

UC Blum Research Action Network:

Discovering Solutions for Global Wellbeing

May 2017

Discovering Solutions for Global Wellbeing

A Compendium of Research Working Toward Reducing Poverty and Improving Health for All Populations



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Acknowledgments

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Many, many thanks to Richard C. Blum, UC Regent and Co-founder, CEO, President and Chariman of Blum Capital Partners, for his vision and many contributions that support the Blum Centers throughout the UC campuses. The combined good work of our Centers is attributable to Mr. Blum's generosity and dedication to alleviating poverty and improving health and wellbeing around the world.

We also express much gratitude to all UC Blum Centers that contributed research summaries and information highlighting the global reach of the collective UC Blum Federation. UC campus members of the UC Blum Federation include:



UC Berkeley Blum Center for Developing Economies

Focus: global poverty and inequality



UC Davis Blum Center for Developing Economies

Focus: finding sustainable solutions to alleviating global poverty



UC Irvine Blum Center for Global Engagement

Focus: sustainable energy, hydrology, public health innovative financial methods and public policy



UC Los Angles Blum Center on Poverty and Health in Latin America

Focus: working across boundaries to reduce poverty and health inequalities in Latin America



UC Merced Blum Center for Developing Economies

Focus: the developing economy of the San Joaquin Valley and the Sierra Nevada region



UC Riverside Blum Poverty Initiative

Focus: the nexus between poverty, water and sustainability in the Coachella Valley in Riverside County



UC San Diego Blum Cross-Border Initiative

Focus: poverty research and practice in the San Diego-Tijuana region



UC San Francisco



UC Santa Barbara Blum Center for Global Poverty Alleviation and Sustainable Development Focus: research and public programming concerning global poverty alleviation and sustainable development



UC Santa Cruz Blum Center on Poverty, Social Enterprise and Participatory Governance
Focus: unique training and research opportunities for students to work and learn firsthand about poverty alleviation projects

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Introduction

The UC Blum Federation, a consortium of the 10 Blum Centers across the University of California, formed in January 2016 as a collaborative effort funded by the University of California's Office of the President. The purpose of the UC Blum Federation is to support activities that cut across all Blum Centers and focus on the areas of: 1) network coordination advancement; 2) enhanced student collaborations; and 3) novel policy and community research.

As a result, the UC Blum Federation's Research and Policy Committee formed the UC Blum Research Action Network to stimulate and showcase original research and policy initiatives across the UC Blum Centers and UC system through a thematic annual publication. This compendium represents the first efforts to do so.

Within these pages, you will find select research activities that have been completed or are currently underway from UC Blum Centers at: UC Berkeley, UC Davis, UC Irvine, UCLA, UC Riverside, UC Santa Barbara and UC Santa Cruz. As exhibited in this volume, the UC Blum centers are conducting high impact and exciting scholarship on poverty. Indeed, this volume demonstrates how the Blum centers are world leaders in poverty research. Unique to the field of poverty scholarship, the Blum centers are also distinctively interdisciplinary. The Blum centers very much view poverty as a complex and multifaceted phenomenon that manifests in many ways including housing, education and poor health.

In this sense, the volume exhibits the broad range and scope of poverty scholarship occurring under the Blum banner. Poverty is not solely a question of economic deprivation, and it is deeply embedded with the natural environment, health, politics, institutions and wellbeing generally.

As you review the breadth of research emanating from the UC Blum Federation, you will find research focused on California and several regions of the world, and on wide varieties of causes and consequences of poverty. The contributions in the volume are organized into themes including: Using Social Cohesion to Strengthen Communities; Initiatives to Improve Health; Politics and Governance; Sustaining the Physical Environment; Frontiers of the Social Science of Poverty; and Impact of Development. This compendium should serve as a useful tool for UC Blum researchers and poverty researchers around the world to identify pressing questions related to these themes, to encourage scholarship in new directions, and to build conversations across the UC system and in the global community of poverty scholars.

We hope you will find this inaugural issue informative. We look forward to subsequent publications and the ability to promote research and the discovery of solutions for improving global wellbeing.

FOREWORD

MICHAEL A. RODRÍGUEZ, MD, MPH;
ANNE M. DUBOIS, MWC

Scholars and community stakeholders have long discussed how societies can effectively work together for the betterment of all. Communities are witnessing an upsurge in understanding how social cohesion affects the societal wellbeing, the quality of institutions, and the ability of societies to respond to various kinds of disasters and issues. The scholarly literature describes social cohesion as a multidimensional construct and illustrates the different degrees of cohesion reflected in the attitudes and behaviors of the individuals of a given society. Each of the society and the scholar of the individuals of a given society.

Researchers at the University of California Blum Centers have advanced the field of social cohesion through efforts in developing programming based on strategic social cohesion principles. Take, for example, research from UC Irvine where two studies are exploring a foundational element of social cohesion, empathy and compassion, among specific populations: university students and at-risk children. In research by Piff and colleagues, data collected through surveys of university students will inform the development of opportunities for enriching empathy-building experiences on and off campus. In another research effort being prepared for publication from UC Irvine, Quas and colleagues explore conditions of high adversity and its effects on developmental outcomes, specifically empathy and pro-social behaviors, among vulnerable children.

Meanwhile, from the UCLA Blum Center, researchers have produced a comprehensive report on how Latin American and European nations have used social cohesion as a strategy for addressing disparities, particularly as it relates to improved health outcomes. After reviewing the literature and conducting targeted interviews with key stakeholders in several countries, Rodríguez and colleagues identified

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Foreword, cont.

operational methods common to successful social cohesion; methods included: cross-sector collaboration; community engagement; and participatory policy development. The full report also provides recommendations for operationalizing social cohesion in the United States. In another initiative of the UCLA Blum Center, research teams are exploring evidence-based rationale to inform the development of a comprehensive Shared Advantage Plan for the commercial real estate industry. The research will define the relationship between the built environment and community wellbeing, including ways to improve social cohesion.

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Over the last several decades, university students across the country have exhibited a dramatic shift from communal values toward self-interest. College students today are experiencing unprecedented levels of narcissism, displaying more self-centered attitudes than ever before, feeling increasingly disconnected from others and their communities, and are less concerned with the wellbeing of others. More and more students are reporting feelings of stress, and are searching for meaning and purpose in life. Moreover, conversations occurring in private and public institutions, such as the United Nations, point to a gap in socio-emotional skills—deficits in empathy and perspective taking—among incoming employees, a need that institutions of higher education are uniquely positioned to address. Ironically, empathy and other-regard are powerful determinants of people's physical and social welbeing: empathy is linked to better health outcomes, improved social relations, enhanced academic performance, and increased life satisfaction. Given the vast cultural, racial and socio-economic diversity of UCI's undergraduate

1.1 Measuring/ **Cultivating Other** Relatedness and Empathy

Researcher: Paul Piff

Status: In Progress

Blum Center: UC Irvine

For more information: Watch for

link

population, this university is well-poised to assess student attitudes and determine how to enhance empathy and connections between different groups, particularly given the high levels of intergroup tension and anxiety in the current sociopolitical climate. The goal of this research and education program is to evaluate students' experiences on campus and feelings of compassion toward others, as well as create new opportunities for enriching empathy-building experiences on and off campus. Surveys to collect data are planned for the next four years. The first survey was administered in January 2017.

1.2 Empathy and Pro-Social Tendencies in At-Risk Children

Researcher: Jodi Quas

Status: In Progress

Blum Center: UC Irvine

For more information:

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Exposure to extreme poverty, family violence, neighborhood chaos, environmental stress and recurring violence exacts a tremendous toll on children, families, and even entire societies, as demonstrated by an impressively large body of science showing links between such exposure and a host of negative outcomes (e.g., in mental and physical health, academic achievement, economic prosperity, delinquency and crime, to name a few). Indeed, in classes, in public venues, and even in policy discussions, these negative outcomes are featured prominently, making them well-known and almost overwhelming to those who would like to make a difference in the lives of some of the most vulnerable populations of children worldwide. Hidden in this literature, though, are hints at sources of resilience in children, as the potential for compassion and empathy, and intrinsic and extrinsic buffers to some of the negative outcomes. What is needed, therefore, is a more direct and sustained

focus on these sources of positive influence. Also needed is education about how to observe and build resilience in adversity-exposed children and families as ways of not only empowering those who need it, but also showing those who come into contact with these populations that there is a way to make a difference and effect change, even if small, in a positive direction. Our research is designed to address two related goals: 1) to examine positive developmental outcomes, specifically empathy and prosocial behaviors, in children growing up under conditions of high adversity; and 2) to build knowledge and skills in field



placement students carrying out work to build resilience in high-risk, vulnerable children. Data collection was carried out in Swaziland (summer 2014) and La Paz, Mexico (spring 2016) and the first articles are in preparation. Further data collection will take place in La Paz in spring 2017.

Building resiliency among at-risk children in Swaziland, summer 2014.

Background: Increasing social cohesion is a strategy for addressing social disparities and is associated with better health outcomes. Globally, policymakers and program developers have implemented social cohesion approaches with the goal of reducing inequities and improving health. Experiences from these global efforts can inform the development of policies and programming that promote social cohesion for addressing health disparities in the United States.

Aim: We aimed to assess how social cohesion is operationalized in Latin America and Europe to develop and implement programming and policies for improved health outcomes.

Methods: Through a review of peer-reviewed and gray literature, we identified social cohesion initiatives in Latin America and Europe. Within those initiatives, we focused on three programs, including one multi-country program, which took place in Mexico, Brazil, Colombia, Ecuador, and Germany. We conducted 17 in-depth, multi-sectoral interviews with key program stakeholders (i.e. funders, academics, program coordinators). Interviews were transcribed, translated, coded line-by-line, and major themes were identified.

1.3 Social Cohesion—Its Role in Health Promotion and Health Policy, Lessons from Latin America

Authors: Michael A. Rodríguez, Ronald Brooks, Alexandra Mendoza, David Eisenman, Anne M. Dubois, Ondine S. von Ehrenstein

Status: Published, UCLA Blum Center; Presented at the American Public Health Association, December 2016

Blum Center: UCLA

For more information:

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Findings and Implications: Major operationalization themes for social cohesion included cross-sector collaboration, community engagement, and participatory policy development to address existing social and health issues. Another theme identified was the need for more academically rigorous and consistent operationalization, as well as evaluation of social cohesion programs and policies. Steps that may promote social cohesion and help reduce health disparities in the U.S. include efforts by policy makers to engage various stakeholders in the development of policy and in the implementation of programs based on those policies. Further research is also needed to develop systematic methods for evaluating outcomes of social cohesion policies and programs.

1.4 CBRE Shared Advantage Approach to Promoting Healthy Communities

Researchers: Michael Rodríguez, Michelle Maurer, Brian Cole, Magali Delmas, Anne Dubois

Status: In Progress

Blum Center: UCLA

For more information:

link

Through this collaborative effort with CBRE, the UCLA Blum Center is conducting research that will result in evidence-based rationale to inform the development of a comprehensive Shared Advantage Plan that provides systemic emphasis on the relationship of the built environment shaped by a commercial real estate company and community wellbeing. Through this work, the Center will produce two (or more) articles: 1) findings from a literature review and other relevant research that will assist commercial real estate leadership in sustaining programming for healthy communities; and

2) a Healthy Communities Report that will assess existing real estate approaches for improving community health and offer recommendations for approaches, measurements and evaluation tools for the Shared Advantage approach. Articles and products will be available in August 2017.



FOREWORD

MICHAEL A. RODRÍGUEZ, MD, MPH;
ANNE M. DUBOIS, MWC

Throughout the UC Blum Centers, research to improve health outcomes, reduce poverty and address other social determinants of health has addressed a variety of issues, ranging from development of tools for disease screening and diagnostics, to community-based risk management system, to health policy and insurance needs, and the development of a novel new health equity institute within a major federally qualified health center. These distinctly different research efforts have the common theme of improving health among the populations involved within the initiatives.

Two initiatives from UC Berkeley target specific diseases:

1) the development of a training tool to assist health care providers in accurately screening for cervical cancer in low- and lower-middle income settings; and 2) a framework for the expanded use of diagnostic microscopy through mobile phones pared with inexpensive optics for low-resource areas to detect tuberculosis, malaria, soil-transmitted helminths, and other infectious and noncommunicable diseases.

To combat the devastating impacts of natural hazards, especially flood and drought, Sanders and colleagues from UC Irvine are implementing a new paradigm in which powerful environmental modeling tools are put in the hands of local communities and oriented around their priorities, where model output is framed in ways that end-users find useful and useable, and where risk information is made readily available to all. This exploratory research is currently underway in Malawi.

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Foreword, cont.

Two studies from UC Davis also provide insights on practices that affect human health. One study examines the wildlife trade in Asia and zoonotic disease transmission that can threaten human health. Mazet and colleagues found markets with alive and freshly dead mammals for sale, including 12 mammal families documented to be capable of hosting zoonotic pathogens. In another study, Dewey and a team of researchers analyzed the effect of interventions addressing water quality, sanitation, handwashing, and nutrition on enteric infections, growth and long-term health among young children in Kenya and Bangladesh. In other research, Dewey and colleagues examine the effects of interventions that mitigate the effects of poor diet on infant growth and development.

While many have heard about the Tuskegee syphilis experiments with 400 African Americans, fewer are aware of the US-led, immoral and unethical experiments involving more than 5,000 uninformed Guatemalan men and women during the 1940s and 1950s. In this research from UCLA, Rodríguez and Garcia explore the backdrop for this atrocity and call for steps the US can take to compensate Guatemala and its people.

In light of the growing number of undocumented immigrants, researchers at UCLA Blum Center have amplified efforts to influence policy and improve conditions that support all healthy people. In one effort, Rodríguez and colleagues analyzed policies within each of the 50 US states to emphasize the critical role states play in promoting or hindering the wellbeing of undocumented immigrants. In another effort, Arredondo and colleagues identified opportunities, barriers and challenges in Mexico's policy networks for the development of health care programs for undocumented migrants and their families in the United States.

Finally, in a new initiative with AltaMed Health Services Corporation, UCLA Blum Center researchers have designed and will operationalize plans for the AltaMed Institute for Health Equity. Activities of the Institute will work toward incorporating a learning health care system throughout AltaMed clinical and operational lines. With this systemwide change, the Institute will promote and support the delivery of health care that results in improved patient outcomes at sustainable rates.

Objectives / Aims: 1) To describe the need for a cervical cancer screening trainer; 2) to design a trainer to support visual inspection with acetic acid (VIA) by midwifery students, midwives, and other health care providers in low and lower-middle income countries; 3) to explain the results of prototyping the trainer and administering preliminary usability tests

Study Design: A design ethnography study using techniques such as observations, interviews, and focus groups was performed during May and June 2013, in the Upper East, Ashanti, and Greater Accra regions of Ghana to identify unmet women's health needs.

Methodology: 1) Design ethnography study; 2) Development of a ranked list of user requirements based on design ethnography observation in Ghana, interviews with health care professionals in the United States, and supplemental literary research including benchmarking; 3) Concept generation through brainstorming, brainsketching, analogical thinking, design heuristics, and functional decomposition; 4) Design iteration through sketch modeling, CAD modeling, and physical prototyping; 5) Preliminary evaluation

Results: Visualize is a box trainer constructed of materials available in Ghana, including pressboard, PVC pipe, latex foam, and assorted hardware.

The Visualize prototype includes a simulated vaginal cavity, made with PVC pipe and latex foam, which allows the user to insert a speculum. The user can either insert a Jhpiego flashcard or a plastic tab with cervical images, both of which are visible by looking through the simulated vaginal cavity. An Arduino microcontroller and LCD screen provide an optional modular electronic feedback mechanism to guide the user through the steps of the VIA.

Conclusions: The need for a tool to aid in training health care providers to accurately screen for cervical cancer in low and lower-middle income settings was established through a design ethnography study in Ghana. Preliminary testing and feedback suggests that the concept solution could improve VIA training, but additional testing is required. Future work involves exploring the marketability of the concept and delivering prototypes to interested end-users in Ghana.

Additional Notes: Building on this research, Julia Kramer, now a UC Berkeley Development Engineering PhD student, founded Visualize. Visualize was a winner in the Blum Center's 2015 Big Ideas Contest.

2.1 A Cervical Cancer Screening Trainer for Use in Low-Resource Settings

Authors: Maria R. Young, Julia M. Kramer, Jeffrey B. Chu, Jeffrey V. Hong, Kathleen H. Sienko, Carolyn M. Johnston

Status: Published, Intl J for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship, 2016; 11(1): 1-18.

Blum Center: UC Berkeley

For more information:

link

2.2 Automated Disease Diagnostics for Low-Resource Areas Using Mobile Phones

Authors: M.V. D'Ambrosio, M. Bakalar, C. Reber, F. Myers, D. Friedman, A. Joffe, D.A. Fletcher

Status: Abstract published, *Annals of Global Health*, 2016; 82(3): 452.

Blum Center: UC Berkeley

For more information:

link

Objectives / Aims: 1) To rethink how diagnostics is performed with microscopy; 2) To develop a solution to the lack of diagnostic experts in low-resource areas; 3) To develop a solution to the absence of well-equipped clinical environments needed for diagnostic microscopy.

Methodology: The approach is to use automation and algorithms to construct fully integrated microscopy-based diagnostics. By leveraging the mass production of consumer electronics such as mobile phones, we can design inexpensive automated devices with extremely low recurring costs for low-resource areas. By using state-of-the-art algorithms, we can provide rapid, quantitative diagnoses without the need for expert microscopists. Lastly, by analyzing large quantities of data collected by the automated devices, we can continuously improve the algorithms to provide quality-controlled diagnostic capabilities.

Results: The research team developed an approach that utilizes automation and integration to quantitatively diagnosis Loa loa infection at the point-of-care to allow resumption of MDA campaigns. We were able to use hobby

electronics to actuate a sample of whole blood in a glass capillary, and a mobile phone mated to inexpensive optics to both image and analyze the sample, providing a quantitative diagnosis in only 2 minutes.

Conclusions: These devices illustrate a framework for the expanded use of diagnostic microscopy in low-resource areas that we are extending to tuberculosis, malaria, soil-transmitted helminths, and other infectious and noncommunicable diseases.

Funding sources / acknowledgments: This work was supported in part by the Bill and Melinda Gates Foundation, the Blum Center for Developing Economies at University of California (UC) Berkeley, U.S. Agency for International Development through the Development Innovation Lab at UC Berkeley, the Purnendu Chatterjee Chair fund, and the Division of Intramural Research of the National Institute of Allergy and Infectious Diseases.

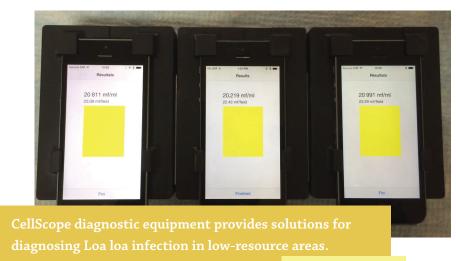


Photo credit: Matt Bakalar

The devastating impacts of natural hazards, in particular flood and drought, have been escalating for decades despite advances in hazards science and extensive effort to manage risks [White et al., 2001; Hirabayashi et al., 2008, 2013; Merz et al., 2014; Ward et al., 2015; Aven, 2016]. Institutional reforms designed to reduce risks have largely been unsuccessful [Lebel et al., 2006; Adger and Barnett, 2009; Adger et al., 2012], and future interconnected trends such as population growth, climate intensification, urbanization, malnutrition and displaced populations all point to more frequent and destructive environmental disasters [IPCC, 2012; Jongman et al., 2015; Mechler and Bouwer, 2015; Winsemius et al., 2015]. The potential for lives lost, communities displaced, property destroyed and public health crises over the next three or four decades is almost unimaginable [IPCC, 2012, 2013; Adger et al., 2015]. The Lancet reports: "the effects of climate change being felt today and future projections represent an unacceptably high and catastrophic risk to human health" [Watts et al., 2015]. Examples of health impacts from extreme events include malnutrition, diarrheal disease, cholera, 2.3 Humans, Health, Flood and Drought: Toward a Community-Based Risk Management System

Authors: Brett Sanders, Richard Matthew, James Orbinski

Status: In Progress

Blum Center: UC Irvine

For more information: Watch for more information to be published at

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cryptosporidiosis, campylobacter, leptospirosis, harmful algal blooms, respiratory allergies, asthma, malaria, denge, encephalitis, hantavirus, Rift Valley fever, Lyme disease, chikungunya, West Nile virus, heat-related illness, forced migration, civil conflict and mental health impacts (CDC). [Lebel et al., 2006] Others attribute the failure of flood disaster risk reduction efforts to five factors that are also applicable to drought. The issues they raise point to need for a grass-roots approach to disaster management built upon a foundation of community engagement, framed by an understanding of what communities care most about, and implemented to co-produce actionable knowledge that is useful and useable by everyone in the community, including individuals, businesses, community groups, government, and non-governmental organizations (e.g., [Spiekermann et al., 2015]). To this end, we are implementing a new paradigm where the most powerful environmental modeling tools on the planet are put in the hands of local communities and oriented around the issues that communities care about the most, where model output is framed in ways that end-users find useful and useable, and where risk information is made readily available to all. We are especially interested in the nexus between extreme events and human health. To this end, exploratory research is currently underway in Malawi.

2.4 Wildlife Trade and Human Health in Lao PDR: An Assessment of the Zoonotic Disease Risk in Markets

Authors: Greatorex Z, Olson S, Singhalath S, Silithammavong S, Khammavong K, Fine A, Weisman W, Douangngeun B, Theppangna W, Keatts L, Gilbert M, Karesh W, Hansel T, Zimicki S, O'Rourke K, Joly D, Mazet J.

Status: Published, *PLoS One.* 2016;11(3): e0150666. https://doi.org/10.1371/journal.pone.0150666

Blum Center: UC Davis

For more information:

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Although the majority of emerging infectious diseases can be linked to wildlife sources, most pathogen spillover events to people could likely be avoided if transmission was better understood and practices adjusted to mitigate risk. Wildlife trade can facilitate zoonotic disease transmission and represents a threat to human health and economies in Asia, highlighted by the 2003 SARS coronavirus outbreak, where a Chinese wildlife market facilitated pathogen transmission. Additionally, wildlife trade poses a serious threat to biodiversity. Therefore, the combined impacts of Asian wildlife trade, sometimes termed bush meat trade, on public health and biodiversity need assessing. From 2010 to 2013, observational data were collected in Lao PDR from markets selling wildlife, including information on volume, form, species and price of wildlife; market biosafety and visitor origin. The potential for traded wildlife to host zoonotic diseases that pose a serious threat to human health was then evaluated at seven markets identified as having high volumes of trade. At the seven markets, during 21 observational surveys, 1,937 alive or fresh dead mammals (approximately 1,009 kg) were observed for sale, including mammals from 12 taxonomic families previously documented to be capable of hosting 36 zoonotic pathogens. In these seven markets, the combination of high wildlife volumes, high risk taxa for zoonoses and poor biosafety increases the potential for pathogen presence and transmission. To examine the potential conservation impact of trade in markets, we assessed the status of 33,752 animals observed during 375 visits to 93 markets,

under the Lao

PDR Wildlife and Aquatic Law. We observed 6,452 animals listed by Lao PDR as near extinct or threatened with extinction. The combined risks of wildlife trade in Lao PDR to human health and biodiversity highlight the need for a multi-sector approach to effectively protect public health, economic interests and biodiversity.



Livestock for sale at local market in Lao PDR

Introduction Enteric infections are common during the first years of life in low-income countries and contribute to growth faltering with long-term impairment of health and development. Water quality, sanitation, handwashing and nutritional interventions can independently reduce enteric infections and growth faltering. There is little evidence that directly compares the effects of these individual and combined interventions on diarrhea and growth when delivered to infants and young children. The objective of the WASH Benefits study is to help fill this knowledge gap.

Methods and analysis WASH Benefits includes two cluster-randomized trials to assess improvements in water quality, sanitation, handwashing and child nutrition—alone and in combination—to rural households with pregnant women in Kenya and Bangladesh. Geographically matched clusters (groups of household compounds in Bangladesh and villages in Kenya) will be randomized to one of six intervention arms or control. Intervention arms include water quality, sanitation, handwashing, nutrition, combined water+sanitation+handwashing (WSH) and WSH+nutrition. The studies will enroll newborn children (n=5760 in Bangladesh and n=8000 in Kenya) and measure outcomes at 12 and 24 months after intervention delivery. Primary outcomes include child length-for-age Z-scores and caregiver-reported diarrhea. Secondary outcomes include stunting prevalence, markers of environmental enteropathy and child development scores (verbal, motor and personal/social). We will estimate unadjusted and adjusted intention-to-treat effects using semiparametric estimators and permutation tests.

Ethics and dissemination Study protocols have been reviewed and approved by human subjects review boards at the University of California, Berkeley, Stanford University, the International Centre for Diarrheal Disease

Research, Bangladesh, the Kenya Medical Research Institute, and Innovations for Poverty Action. Independent data safety monitoring boards in each country oversee the trials. This study is funded by a grant from the Bill & Melinda Gates Foundation to the University of California, Berkeley.

2.5 Cluster-Randomized
Controlled Trials of
Individual and Combined
Water, Sanitation,
Hygiene and Nutritional
Interventions in Rural
Bangladesh and Kenya:
The WASH Benefits Study
Design and Rationale

Authors: Arnold BF, Null C, Luby SP, Unicomb L, Stewart CP, Dewey KG, Ahmed T, Ashraf S, Christensen G, Clasen T, Dentz HN, Fernald LC, Haque R, Hubbard AE, Kariger P, Leontsini E, Lin A, Njenga SM, Pickering AJ, Ram PK, Tofail F, Winch PJ, Colford JM Jr.

Status: Published, BMJ Open. 2013 Aug

Blum Center: UC Davis

For more information:

link

2.6 First, Do No Harm: The US Sexually Transmitted Disease Experiment in Guatemala

Authors: Michael A. Rodríguez, MD, MPH, and Robert García, ID

Status: Published, *Am J Public Health*. 2013;103:2122–2126

Blum Center: UCLA

For more information:

link

From 1946-1948, the United States government conducted research experiments involving more than 5,000 uninformed and unconsenting Guatemalan people. While US President Barack Obama apologized in 2010 and the presidential commission found experimentation was wrongful, little, if anything, has been done to compensate the victims and their families. In this commentary, Rodríguez and García explore the backdrop for this unethical research and call for steps the United States should take to provide relief and compensation to the Guatemalan people.



For this study, we selected five policy areas that influence immigrant health, while also being the subject of recent state policy activity: 1) public health and welfare benefits; 2) higher education; 3) labor and employment practices; 4) driver licensing and identification; and 5) the federal enforcement program, Secure Communities. The first three policy areas directly affect access to health care and other social determinants of health. The last two represent two areas of immigration policy that more indirectly impact health and are the focus of highly visible debates in many states. Within these policy areas, we identified instances where federal policy allows for states to establish their own policy or allows variation in the implementation of federal policy. Criteria for selecting policies included: 1) policies that have a direct impact on immigrants based on their legal status; 2) policies that influence the social determinants of health; and 3) policies covered in existing summaries of all 50 states. Selected policies were then assigned a score according to a policy outcome that was either inclusive or exclusive and state policies were scored accordingly. The total inclusion score is the sum of each policy score.

Findings. Total inclusion scores show California having the most inclusive set of policies that foster conditions beneficial to the health of undocumented immigrants. Illinois, Washington, Colorado, and Texas round out

2.7 Creating Conditions to Support Healthy People: State Policies that Affect the Health of Undocumented Immigrants and their Families

Authors: Michael A. Rodríguez, Maria-Elena Young, Steven P. Wallace

Status: Published, Copyright © 2015, University of California Global Health Institute

Blum Center: UCLA

For more information:

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the top five inclusive states. The states with the most exclusionary policies are Ohio, followed by Alabama, Arizona, Indiana, Mississippi, and West Virginia. The average score of -2.5 for the 50 states and the District of Columbia indicates that most states have policy environments that exclude undocumented immigrants from some protections in several key domains of life that can impact their health.

Conclusion. Our analysis of each state's policies brings to light the critical role states play in promoting or hindering the well-being of undocumented immigrants throughout the nation, and it sets the stage for additional research, advocacy, and action to ensure the advancement of policies that include undocumented immigrants.



Creating conditions to support healthy people:
State policies that affect the health of undocumented immigrants and their families

2.8 Health Insurance for Undocumented Immigrants: Opportunities and Barriers on the Mexico Side of the US Border

Authors: Armando Arredondo, Emanuel Orozco, Steven P. Wallace Michael Rodríguez

Status: Published, *Int J Health Plann Mgmt*. 2012; 27: 50–62. doi:10.1002/hpm.1100

Blum Center: UCLA

For more information:

link

Arredondo and researchers examined the opportunities, barriers and challenges in Mexico's policy networks that determine health care programs for undocumented migrants and their families in the United States. Through policy analysis, interviews with key stakeholders and examination of a case study, the authors found broad interest in creating binational health insurance. They found key elements for success of such a plan would be dependent on the involvement of political actors and the identification of high, medium or low interaction among key stakeholders, integration of coalitions, and negotiating skills of all stakeholders involved.

2.9 The AltaMed Institute for Health Equity

Researchers: Michael A. Rodríguez, MD, MPH; Moira Inkelas, PhD; James Macinko, PhD; Anne M. Dubois, MWC

Status: In Progress

Blum Center: UCLA

For more information:

link

Through this collaborative effort with AltaMed Health Services Corporation, faculty and staff at UCLA will direct and implement a series of activities designed to incorporate a learning health care system throughout AltaMed clinical and operational lines. When these activities have been implemented, the AltaMed Institute for Health Equity will become institutionalized as an entity that promotes and supports an effective approach for delivering health care resulting in improved patient outcomes at sustainable cost rates. Implementation planning began in January 2017 and the Institute is expected to be launched and fully operational in 2018 to conduct activities related to

research, rapid response, patient and family engagement, partnership/collaboration and other components of a learning health care center.



In this review article, Dewey addresses mechanisms for meeting the nutritional needs of women and their children in challenging regions of South Asia where diets have low nutritional value. The article examines the challenges of meeting nutritional needs during the first 1000 days of a child and discusses strategies that have been found successful in improving nutrient intake in these South Asian at-risk maternal and child populations. It also provides evidence on the impact of interventions designed to address poor diet and its effect on growth and stunting from prenatal and post-natal nutritional intake.

2.10 Reducing Stunting by Improving Maternal, Infant and Young Child Nutrition in Regions such as South Asia: Evidence, Challenges and Opportunities

Author: Kathryn G. Dewey

Status: Published, Matern Child Nutr;2016;12(Suppl 1):27-38

Blum Center: UC Davis

For more information:

link

2.11. Effects of an Intervention on Infant Growth and Development: Evidence for Different Mechanisms at Work

Authors: Elizabeth L. Prado, Souheila Abbeddou, Elizabeth Yakes Jimenez, Jérôme W. Somé, Kathryn G. Dewey, Kenneth H. Brown, and Sonja Y. Hess

Status: Published, Matern Child Nutr;2017; Epub 4 May 2016

Blum Center: UC Davis

For more information:

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Through preliminary work, Prado and colleagues found that lipid-based nutrient supplements plus malaria and diarrhea treatment from age 9 to 18 months resulted in positive developmental effects including length-for-age z-score (LAZ) as well as motor, language and person-social development scores at 18 months. In this article, the researchers present results of research to determine if the improved developmental scores were attributable to the LAZ factor or whether the intervention had independent effects on both growth and development. Their findings indicate that the intervention had independent positive effects on linear growth and development, pointing to the suggestion that these factors occur through different mechanisms.

Section 3. Politics and Governance

FOREWORD
HEATHER BULLOCK, PHD

Researchers at UC Blum Centers are working to reduce social exclusion in its many forms. Of particular interest is fostering political participation, civic engagement, and government accountability. Two recent research efforts from UC Santa Barbara illuminate effective practices for fostering greater government responsiveness and accountability. With the goals of interrupting government-citizen disengagement and fostering collaborative governance, Buntaine, Skaggs, and Nielson conducted two field experiments in Kampala, Uganda assessing responses to solid waste management services. Although announcements about reporters' activities did not increase citizen engagement, government responsiveness to reporters significantly enhanced involvement. Importantly, these findings document the role of government responsiveness in fostering collaborative, participatory systems.

New technologies can also be harnessed to increase engagement and participation. In a randomized controlled trial conducted during the 2016 Ugandan district elections, Buntaine and his colleagues investigated the impact of text messages on citizens' attitudes on budget matters, revealing that information, itself, is a source of power.

Section 3. Politics and Governance

Governments face problems serving the public interest when they do not have good information about how well the demands of citizens are met. Citizens experience deficient or absent public services, but they do not have incentives to provide monitoring when they do not expect governments to be responsive to their concerns. Over time, this reinforcing cycle creates what we term the valley of disengagement. We investigated how to activate and sustain collaborative governance given the challenges posed by this vicious cycle. In two field experiments implemented in Kampala, Uganda between fall 2015 and fall 2016, we recruited citizens to report on solid waste services to a municipal government. We find that community nominations of reporters and community announcements about reporters' activity do not increase citizen monitoring. However, responsiveness to reporters by government significantly boosts engagement over several months, highlighting the critical role of timely and targeted responsiveness by governments for sustaining collaborative governance.

Funding sources / acknowledgments: The authors are grateful to Polycarp Komakech, Immaculate Apio Ayado and Catherine Tabingwa for contributions to the design and implementation of this research. This project has been

3.1 Escaping the Valley of Disengagement: Two Field Experiments on Citizen Motivations to Engage in Collaborative Governance

Authors: Mark T. Buntaine, Jacob T. Skaggs, and Daniel L. Nielson

Status: Presented at NYU CESS 10th Annual Experimental Political Science Conference, Feb 25, 2017

Blum Center: UC Santa Barbara

For more information:

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carried out in partnership with the Kampala Capital City Authority, and we gratefully acknowledge the support and participation of Charles Herbert, Josephine Kitaka, James Semuwemba, Martin Ssekajja, Frank Batungwa Tumusiime, and Judith Tukahirwa. Experiment 1 was supported by AidData at the College of William and Mary and the U.S. Agency for International Development (USAID) Global Development Lab through cooperative agreement AID-OAA-A-12-00096. The views expressed here do not necessarily reflect the views of AidData, USAID, or the United States Government. Experiment 2 was supported

by the Hellman Family Foundation through a fellowship to MB. All activities described in this paper received approval from the University of California, Santa Barbara Human Subjects Committee (protocol ESMS-BU-MA-031), the Uganda Mildmay Research Ethics Committee (protocol 0706-2015), and the Uganda National Council for Science and Technology (protocol SS 3840) and the Uganda Office of the President (ref: ADM/154/212/03). We pre-registered the hypotheses and our plans for testing them at the Evidence in Governance and Politics registry (20151103AA). The authors received helpful feedback on previous versions of this paper from Matt Potoski and from seminar participants at the University of California, Santa Barbara, and from conference participants at the 2nd Annual Conference on Environmental Politics and Governance in Gerzensee, Switzerland.



Photo credit: Mark Buntaine

Section 3. Politics and Governance

3.2 Electoral Accountability in Inhibited Information Environments: Disclosing Budget Performance by Mobile Phone in Uganda

Authors: Mark T. Buntaine, Sarah Bush, Ryan Jablonski, Daniel Nielson, and Paula Pickering

Status: Presented at Metaketa Initiative Results Meeting, December 8, 2016

Blum Center: UC Santa Barbara

For more information:

link

Politicians often enjoy information advantages over voters and can both spin disclosures and hide actions in ways that undermine accountability. We conceive of governance as an information problem and highlight how the distribution of information drives accountability in democracies and non-democracies. New information technologies, including SMS text-messaging by mobile phone, offer advantages to civil society organizations and citizens in gaining access to independent information that elected politicians can counter only at significant cost. Demonstrating the implications for electoral accountability, we report results from a large (n=16,083) randomized controlled trial conducted during the 2016 Ugandan district elections. Using official data from the Auditor General of Uganda, we compiled salient information on irregularities in district budgets and, with a partner non-governmental organization, shared it with citizens privately via mobile phone text-messages immediately prior to the election. We find evidence that messages reporting greater budget discrepancies than expected decreased support for incumbent district councilors and that disclosures of better budget performance increased support for incumbent councilors. But the same information had no discernable effects on support for district chairs, perhaps due to a more saturated information environment and spillover from treated subjects. Our results suggest that open budget data, disseminated privately using

commonly available communication technologies, enhances local electoral accountability in a competitive authoritarian system.

Funding sources / acknowledgments: The authors thank Jacob Skaggs, Catherine Tabingwa, and Immaculate Apio Ayado for contributions to the design and implementation of this research, as well as Twaweza staff for their contributions to research design and for sharing data. This project received approval from the UCSB Human Subjects Committee on September 7, 2016, ID #15-0690. It was also approved by IRBs at BYU (#15381), William and Mary (2015-09-10-10589), Temple (via an IAA with UCSB) and LSE's Research Ethics Committee. Within Uganda, this project was approved by the Uganda Mildmay Research Ethics Committee (protocol 0309-2015), the Uganda National Council for Science and Technology (protocol SS 3943), and the Office of the President (ref: ADM 154/212/03). The authors thank Nicole Bonoff, Aashish Mehta, Luis Schiumerini, seminar participants at the University of California, Santa Barbara, and conference participants at EGAP 17 and APSA 2016 for helpful comments on earlier drafts. This project was funded by an anonymous donor as part of the EGAP Information and Accountability Metaketa Initiative.



Buntaine exploring voter habits and electoral accountability in Uganda.

Photo credit: Mark Buntaine

Foreword David Brady, PhD

Like any population, the poor confront a host of environmental challenges in this era of climate change and environmental insecurity. Indeed, the poor are likely to be more vulnerable to, and immediately affected by, environmental change. A number of projects affiliated with the UC Blum Centers focus on how the poor will be affected by, cope with, respond to, and manage environmental challenges. This is a particularly important issue given that the world's poor often work in agriculture as farmers and peasants. This is also relevant to the UC system-wide interest in food security and systems.

Much of the research in this theme is focused on local settings, both in California and internationally. Several studies in this theme concentrate on local responses to climate change and how those could affect the poor in particular. In two studies, Walsh analyzes the control and use of mineral springs at Topo Chico, Nuevo Leon, Mexico, and how the poor's access to ground water in Central Coast California is affected by climate change and wine grape cultivation. Given the vulnerability of the poor to weather events influenced by climate change, several UC Blum-affiliated scholars engage in research aiming to aid poor communities. Sanders and Matthew develop models to manage water and coastal areas in Southern California in one study. In another study, these researchers develop a system for community-based flood and drought risk management.

Other research concentrates on how climate change will affect the poor globally. For instance, Mazet examines how environmental change effects livestock and their vulnerability to disease transmission in areas with poor access to livestock health services. The authors call for improved policies at the local level to address resiliency to environmental change among livestock.

4.1 Mineral Springs, Primitive Accumulation, and the 'New Water' in Mexico

Author: Casey Walsh

Status: Published, *Regions and Cohesion*. 2015;5(1): 1-25.

Blum Center: UC Santa Barbara

For more information:

link

Objectives / Aims: To analyze how control and use of the mineral springs at Topo Chico, Nuevo Leon, Mexico, passed from peasants to industrial capital between 1880 and 1940.

Study Design: Historical, Archival

Conclusions: The Mexican state facilitated the alienation of these common pool resources and their control by industrial capital through a series of laws and scientific hydrological studies.

4.2 Groundwater and Grapes in California's Central Coast (2014-present)

Researcher: Casey Walsh

Status: In Progress

Blum Center: UC Santa Barbara

For more information:

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This project assesses the impact of expanding wine grape cultivation on groundwater in Santa Barbara and San Luis Obispo Counties. Particular attention is given to the recent capitalization of the sector, the depletion of aquifers, and the ensuing creation and implementation of laws regulating groundwater in California (The Sustainable Groundwater Management Act – SGMA). It situates the local social and environmental dimensions of the expansion of wine grape production within global markets and climate change. Study will assess the likelihoods of achieving sustainable use of groundwater basins in California within the existing political and economic conditions.

Acknowledgments: Seed funding from UC Mexus. Funding from California State Government's Integral Regional Water Management office to conduct a survey of water needs in the Cuyama groundwater basin.

This NOAA funded project will analyze the potential implications of various sediment management options on the resiliency and vulnerability of coastal communities and coastal wetlands under climate change scenarios in two

areas, the Tijuana River Valley and Newport Beach, CA. We will also co-develop modeling tools with both high and low resource communities. Funding has been received and preliminary data collection is underway.

Developing modeling tools to mitigate flooding in coastal areas.

Photo credit: Richard Matthew

4.3 Co-development of Modeling Tools to Manage Sediment for Sustainable and Resilient Coastal Lowland Habitat in Southern California

Authors: Brett Sanders, Richard

Matthew

Status: In Progress

Blum Center: UC Irvine

For more information: Watch for more information to be published at

link

4.4 FloodRISE: Toward a Community-Based Flood Risk Management System

Authors: Brett Sanders, Richard Matthew

Status: Research published in numerous journals; continues to be in progress

Blum Center: UC Irvine

For more information: Watch for more information to be published at

link

Researchers point to the need for a grass-roots approach to disaster management built upon a foundation of community engagement, framed by an understanding of what communities care most about, and implemented to co-produce actionable knowledge that is useful and useable by everyone in the community, including individuals, businesses, community groups, government, and non-governmental organizations (e.g., Spiekermann et al., 2015). To this end, we are implementing a new paradigm where the most powerful environmental modeling tools on the planet are put in the hands of local communities and oriented around the issues that communities care about the most, where model output is framed in ways that end-users find useful and useable, and where risk information is made readily available to all. Funded through an NSF grant, we have been carrying out research and developing flood risk models for Newport Beach, Calif. and two sites in the Tijuana River Estuary in Mexico since 2014. Our models are currently being used by lowresource communities in Mexico. Numerous articles have been published on this research.

4.5 Educating Pastoralists and Extension Officers on Diverse Livestock Diseases in a Changing Environment in Tanzania

Authors: Gustafson C, VanWormer E, Kazwala R, Makweta A, Paul G, Smith W, Mazet J

Status: Published, *Pastoralism*. 2015(5):1. doi:10.1186/s13570-014-0022-5

Blum Center: UC Davis

For more information:

link

resource availability and disease transmission and frequently face poor access to livestock health services. Government veterinarians tasked with guiding health services must prioritize livestock health risks and allocate limited resources across disparate ecosystems with different disease threats. To identify livestock diseases of concern and strategies for improving herd health and resilience, we conducted community focus groups with pastoralists and interviewed pastoralist household leaders, village extension officers, and government veterinary officials in south-central Tanzania, an area experiencing rapid population growth and environmental change. All participants discussed access to livestock health services, livestock disease priorities, and means to improve livestock health.

East African pastoralists and their livestock are vulnerable to alterations in

Perceptions of diseases of importance differed among pastoralists, extension officers, and government veterinarians. Spatial differences in diseases of concern among study area pastoralists emphasized the need for locally adaptable livestock health service delivery. Although pastoralist strategies to improve livestock health differed by ethnic group, many pastoralists, as well as extension officers and government veterinarians, identified livestock health education and training for pastoralists and extension officers as a critical need.

Policies designed at the regional, rather than the local, level may not reflect the disease concerns of the entire area. To effectively address veterinary health problems and make livestock herds more resilient to environmental change, conditions at the local level must be considered. Education targeted to pastoralist households and extension officers could achieve greater flexibility in the livestock health system and provide more reliable information about local conditions for governmental policymakers.



Pastoralists at focus groups in the Ruaha ecosystem voiced concern about climate change affecting livestock health and livelihoods and requested more education to increase their resiliency.

Foreword David Brady, PhD

Across the UC campuses, one can find scholars advancing the basic science of poverty research and developing techniques, methods, theories, and innovative strategies to study poverty. This section features studies that aim to advance the frontiers of the social sciences of poverty. Much of this work brings together social scientists of poverty into a common conversation. In this sense, the UC Blum Centers exhibit an interdisciplinary convening that is likely to yield far-reaching contributions in the social science of poverty, which are truly interdisciplinary and international; however, much poverty research is conducted without fully acknowledging these realities. In that vein, the recently published The Oxford Handbook of the Social Science of Poverty advances the agenda of highlighting and emphasizing the need for international and interdisciplinary dialogue. This volume, edited by UC Riverside (UCR) Blum Center Director David Brady includes contributions from four UC faculty, including UC Santa Cruz (UCSC) Blum Director Heather Bullock. The volume contains approximately 40 chapters from a wide variety of disciplines and fields of study. As well, the volume contains chapters authored by scholars from both rich and developing nations. This volume includes sections on: concepts and theories; classic debates; place and context; causes, consequences; and policies and solutions.

Several UC Blum Centers are engaged in research on the most immediate and recent social changes facing the poor in local communities. The immediacy of this research ensures that poverty scholarship stays current and relevant with the local environment in California. One study by Ennis, Cohen and Chen at UCSC attempts to understand the pressing social problem of food insecurity. It offers a

continued...

Foreword, cont.

unique and innovative contribution by utilizing client surveys at food pantries. Another project at UCSC scrutinizes how the Great Recession affected poverty and inequality. This project included an undergraduate seminar, community-based field research, service-learning, and student engagement in community activities. This combination of activities provided a powerful learning opportunity for UCSC students and demonstrated a pioneering approach to education about poverty. The UCSC Blum Center supported the seminar and funded students with fellowships to continue their research and service. Further, the project aims to ultimately disseminate and publicize the findings about local poverty.

Just as the UC Blum Centers are interested in convening an interdisciplinary discussion of poverty, the Centers also aim to reorient and encourage new perspectives within poverty scholarship. A recent article by UCR Blum Center Director Brady and colleagues aims to challenge the social science consensus on how the risks of poverty are studied. They develop a framework for studying the risks of poverty in terms of prevalence (share of the population with a risk) and penalties (increased probability of poverty associated with a risk). They then show how this framework reveals a number of surprising conclusions. Their aim is to enable analysts to better understand how the risks of poverty do and do not matter to levels of poverty within a society.

Considerable attention focuses on the risks of poverty, defined as individuallevel labor market and family characteristics more common among the poor than the non-poor. This article first develops a framework for analyzing the risks of poverty in terms of prevalences (share of the population with a risk) and penalties (increased probability of poverty associated with a risk). Comparing the four major risks (low education, single motherhood, young headship, and unemployment) across 29 rich democracies, we show there is greater variation in penalties than prevalences. Second, we apply this framework to the United States. We show that prevalences cannot explain high U.S. poverty as the United States has below average prevalences. Rather, the United States has high poverty partly because it has the highest penalties. U.S. poverty would decline more with cross-national median penalties than cross-national median prevalences, and U.S. poverty in 2013 would actually be worse with prevalences from 1970 or 1980. Third, we analyze crossnational variation in prevalences and penalties. We find very little evidence that higher penalties discourage prevalences, or that lower penalties encourage prevalences. We also show welfare generosity significantly moderates the

5.1 Rethinking the Risks of Poverty: A Framework for Analyzing Prevalences and Penalties

Authors: David Brady, Ryan M. Finnigan, Sabine Hibgen

Status: Presentation, Department of Sociology; University of Massachusetts, December 2, 2016

Blum Center: UC Riverside

For more information:

link

penalties for unemployment and low education. We conclude with three broader implications. First, a focus on risks is unlikely to provide a convincing explanation or effective strategy for poverty. Second, despite being the subject of the most research, single motherhood may be the least important of the risks. Third, for general explanations of poverty, studies based solely on the U.S. are constrained by potentially large sample selection biases.

5.2 Oxford Handbook of the Social Science of Poverty

Editors: David Brady, Linda M.

Burton

Status: Published, Oxford University

Press

Blum Center: UC Riverside

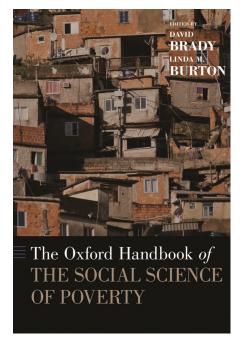
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Despite remarkable economic advances in many societies during the latter half of the 20th century, poverty remains a global issue of enduring concern. Poverty is present in some form in every society in the world, and has serious implications for everything from health and wellbeing to identity and behavior. Nevertheless, the study of poverty has remained disconnected across disciplines. The *Oxford Handbook of the Social Science of Poverty* builds a com-

mon scholarly ground in the study of poverty by bringing together an international, inter-disciplinary group of scholars to provide their perspectives on the issue. Contributors engage in discussions about the leading theories and conceptual debates regarding poverty, the most salient topics in poverty research,

and the far-reaching consequences of poverty on the individual and societal level. The volume incorporates many methodological perspectives, including survey research, ethnography, and mixed methods approaches, while the chapters extend beyond the United States to provide a truly global portrait of poverty. A thorough examination of contemporary poverty, this Handbook is a valuable tool for non-profit practitioners, policy makers, social workers, and students and scholars in the fields of public policy, sociology, political science, international development, anthropology, and economics.



This project has three objectives: 1) to examine and expose the depth and dimensions of economic insecurity in the wake of the Great Recession (including less visible manifestations of contemporary poverty); 2) to give students experience and skills in community-based field research on these issues; and 3) to engage with community practitioners addressing these problems at the local level.

The first phase of this project was conducted in spring 2015. Twenty UCSC students enrolled in a senior seminar on Poverty Politics and conducted independent research resulting in 18-20 page papers. Students were grouped into research teams around specific dimensions of poverty, such as food insecurity, housing and homelessness, employment, criminal justice, and education. To gain multiple perspectives on his or her topic, each student

5.3 Poverty and Inequality After the Great Recession

Author: Eva Bertram

Status: In Progress

Blum Center: UC Santa Cruz

For more information: Watch for more information to be published at

link

conducted interviews with one or more representatives of each of three groups: a) local service providers or advocates; b) affected individuals or groups; and c) public decisionmakers or policymakers. The outcome of this phase was the final research papers submitted by the students, each of which incorporated local field research.



Student researcher working to identify trends in poverty and inequality. In phase two of the project, four students were provided research fellowship grants from the UCSC Blum Center. These students analyzed information from several agencies to identify trends in: poverty; income and inequality; pay inequity and job creation; and receipt of services. The research also examined trends in policy response to poverty and employee misclassification. This research, combined with new poverty data released by the Census Bureau in fall 2016, will be used in compiling a brief report on poverty, inequality, and employment in Santa Cruz County.

5.4 Understanding Food Insecurity from Client Surveys at Food Pantries

Authors: Katherine Ennis, Hamutahl Cohen, and Nancy Chen

Status: Presented at the 2016 California Higher Education Sustainability Conference; preparing for publication

Blum Center: UC Santa Cruz

For more information:

link

Project Goals: To: determine the distinct Santa Cruz communities that utilize food distribution programs; document the food preferences of these populations; identify specific factors contributing to student visits; identify differences in use of food assistance programs between student and non-student populations; compare generational differences in use of food assistance programs.

Methods: For demographic analysis, we used nonrandom purposive selection of 5 sites reflecting range of clientele. In winter 2016, we conducted anonymous survey of willing pantry visitors and offered monetary raffle (regardless of participation). Survey questions were grouped around: demographics; education and student status; income; housing and commuting; experiences and preferences around food distribution; health perceptions; and public assistance utilization.

Results: Eighty-seven food pantry visitors completed the survey across the five pantry sites. From the survey responses, we identified three common and distinct groups of clientele, including students (24%); retirees (21%);

and immigrants (21%). Both students and non-students expressed primary preferences for fresh fruit and vegetables and dairy and eggs in food aid programs. Students reported spending majority of total income on combined food and housing costs, indicating limited allocation of funds for emergencies, debt repayment, taxes, childcare, transportation, and other expenses. Most survey respondents reported that their families did not use food assistance during their childhood – suggesting that the need for such programs may be new to them as adults, or such programs did not exist/were not utilized previously.

Conclusions: The need for food assistance is not uniform and is likely motivated by stressors that vary, in part, with clientele

group. For example, student populations experience more housing insecurity than non-students, changing residence an average of 3.5 times. Despite need, students utilize food assistance programs less than non-student populations. Future studies should compare graduate and undergraduate experiences with hunger. While homeless populations are food insecure, understanding visitation drivers and food preferences may require different methods as they did not participate substantially in our survey.

Food pantry visitors in Santa Cruz area expressed preference for fresh fruits and vegetables.



Acknowledgment: This work was supported by the

UCSC Blum Center on Poverty, Social Enterprise, and Participatory Governance and the UC Global Food Initiative.

Section 6. The Impact of Development

Foreword Heather Bullock, PhD UC researchers are leading the way in addressing one of the great challenges of our time – how to foster sustainable, humane, equitable development. Balancing protection of the environment and meeting human and labor needs is a source of conflict around the world. Without appropriate incentives, support for conservation may be limited, particularly in low-income communities struggling to survive.

Gender discrimination stands out as one of the most intractable barriers to equitable development.1 Initiatives at UC Berkeley and UC Santa Cruz seek to reduce gender inequality in its many forms. Grounded in the belief that all people deserve access to sanitation with dignity regardless of income, gender, ethnicity, religion, sexuality, migrant status or caste, UC Berkeley researchers Burt, Nelson, and Ray document how public latrines support human rights and gender equality. Researchers at the UC Santa Cruz Blum Center are tackling another major obstacle to gender and racial equality – economic exploitation and predatory lending. In collaboration with their community partner, Santa Cruz Community Ventures (SCCV), Bullock and her colleagues are studying low-income Latina mothers' use of alternative financial services. Through focus groups, they are examining use of predatory lending services and their impact on families, barriers to accessing mainstream banking services, and resources and services that can reduce use of exploitative lending services and promote financial capability and well-being.

References

1. United Nations Development Programme. *Barriers at the Base of the Pyramid: The Role of the Private Sector in Inclusive Development.* Istanbul International Center for Private Sector in Development (IICPSD). Turkey: UNDP. August, 2014.

Section 6. The Impact of Development

6.1 Understanding
Alternative Financial
Service Use among LowIncome Latinas

Authors: Heather E. Bullock, Erin E.
Toolis, and Maria Cadenas

Status: In Progress

Blum Center: UC Santa Cruz

For more information: Watch for more information to be published at

link

Common characteristics of predatory lending include exorbitant fees and interest rates, misleading terms, and lack of consideration of a borrower's ability to repay. These services are disproportionately located in low-income communities and communities of color, communities that are also underserved by traditional banking services. Low-income families with children are particularly hard hit by predatory services. In Watsonville, Calif., an area with a large low-income Latino/a community, half of the residents are unbanked or underbanked - a rate that is double the county and state average — making predatory lending a significant concern.

The overarching goal of this study, a collaboration between Santa Cruz Community Ventures (SCCV) and UCSC's Blum Center, is to learn more about the use of alternative financial services, particularly predatory lending services in Watsonville, Calif. Approximately 100 low-income Latina mothers living in southern Santa Cruz County will be recruited to participate in focus groups examining their use of traditional and alternative financial services. Participants will be recruited through nonprofit organizations.

Bicultural community-based researchers, who will be trained by the UCSC Blum Center, will conduct the focus groups. Focus groups will explore factors influencing the use of predatory lending services and their impact on families, barriers to accessing mainstream banking services, and resources and services that can reduce use of exploitative lending services and promote financial capability and well-being.

Focus groups will be taped and transcribed for analysis and a team of trained coders will identify central themes. In addition to academic publication, comprehensive community dissemination is planned including the creation of a fact sheet summarizing key findings and community impact, development of a resource guide that identifies strategies and organizations working for change in the area, and the creation of recommendations for policies and services.

Acknowledgment: This project is funded by UCSC's Blum Center on Poverty, Social Enterprise, and Participatory Governance and UCSC's Division of Social Sciences.

Section 6. The Impact of Development

Objectives / Aims: 1) To review the extensive literature on sanitation to demonstrate that inadequate access to sanitation prevents the realization of gender equality and a range of human rights; 2) To review the findings of literature on menstrual hygiene management; 3) To review the work and life conditions of "back-end" workers of sanitation systems.

Methodology: Analysis and review of relevant literature that included a mix of vignettes, site-specific interviews, systematically collected qualitative evidence from several countries, and quantitative impact studies of access to (or the lack of access to) latrines.

Results: 1) Dignity must be at the heart of safe and sustainable sanitation; 2) Equality in access to basic sanitation is both necessary and a human right. All people deserve access to sanitation with dignity, regardless of income, gender, ethnicity, religion, sexuality, migrant status or caste; 3) Public latrines are a vital part of equal access to sanitation with dignity. Sanitation

6.2 Toward Gender Equality Through Sanitation Access

Authors: Zachary Burt, Kara Nelson,

Status: Published, UN Women, 2016

Blum Center: UC Berkeley

For more information:

link

systems should be designed, and adequately funded, such that extra-household access in slums, markets, transit hubs, health clinics, government offices and schools is provided for all genders; 4) Safe sanitation is a gateway service for dignity, health and gender equality. A sanitation program within a human rights framework incorporates both dignity and equality, whereas a program focused exclusively on public health or even personal safety does not.

Conclusions: The article concludes that safe sanitation is a gateway service for human dignity, human health, and gender equality. Inadequate access to sanitation in a community is an inherently gendered problem, requiring an explicitly gendered

solution. All three needs of women and girls—defecation, urination and menstrual management—should be met with dignity through accessing a latrine that is clean, safe, accessible and affordable. Marginalized workers, predominantly women who are employed in the maintenance of these latrines, should be able to do their jobs with dignity and allotted protective equipment. Equal access to a sanitation system (both in public and in private) that protects personal dignity is a necessary characteristic of a sanitation system that protects public health.

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list of full links

- 1.1 http://www.blumcenter.uci.edu/
- 1.2 http://www.occourts.org/directory/juvenile/misc-court-orders/orders/Misc_Order_M-2014-5_re_Expanded_Study_of_At_Risk_Children_s_Emotional_Understanding.pdf
- 1.3 http://blumcenter.ucla.edu/files/view/researchimagesdocs/RWJF2016Report fin.pdf
- 1.4 http://blumcenter.ucla.edu/xowiki/social#recentlyCompleted
- 2.1 http://dx.doi.org/10.24908/ijsle.v11i1.6323 or http://ojs.library.queensu.ca/index.php/ijsle/article/view/6323
- 2.2 http://dx.doi.org/10.1016/j.aogh.2016.04.245
- 2.3 http://www.blumcenter.uci.edu/
- 2.4 http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0150666
- 2.5 http://bmjopen.bmj.com/content/3/8/e003476.short
- 2.6 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3828982/
- 2.7 http://blumcenter.ucla.edu/files/view/policydocs/ugchi_immigrant_health_for_web.pdf
- 2.8 http://doi.org/10.1002/hpm.1100
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- 2.10 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5084734/pdf/MCN-12-27.pdf
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- 3.1 https://mbuntaine.files.wordpress.com/2012/03/bns_escapingthevalley_170324.pdf
- 3.2 https://mbuntaine.files.wordpress.com/2012/03/bbjnp_electoralaccountabilitybudget_170104.pdf
- 4.1 http://dx.doi.org/10.3167/reco.2015.050101
- 4.2 http://www.anth.ucsb.edu/walshlab/projects
- 4.3 http://www.blumcenter.uci.edu/
- 4.4 http://www.blumcenter.uci.edu/
- 4.5 http://link.springer.com/article/10.1186/s13570-014-0022-5
- 5.1 http://www.lisdatacenter.org/wps/liswps/693.pdf
- 5.2 http://oup.com/academic
- 5.3 http://www.blumcenter.ucsc.edu
- 5.4 https://casfs.ucsc.edu/research/chesc-ennis-cohen2016.pdf
- 6 Foreword http://www.undp.org/content/undp/en/home/librarypage/poverty-reduction/private_sector/barriers-and-the-opportunities-at-the-base-of-the-pyramid---the-/
- 6.1 http://www.blumcenter.ucsc.edu
- 6.2 http://www2.unwomen.org/~/media/headquarters/attachments/sections/library/publications/2016/towards-gender-equality-through-sanitation.pdf?v=1&d=20160311T22595

