

BIOGRAPHICAL SKETCH

NAME: Streichert, Laura C.

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

POSITION TITLE: Executive Director

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date MM/YYYY	FIELD OF STUDY
Princeton University	AB	1981	Biology
Stanford University	PhD	1991	Neuroscience
University of Washington	MPH	2005	Health Services
University of Washington	Certificate	1998	Admin. & Management
University of Oregon	postdoc	1994	Developmental Neuroscience
University of Washington	Sr. Fellow	1997	Neuroscience

A. Personal Statement

Laura Streichert, PhD, MPH, brings subject matter expertise and perspective to this project as an experienced executive leader, neuroscientist, biomedical researcher, and public health specialist. As Executive Director of the International Society for Disease Surveillance (ISDS), Laura works across disciplines and sectors researchers and surveillance practitioners at the local, state, national, and global levels, and other stakeholders worldwide to forge new collaborative ventures to advance the science and practice of disease surveillance. Laura additionally brings knowledge and experience in system-level approaches; qualitative and quantitative research methodologies; public health informatics; program management and evaluation; real-time (i.e., syndromic) surveillance; One Health Surveillance; knowledge management; building Communities of Practice; surveillance policy; and assessment to identify public health priorities, practices, and workforce development needs. Most recently, as PI on the DTRA-funded *Analytic Solutions for Challenges in Real-Time Biosurveillance* project, Dr. Streichert is leading efforts to convene public health practitioners who have identified analytic problems with the statisticians, computer scientists, and other developers to create solutions. To date, she has orchestrated the development of two consultancies on 1) asyndromic cluster detection; and 2) evaluating disease-forecasting models for public health utility. The ability to engage end-users from the onset of the development process helps to ensure the practical utility of any solution developments. This is particularly relevant to this EcoHealth Alliance project where Dr. Streichert will provide expertise and tap into the collective expertise of the ISDS membership to provide community input to the project. The paper below details the process and outcomes of ISDS's approach:

- a. Faigen Z, Deyneka L, Ising A, Neill D, Conway M, Fairchild G, Gunn J, Swenson D, Painter I, Johnson L, Kiley C, **Streichert LC**, Burkom H. (2015). Cross-Disciplinary Consultancy to Bridge Public Health Technical Needs and Solution Development Expertise: Asyndromic Surveillance Use Case. Public Health Reports (in press).

B. Positions and Honors

1991 – 1994 Postdoctoral Fellow, University of Oregon, Institute for Neuroscience
1995 – 1998 Senior Research Fellow, University of Washington, Department of Biological Structure
1998 – 1999 Science Education Program Manager, HutchLab, Fred Hutchinson Cancer Research Center
1999 – 2001 Outreach Programs Manager, Northwest Association for Biomedical Research
2001 – 2003 Development Officer, Seattle Biomedical Research Institute
2004 Instructor, Northwest Center for Public Health Practice Summer Institute
2005 – 2006 Manager of Center Operations, Univ. of Washington Exploratory Center for Obesity Research
2007 – 2008 Assistant Director, University of Washington Center for Obesity Research
2008 – 2010 Public Health Consultant, Streichert Strategic Consulting
2010 – 2010 Program Director, Harvard School of Public Health Center for Public Health Preparedness
2011 – Executive Director, International Society for Disease Surveillance (ISDS)

Other Experience and Professional Memberships

2011 – Joint Public Health Informatics Taskforce
2011 – Council of State and Territorial Epidemiologists (CSTE), affiliate member
2009 – Newton Medical Reserve Corps
1981 – 1984 U.S. Peace Corps, Nepal

C. Contribution to Science

1. My early work in basic science addressed unanswered questions related to the structural and functional changes that neurons and synaptic connections undergo during development or following injury of the nervous system. The results demonstrated changes in the anatomical, cellular, and electrophysiological features of the developing nervous system in a variety of animal models. The NIH training I received as a PhD student and postdoctoral fellow in neuroscience helped to build my foundational skills in research design, data analysis, and quantitative methods.
 - a. **Streichert, L.C.**, Birnbach, C.D. & Reh, T.A. (1999). A diffusible factor from normal retinal cells promotes rod photoreceptor survival in an *in vitro* model of retinitis pigmentosa. *J Neurobiol.* 39: 475-490.
 - b. **Streichert, L.C.**, Pierce, J.T., Nelson, J.A. & Weeks, J.C. (1997). Steroid hormones act directly to trigger segment-specific programmed cell death of identified motoneurons *in vitro*. *Dev Biol.* 183: 95-107.
 - c. **Streichert, L.C.** & Sargent, P.B. (1992). The role of acetylcholinesterase in denervation supersensitivity in the frog cardiac ganglion. *J Physiol.* 445: 249-260.
2. Innovative strategies for obesity prevention require the application of a social-ecological model that understands and addresses the root causes of the problem. At the NIH-funded Exploratory Center for Obesity Research (ECOR) at the University of Washington, and subsequently as an independent contractor with a public health agency, I worked to bridge disciplines and sectors to examine environmental determinants of obesity from the cellular to the community levels. This project also utilized my ability to weave common threads across disciplines and scientific levels in a *Lab to Leadership* approach. For example, I was part of a team that connected basic research on the hypothalamic control of glucose metabolism in developing mice to possible mechanisms for the effects of high sugar diets in children or looking at the relationship between fast food locations and socioeconomic status using GIS approaches. The results and conceptual underpinnings of this translational research were applied to the activities of the Public Health—Seattle & King County Obesity Prevention Initiative and the creation of a Community Action Plan that has been used to guide policy making and community-based interventions in Pierce County, Washington. The outcomes of this research are detailed, in part in the following publications:

- a. Hurvitz PM, Moudon AV, Rehm CD, **Streichert LC**, Drewnowski A. (2009). Arterial roads and area socioeconomic status are predictors of fast food restaurant density in King County, WA. *Int J Behav Nutr Phys Act*. Jul 24;6:46.
 - b. Podrabsky M, **Streichert LC**, Levinger D, Johnson DB. (2007). Campus-community-school partnerships to evaluate a multi-component nutrition intervention. *Public Health Reports*. Jul-Aug;122(4):566-9.
 - c. **Streichert LC**. (2009). *Pierce County Community Action Plan for Active Living and Healthy Eating*. Tacoma-Pierce County Health Department. <http://www.tpchd.org/files/library/f88dec11fd52279e.pdf>
 - d. **Streichert LC**, Johnson DB, Drewnowski, A. (2008). Reframing Obesity Prevention. *Northwest Public Health*. 25 (1): 6-7. (Guest editor of special issue: *Preventing Obesity: Moving Beyond Individual Responsibility*). <http://www.nwpublichealth.org/archives/s2008>
3. As Executive Director at ISDS I have initiated and led a number of projects to advance the science and practice of disease surveillance through assessments and evaluations, standards development, knowledge management, community building, workforce development, and advocacy, particularly in the area of syndromic surveillance. My broad-based experience and expertise has enabled me to create unique action-oriented partnerships to develop tools and approaches to data collection, management, analysis, visualization, inter-jurisdictional sharing, and application to decision-making. I have been an active contributor to the groundwork leading to the launching of the National Syndromic Surveillance Program. In addition, my leadership has helped to expand ISDS's efforts in the realm of integrating animal, human, and environmental surveillance through the advancement of One Health strategies. Recent work in creating functional requirements for analytic solutions to particular public health challenges is aimed to identify and address barriers to real-time surveillance of pressing public health challenges. Working with the surveillance community, I have helped to identify and disseminate information on topics of priority of the surveillance community, including the need for sustainable approaches to the surveillance enterprise:
- a. Mirza N, Reynolds TL, Coletta M, Suda K, Soyiri I, Markle A, Leopold H, Lenert L, Samoff E, Siniscalchi A, Streichert LC. (2013). Steps to a Sustainable Public Health Surveillance Enterprise. *Online J Public Health Inform*. 2013;5(2). Available at: <http://ojphi.org/ojs/index.php/ojphi/article/view/4703>

Complete List of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/1r5K3ZvZkma5l/bibliographay/48710397/public/?sort=date&direction=ascending>

D. Research Support

Ongoing Research Support

Defense Threat Reduction Agency (DTRA)

HDTRA1-15-C-0004 Streichert (PI) 01/06/15-01/5/17

Analytic Solutions for Challenges in Real-Time Biosurveillance

The goal of this study is to advance analytic capabilities in real-time biosurveillance (BSV) by expediting next-generation solutions to currently intractable problems through focused consultancies that join problem owners from civilian and military public health agencies with solution developers in academia, industry, and government.

Role: PI

Skoll Global Threats Fund (SGTF)

#14-02503

Streichert (PI)

11/1/14-12/31/15

Advancing One Health Surveillance Strategies

The purpose of this project is to strengthen alliances between animal and public health surveillance professionals for the identification and development of practical One Health Surveillance approaches to challenges in disease detection and response. In parallel, given that most of the emerging infectious diseases with an animal source originate from resource constrained settings, the project will provide a platform to share experiences on the use of mobile technologies in these contexts and discuss their application for capturing, transmitting, and analyzing health information in a timely and efficient fashion.

Role: PI

Completed Research Support**National Association of County and City Health Officials (NACCHO)**

#2014-090801

Streichert (PI)

10/1/14-6/30/15

Surveillance practice and technical assistance needs among local health departments in the US.

ISDS, in collaboration with NACCHO coordinated, executed, and analyzed a rigorous nation-wide assessment of current disease surveillance practices and technical assistance needs of local public health departments within the U.S.

Role: P