The School of Rural Public Health
Texas A&M Health Science Center

Annual Research Report

Calendar Year 2012

The mission of the School of Rural Public Health is to improve the health of communities, with emphasis on rural and underserved populations, through education, research, service, outreach and creative partnerships.
Message from the Interim Dean

At the School of Rural Public Health (SRPH), our goal is to improve the health of communities through education, service, outreach and research. One of the strategies we employ is the development of creative partnerships to enhance our effectiveness in working toward that goal. Nowhere is the impact of those partnerships more evident than in our research activities.

This report presents an overview of the SRPH research portfolio including a listing of our Board of Regents approved research centers, dedicated research programs, research projects, and publications. As highlighted in this report, SRPH research endeavors and extramural funding are diverse, addressing a myriad of some of the most pressing public health issues such as prevention research to reduce health disparities in rural and underserved communities, public health and emergency preparedness and response, innovative methods to increase physical activity and combat obesity in children, interventions to promote healthy aging and decrease chronic diseases, development of novel approaches to cancer prevention and survivorship, health organization transformation through creative industry partnerships, the impact of water quality on pregnancy outcomes, asthma education, lifestyle interventions and diabetes, reduction in food insecurity, and tobacco use prevention and cessation.

Recognizing the importance of disseminating research findings, our faculty published over 125 full articles in 2012 in a wide range of public health journals and related disciplines. A full listing is included in this report. Finally, we would also like to recognize our students and former students who served as first authors or co-authors on numerous papers. We strongly believe that education and research go hand-in-hand, and the investment in training the next generation of public health researchers will lead to better health for populations across Texas, the United States, and the world.

James N. Burdine, DrPH, Interim Dean
School of Rural Public Health
Texas A&M Health Science Center

Report prepared by Linnae Hutchison, MBA, MT, Assistant Director for Research, Scott Horel, MA, Program Coordinator, and Jean Brender, PhD, RN, Associate Dean for Research. For further information, please contact Dr. Brender at jdbrender@sarp.tamhsc.edu.
Despite the economic challenges that have reduced federal, state, and private funding sources while simultaneously increasing competition for these same dollars, SRPH research expenditures have remained relatively the same for the past 7 years. One reason for this relative stability is the aggressive pursuit of creative partnerships and collaborations, a hallmark of the school’s mission. This approach is exemplified by a diversified funding portfolio which includes not only traditional federal funding sources such as the National Institutes of Health (NIH), Center for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA), and Agency for Healthcare Research and Quality (AHRQ), but also a variety of state agencies, community collaborations, and private foundations.
### BOARD OF REGENTS APPROVED CENTERS

<table>
<thead>
<tr>
<th>Center for Community Health Development (CCHD): CDC funded Prevention Research Center (PI: Kenneth McLeroy, PhD, Regents &amp; Distinguished Professor; Co-PI: James Burdine, DrPH; Director: Monica Wendel, DrPH)</th>
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<tr>
<td>Center for Health Organization Transformation (CHOT): NSF Industry/University Cooperative Research Centers Program (PI and Director: Larry Gamm, PhD, Regents Professor)</td>
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<td>Southwest Rural Health Research Center (SRHRC): established with funding initially from The Federal Office of Rural Health Policy (Director: Jane Bolin, PhD, JD, RN)</td>
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<tr>
<td>USA Center for Rural Public Health Preparedness (USA Center): CDC funded Center for Public Health Preparedness (PI and Director: Barbara Quiram, PhD)</td>
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<tr>
<td>The Ergonomics Center: CDC and other externally supported Center (PI and Director: Jerry Congleton, PhD* / Mark E. Benden, Ph.D.)</td>
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*Dr. Congleton served as Director through May 2013.*

### SRPH PROGRAMS

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<tr>
<th>Program on Healthy Aging: (Director: Marcia Ory, PhD, MPH, Regents &amp; Distinguished Professor)</th>
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<tr>
<td>Program on Aging and Long-Term Care Policy: (Director: Catherine Hawes, PhD, Regents Professor)</td>
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<td>Program on Public Health and Water Research: (Contact: Thomas McDonald, PhD)</td>
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<td>Program for Research and Outreach Engagement in Nutrition and Health Disparities: (Director: Joseph R. Sharkey, PhD, MPH, RD)</td>
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<tr>
<td>Program for Health Workforce Analysis &amp; Policy: (Director: Ciro V. Sumaya, M.D., MPHTM, Regents Professor)</td>
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<td>Program for Reproductive and Child Health: (Director: Anne Sweeney, PhD)</td>
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<td>Program on Health Policy Research (Interim Director: Jane Bolin, PhD, JD, RN)</td>
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### SELECTED RESEARCH PROJECTS

- Prevention Research Center, CDC, PI: McLeroy
- Program for Rural and Minority Health Disparities Research, NCMHD, PI: McLeroy
- Statewide Evaluation of Childhood Obesity Prevention Policies in Texas, Robert Wood Johnson Foundation, PI: Ory
- Central Texas Cancer Prevention and Control Research Network, CDC, PI: Ory
- Texas Nutrition and Obesity Policy Research and Evaluation Network Collaborating Center, CDC, PI: Sharkey
- Texas Healthy Aging Research Network Collaborating Center, CDC, PI: Sharkey
- Nitrites, Nitrites, and Nitrosatable Drugs and Birth Defects, NIH, PI: Bender
- Center for Health Organization Transformation, NSF I/UCRC, PI: Gamm
- (TECS-PERLC) Training and Education Collaborative System Preparedness & Response Learning Center, CDC, PI: Quiram
- Nursing Care Assessment Form Project, Texas HHSC, PI: Phillips
- Enhanced Smoking Cessation for University Students (SUCCESS), sub to M.D. Anderson/NCI/NIH (ARRA), PI: Colwell
- Standardized Antibiotic Use in Long-term Care (SAUL), AIR, AHRQ, PI: Phillips
- Brazos Partnership to Prevent Childhood Obesity Research (Dynamic Classroom), NIH, PI: Benden
- Education to Promote Improved Cancer Outcomes, CPRIT, PI: St. John
- Enhanced Colorectal Cancer Screening, CPRIT, Co-Pls: McClellan/Bolin
- Texas Asthma Control Program, DSHS, PI: Carrillo-Zuniga

### KEY RESEARCH AREAS

- Aging and health promotion
- Aging and disability
- Alcohol and drug abuse
- Border health
- Cancer prevention
- Community health development
- Community-based participatory research
- Chronic disease management
- Cost-effectiveness analysis
- Ergonomics
- Emergency medical preparedness and response
- Environmental exposures and birth defects
- Environmental health
- Food security
- Health information systems
- Health services research
- Health systems research
- Health care associated infections
- Health care cost and quality
- Long-term care and aging policy
- Nutrition and obesity
- Occupational safety and health
- Prevention research
- Program Evaluation
- Public health training
- Quality of life
- Reproductive health
- Rural disparities
- Rural health policy
- Rural emergency preparedness and response
- Veterans health
- Translational research
- Tobacco cessation and prevention
- Underserved and vunerable populations
- Water quality
ACTIVE GRANTS & CONTRACTS CY2012

Alexander, James. East Texas Medical Center (ETMC) Corporate History Project, East Texas Medical Center (ETMC), $62,500 (2011-2012) [ETMC].

Benden, Mark. SBIR: Refining and testing a novel stand-biased desk for the classroom to prevent childhood obesity, Positive Motion LLC (prime is CDC), $50,000 (2011-2012).

Benden, Mark. Brazos Partnership for Childhood Obesity Research, NIH-Eunice Kennedy Shriver Institute of Child Health & Human Development, $402,875, (2012-2013) [ERGO].

Bolin, Jane. VA Project ARCH Evaluation, sub to Altarum Institute (Prime Department of Veterans Affairs), $280,455 (2011-2012) [SRHRC].


Bolin, Jane, Co-PI (McClellan, David, PI). Enhanced Colorectal Cancer Screening in a Family Medicine Residency Program Serving Low-Income & Underserved: Translating Research into Practice, Cancer Prevention & Research Institute of Texas (CPRIT), $2,748,008 (2011-2014) [CCHD].

Bolin, Jane. Anti-Psychotic Medication Protocol (AMP), CHOT member-Lone Star Circle of Care, $100,000, (2010-2012) [CCHD].

Bolin, Jane. Rural Healthy People 2020, (Prevention Research Center funded subproject), CDC, $98,000 (2011-2014) [CCHD] [SRHRC].


Brender, Jean. Mining Massive Geographically Referenced Environmental Health Data to Identify Risk Factors for Birth Defects, subcontract to Texas State University (prime is EPA), $107,672 (2011-2014).

Carrillo-Zuniga, Genny. Texas Asthma Control Project, Texas Department of State Health Services, $286,103 (2009-2013).

Carrillo-Zuniga, Genny. Development of an Environmental/Epidemiological Database in Texas-Mexico Border, Border Environmental Cooperation Commission (BECC), $50,000 (2012-2013).*

Carrillo-Zuniga, Genny. Environmental Management Asthma Education to Improve the Quality of Life of Children with Asthma, subcontract to Texas A&M Kingsville (prime is EPA), $10,504 (2012-2013).*

Carrillo-Zuniga, Genny. Integrated Environmental Indoor Management using Healthy Homes and Asthma Education, EPA, $50,000 (2012-2014).*

Colwell, Brian. Youth Tobacco Education Project, Texas Department of State Health Services, $489,408 (2003-2013). 

Colwell, Brian. Enhanced Smoking Cessation for University Students (Success II), Subcontract to M.D. Anderson (prime is NIH/NCI), $203,578 (2010-2012).

Congleton, Jerome. Texas A&M University Occupational Safety & Health Training Program, NIOSH, $225,000 (2009-2012) [CCHD].

Congleton, Jerome. Texas A&M University Occupational Safety & Health Training Program Renewal, NIOSH, $225,000 (2012-2017) [ERGO]. *

Dowdy, Diane. Texas Legislators Survey: A T-COPPE Collaborative Effort. University of Texas Health Science Center School of Public Health (prime is the Robert Wood Johnson Foundation), $18,000 (2012-2013).

Gamm, Larry. Center for Health Organization Transformation (CHOT), National Science Foundation (UUCRC), $460,999 (2008-2013) [CCHD].


Gamm, Larry. Leveraging a Studer Group Intervention for Continuous Innovation, Studer Group, $100,000 (2012-2014) [CCHD]. *


Hong, Yan. A Mobile Application to Promote Physical Activity and Access to Health Information among Seniors in Central and Rural Texas, National Network of Libraries of Medicine, $10,000 (2011-2013).

Jiang, Luohua. Indian Health Services Division of Diabetes Treatment and Prevention (DHYTP) Demonstration Projects Coordinating Center, subcontract to University of Colorado Denver (prime is Indian Health Services), $76,692 (2011-2013).


Lillibridge, Scott. Western Regional Center of Excellence for Biodefense and Emerging Infectious Diseases Administrative Core, Subcontract to University of Texas Medical Branch Galveston (prime is NIH), $438,971 (2007-2014).


McDonald, Thomas. Border Environmental Health and Toxicology, ATSDR, $750,000 (2009-2013).


McLeroy, Kenneth. Prevention Research Center (PRC). Center for Community Health Development 5 year renewal, CDC, $6.4M (2009-2014) [CCHD].


McLeroy, Kenneth (Monica Wendel, Co-PI). Evaluation of minority youth tobacco education program. Subcontract to American Legacy Foundation (prime is DHHS), $235,343 (2011-2014) [CCHD].


McLeroy, Kenneth. International Conference to Advance a Population Health Research Agenda, CDC Conference, CDC, $152,000 (2011-2012) [CCHD].


Millard, Ann. Breast Feeding Support in Hidalgo County, Hidalgo County WIC, $12,000 (2012-2013).*

Millard, Ann. Loteria De Comadres Contra El Cancer, subcontract to Mercy Ministries of Laredo (prime is Cancer Prevention Research Institute of Texas [CPRIT]), $56,072, (2012-2015).*
Millard, Ann. SKIP (School Kids at Play)-Outdoor Recreation and a Community Coalition, subcontract to Edinburg Independent School District (prime is Texas Department of State Health Services), $4,200 (2011-2012).

Millard, Ann. Safe Cycling to Edinburg Schools, Edinburg Independent School District, $4,326 (2012-2013).*


Ohsfeldt, Robert. Technology Directed Advanced Radiation Therapy of Lung Cancer, subcontract to the University of Texas Southwestern Medical Center (prime is CPRIT), $232,440, (2011-2016).

Ohsfeldt, Robert. Functional Outcomes in OEF/OIF-Veterans with PTSD and Alcohol Misuse, Central Texas Veterans Administration, $34,071 (2010-2013).

Ory, Marcia G. Evaluation of Evidence-Based Disease Prevention Services, Texas Healthy Lifestyles, subcontract to Texas Department of Aging and Disability Services (prime is AoA, ARRA funded), $125,618 (2010-2012).

Ory, Marcia G. Communities Putting Prevention to Work, subcontract to National Council on Aging (prime is AoA), $470,000 (2011-2012).


Ory, Marcia G. Community Research Center for Senior Health, subcontract to Scott & White Health System (prime is NIH/NIA, ARRA funding), $129,077 (2010-2013).

Ory, Marcia G. South, West & Central Consortium- Geriatric Education Center of Texas, subcontract to University of Texas-San Antonio (prime is HRSA), $150,000, (2010-2015).

Ory, Marcia G. The Central Texas Cancer Prevention and Control Research Network (CTxCPCRN), CDC Special Interest Project, $1,500,000 (2009-2014) [CCHD].

Ory, Marcia G. Impact, Sustainability & Scalability of Multi-component Falls Prevention Programs, CDC Special Interest Project, $1,321,277 (2011-2013) [CCHD].

Ory, Marcia G. The Policies, Programs, and Partners for Falls Prevention (PPPF), CDC Special Interest Project, $799,977 (2012-2014) [CCHD].*

Ory, Marcia G. Developing Partnerships for Delivering Evidence-Based Self-Management Programs, The Wellcare Foundation, $100,000 (2012-2013)*

Ory, Marcia G. Texercise: Evaluating Its Reach and Effectiveness, Texas Department of Aging and Disability Services (TDADS), $196,219 (2012-2013).*

Ory, Marcia G. Increasing Reach and Implementation of Evidence-Based Programs for Cancer Control (PRO), subcontract to UTHSC Houston (prime is NIH/NCI), $27,000 (2012-2013).*

Ory, Marcia G. Dissemination of Fit & Strong in the Brazos Valley, Brazos Valley Council of Governments (BVCOG), $13,541 (2012-2013).*

Ory, Marcia G. Evidence Based Training and Exercise Services to Seniors in the Brazos Valley, St. Joseph Health System, $15,000 (2012-2013).*

Pickens, Adam. Anti-Fatigue Mat Study, Let’s Get, Inc., $24,964 (2012-2013).*

Phillips, Charles D. Nursing Care Assessment Form Project, Texas Health and Human Services Commission (TxHSC), $927,278 (2010-2014).


Quiram, Barbara. Training & Education Collaborative System - Preparedness and Emergency Response Learning Center (TECS PERLC), CDC, $4,688,285 (2010-2015) [USA].*

Quiram, Barbara. Texas Public Health Training Center, 5 year renewal, The University of Texas Health Science Center School of Public Health, subcontract to UTHSC Houston (prime is HRSA), $855,000 (2010-2015).

Quiram, Barbara. Retrospective Review of the Texas Medicare Rural Hospital Flexibility Program (FLEX), Texas Department of Rural Affairs (TDRA), $18,259 (2011-2012) [USA].

Quiram, Barbara. Region 6/5S Hazard Risk Assessment, Texas Department of Health and Human Services, $71,917 (2012-2013) [USA].

Quiram, Barbara. H-RAMP: Hazard Risk Assessment and Mitigation Plans, Texas Department of Health and Human Services (DHS), $492,581 (2012-2013) [USA].*

Radcliff, Tiffany. Rerouting Non-Emergency Patients from the Emergency Department (ED) to a Rural Health Clinic (RHC) within East Texas Medical Center Regional Health System (ETMC), ETMC, $50,000, (2012-2013) [CHOT].*

Radcliff, Tiffany. Rural Lifestyle Intervention Treatment Effectiveness Trial (Rural LITE), subcontract to the University of Florida, (prime is NIH) $33,841, (2010-2013).


Sharkey, Joseph R. Behavioral and Environmental Influence on Obesity: Rural Context & Race/Ethnicity, subproject of P20 Grant (PI: McLeroy), $1,455,000, NIH/NIMHD, (2007-2013) [CCHD].

Sharkey, Joseph R. Texas Healthy Aging Research Network (TxHAN), CDC Special Interest Project, $375,000, (2009-2014) [CCHD].

Sharkey, Joseph R. Texas Nutrition and Obesity Policy Research and Evaluation Network (TxNOPREN), CDC Special Interest Project, $227,140 (2009-2013) [CCHD].

Sharkey, Joseph R. Texas Nutrition and Obesity Policy Research and Evaluation Network (TxNOPREN), CDC Special Interest Project Renewal, $140,000 (2012-2014) [CCHD].*

Sharkey, Joseph R. Prevention Research Center (Center PI: McLeroy) Core Research Project-Working with Rural and Underserved Communities to Promote a Healthy Food Environment: Mixed Methods Approach, CDC, $1,411,257 [CCHD].

Sharkey, Joseph R. Understanding Very Low Food Security among Children of Mexican Origin: The Circumstances of Mexican Origin Families in Texas, University of Kentucky Center for Poverty Research (prime is USDA), $100,000 (2012-2014).*

Shipp, Eva. Migrant Adolescent Health Research Study, subcontract to UTHSC Houston (prime is NIOSH), $66,243 (2010-2012).

Shipp, Eva. ARRA: Community-Academic Linkages to Build a National Network of Farmworker Research, subcontract to UTHSC Houston (prime is NIH), $37,519 (2012-2013).*

Shipp, Eva. Neuromotor Function and Work Injury Risk among Hispanic Adolescent Farmworkers (a.k.a. The HIP Project). The Southwest Center for Agricultural Health Injury Prevention and Education at The University of Texas Health Center at Tyler (prime is NIOSH/CDC), $724,345 (2011-2016).

St. John, Julie. ÉPICO: Education to Promote Improved Cancer Outcomes, Cancer Prevention Research Institute of Texas (CPRIT), $487,589 (2011-2013) [CCHD].


Wendel, Monica and Clark, Heather. Evaluation of the Shellbrook Intervention, Aids Foundation of Houston, $120,178 (2011-2013) [CCHD].


Wendel, Monica. Williamson County and Cities Health District (WCCHD) Assessment, $35,000, WCCHD (2012) [CCHD].*


Wendel, Monica. Using a Community Health Development Approach to Increase Access to Opportunities for Physical Activity (Prevention Research Center Core Research Project #2), CDC, $140,155 (2011-2014) [CCHD].

Zhao, Hongwei. A Unified Approach of Cost-Effectiveness Analysis, subcontract to UC Davis (prime is NIH), $243,686 (2009-2013).

Projects Key:
* Denotes newly granted in CY2012.
[ ] Denotes Center affiliated projects
[CCHD] = Center for Community Health Development
[CHOT] = Center for Health Organization Transformation
[ERGC] = The Ergonomics Center
[SRHRC] = Southwest Rural Health Research Center
[USA] = USA Center for Rural Public Health Preparedness


(81) Rivera CM, Song J, Copeland L, Buirge C, Kiss N, Côté MJ*. Use of vendedores (mobile food vendors), pulgas (flea markets), and vecinos o amigos (neighbors or friends) as alternative sources of food for purchase among Mexican-origin households in Texas border colonias. *Journal of the Academy of Nutrition and Dietetics*. 2012 May;112(5):705-710.


(87) Sharkey JR, Dean WR, Johnson CM*. Use of vendedores (mobile food vendors), pulgas (flea markets), and vecinos o amigos (neighbors or friends) as alternative sources of food for purchase among Mexican-origin households in Texas border colonias. *Journal of the Academy of Nutrition and Dietetics*. 2012 May;112(5):705-710.


*BOLD denotes SRPH faculty or staff. An asterisk (*) indicates an SRPH student/graduate. Listed publications were published in final form in calendar year 2012, and do not include published meeting abstracts.
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For additional information regarding this report or research at the school, please contact
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