Building Community-Researcher CBPR Capacity & Incubating Partnerships...

... through an Environmental Justice Network / Community Science Workshop
Basic Components of Community Research Incubator Model

**Environmental Justice Encuentro Network:**
- Engagement, Discovery, Connectivity for Mutual Action
- Approx. 26 CSOs, 8 academic institutions, 3 institutes / centers

**Community-Based Participatory Research:** a Research Approach with a Bias Toward Action

**Community Science Workshop:**
- Driven by Community Needs / Observations / Requests
- Screening, Scoping, Framing function
- Linked to EH Science Research Capacities & Interests (regional network of professional research institutions)
- Bi-directional Sharing of Local Knowledge / Perceptions, & Research Expertise
How does the Encuentro Connect, Inform & Activate?

Encuentro multiplies Community NODES, increases Regional CONNECTIVITY & amplifies the POWER of Research to Characterize and Address Environmental Public Health issues.
An Issue-Based EJ Encuentro Network (in progress): Ports Communities in Coastal Texas – Houston Ship Channel, Galveston & Port Arthur TX

This map was compiled from various sources and efforts have been taken to ensure accuracy. The Port of Houston Authority assumes no liability for errors or omissions contained in this map.
Definition of CBPR

“Collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. **CBPR begins with a research topic of importance to the community with the aim of combining knowledge and action for social change** to improve community health and eliminate health disparities.”

W.K. Kellogg Community Scholar’s Program (2001)
Community-Focused Research
CBO as Specific Task Contractor:
some + Capacity
Recruitment Logistics

PAR (North) Kurt Lewin
Active Involvement in Pre-Planned Research Activities
Focused on Community
No +/- Capacity

COMMUNITY-FOCUSED RESEARCH
(Engaged, Based) (Participatory) Research

CEnR Community (Engaged) Research:
Capacity-Building
Participatory Assessment-Intervention
Dissemination Facilitation

CBPR (South) Paulo Freire
Multi-Capacity Framing Science Co-Decision-Making
Bias toward Equity in Collaboration
Data Collection Co-Interpret Co-Authorship
Empowerment Sustainability

Form Follows Function: Range of Community Engagement Modes Accommodates Range of Project Needs & Partner Capacities
Community-Based Participatory Research

Bi-directional Communication / Effective Multi-level Participation, Co-learning, Capacity

Research Informs Policy That Reflects Environmental Health Impacts

Community Science Workshop: Community-Based Research Incubator

Community Context as Pretext for Research / Develop Public Health Research Framing Strategies

Networking of Communities & Researchers / Sharing Skills, News and Issues / ID Needs, Emerging Concerns

Environmental Justice Encuentro: Regional Meeting (Convened Annually), ongoing projects

Relationship of Environmental Justice Encuentro, Community Science Workshop & CBPR Approach
GC-HARMS (Gulf Coast Health Alliance: health Risks related to the Macondo oil Spill)

Co-identified purpose:

- Understand long-term health effects of exposure to oil & dispersants, especially from consuming Gulf seafood

Gulf Coast Consortium:

- Coalition of community organizations from LA, MS, AL, TX
- Academic institutions: UTMB, UPenn, TAMUG, LSU

Research projects:

- (1) Clinical cohort study of coastal residents
- (2) Exposure assessment & bio-monitoring research in seafood & human population
- (3) Community vulnerability & resilience research
- (4) Community outreach, education, & dissemination
GC-HARMS Community and Academic Partners

- UTMB, University of Pennsylvania, Louisiana State University, Texas A&M at Galveston
- Louisiana Environmental Action Network (Regional / Baton Rouge LA)
- Center for Environmental and Economic Justice (Biloxi MS)
- Mississippi Coalition for Vietnamese-American Fisherfolk and Families (Gulfport / Biloxi, MS)
- United Houma Nation (Houma, LA)
- South Bay Communities Alliance (Coden / Bayou La Batre, AL)
- Zion Travelers Cooperative Center (Phoenix, LA)
- Bayou Interfaith Shared Community Organizing (Thibodaux LA)
Community Hubs Identify Impacts, Consequences & Developments Related to Macondo Oil Spill

- Community hubs extend scope of research into *Social Determinants of Health, Regional Cumulative Risk Burdens*, & Social / Political Context of the Macondo Oil Spill.
- Community hubs *offer access to anecdotal evidence* of Health Impacts of spill on coastal residents & structural problems with Medical Care Access / Delivery.
- Community Networks *carry “breaking news”*: forums, symposia, coalition advocacy, realignments in power dynamic.
- Community hubs help *clarify regional risk perceptions*.
- Coastal fishers *provide nuanced reportage* on state of ecosystem, conditions of fishery, economic impacts of fishing area closures / public perceptions of seafood consumption risk / economic impacts on traditional subsistence food web.
- Community Hubs *convey logistical, risk, and health promotion messages* within structure of existing local / regional networks.
- Community Hubs *provide expertise in navigating the complex and changing regional social / political dynamic*.
Salient Aspects of GC-HARMS

Marine Life Sampling Efforts:

- Sampling focuses on seafood species vital to local / regional fishing economies: **shrimp (white & brown), oyster, blue crab.**
- Sampling **speckled trout** (et al.) targets significant “sport species.”
- Sample analysis focused on detection of **presence / levels of petrogenic PAH / observation of PAH levels over time for possible bioaccumulation**
- Design of sampling site matrix reflects focus on “**proportional exposure,**” geo-physical properties of the Macando oil spill, drift of resultant plumes.
- Contact with community hubs / local fishers essential in identifying strategic sampling sites, alterations in patterns of species behavior / numbers.
- Sampling protocols developed from **Subra Company / LEAN / Lower Mississippi Riverkeeper 1st responder methodology.**
GC-HARMS Community Based Marine Life Sampling Hubs:

- **United Houma Nation** (St. Mary’s, Terrebonne, Lafourche, Jefferson, St. Bernard, Plaquemines Parishes) – based in Houma, Louisiana

- **Mississippi Coalition of Vietnamese-American Fisherfolk & Families** (coastal Mississippi) – based in Gulfport, Mississippi

- **South Bay Communities Alliance** (Mobile Bay / Dauphin Island area of coastal Alabama) – based in Coden, Alabama

- **Louisiana Environmental Action Network / Lower Mississippi Riverkeeper / Subra Company** (regional) – based in Baton Rouge, Louisiana
GC-HARMS Marine Life
Sampling Matrix: LA, MS, AL
Sampling Process begins with outreach to local fishers:

Wilma Subra (LEAN) & Thao Vu (MCV-AF&F) doing “translational science” outreach at Fishermen’s Forum. (Gulfport MS)

Fishermen’s Forums cover goals of GC-HARMS, sampling protocols & communications channels.
Flow of Community Hub / CODC Outreach & Collaboration with Local Fishers

Community hub recruits fishers to sample target species

Hub / LEAN / CODC convene Forum to demo protocols

Hub / LEAN / CODC share results with fisher community

Fishers / Hub / CODC collect / prepare & ship samples

Fishers collaborate in developing sampling site matrix

Louisiana Environmental Action Network Field Methodology Protocols Overarch the Fisher Forums Process
Louisiana Environmental Action Network (Baton Rouge LA – www.leanweb.org) serves as citizen sampler training specialists, and as a portal for information on the progress of the project, informational public outreach & community-focused commentary on scientific findings.

**White Shrimp**

Packaged shrimp sample

The end of a successful trawl
Sidney Schwartz Jr. operates single rig rear trawl hoist mechanism in Mobile Bay (AL) – Pilot Project
Pornchai Singhasiri hoists blue crab trap into Captain Siripon Hall’s boat in Grand Savannah Marshes off Bayou la Batrie AL – Pilot Project
United Houma Nation Fishers
Collecting Samples for PAH Analysis

Alex Serigne visits his blue crab trap line

Anesie Verdin pulls up hand-dredged oysters (Pointe-aux-Chenes)
Lower Mississippi Riverkeeper, Paul Orr, shucks oysters to make sample on Big Oyster Bayou (Atchafalaya outlet to Gulf, LA)
Side skimmer-rigged Vietnamese-American shrimper, the Lee Bien.

Emptying trawl net onto sorting table (Lee Bien, Pass Christian MS)
Opening “try net” to gauge success of trawl. (Mobile Bay, AL)
GC-HARMS: Gulf Coast Health Alliance: health Risks related to the Macondo Spill

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