Solicitation name:	Increasing Openness and Transparency in Research 2016 Call for Proposals
Letter ID:	50694 Letter of Intent
Applicant:	George Mason University

Title: Insomnia Hub Open Source Network

Status: Submitted

Submitted on: Oct 4, 2016 07:34 PM ET

Submitted by: Gary L. Kreps

Eligibility Criteria *	* Indicates required
The following criteria are required to apply to this solicitation:	
 All projects must have implications and impact in the United States. 	
 Lead organizations must be based in the United States or its territories. International individ partner with U.S. based institutions in order to apply (see more information below). 	luals and organizations can
 Previous work in open access and/or open science. 	
Note : Applicant organizations may partner with other organizations, in order to fulfill the purpose of requirements, and selection criteria. While the eligibility of each collaborating organization must be only one US based organization may represent the collaboration and be the lead contact in the app	described in the proposal,
 Does the applicant organization meet these criteria? * 	
Yes No	

Applicant Organization and Tax Verification *

* Indicates required

Provide the following information about the applicant organization. **Include the formal legal name of the organization** that, if awarded, will receive grant funds.

Note: If the Applicant Organization is a college or university, include the appropriate School, Department or Unit.

You may use the "Select organization information" link below to facilitate the entry of data required below. If the information already exists in the GuideStar Exchange or from prior activity with RWJF, the fields below will become prepopulated with the required data. If that occurs, please be sure to proofread the prepopulated information to ensure that it is accurate and current. Feel free to edit as needed. Use this link to learn more about this feature. If, instead, you prefer to manually enter all the required information below, you may do so.

Organization *	George Mason University
School/Department/Unit	Center for Health and Risk Communication
Address*	Robinson Hall A339, MS 3D6
Address (line 2)	
City*	Fairfax
State / Territory *	Virginia
Zip Code + 4-digit extension *	22030
Phone Number*	703-993-1094
Fax Number	703-993-1096
Website	http://chrc.gmu.edu/
Tax Verification	
1. Applicant Organization Tax II	D (Employer ID Number) 54-0836354
 Is the applicant organization governmental entity? * 	tax-exempt under section 501(c)(3) of the Internal Revenue Code, or a state university, or a
• Yes O No	
3. Is the applicant organization	a private foundation, or a Type III supporting organization? *
-	o tax-exempt organizations that are not private foundations or Type III supporting on may require additional documentation.

Key Contacts *

* Indicates required

- To save your partially completed page, scroll to the bottom of this page and select "Save, continue editing" or "Save, return home."
- Use the "Copy" feature to copy completed organizational and address information to a new contact. Choose a role from the drop-down menu and select the "Copy" button.
- If the Key Contact Organization is a college or university, include the appropriate School, Department, or Unit.

You may use the "Select contact information" link below to facilitate the entry of data required below. If the information already exists in the GuideStar Exchange or from prior activity with RWJF, the fields below will become prepopulated with the required data. If that occurs, please be sure to proofread the prepopulated information to ensure that it is accurate and current. Feel free to edit as needed. Use this link to learn more about this feature. If, instead, you prefer to manually enter all the required information below, you may do so.

Principal Investigator *

This is the person with the responsibility for overseeing the project. This person will be the primary recipient of all key Foundation correspondence: copy of award notice, post-award financial and monitoring, and grant closure. Additionally, after the application is submitted, this person will be asked to provide feedback to an independent survey firm on the application process and applicant characteristics in a brief, online survey. RWJF will share this person's contact information, including email address, with the survey firm for the sole purpose of soliciting feedback.

Email *	gkreps@gmu.edu
Confirm Email *	gkreps@gmu.edu
Prefix	Dr.
First Name*	Gary
Middle Name	L.
Last Name*	Kreps
Suffix	
Degree(s)*	PhD
Organization *	George Mason University
Position *	University Distinguished Professor and Director, Center for Health and Risk Communication
School/Department/Unit	College of Humanities & Social Sciences/Dept. of Communication/Center for Health & Risk Communicatio
Address*	Robinson Hall A339, MS 3D6
Address (line 2)	
City*	Fairfax
State / Territory *	Virginia

Zip or Postal Code*	22030
Office Phone Number*	703-993-1094 Phone Extn
Cell Phone Number	202-594-2974
	information for the project co-principal investigator who will share responsibility for this ve all key Foundation correspondence as described above.
Email*	jherrick@gmu.edu
Confirm Email *	jherrick@gmu.edu
Prefix	Dr.
First Name*	Jeffrey
Middle Name	Ε.
Last Name *	Herrick
Suffix	
Degree(s)*	PhD
Organization *	George Mason University
Position *	Assistant Professor
School/Department/Unit	College of Health and Human Services, Department of Rehabilitation Sciences
Address*	4400 University Drive MS 2G7
Address (line 2)	
City*	Fairfax
State / Territory *	Virginia
Zip or Postal Code*	22030
Office Phone Number*	703.993.1263 Phone Extn

Email*

Confirm Email*		
Prefix		
First Name*		
Middle Name		
Last Name*		
Suffix		
Degree(s)		
Organization *		
Position *		
School/Department/Unit		
Address *		
Address (line 2)		
City *		
State / Territory *		
Zip or Postal Code *		
Office Phone Number*	Phone Extn	
Cell Phone		

roject Title & Summa	ary Informatic	* Indicates required
ovide the following information fo	or your proposed proj	ject:
 Title Requested amount (up to \$ Duration (up to 24 months) Statement of impact 	250,000)	
Title*	Insomnia Hub Oper	n Source Network
Requested Amount \$*	250,000	
Duration*	24	months
Statement of Impact *		
research questions,	and expected impac now if you will not be	statement (approximately 2-3 sentences) summarizing the key ct of this research. e able to start your research on the March 1, 2017 grant start date. If
technology firm, proposes a knowledge sharing Insomnia	project to assess the Hub website. We plangs on this site abou	iversity, in collaboration with the Open Networks (ON) advanced e utility of implementing and sustaining a robust open and transparent, an to crowdsource, curate, and disseminate current evidence-based t Cognitive Behavioral Therapy for Insomnia (CBT-I) to and by a
	ctor community of sta	akeholders (health care providers, consumers, and policy makers)

App	licant Questions *			* Indicates required
	ernal planning purposes, we need to gather informative to be used in evaluating applications, but will be used to			
1. Wr	nat sector does the principal investigator represent Academic Government Non-Profit Publishing Other (specify below)	? *		
2. If a	nswer to question one is Academic: What academ	ic dise	cipline does the principal investigato	r represent? *
	Anthropology	 ✓ 	Health Services	
	Architecture	 ✓ 	Healthcare	
	Banking	\Box	Housing	
	Biology		Law	
	Business	\square	Medicine	
	Business		Nursing	
~	Communications		Political Science	
	Design		Psychology	
	Economics	▼	Public Health	
	Education	▼		
	Education		Social Work	
		\square	Sociology	
	Epidemiology	\Box	Transportation	
	Finance		Urban Planning	
	Other (please explain)			
3.				

If the answer to question one is Non-Profit: Is Ves No	the primary focus non-profit health? *
 4. If the answer to question three is "No", whe Select all that apply. Advocacy Asset Building Education Environment Faith Based Housing Labor Other (please explain) 	nat is the primary focus of the non-profit? * Law Public Policy Social Justice Social Services Transportation Urban Planning/Design/Architecture g, what sector(s) does the publication represent? * Health Services HealthCare Housing Law Medicine Nursing Political Science Psychology Public Health
Education	Public Policy Social Work
Engineering	Sociology
Epidemiology	Transportation
Finance	Urban Planning
 How did you learn about this funding opport Select all that apply. 	ortunity? *

	From an electronic mailing list	At a national meeting
	From a colleague in the same organization	From the RWJF website
✓	From a colleague in a different organization	
	Other (please explain)	

Letter of Intent *

* Indicates required

To Begin

Download the template shown below. Follow the instructions included on the template.

To Upload

Upload the completed template by selecting the "Upload document" button in the "Uploaded Documents" column. For assistance with uploading, refer to the "Upload Documents" section of the "Applicant Guide," located in the Reference box to the left.

Description	Templates	Uploaded Documents
Letter of Intent * Download the template in the "Templates" column to the right, and follow the instructions carefully. To maintain the original formatting, <i>you must convert your document</i> to a PDF file prior to uploading. For additional information, refer to "Troubleshooting Tips," located in the Reference box to the left. Maximum of three pages.	Letter of Intent	Final LOI, Insomnia Hu Date added: 10/04/2016 By: Gary L. Kreps

Increasing Openness and Transparency in Research, Letter of Intent

Identifying Information Project Title: Insomnia Hub Open Source Network Brief Proposal I.D.: ID: 50694 Applicant Name: Gary L. Kreps, Ph.D. Legal Name of Applicant Organization: George Mason University

Brief Proposal Narrative: An interdisciplinary team from George Mason University (GMU), in collaboration with Open Networks (ON) proposes to assess the utility of implementing and sustaining a robust open and transparent, knowledge sharing <u>Insomnia Hub</u> website. We plan to crowdsource, curate, and disseminate current evidence-based research and treatment findings on this site about Cognitive Behavioral Therapy for Insomnia (CBT-I) to a transdisciplinary and multisector community of stakeholders (health care providers, consumers, and policy makers). We will examine the feasibility of sustaining the Insomnia Hub as an ongoing social enterprise, as well as the potential to leverage findings from this open access model for implementing other open source hubs. We will test whether accelerating dissemination of relevant health information can promote a culture of health by improving health, well-being, and equity.

Problem: Insomnia is a pervasive and disruptive sleep condition associated with poor mental health and impaired physical functioning that is a significant burden on quality of life (Maloney, Konrad, & Zimmer, 2011). Insomnia treatment routinely involves over-prescribing of highly addictive sedative hypnotic pills despite clear evidence of significant safety risks and harm from chronic use (Rabin, 2012). In the US, up to 70 million adults are sleep deprived and, according to the CDC, 60 million sleeping pill prescriptions were written in 2011 (Rabin, 2012). A recent position statement from the American College of Physicians' Clinical Practice Guideline for Insomnia recommends that primary care providers treat chronic insomnia with CBT-1 prior to any pharmaceutical intervention (Qaseem et al, 2016). There is great need for providers and health care consumers to access evidence based information about CBT-I as interventions and effective treatments for insomnia (Mooghe et al, 2014). Evidence indicates that online searches for insomnia-related information can influence key health decisions (Mooghe et al, 2014).

Methods: Our interdisciplinary project team will implement an established open source, 'digital bridge' to promote sharing of relevant insomnia treatment information between primary care physicians, specialists, patients and the public. We will test development of a strategic health communication campaign (<u>Share CBT-I</u>) conducted by GMU faculty and students to accelerate enhanced public understanding and motivation to use CBT-I. We will test a course-based program enlisting GMU students from health, risk, and science communication, clinical psychology, and rehabilitation science to author and curate CBYI-I posts that can be easily understood and used by key audiences, and disseminate information about the Hub to encourage providers, consumers, and policy makers to access current insomnia evidence. We will asses the utility of free *voluntary* knowledge sharing on the Insomnia Hub by multiple stakeholders.

The project starts with formative evaluation (audience and needs analyses) of the insomnia information needs and preferences of health care providers, patients, researchers, policymakers, educators and students (Kreps,2014a). Data from the formative research will guide implementation and dissemination of the Insomnia Hub. Repeated measures will be conducted for process and summative evaluation, tracking project influences on measurable health outcomes (knowledge, attitude changes, referrals to CBT-I, prescription of opiate sleep medications, and improvements in sleep dysfunctions) (Kreps, 2014a).

We will attend professional conferences (i.e., the Society for Neuroscience November, 2017; SLEEP June, 2018) to engage participants to share their knowledge about CBT-I. We will interview individuals in live online broadcasts that will be embedded and archived in Insomnia Hub posts. Conference presenters will convey their findings to the public, immediately view their online Hub posts, and will then evaluate the value of continuing to share their knowledge (at no cost) on the Hub. Attendees with booths will convey their information, immediately view their 'virtual booth' in the Hub's Expo, and then evaluate its value as paid content marketing. This is one way in which to assess the feasibility of sustaining the Hub as a social enterprise.

We will also evaluate the utility of *paid student-led* transdisciplinary content creation, curation, and dissemination on the Hub. Health and science communication, clinical psychology, and rehabilitation science students, under faculty direction, will learn to author and curate Hub posts and train others to do the same. They will evaluate the Hub and PressForward curation tools to interprofessionally aggregate, curate, discuss, and publish content for health consumers. They will evaluate the ease of training other students to do the same. This will help to study the sustainability of semester-by-semester student-led content authoring and curation on the Hub.

Impact: The project can have significant and lasting influences in the US by increasing the opportunity for open multisector communication, collaboration, curation, and dissemination across the entire Neuroscience Knowledge Network (over 35 Hubs) built on a creative commons platform, where current established knowledge will be openly shared across the entire network, by multisector authors who own their content. Any curated post in one Hub can be shared by its author with any other Hub. The Insomnia Hub is an open access, knowledge sharing platform that curates and crowdsources health information content. Shared content will be transparently curated and contextualized by paid transdisciplinary student teams. Hubs will be led by thought leaders who want to share knowledge Networks, such as the Sleep Knowledge Network or the Physical Activity Knowledge Network. HKN's can become the 'digital bridge' to foster the crucial link between clinical prevention and population health and well-being - with open and equal access for all (Kreps, 2014b; 2012).

Principal Collaborators: <u>Gary Kreps</u>, PI, is a Distinguished Professor and Director of the Center for Health and Risk Communication at GMU. He is a leading health communication scholar, with expertise in the development, implementation, evaluation, and institutionalization of programs to disseminate relevant health information. He has extensive open source experience. As the founding Chief of the Health Communication and Informatics Research Branch at the National Cancer Institute (NIH), he introduced the open-source annual Health Information National Trends Survey (HINTS) research program to disseminate current data about where the US public accesses and uses health information. HINTS data guide evidence-based targeted health promotion programs. He is expanding the HINTS program internationally to China and Germany. He has also edited open source scholarly journals, is an active member of the Society for Participatory Medicine, will co-sponsor/host the initial 2016 Open Scholarship Initiative Conference), and is the lead faculty of the Share CBT-I campaign.

<u>Jeffrey E. Herrick, PhD</u>, Co-PI, is Assistant professor of Rehabilitation Science at GMU. He has led evidence based behavior change programs for clinical populations for over a decade, is an advocate for physical activity as an adjunct treatment for clinical conditions including sleep disorders. His current research is focused on understanding the relationship between sleep disorders and skeletal muscle fatigue, in addition to exploring the impact of sleep disruption on adult daily functioning through the National Health and Nutrition Examination Survey (NHANES). On the grant, Dr. Herrick will serve as the sleep science subject matter expert for the Insomnia Hub and would direct and supervise participating Rehabilitation Science students.

<u>Eric Olson is the</u> Outreach Coordinator, PressForward Project, GMU Center for History and New Media. <u>PressForward</u> software is used in more than a dozen science organizations, such as PLOS, to enable flexible, transparent, collaborative content curation and republishing. Mr. Olson is also Director of the Science Communication Network Initiative, a project of the National Science Communication Institute (nSCI). As part of the nSCI and the conference organizing committee, Mr. Olson assisted in the nSCI planning and implementation of the first of 10 annual meetings of the Open Scholarship Initiative, in partnership with (and funded in large part by) the United Nations Educational, Scientific and Cultural Organization (UNESCO). On the grant, Mr. Olson would advise, teach, and supervise the use of the PressForward curating tool.

<u>Meredith Cary PsyD</u>, Medstar Georgetown Hospital behavioral sleep consultant, is developing the <u>Insomnia Hub</u> as Lead Curator to enable colleagues to openly share what they know works and where to find it. Having clinical, teaching, and research experience in academic health centers (civilian and military) for decades, she recently initiated the transdisciplinary health communication campaign, <u>Share CBT-i</u> with GMU faculty. On the grant, Dr. Cary would be a CBT-I subject matter expert, she would advise, teach, supervise the use of the Hub authoring tool, and would help implement stakeholder field-testing at professional conferences.

<u>Scott Joy</u> is a Director and Network Administrator for <u>Open Networks</u> (ON), the social enterprise that is developing the open access Knowledge Networks. Scott is an experienced tech entrepreneur who was founder and Chair of the first publicly traded tablet PC company and one of the first peer to peer Internet companies. On the grant, Mr. Joy will provide technical support for the Insomnia Hub, provide expertise concerning financial sustainability for the social enterprise, and direct implementation of field-testing at professional conferences.

References:

Kreps, G.L. (2014a). Evaluating health communication programs to enhance health care and health promotion. *Journal of Health Communication, 19:12*, 1449-1459.

Kreps, G.L. (2014b). Achieving the promise of digital health information systems. *Journal of Public Health Research 3:471,* pp. 128-129.

Kreps, G.L. (2012). Consumer control over and access to health information. *Annals of Family Medicine, 10(5).*

Maloney, M.E., Konrad, T.R., & Zimmer, C.R. (2011). The medicalization of sleeplessness: A public health concern. *American Journal of Public Health*, *101(8)*, 1429-1433.

Moghe, R., Cheung, J.M., Saini, B., Marshall, N.S,m & Williams, K.A. (2014). Consumers using the Internet for insomnia information: The who, what, and why. *Sleep and Biological Rhythms*, *12*, 297-304.

Quaseem, A., Kansagara, D., Forciea, M.A., Cooke, M., & Denberg, T.D. (2016). Management of chronic insomnia disorder in adults: A clinical practice guideline from the American College of Physicians. *Annals of Internal Medicine*, *165(2)*, 125-133.

Rabin, R.C. (March 12, 2012). New worries about sleeping pills. *New York Times Well*. Available at: <u>http://well.blogs.nytimes.com/2012/03/12/new-worries-about-sleeping-pills/? r=1</u>