, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis:

I am pleased to write in support of your proposal entitled "Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration," and welcome your invitation to join the *Mechanisms Network of Expertise*. As an emerging field, implementation science would benefit from innovative approaches to collecting, synthesizing, and disseminating collective wisdom from leaders in the field. The conference series focus on mechanisms is timely and critical, because the evidence base on the nature and effects of implementation support strategies is beginning to grow; and, to avoid a multi-year gap between the science of implementation support and its practice on the ground, forums are needed to keep science and practice developments apace and mutually informative. The conference series has the potential to do just that, and to advance implementation science and improve healthcare policy and practice.

My career has focused on the development and testing of clinically and cost effective psychosocial interventions for serious and co-occurring conditions that trigger adolescent and family involvement with Juvenile Justice and Child Welfare systems, involvement that disproportionately affects racial and ethnic minorities and people in poverty; and, on the development and testing of strategies to support the effective implementation of such interventions by the existing workforce in diverse community contexts. Included in this research has been a focus on methods to efficiently and accurately measure fidelity, quality, and outcomes in community settings. I have served as Principle Investigator or Co-Investigator on a number of NIMH and NIDA funded multi-site, community-based treatment effectiveness, transportability, and implementation studies, and in Advanced and Developing Center grants funded by NIMH that focused on the implementation in child welfare systems and schools of effective interventions, particularly in centers of urban poverty. As a founding member of the MacArthur Research Network on Youth Mental Health, I collaborated in the development and testing of modular approaches to treating younger children with anxiety, depression, and conduct disorders (and their co-occurrence) and in studies of organizational and infrastructure support for the implementation of effective community based mental health services for such children. I have also participated in SIRC activities over the past five years, including conference attendance and serving as an invited expert to an Implementation Development Workshop. I am eager to engage the *Network of Expertise* members to share research findings, review and discuss literature, offer new opportunities for SIRC members to propel their own work, and learn from other experts to advance a Mechanisms of Implementation Science Research Agenda.

Finally, as you know, the Medical University of South Carolina had, until July of 2017, been my academic home for almost 25 years, and I was the founding Associate Director of the Family Services Research Center there, which recently expanded to become the Division of Global and Community Health. I am currently an Affiliated Scientist at the Oregon Social Learning

Center. Regardless of my institutional affiliation, my research has always involved active collaboration with numerous state and local level directors of juvenile justice, child welfare, and mental health systems; and, with the provider organizations and practitioners who serve youth and families referred by these systems. I am a member of several organizations that include current and past directors of public systems, private behavioral health care organizations, insurance plans, and consumer advocacy organizations (e.g., the College of Behavioral Health Leadership, formerly American College of Mental Health Administration; Annapolis Coalition on the Behavioral Health Workforce; Mental Health America); and, of organizations that focus on the mutually informative nature of implementation research and practice, such as the National Implementation Research Network (NIRN). As well, I retain active, grant-funded collaborations, and collegial consultation arrangements with numerous treatment and implementation research scientists and training initiatives, including the Implementation Research Institute (IRI), at Washington University, jointly funded by NIMH and the Veterans Affairs Administration. I would expect to be able to identify, from among this extensive network of stakeholders, the individuals and organizations whose perspectives could inform and advance the work we undertake with the conference series, and the products that emanate from that series.

I look forward to participating in the full quarterly Network calls in each of the grant years. I also plan to attend SIRC conferences in 2019 and 2021, as well as the annual Deep Dive activities. Should you wish to include me in the program, I would also be delighted to speak on behalf of the Network at the SIRC conference. I applaud your initiative and look forward to working with you on this exciting conference series.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sonja K. Schoenwald".

Sonja K. Schoenwald



# Langone Medical Center

**Donna Shelley, MD, MPH**

Associate Professor of Medicine and Population Health  
Vice Chair for Research  
Department of Population Health

227 East 30th Street, New York, NY 10016

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Telephone: (646)501-2526

January 15, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I am delighted to offer my enthusiastic support of your proposal entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration”. You and your colleagues have already made significant contributions to advancing the field of IS and this conference is a natural extension of that work. Implementation Science is still in the early stages of development with many gaps in key areas including our understanding of implementation mechanisms. The conference design is innovative and promises to maximize impact through engagement of experts and a process that will result in a research agenda and recommendations for reporting mechanisms that will increase the rigor and public health impact of this field of science.

As you know, I am actively engaged in a range of activities related to advancing this field both in the US and globally. My research portfolio in this area includes three active NCI funded R01s that are studying different implementation strategies for enhancing implementation of tobacco use treatment guidelines in a range of clinical settings, including in dental settings, lung cancer screening programs and in the public health care delivery system in Vietnam.

I have worked closely with your colleague and Co Investigator Dr. Weiner on two of these grants. Our focus, which is well aligned with this proposal, has been on validating new measures of climate and readiness to change in the US and the cross cultural relevance of these measures in Vietnam. Most recently we have collaborated on AHRQs \$112 million national EvidenceNOW initiative which similarly has provided opportunities to continue to develop meaningful measures of factors that influence implementation outcomes.

If funded I am committed to participating fully in the *Mechanisms Network of Expertise project*. Specifically, I agree to participate in full network calls during all grant years; attend the 2019 Society for Implementation Collaboration conferences in 2019 and 2021, and serve as a speaker if invited and; attend annual 3-day Deep Dive meetings. Given my extensive experience in IS and history of collaboration with your group, I believe I am well positioned to make a substantive contribution to this project.

I look forward to working with you and your colleagues on this important proposal. The aims and planned activities promise to result in findings and guidelines that will enhance the quality, rigor and impact of future implementation research.

Sincerely,

A handwritten signature in black ink, appearing to read "Donna Shelley". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Donna Shelley, MD MPH



MIND INSTITUTE

*Medical Investigation of Neurodevelopmental Disorders*

UC DAVIS HEALTH SYSTEM

2825 50<sup>th</sup> Street

SACRAMENTO, CALIFORNIA 95817

<http://www.mindinstitute.org>

January 18, 2018

Dr. Cara C. Lewis

1730 Minor Ave #1200

Seattle WA 98101

Dear Dr. Lewis,

I appreciate your involving me in your proposal entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration”. I am very supportive of this project. I have personally benefited from SIRC, the conferences and the incredible resources provided to researchers. In addition, our community partners have attended the meeting and one subsequently joined the community stakeholders group. The current conference design is highly innovative and will clearly outline how implementation science can contribute significantly to the NIMH focus on mechanisms of action. Utilizing methods such as quarterly meetings, workgroups and the 3-day “deep dive” ensure that the research agenda will be well thought out and that the researchers involved will produce excellent workshops and publications. The SIRC group has a strong history of productivity and public health impact and this new proposal will once again help guide the field into the future.

I have spent over 20 years developing expertise and training in the area of services research and implementation science in community settings serving children with autism spectrum disorder and their families. My training includes the use of qualitative research methods and single subject design and I am currently leading a randomized trial of a psychosocial intervention for autism in the community in which over half of our population is Hispanic. I recently obtained an NIMH collaborative R01 designed to examine implementation leadership and provider motivation as mechanisms of action in successful use of evidence-based practices in schools and mental health services. The program of research in my laboratory involves using basic services research and implementation theory to collaboratively adapt and translate evidence-based practices for use in community settings. I am currently the principal investigator on several federal and foundation grants that involve multi-site, community collaboration. This research is conducted by teams that include researchers, community providers, funding agency representatives and families. We have recently begun to focus more specifically on addressing the needs of underserved populations. I have two grants with focus on increasing service access to families of color, families living in poverty and those in rural settings. I am currently an editor for the journal *Autism Research*. I am author on the upcoming American Academy of Neurology autism treatment guidelines commissioned by NIH. I was selected as a Fellow of the NIMH funded Implementation Research Institute in the 3<sup>rd</sup> cohort. As part of my training we did a great deal of work with the SIRC resources and I have utilized them in each of my subsequent grant proposals.

I am honored to participate as an invited participant in the *Mechanisms Network of Expertise* and will serve the project by attending the invited 3-day Deep Dives and conference calls each year of the grant, and speaking at the 2019 and 2021 SIRC conferences. I feel my experience exploring implementation of evidence-based practices in the complex autism service system, and specifically with priority populations, will provide unique expertise to the project and look forward to taking part in this exciting series of meetings and workgroups that is surely going to make an excellent contribution to the field.

Sincerely,

A handwritten signature in black ink, appearing to read "Aubyn Stahmer".

Aubyn Stahmer, PhD, Associate Professor, UC Davis MIND Institute





January 17, 2018

Cara C. Lewis, PhD  
Associate Investigator  
Kaiser Permanente Washington Health Research Institute  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis

I am very pleased to write this letter in strong support for your proposal to the Agency for Healthcare Research and Quality (AHRQ) entitled "Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration." Effective implementation of evidence-based practices, a process well known to be difficult to achieve, has major implications for the quality, safety, efficacy of healthcare. Therefore, it is crucial to identify and evaluate effective mechanisms and strategies for implementation. I enthusiastically support your concept of evaluating these mechanisms through collaborative discussion with key leaders in the field.

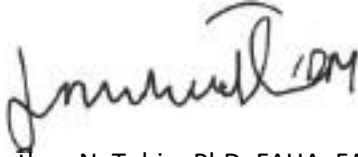
As President/CEO of Clinical Directors Network (CDN-www.CDNetwork.org), a primary care practice-based research network (PBRN) and an AHRQ-designated Center of Excellence (P30) for Practice-Based Research and Learning, and as Co-Director for the Community Engaged Research CORE at The Rockefeller University Center for Clinical and Translational Science, I have designed and conducted numerous large, multi-site, practice-based Comparative Effectiveness Research (CER)/ Patient-Centered Outcomes (PCOR) studies with Federally Qualified Health Centers (FQHCs) and other health care safety net organizations. I have served as PI or Co-PI on grants from NIMH, NHLBI, NCI, NIDDK, NIDCR, NIDA, NIAID, CDC, HRSA, AHRQ, and PCORI. Under my leadership at CON, over 1,000 low income, minority, and other medical underserved patients have been enrolled into clinical trials and observational studies. With AHRQ funding, I serve as PI at CON for the Center of Excellence (P30) for Practice-Based Research and learning (HS-021667), which includes nine established PBRNs with over 600 health centers serving 4.5 million patients nationally. This infrastructure provides capacity both to evaluate, disseminate, and implement evidence-based practices, as well as to conduct dissemination of implementation research in safety net settings.

I am very confident in the ability of Dr. Cara Lewis and her team to accomplish the goals of this proposal to evaluate mechanisms of implementation through collaboration with key members of the scientific community and to effectively disseminate the findings through research networks and conferences. I am pleased to serve as an active participant of the conference workgroup, Mechanisms Network of Expertise, where I will assist in providing guidance and feedback to the synthesis of literature to identify gaps in our current knowledge and current issues within the field and assist in developing a research agenda for the benefit of the larger scientific, clinical, and healthcare delivery communities.

As an invited participant on the Mechanisms Network of Expertise, I agree to participate in quarterly network calls during the three years of the grant, attend the Society for Implementation Research Collaboration (SIRC) conferences in 2019 and 2021, and the "Deep Dive" events to develop a research

agenda, as well as to serve as plenary speaker at the STRC conference. I recognize the value and importance of implementation research, given the larger implications for the healthcare community. I look forward to collaborating with you, your team, as well as other members of the Mechanisms Network of Expertise on this very important project which will surely be a success.

Very Truly Yours,

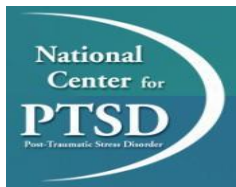
A handwritten signature in black ink, appearing to read "Jonathan N. Tobin". The signature is written in a cursive, flowing style.

Jonathan N. Tobin, PhD, FAHA, FACE  
President/CEO

**Clinical Directors Network, Inc. (CDN)**

Co-Director for Community Engaged Research CORE  
**Center for Clinical and Translational Science (CCTS), The Rockefeller University**

Professor, Department of Epidemiology and Population Health  
**Albert Einstein College of Medicine/Montefiore Medical Center**



Shannon Wiltsey Stirman, Ph.D.  
National Center for PTSD  
Dissemination and Training Division  
795 Willow Road (NC-PTSD)  
Menlo Park, CA 94025

January 17, 2018

Dear Dr. Lewis,

It is my pleasure to write in support of your proposal entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration”. SIRC has been at the forefront of efforts to advance implementation science methodologies and measurement, and has been an invaluable source of information and support for researchers who seek to conduct rigorous implementation research and programming efforts. In contrast with other conferences that focus on implementation, which tend to focus more on research results, SIRC has been extremely valuable in advancing and sharing methodologies and measurement strategies. Thus, I was delighted to hear about the opportunity to participate in the proposed project, which will significantly expand the reach and impact of this important program.

As a researcher at the National Center for PTSD and Stanford’s Department of Psychiatry and Behavioral Sciences, I have been studying implementation and sustainability of evidence-based treatments in mental health settings for over a decade. I have conducted reviews of dissemination and training models as well as a review of the literature on the sustainability of evidence-based practices in healthcare settings. One of our key findings was the dearth of high-quality, quantitative assessment of key constructs that have been hypothesized to contribute to sustainability, a challenge that is being addressed by your innovative work. Additionally, through my NIMH-funded research, I have developed a framework and coding system of modifications and adaptations to evidence-based treatments and am currently developing a streamlined method of assessing fidelity to an EBP. In my own NIMH-funded research, I am currently comparing two strategies to sustain the use of an evidence-based psychotherapy across three mental health systems. This research includes investigation of fidelity, adaptation, cost, and potential organization and therapist-level mediators of clinical outcomes. Having worked with you as a reviewer for your measures project and as a member of the SIRC Network of Expertise, I am confident that you and the team will be able to accomplish the important goals of the proposed project.

As an invited participant on the *Mechanisms Network of Expertise*, I will be happy to participate in quarterly full network calls during all 3 years (more often as needed), to contribute to manuscript development, and to serve as plenary speaker at SIRC conference if needed. I wouldn’t miss the SIRC conference or pre-conference in 2019 and 2021 for anything but the most pressing conflicts, as it is a conference that I prioritize, and I will be delighted to attend the annual 3-day Deep Dives



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with the network you are bringing together. My contribution will be based on my experience in research on training, fidelity, adaptation, and sustainability research and my understanding of the methodologies that facilitate this research. I am also delighted to spread the word with our partners in community mental health organizations that serve low-income, minority individuals, VA hospitals, and trauma treatment programs, as I am sure that many of them would be eager to attend SIRC or participate in partner interviews.

I am confident that the proposed project and its planned products will make an important contribution to the field. I am honored to have been invited to participate in the *Mechanisms Network of Expertise*, and I look forward to working with you.

Sincerely,



Shannon Wiltsey Stirman, Ph.D.  
Staff Research Psychologist  
Dissemination and Training Division  
National Center for PTSD and VA Palo Alto Healthcare System  
Assistant Professor  
Department of Psychiatry and Behavioral Sciences  
Stanford University



*Center on Alcoholism, Substance Abuse, and Addictions*  
2650 Yale SE MSC11-6280 Albuquerque, NM 87106  
Phone: (505) 925-2300 Fax: (505) 925-2301

January 16, 2018

Dr. Cara C. Lewis  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Dr. Lewis,

I am honored to enthusiastically and strongly support your proposed R13 entitled "Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration." The promotion and advancement of implementation science and providing a forum for collaboration among implementation researchers is an important endeavor for NIH. For example, the strategic plans of NIMH, NIAAA, NIDA, and other institutes all highlight the importance of improving the dissemination and implementation of evidence-based treatments in order to have a broader impact on public health.

Over the past 12 years I have been actively involved in mechanisms of behavior change research and have championed the importance of understanding relevant 'mechanisms' - as this is the only way we can understand why and for whom treatments work, their limitations, and how we can move the field forward to develop, disseminate, and implement more effective interventions and sustain positive treatment outcomes. I am thrilled that the Society for Implementation Research Collaboration is expanding to focus on mechanisms and I would be honored to serve as a participant on the *Mechanisms Network of Expertise*; particularly given my current experience as Principal Investigator of a U13-funded Mechanisms of Behavior Change meeting (U13 AA024103) and my prior experience as PI or Co-I on over 25 NIH funded grants, mostly focusing on the development of treatments for addictive behaviors and studying mechanisms of behavior change in addiction treatment.

The Society for Implementation Research Collaboration is a successful and rapidly grouping organization and I am confident in both Dr. Cara Lewis and her team in accomplishing the tasks of the proposed R13. As such, I agree to serve as an invited participant in the *Mechanisms Network of Expertise* and participate in this research through three annual Deep Dives, speaking at the Society for Implementation Research Collaboration conferences in 2019 and 2021, and participating in quarterly calls. I bring extensive expertise in mechanisms research and I would also look forward to helping to ensure that cutting-edge speakers would present at the sessions to introduce innovative approaches. My own research program has grown to integrate quantitative methodology, neuroscience, and clinical science with behavioral research questions and methods in studying mechanisms of change. I would be happy contribute ideas for speakers and topics gained from my expanding contacts in these areas.

I am committed to working with the PI on the R13 goals and committed to helping with creating an excellent series of meetings and products related to the goals of the R13. I offer my best wishes for a successful application and very much would look forward to supporting the important work of the Society for Implementation Research Collaboration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Katie', with a stylized flourish at the end.

Katie Witkiewitz, PhD  
Professor  
Department of Psychology  
Center on Alcoholism, Substance Abuse, and Addictions  
University of New Mexico  
Albuquerque, NM 87131  
Email: [katiew@unm.edu](mailto:katiew@unm.edu)

Cara C. Lewis, PhD  
Associate Investigator  
Kaiser Permanente Washington  
Health Research Institute  
1730 Minor Ave. Suite 1200  
Seattle, WA 98101

January 17, 2018

RE: Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration, AHRQ, PA-16-453

Dear Dr. Lewis,

As Associate Dean of Translational Science at the University of Washington School of Medicine and Director for the Institute of Translational Health Sciences, I am pleased to write this letter in support of your project, "Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration."

The Institute of Translational Health Sciences (ITHS) develops and maintains resources and educational programs that support the spectrum of translational research activities. The ITHS is a partnership between the University of Washington, Seattle Children's, and Fred Hutch, and is funded by an NIH Clinical and Translational Science Award (CTSA). The national CTSA consortium is dedicated to improving human health by fostering translation of knowledge from basic science to the clinic and community.

Efficient knowledge translation to practice settings, which is the centerpiece of your proposal, is critical to improving health outcomes, and dovetails with the work of our Community Engagement Program. Because the field of implementation science, particularly the study of implementation mechanisms, is in its infancy, I am in full support of your planned 3-year conference series to grow the knowledge base of implementation science mechanisms, articulate a research agenda, and disseminate it broadly. ITHS applauds the approach of your proposal, which embraces multidisciplinary collaboration by creating a Mechanisms Network of Expertise, and initiates innovative conference activities to advance this work. The likelihood that the results and products of this conference series will improve health care quality by accelerating implementation of patient centered outcomes research is very high.

ITHS is positioned to help disseminate the results and products of your work to researchers and stakeholders across several states, primarily because of your proposal's strong relevance to the work of ITHS members. Described below are examples of specific ITHS programs relevant to your research.

### **Community Engagement Program**

The ITHS has established collaborative pathways for academic-and community-based research within the five-state WWAMI region (Washington, Wyoming, Alaska, Montana and Idaho) with clinical

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Web: [www.iths.org](http://www.iths.org)

providers, community representatives and populations that are diverse by race, ethnicity, culture, rural and urban locations, geography, health status, and health service delivery. Our Connections Program links academic teams with community clinicians, community-based organizations, patients and patient advocacy groups. Researchers can partner with the WWAMI-region Practice and Research Network (WPRN), whose mission is to conduct collaborative research that informs and enhances primary care clinical practice, the Northwest Participant and Clinical Interactions (NW PCI) Network, a network of hospital- and community-based clinical research units across the WWAMI region, community-based organizations, and the UW CERTAIN Patient Advisory Network.

Our Community Engagement Program is active in the development of dissemination and implementation (D&I) science methods, and we have a national leadership role in the national CTSA Consortium's Dissemination and Implementation Workgroup. This group is increasing awareness of the critical importance of D&I science to the translational science process, promoting coordination of D&I efforts across CTSA hubs, identifying gaps in D&I scientific methods, and enhancing availability of D&I methods and approaches across CTSA settings.

### **Education and Training Programs**

**Training and Career Development:** Education and training of investigators is an important mission of the ITHS, and we currently have educational programs that could help disseminate your project's products. For example, the ITHS Self-Directed Learning Center is a free online learning repository for translational health sciences that is adaptable to the learning needs of individual investigators. The Learning Center covers domains such as research initiation, data analysis and management, professional regulations and skills, and innovation and commercialization. In working with the Workforce Development Team, we may find an opportunity to include some of the brief video learning series that will emerge from your project's workgroups in the areas of: (a) design & analysis, (b) measurement, (c) implementation strategies → mechanisms, and (d) mechanisms → outcomes. By viewing this video learning series, investigators interested in implementation science will be positioned to apply the knowledge, methods, and tools generated by your conferenceseries.

### **KL2 Program**

The ITHS offers an NIH-funded KL2 Multidisciplinary Clinical Research Career Development Program, which offers rigorous training in clinical and translational research. This program provides the time, funding, and mentorship necessary to foster the early career development of clinical and translational researchers ("NIH Clinical Research Scholars"). The program encourages all types of clinical research, including patient-oriented research, translational research, small- and large-scale clinical investigation and trials, epidemiologic and natural history studies, health services research, and health behavior research. We would also welcome one of your local Mechanisms Network of Expertise (MNoE) members to provide an educational session in the KL2 seminar series. Finally, we appreciate the opportunity for our KL2 scholars to consider MNoE members as possible consultants or mentors for their work.



The ITHS will work with you to strategically disseminate your conference series' findings to its dense network of investigators and stakeholders across the five participating states. In addition, Dr. Baldwin, co-lead of the national Dissemination and Implementation Workgroup within the CTSA Consortium, will disseminate your findings to this Workgroup to enhance its potential for nation-wide impact.

We wish you success with your application and look forward to a fruitful collaboration.

Sincerely,



Mary L. (Nora) Disis, MD, FACP  
Associate Dean, Translational Science, University of Washington School of Medicine  
Professor, Medicine  
Member, Fred Hutchinson Cancer Research Center  
Director, Institute of Translational Health Sciences



January 16, 2018

Dr. Cara C. Lewis  
Kaiser Permanente Washington Health Research Institute  
1730 Minor Ave #1200  
Seattle WA 98101

Dear Cara,

As Director of the University of Washington (UW) School Mental Health Assessment, Research, and Training (SMART) Center, I am happy to provide a letter of support for your conference grant (R13) proposal, entitled “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration,” to the Agency for Healthcare Research and Quality (AHRQ). Identification of the processes through which implementation strategies have their intended effects on service quality and efficiency is in its infancy and requires substantial development. The application is also highly consistent with many of AHRQ’s priorities, most notably improving the affordability, efficiency, and cost transparency of healthcare (Priority #4). Your innovative project reflects a critical next step in the advancement of the field of implementation science and it likely to have a significant impact on the way implementation researchers working across settings conceptualize their research questions and conduct their projects. I am happy to pledge the resources and collective expertise of the SMART Center (<https://education.uw.edu/smart>) to this work.

A substantial body of research indicates that schools are responsible for up to 70-80% of the mental and behavioral health services received by youth, making it the most significant service delivery sector nationwide. Furthermore, the accessibility provided by education sector services has been found to reduce longstanding service access gaps for ethnic and racial minor youth. Nevertheless, similar to many other service contexts, the services available in schools are unlikely to reflect research-based and consumer-centered best practices. To address these issues and optimize the impact of school-based healthcare, the SMART Center conducts implementation research and technical assistance activities to improve the quality and efficiency of school-based mental and behavioral health services nationally. Dually housed in the UW School of Medicine and College of Education, the SMART Center represents a unique and rigorous research environment with active federal funding from the National Institutes of Health, the Institute of Educational Sciences, the National Institute of Justice, and various local and national foundations. These projects focus on the identification, implementation, and sustained use of evidence-based practices in schools and have recently begun incorporating explicit consideration of implementation mechanisms in the education sector. Our work – and the work of many of our domestic and international colleagues – would benefit greatly from the type of explicit framework and methods for the identification and evaluation of implementation mechanisms that your proposal is designed to produce.

Although the vast majority of the SMART Center research portfolio is relevant to your application, there are a few specific projects I will highlight as exemplars of our alignment with your proposal and AHRQ priorities. These include the Institute of Education Sciences-funded **Minority Engagement and Disproportionality Reduction project (MENDR; R305H150035; PI: Pullmann)**, which reflects a collaborative effort with a large urban school district to develop, implement, and test an approach for reducing and preventing ethnic/racial disproportionality in student discipline. In addition, the **Beliefs and Attitudes for Successful Implementation in Schools (BASIS; R21 MH108714; PIs: Lyon & Cook)** project is developing, and evaluating the



mechanisms through which, a set of bundled implementation strategies can improve the uptake of high quality practices among mental health clinicians working in ethnically diverse, high-poverty school districts. Finally, we have received a series of grants to support the development and large-scale testing of the **Brief Intervention for School Clinicians (BRISC; R305A120128, R305A160111; PIs: Bruns & McCauley)**, a short-term, contextually appropriate, and client-centered program for addressing a wide range of student presenting concerns. We are presently testing BRISC in an efficacy trial across three states, evaluating proposed moderators and mediators of outcome as well as the program's feasibility, acceptability, and costs.

The SMART Center also enjoys a broad network of community-based policy and practice stakeholders who could easily be engaged in the activities laid out as part of this R13 application. These include (but are not limited to) Washington State's **Office of the Superintendent for Public Instruction (OSPI)**, which is Washington's Department of Education; **Public Health of Seattle – King County**, an entity responsible for supporting public healthcare services in schools and other contexts in the region; **North Sound Behavioral Health Organization** (Skagit County, WA); **Puget Sound Educational Services District**; as well as a wide number of urban, suburban, and rural school districts throughout the state and county (e.g., **Seattle Public Schools, Chicago Public Schools, Cleveland Metropolitan School District, Mt. Vernon School District, Marysville School District, Spokane Public Schools**).

In prior a collaboration, The SMART Center hosted you in order to gather your feedback on our developing BASIS intervention protocol (see above). Your input was invaluable and critical to helping us revamp portions of the intervention. We welcome the opportunity to collaborate further with you and are very happy to support your conference grant application. I am very pleased that the SMART Center is able to support this important and innovative project.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron Lyon", written over a horizontal line.

Aaron R. Lyon, PhD  
Director  
School Mental Health Assessment,  
Research, & Training (SMART) Center

Associate Professor  
Psychiatry and Behavioral Sciences  
University of Washington



January 25, 2018

Dear Dr. Lewis:

As President of the Society for Implementation Research Collaboration (SIRC), I am pleased to offer support for “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration,” your R13 application for an Agency for Healthcare Research and Quality *Conference Grant (PA-16-453)*.

SIRC is dedicated to facilitating communication and collaboration among implementation scientists, provider organizations, and community members across the country. Members of our group of highly skilled and dedicated scientists are a natural fit to join your Mechanisms Network of Expertise to take on the task of advancing an implementation mechanisms research agenda. We are excited to continue our collaboration with you to advance the science of implementation and to ensure that research findings are translated into tangible public health benefit locally, nationally, and internationally. Specifically, we will support your R13 by 1) continuing to partner with your faculty and staff to advance dissemination and implementation methods, 2) facilitating linkages between MNoE-affiliated investigators and leading implementation researchers nationally and internationally, and 3) disseminating the results of the research carried out by the MNoE related to implementation and the advancement of healthcare innovations.

We have enjoyed fruitful collaborative relationships with multiple members of the proposed MNoE who have been intimately involved in the ongoing development of our professional society and have worked with us on federally funded research. Two examples are illustrative of these collaborations, which involve MNoE investigators as co-investigators or consultants. First, we have an ongoing NIMH-funded R01 that focuses on advancing measurement in implementation science, which has already resulted in a number of scientific presentations at NIH-sponsored meetings. Second, we are collaborating with MNoE investigators on efforts to develop new knowledge about how implementation strategies can be tailored to address the needs of specific contexts, which includes a second NIMH-funded R01 that tests a tailored approach to implementing measurement-based care for depression. I fully anticipate that these collaborations will continue to result in important scholarly products (i.e., high impact presentations and publications), as well as generate new collaborations and projects over time.

SIRC is well positioned to connect MNoE investigators with other relevant implementation scholars and community stakeholders. Two formal mechanisms that foster connections between investigators are our mentorship program and our Implementation Development Workshops. The former connects students and investigators at various stages with more senior implementation research experts. The latter provides both in-person and virtual opportunities for investigators to receive feedback on emerging ideas that could be substantially shaped by expert feedback. Furthermore, SIRC is intended to be a robust social network of implementation researchers and community stakeholders; thus, we are well positioned to facilitate informal connections through the strength of our professional network.

Finally, our website provides a potential platform to disseminate research findings and other

implementation-related information to a broad audience. We are committed to allowing the MNoE to disseminate information through our site, providing the information is pertinent to our overarching mission. I recognize that the MNoE investigators are already strong in this area given the Implementation Science Exchange and the Consortium for Implementation Science's *Implementation Science News*; however, we are happy to extend your impressive reach further when appropriate.

In summary, we are grateful for your service as SIRC President and your ongoing support as Past President. We have thoroughly enjoyed our collaborations over the past years and are thrilled to continue our fruitful relationship. Please do not hesitate to let me know if there is anything that I can do that is in service of the MNoE, and we will look forward to our continued work together.

Sincerely,

A handwritten signature in black ink that reads "Sara J. Landes, PhD". The signature is written in a cursive, flowing style.

Sara J. Landes  
President  
Society for Implementation Research Collaboration



January 17, 2018

Cara C. Lewis, PhD  
Associate Investigator  
Kaiser Permanente Washington  
Health Research Institute  
1730 Minor Ave #1200  
Seattle, WA 98101

Dear Dr. Lewis:

As Chair of the Department of Health Services in the University of Washington School of Public Health, I am pleased to express my enthusiastic support for your project, “Advancing Mechanisms of Implementation to Accelerate Sustainable Evidence-Based Practice Integration.” I applaud your efforts to bring together a multidisciplinary network of experts to develop research priorities for the study of mechanisms in implementation science, to generate a policy- and practice-informed research agenda, and to disseminate the knowledge gained and associated products to researchers and stakeholders across the country. The proposed conference series promises to advance the agenda for research on implementation mechanisms.

The study of implementation and associated mechanisms aligns with the goals and interests of many faculty members in the Department of Health Services. It is our mission to work with partners in public health and health care to design solutions and conduct innovative research that is translated into practice and policy. Gaining a better understanding of the mechanisms that underlie successful implementation will enable our faculty to engage in more effective research and contribute to quality improvement in both health care and community settings. Several faculty have recently received related funding from AHRQ. These faculty include Anne Turner, MD, and Ian Painter, PhD, who focus on health information management needs for older adults, as well as Mark Oberle, MD, who focuses on health information technology. The proposed conference series and its resulting research agenda, knowledge, and products would position our faculty to pursue the soon-to-be-released AHRQ R01 and R18 dissemination and implementation program announcements that emphasize a desire to fund mechanisms-focused research.

Numerous faculty members will benefit from the proposed work and are poised to engage with the Mechanisms Network of Expertise and aid in the dissemination of findings to students and policy and practice partners. In addition to Christian Helfrich, PhD, and Bryan Weiner, PhD, both of whom have agreed to serve as members of the proposed Mechanisms Network of Expertise, I can see this proposal aligning with the work of the following multidisciplinary group of our faculty and their community-based partners:

- Peggy Hannon, PhD, a social psychologist who directs our CDC-funded Prevention Research Center, serves on the NIH Special Emphasis Panel on Dissemination and

Implementation Research for Health, and is leading several NIH- and CDC-funded projects on delivery of evidence-based interventions by health departments and community health centers to increase cancer screening;

- Paul Fishman, PhD, a health economist, and Suzanne Wood, PhD, a health administrator, who study evidence-based implementation of collaborative care with UW Medicine;
- Miruna Petrescu-Prahova, PhD, a sociologist, graduate of the NIH Training Institute on Dissemination and Implementation Research (TDIRH), and leader of a 5-year research project on community-clinical linkages for physical-therapy practices and YMCAs offering an evidence-based physical activity program for older adults;
- Emily Williams, PhD, a health services researcher, who is studying dissemination of effective web-based brief interventions to limit alcohol misuse within the VA;
- India Ornelas, PhD, a health communications researcher who is testing an intervention to reduce binge-drinking among Latino immigrants at Casa Latina;
- Basia Belza, PhD, a nurse and TDIRH graduate, whose work focuses on increasing physical activity among low-income older adults in senior centers; and
- Mark Snowden, MD, a psychiatrist who has served on the NIH Special Emphasis Panel on Dissemination and Implementation Research and leads research on scale-up of PEARLS, an evidence-based intervention for depression treatment among home-bound, low-income older adults in both inner-city and rural settings.

Finally, it is important to highlight that Dr. Weiner, who is slated to co-lead the Measurement Strategic Focus Area with you, is our recent “Strategic Hire in Implementation Science.” He leads the work on implementation science in our department, the Seattle community, and globally (given his joint appointment in the School of Global Health). Bryan has the experience and passion to successfully carry out the tasks of this R13. His work in implementation science over the past two decades has spanned quality-improvement practices, care management, clinical information systems, patient safety, and evidence-based clinical practices to control chronic diseases. He has participated in efforts to develop and test measures of various implementation outcomes and has contributed substantially to the growing body of literature on organizational readiness for implementation.

In sum, I am pleased to offer my support of this important and innovative conference series proposal. Your plan to bring together a multidisciplinary group of experts in a Deep Dive conference format is innovative and likely to push the field in new and exciting directions. I look forward to future collaborations as we work to advance the fields of health services research and implementation science.

Sincerely,



Jeffrey R. Harris, M.D., MPH, MBA  
Professor and Chair  
Department of Health Services  
School of Public Health  
University of Washington