BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME:Sharon L Larson

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE:Senior Investigator and Director of Behavioral Health Research

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
University of Nebraska-Kearney	BS	12/1993	Psychology and Sociology
University of Nebraska-Lincoln	MA	12/1995	Sociology
University of Nebraska-Lincoln	PhD	08/1999	Sociology
Johns Hopkins University –Bloomberg School of Public Health	Post-doctoral certificate	04/2001	Psychiatric Epidemiology

NOTE: The Biographical Sketch may not exceed five pages. Follow the formats and instructions below.

A. Personal Statement

I have conducted research in the areas of depression, depression measurement, substance abuse epidemiology, health disparities in vulnerable populations and rural-urban differences in access to health care for the past 20 years. Mostly recently, before returning to Geisinger Health System, I served as the inaugural Division Director for the Division of Evaluation, Analysis and Quality (DEAQ) in the Center for Behavioral Health Statistics and Quality (CBHSQ), as well as the Acting Division Director for the Division of Surveillance and Data Collection. In DEAQ I was responsible for developing a new division responsible for the development of rigorous evaluation of all SAMHSA programs, implementation of a national behavioral health research agenda, mentoring and supervision of statisticians and investigators, development of a Service Fellow program, serving as editor of the Short Report and Spotlight series of publications, oversight of the development of the Common Data Platform (CDP) for capturing performance data from several thousand grantee sites, and the development of a partnership across federal government for developing community level measures and indicators of behavioral health. I developed and implemented a new program modeled after the Epidemic Intelligence Services (EIS) at CDC focused on behavioral health—the Behavioral Health Epidemic Intelligence Services (BHEIS)— and charged with conducting epidemiological investigations around such issues as possible suicide clusters and monitoring drug outbreaks as well as establishing sentinel sites for drug and mental health related community issues. As the Acting Director of DSDC for more than a year I was responsible for oversight of the National Survey of Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), and the Drug Abuse Warning Set (DAWN) data, all of which were and are undergoing redesign. I have, over several years, served as an expert on mental health measures in the NSDUH. I conducted, in collaboration with junior investigators at SAMHSA and CDC, research into the behavioral health implications of disasters such as the Deepwater Horizon oil spill, and served as guest editor for the Journal of Behavioral Health Services Research (2015) focused on public health responses and planning for the behavioral health of communities in the face of disaster. I developed a health economics team intended to understand the implications of health policy such as the implementation of the Affordable Care Act for behavioral health and behavioral health parity. I am trained as a Psychiatric Epidemiologist, completing a

post-doctoral fellowship at Johns Hopkins University School of Public Health. During my current tenure at the Geisinger Health System I return as the Director of Behavioral Health Research charged with developing behavioral health research across the health system. In a previous period of employment with Geisinger I conducted research on returning rural veteran's behavioral health needs and environmental (family) factors associated with childhood obesity, as well as HPV vaccination uptake among adolescents. My publication record during my previous tenure at Gesinger is limited due to caring for my spouse during a lengthy cancer illness.

B. Positions and Honors

1999-2001	Post-Doctoral Fellow Psychiatric Epidemiology Johns Hopkins University Bloomberg School of Public Health
2001-2004	Service Fellow Agency for Healthcare Research and Quality
2004-2006	Senior Statistician Substance Abuse and Mental Health Services Administration Office of Applied Studies
2006-2011	Investigator Geisinger Center for Health Research
2011-2015	Division Director Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality
2015-	Senior Investigator and Director of Behavioral Health Research Geisinger Health System

Awards

2014 Administrator's Award SAMHSA
2012 Leading Change Award SAMHSA
2011 Leading Change Award SAMHSA
2005 Superior Achievement Project Officer Training DHHS
2003 Superior Agency Achievement Award-AHRQ
1997 Honors Program, American Sociological Association, Toronto, Ontario
1977 University Scholar's Award in Chemistry, University of Denver

Memberships

Member--Academy Health
Member—Behavioral Health Interest Group Steering Committee
Member--American Public Health Association
Member--American Sociological Association

C. Contribution to Science

My work over the course of my career has principally focused on the use of survey data to address questions related to rural vulnerabilities, health services access, and behavioral health including substance use and abuse as well as mental illness, with a particular focus on depression. I have been involved in the design of behavioral health and health services surveys, the deployment of large population based studies, and the analysis and reporting of survey findings to answer public health questions.

Early in my career while completing a post-doctoral fellowship I conducted research examining the epidemiology of depression in relation to other physical health conditions. In the first study, we used the Epidemiological Catchment Area study to examine the relationship between depression among individuals with no history of stroke, and stroke 13 years later. During the 13-year follow-up individuals with a history of depressive disorder were 2.6 times more likely to report stroke than those without this disorder after controlling for heart disease, hypertension, diabetes, and current and previous use of tobacco. Medications used in the treatment of depressive disorder at baseline did not alter this finding. A history of dysthymia demonstrated a similar relationship to stroke, although the estimate was not statistically significant. Similarly, we found

depression was associated with an increase in incident back pain. We concluded that Depressive disorder appears to be a risk factor for incident back pain independent of other characteristics often associated with back pain. Back pain is not a short-term consequence of depressive disorder but emerges over periods longer than 1 year. Moreover, in this study the alternative pathway of back pain as a risk factor for depressive disorder could not be supported. These studies contributed significantly to later research that focused depression as a chronic health condition with significant physical consequences contributing to increased morbidity and mortality among those with depression and other serious mental illness.

Larson SL, Clark MR, Eaton WW. Depressive disorder as a long-term risk factor for incident back pain: A thirteen-year follow-up from the Baltimore ECA. *Psychiatric Services*, March 2004.

Larson SL, Owens P, Ford DE, Eaton WW. Depressive disorder, dysthymia and risk of stroke: A Thirteen-year follow-up from the Baltimore ECA. *Stroke* 2001.

Later, as a service fellow at the AHRQ and as a Senior Statistician at SAMHSA, my work focused on health services, health disparities and behavioral health. At the AHRQ I responsible for conducting independent and collaborative research primarily was using the Medical Expenditure Panel Survey (MEPS). I additionally served on the Steering Committee for MEPS, responsible for developing redesign recommendations and enhancements to this important survey. I contributed to the development of rural-urban codes for linking with the MEPS in order to better understand vulnerabilities particularly present for rural residents in the use of health care services. For example, our research demonstrated that while rural residents may report having a usual source of care at a rate similar to more urban counterparts, rural residents reported about 2.4 fewer visits per year to a health care provider. This study advanced recognition that metropolitan non-metropolitan dichotomies may conceal important distinctions and prevent policy maker efforts to fine-tune delivery systems for disparate populations. In this same setting we identified rural disparities related to preventive health examinations and disparities among rural residents in health insurance access the result of differentials in employment options in rural settings. While at AHRQ I contributed to the National Disparities Report.

Taylor A, Larson SL, Correa R. Women's health care utilization and expenditures. *Women's Health issues*, March-April 2006.

Larson SL and Correa R. Preventive health examinations: A comparison along the rural urban continuum. *Women's Health Issues,* March-April 2006.

Larson SL and Hill S. Rural-urban differences in employment-related health insurance: Analyses of national data using urban influence codes. *Journal of Rural Health*, January 2005.

Larson SL and Fleischman, J. Rural-Urban Differences in Usual Source of Care and Ambulatory Service Use: Analyses of National Data Using Urban Influence Codes. *Medical Care*, 2003.

In my work at SAMHSA my research focus continued to be on rural-urban differences, health services and allowed expansion of my research focus to encompass behavioral health including substance abuse and mental health. It is important to remember that when employed as a federal intramural researcher there are many publications that are carefully vetted and reviewed by peers, but are not reported in the peer reviewed literature. Federal reports are subject to a multi-level review process that includes senior doctoral trained scientists in most instances. While employed at AHRQ and SAMHSA I was involved in the publication of many federal reports intended to provide policy makers and legislators with data for use in developing policy responses to health care and health issues. However, I also used the National Survey on Drug Use and Health (NSDUH) for peer review publications. Moreover, I was responsible for assessing the validity of measures for reporting on the congressionally defined measure of Serious Mental Illness (SMI).

An example of a federal book length publication in which I served as the lead author is:
Worker Substance Use and Workplace Policies and Programs, Analytic Series A-29 (2007).

Other relevant peer reviewed publications while at SAMHSA included:

Gfroerer J, Larson S, Colliver J. Drug use patterns and trends in rural communities. Journal of Rural Health, Fall 2007 (Suppl), pg. 10-15.

Harris KM, Edlund MJ, Larson SL. Religious involvement and the use of mental health care. *Health Services Research*, April 2006.

Harris K, M Edlund, Larson S. Racial and Ethnic Differences in mental health problems and use of mental health care. *Medical Care*, August 2005.

Harris KM, Larson SL, Edlund MJ. Use of prescription psychiatric drugs and religious service attendance. *Psychiatric Services*, April 2005.

While at the Geisinger Health System I focused attention on the development of a rural health policy institute and conducted research related to childhood obesity, rural veterans, and uptake of the HPV vaccine. I conducted the first community needs assessment of the region with focus groups, individual interviews and a population based survey of 3500 residents. This project allowed the development of a regional partnership with colleges and universities as well as other providers in the region to address identified community needs. I was also a co-PI on the Keystone Beacon Project, a $16.2 million project funded by the Office of the National Coordinator for Health Information Technology (ONC) and was responsible for community/patient engagement as well as the design and implementation of evaluation. Although there were few publications resulting from this project, it lead to significant expansion of the KeyHIE throughout the region and has improved continuity of care by making health records readily available across the region. I was invited by ONC to serve as the lead for the community of practice in evaluation for all Beacon awardees.

Boscarino J, **Larson S,** Ladd I, Hill E, Paolucci S. Mental Health Experiences and Needs among Primary Care Providers Treating OEF/OIF Veterans: Preliminary Findings from the Geisinger Veterans Initiative. International Journal of Emergency Mental Health 2010; 12(3), 161-70.

McConnell TR, **Larson SL**, Santamore WP, Homko CJ, Trevino KM., Kashem A, Cross RC, Bove AA. Rural Versus Urban Residence Mitigates the Effects of Telemedicine on Exercise Capacity. JEPonline 2010; 13(6): 1-13.

Carayon P, Alyousef B, Hoonaker P, Hundt A, Cartmill R, Tomcavage J, Hassol A, Chaundy K, Larson S, Younkin J, Walker J. Challenges to Care Coordination Posed by the Use of Multiple Health IT applications. Work. Vol 41 S1 (2012).

Upon my return to SAMHSA as a Division Director I focused on research and evaluation described above and was primarily responsible for this administrative work as well as providing oversight and mentoring for investigators. However, I also conducted and provided oversight of a study to examine the impact of community level events such as Deepwater Horizon Oil Spill on behavioral health. I was invited by the editors of Journal of Behavioral Health Services Research (JBHSR) to serve as guest editor for a special section on behavioral health and disasters. The focus of this work was/is to emphasize that behavioral health data at the community level is an imperative in responding to disasters. Our ability to characterize the impact of a disaster is dependent upon good surveillance. All submissions to this section were peer reviewed.

Larson, S and Gould DW. Introduction to special section: Behavioral health and disasters-planning for the next time. J Behav Health Serv Res. 2015 Jan:42(1) 3-5).

Gould DW, Teich JL, Pemberton MR, Pierannunzi C, Larson S. Behavioral health in the gulf coast region following the Deepwater horizon oil spill: findings from two federal surveys. J Behav Health Serv Res. 2015 Jan:42(1) 3-5).

Rose, T, Shields J, Tueller S, and **Larson S.** Religiosity and behavioral health outcomes of adolescents living in disaster-vulnerable areas. J Relig Health. 2014 (Apr: 54(2): 480-94.

Also provide a URL to a full list of your published work as found in a publicly available digital database such as SciENcv or My Bibliography, which are maintained by the US National Library of Medicine. I have not yet established these databases.

D. Research Support

List both selected ongoing and completed research projects for the past three years (Federal or non-Federally-supported). *Begin with the projects that are most relevant to the research proposed in the application.* Briefly indicate the overall goals of the projects and responsibilities of the key person identified on the Biographical Sketch. Do not include number of person months or direct costs.

Director of a federal division responsible for intramural research, data analysis, intramural evaluation and evaluation oversight, publication of federal reports and management of $100M + annual budget for surveillance and nationally representative surveys. I was employed at the Substance and Mental Health Services Administration (SAMHSA) 2011-2015. External funding is disallowed in this position.