The summary below is representative of the School of Public Health current research projects, funded grants and publications. The format employed cuts across disciplines, areas of inquiry, methodologies and analyses. As such, it is not specific but general. Within each of these topics and whenever applicable, you will find research in basic laboratory sciences, population based and intervention studies grouped under a broad topic of inquiry. And within these groupings, you may also find an extensive range of research interests. For example, in terms of age and gender, some among our faculty conduct childhood related research, while others concentrate on adult women or the elderly. There is also wide diversity in research designs and methodologies; our current research expands from research conducted in wet laboratories, to investigations that rely on large databases, to studies employing qualitative or mixed methods. In order to facilitate the identification of individual faculty currently conducting work or with previous expertise in any one of these topics, a list of currently funded research and selected publications has been appended to this summary.

In sum, we hope that you will find this handout useful in becoming better acquainted with the research currently conducted at the SPH. We encourage you to contact our faculty and set up an appointment to explore possible research interests and joint endeavors.

**Aging**
- Strong research emphasis on older Mexican Americans, current research includes: cohort studies, longitudinal analyses, neighborhood effects and contextual factors, the interface of religion and health, diabetes, obesity, cancer detection and screening, mental health and widowhood;
- Quality of life issues
- End of life care, end of life ethnic differences in in-hospital place of death among older adults

**Cancer**
- Investigation of:
  - Energy balance on cancer risk,
  - Epigenetic changes that affect cancer risk;
  - Gastric cancer and its putative precancerous lesions;
  - Esophageal cancer and its putative precancerous lesion (Barrett’s esophagus)
- Determination of genetic susceptibility to cancers within the context of environmental exposures
- Identification of genetic markers that can be used for early cancer detection
• Implementation of Community Based Participatory Research in the prevention of cancer

• Studies of geography of cancer disparity:
  o Geographical distribution of cancer-specific population risk that
  o May not be evenly spread across a region, but rather clustered in some areas.
  o Sociological and/or environmental (land use) factors possibly confounded with the
  o Geographically clustered cancers.
  o Contextual Influences on cancer screening; particularly family relationships and
  o Neighborhoods
  o Protective effect of neighborhood composition on smoking behaviors among
  o Hispanics in prospective cohort studies

• Studies examining lifestyle behaviors in cancer prevention, particularly, nutrition & smoking behaviors, employing Motivational Interviewing in cancer prevention studies

• Exploration of health disparities in incidence –survival and cancer screening

• Qualitative studies of adult women and the homeless at risk of breast cancer

• Investigations of the relationship between cultural attitudes and cancer prevention

• Genetic risk predictor models for cancer

• Biologically supported mathematical models of cancer development: fitted colon and retinoblastoma data; fitted lung cancer data.

• Bio-statistical data analysis on pre-leukemia, breast cancer, prostate, pancreatic and other lethal cancers

**Cardiovascular Disease, Diabetes, Obesity, Physical Activity, Dietary Behaviors**
(current research on above topics overlap; therefore, we have grouped it together)

• Population based studies of prevalence and incidence of obesity, cardiovascular disease and diabetes, particularly in minority populations.

• Intervention studies with children and adults: African Americans and Hispanics in the metroplex and other regions in Texas.

• Motivational Interviewing in weight reduction & physical activity studies

• Weight reduction studies of obesity as a preventable risk factor for diabetes, cardiovascular and heart disease
• Community based projects on childhood obesity, particularly as it relates to minority populations

**Economic Issues and Health**
• Impact of economic downturn on health

• Quality of life Issues related to economic cycles

**Environmental Exposure**
• Research focused in two basic areas of exposure assessment: (1) methodologies for evaluating exposures, and (2) application of these methods. Application of these methods in examining lead in the environment, asbestos exposure to workers, asthma in schools, environmental exposure in a mining and processing region of Peru, and most recently welding exposures and Parkinsonism.

• Lead and asthma research has primarily been focused on children: St. Louis metropolitan region, as well as the SE and SW old lead mining areas of Missouri. Asthma research has been primarily with children in k-12 in the St. Louis Metropolitan area.

• Community based studies examining asthma prevalence

• Asbestos exposure has been examined mainly with adults through an occupational exposure registry developed by the Selikoff Foundation.

• Exposure reconstruction of welders: Ship building industry in Wisconsin and construction workers.

• International research currently conducted in Peru with a focus on community level and investigation exposure to all populations.

• Identification of environmental factors that attribute an outbreak of infectious disease in North Texas, Dallas and Tarrant Counties

• Risk Assessment of vector-borne disease transmissions

• Assessment of environmental impacts on biology of vectors at molecular level

• Above area are investigated using statistical tools to associate environmental factors and disease occurrences or using molecular and genomics tools to assess environmental impacts on biology of the vectors.

**Health Service Related Research**
• The application of fixed effects model and longitudinal design to examine how community hospitals’ finance, markets, and health policies affect hospital behaviors including the adjustment for the quality of care and unprofitable services
• Investigation of health services research using administrative data in the areas of aging, minority health, health disparities, end of life care, hospice care, and cancer

• Impact of social factors (marital status, education, unemployment) and racial and ethnic concordance on utilization of health services

**Mental Health & Psychiatric Disorders**

• Effects of chronic exposure to interpersonal violence on social behavior in animal models, and interpersonal relationships, hostility, and decision making in humans

• Treatment outcomes in crisis intervention models, and chronic medical conditions thought to increase risk for depression

• Survey research study of veterans care needs

• Opinions of mental illness among medical students

• Psychiatric symptoms in juvenile detainees

• Assessing utility of diagnostic instruments in psychiatric outpatient settings, near-suicide risk, and perinatal depression

• Analysis of trends in psychiatry inpatient and crisis services utilization in Tarrant County, primarily the psychiatric clinical population, but also juveniles, adults and children/adolescents at risk for mental illness

**Special Populations** (overlapped with above topics, listed below as additional information)

• Children

• Elderly

• Women’s Health

• African Americans/Hispanics

**Research Training and Public Health Workforce Development and Training**

• Clinical Training: NIH training awards

• Minority Post-Doctoral Basic Science and Socio Behavioral Research: NIH Training Awards

• Public Health Workforce Development and Training: ASPH/CDC Cooperative Agreement
**Current External Funded Research**  
(Only Principal Investigators are indicated)

**Aging**  
National Institute on Aging, R01, Religion, Aging and Mexican Americans, (2007-2011) (Elena Bastida, Ph.D)

**Cancer**  
Department of Defense Prostate Cancer Research Program, Acculturation and nutritional biomarkers for prostate cancer risk in Hispanic men (2006-2009), (Carlos Reyes Ortiz, MD, Ph.D., PI)


National Cancer Institute, Dallas Cancer Disparities Community Research Coalition (06/16/08 - 05/31/10), (Kathryn Cardarelli, Ph.D. PI)

Komen Foundation, Breast Cancer in Hispanic Women (2008-2009), Carlos Reyes Ortiz, MD., Ph.D., (CO PI)

Komen Foundation, Energy Balance and Breast Cancer Risk in Breast Cancer Family Registry (2008-2011), (Fang Fang Zhang, Ph.D., PI)


Komen Foundation, Community Profile on Breast Cancer (2008-2009) (Sue Lurie PI), Jim Simpson, Ph.D., COPI)

**Current Institutional Research Awards**

Validation of a Statistical Model for Prediction of Carrying Breast/Ovarian Cancer Susceptibility Genes BRCA1 and BRCA2, School of Public Health, (Swati Biswas, Ph.D., PI)

Environmental and Behavioral Impact on Global Hypomethylation and Gene Specific Hypermethylation in Healthy Individuals, Institute for Cancer Research at UNT Health Science Center & Joe and Jessie Crump Fund for Medical Education (2008-2009) (Fang Fang Zhang, Ph.D. PI)

Behavioral Determinants of Methylation Abnormalities: A Pilot Study of Potential Markers for Cancer Prevention and Control, School of Public Health, (2008-2009), (Fang Fang Zhang, Ph.D. PI)

Influence of County and Facility Level Factors on Physician Cancer Screening Practices, School of Public Health, (Jim Stimpson, Ph.D. PI).
**Cardiovascular Disease, Diabetes, Dietary Behaviors, Obesity, Physical Activity**
National Institutes of Health, NCMHD, Beyond Sabor: A Border Embedded Health Promotion Phase II (Targets obesity as a risk factor for diabetes and CVD in adults; also targets prevention or maintenance of diabetes) 2008-2013. (E. Bastida, Ph.D., PI)

United Way of Tarrant County, FitFuture, Childhood Obesity Impact Project, $172,000: 2006-2009. (X. Urrutias-Rojas, Ph.D./N. Lackan, Ph.D., PIs)

**Environmental Exposure**

Building the Capacity for Evidence-Based Decision Making to Prevent Disease and Protect the Environment in Central Peru. USAID/Health Education for Development. Dec 1, 2006 – Nov 30, 2009. (D. Sterling, Ph.D.)


Grant # 1 RO1 OH08071-01. National Institute for Occupational Safety & Health (NIOSH), CDC/National Cancer Institute (NCI), NIH. Cancer risk in Workers Exposed to oncogenic Viruses. 05/01/04-04/30/07. (ES Johnson, Ph.D, PI)

Supplemental Grant # 1 RO1 OH08071-04. NIOSH/NCI. Analysis of Case-Cohort Study of Cancer risk in Workers Exposed to oncogenic Viruses. 06/01/07-04/30/08. (ES Johnson, Ph.D, PI)

Grant # 1 RO1 OH008687 -01. NIOSH/NCI/NIEHS. Cancer and Non-cancer Mortality in Meat Workers. 09/01/07-08/31/09. (ES Johnson, Ph.D, PI)

**Mental Health and Psychiatric Disorders**
Veterans Care Needs (D. Cruser, Ph.D.)

Psychiatric Symptoms in Juvenile Detainees (D. Cruser, Ph.D.)

Assessing Utility of Diagnostic Instruments in Psychiatric Outpatient Settings (D. Cruser, Ph.D.)
Recent Publications on Selected Topics: Representative

### Aging

**Bastida, E.**
Krause, N. & **Bastida E.** Exploring the interface between religion and contact with the dead among older Mexican Americans, *Review of Religious Research*, (December 2008)

Krause, N and **Bastida, E.** "Core Religious Beliefs and Providing Support to Others in Late Life" (forthcoming) *Mental Health, Religion, and Culture.*


**Lurie, S.**

**Lackan NA**

**Stimpson, JP**


**Cancer**

Biswas, S


Chen, Shande


Coggin, C.


Fellini, M.


Johnson, ES
Lackan, NA


Reyez-Ortiz, CA


Singh, K


Zhang, FF


**Cardiovascular Disease, Diabetes and Obesity**

Bastida, E


Cardarelli, KM


Johnson, ES

Reyes-Ortiz, CA

Environmental and Occupational Health

Johnson, ES


Lee, Joon-Hak


Ramphal, Lilly

Ramphal, Lilly. Firefighter cardiovascular risk factor intervention study began in 2008 and is currently ongoing.


Sterling, David


Health Services, Health Utilization, Access to Health Care

**Bastida, E.**


**Cardarelli, K.**

**Kurz, RS**
Wilson K, Gillespie K, **Kurz, R.** Cost-utility analysis of the provision of consulting physician services to enhance the school nurse role for children with asthma. *Journal of School Health, in press.*

Wilson K, Moonie S, Sterling D, Gillespie K, **Kurz R.** Examining the consulting physician role to enhance the school nurse role for children with asthma. *Journal of School Health, in press.*


**Lackan, NA**

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**Health Disparities** (Miscellaneous topics not included above)

**Cardarelli, K**


**Lurie, S**


**Women’s Health**

**Coggin, C.**