Regional Cooperation in Addressing Cancer Health Disparities: NCI’s Geographic Management Program (GMaP) and Biospecimen Management Program (BMaP) in Western States, Hawai‘i, and US Pacific Territories

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The Cancer Center Connection is a standing column from the University of Hawai‘i Cancer Center and is edited by Carl-Wilhelm Vogel MD, PhD; HJMPH Contributing Editor. Dr. Vogel is professor and former director of the University of Hawai‘i Cancer Center and has been the editor of this column since 2001.

The National Cancer Institute (NCI) Strategic Plan suggests that addressing cancer health disparities (CHD) is one of the best ways to overcome the burden of cancer. To achieve this strategic objective, the NCI’s Center to Reduce Cancer Health Disparities (CRCHD) developed a Geographic Management of Cancer Health Disparities Program (GMaP) to create regional networks of CRCHD-funded institutions dedicated to CHD research and care through a geographical management approach. Similarly, NCI’s Minority Biospecimen/Biobanking - Geographic Management of Cancer Health Disparities Program (BMaP), a companion project to GMaP, was established to create parallel networks dedicated to ensuring the adequate and continuous supply of high-quality human biospecimens from multi-ethnic communities for cancer research. These companion networks, funded by the NCI through peer-reviewed supplements to CRCHD-funded investigators, support a comprehensive approach to facilitating collaboration, cooperation, information- and resource-sharing, as well as capacity-building among CHD researchers, students/ trainees, outreach workers, and organizations, with the key goal of advancing CHD research and training.

Since 2009, NCI has supported six regional GMaP/BMaP networks (reorganized into five in 2012) across the nation, including Region VI — the largest geographical and arguably most ethnically diverse area of any GMaP/BMaP region — comprised of AK, CA, OR, ID, NV, MT, WA, HI and US Pacific island territories of Guam and American Samoa. Leading the work of Region VI are principal investigators (PI) Beti Thompson PhD, Professor at the University of Washington and Associate Program Head in the Cancer Prevention Program at the Fred Hutchinson Cancer Research Center (for GMaP) and Elizabeth Klonoff PhD, Professor at San Diego State University (for BMaP). Over 17 cancer research institutions are represented on Region VI’s ICC since its inception.

The University of Hawai‘i Cancer Center, represented by Dr. Carl-Wilhelm Vogel, PI, and Hali Robinett, Program Manager, of the University of Guam (UOG)/University of Hawai‘i Cancer Center (UHCC) Partnership (PACHE), has been a member of GMaP’s Region VI ICC since its inception.

GMaP/BMaP Activities

Infrastructure Development

To date, Region VI has focused its efforts on infrastructure building, colorectal cancer screening, and biospecimen education within diverse communities. The first two years of the program were dedicated to completing a comprehensive needs assessment aimed at identifying the strengths and gaps in CHD research, including minority biospecimens and biobanking, within Region VI. Prior to conducting a needs assessment, Region VI used NCI’s health disparities calculator (HD*Calc) to measure and evaluate the burden of cancer health disparities in the region. HD*Calc results led to a decision by Region VI leadership to focus the region’s needs assessment and subsequent five year implementation plan on colorectal cancer in light of the particularly low screening rates among the underserved, resulting in late stage diagnosis and high mortality rates among this population. A robust needs assessment provided an accurate and comprehensive depiction of the current colorectal CHD research, activities, and resources within the region while assessing the strengths, capabilities, needs, and interest in developing a GMaP/BMaP regional network. A subsequent implementation plan provided the foundation for establishing an operational network – one that focused on community engagement/outreach, training, and biospecimens.

Colorectal Cancer Mini-grants

In 2012, Region VI GMaP/BMaP invited applications from community-based organizations across the region to address disparities in colorectal cancer education, prevention, and treat-
ment among underserved populations. Funding was limited to $5,000 per project for a one-year period. A total of eight applications were received and five were funded, including one project in Hawai‘i awarded to Nursing Advocates and Mentors, Inc. (NAMI). NAMI aimed to create culturally relevant, translated educational brochures as well as a video for three Filipino subgroups. Unfortunately, the complex institutional review board (IRB) requirements delayed and, in some cases, prevented completion of projects, a challenging barrier that the network will have to address to grow future community-academic partnerships in colorectal cancer research.

**Biospecimen and Biobanking Training**

GMaP’s funding in 2013 supported the planning and implementation of nine biospecimen collection and donation training workshops in Region VI, including three such trainings in Hawai‘i and Guam. The University of Guam/University of Hawai‘i Cancer Center Partnership organized two of the nine trainings, one each in Honolulu, Hawai‘i and Mangilao, Guam. Together the trainings attracted over 60 participants working in public health, cancer/biomedical research, and health care settings. All four of Hawai‘i’s major islands—O‘ahu, Maui, Kaua‘i and Hawai‘i—were represented among the speakers and trainees. In addition, ‘Imi Hale, the Native Hawaiian Cancer Network (CNP), offered a two-part training designed for primary health care providers.

The biospecimen training workshops, based on NCI’s “Biospecimens and Biobanking” module from “Cancer 101: A Cancer Education and Training Program,” were designed to: (1) assess the level of readiness of providers and ancillary staff in cancer institutions to participate in biospecimen collection efforts, and (2) provide education to community members about the importance of providing biospecimens in the advancement of cancer research. Pre- and post-assessment data, assessing knowledge and attitude, were collected at each of the trainings using either paper questionnaires or the electronic Audience Response System. Five Community Health Educators from CRCHD’s National Outreach Network, based in Region VI, were critical to the planning and implementation process; their involvement further strengthened relationships among CRCHD-funded programs in the region.

**Region VI Plans for 2014**

Having been awarded funding for a fifth consecutive year, through August 2014, Region VI will focus on engaging more investigators across the region in CHD research through training and mentorship. The participating institutions and community partners will collaborate to support activities designed to increase knowledge about key principles and concepts in cancer disparities research, provide expert grant review, and identify and promote faculty recruitment/job placement and training opportunities in CHD research for trainees and early stage investigators. Listservs, webinars, and workshops will be among the offerings, including a workshop in community-based participatory research (CBPR) designed to help trainees and young investigators become familiar with best practices for working with disparate communities.

**Conclusion**

Although individual research studies have made progress toward identifying key contributors and causes of CHD, the overall impact on the prevalence of CHD has been minimal. This may be due to the complex nature of CHD, as well as a lack of collaboration and coordination among differing research factions. The GMaP/BMaP infrastructure was designed to systematically and comprehensively support and manage CHD research and training at a regional level. By working across institutions, engaging researchers from the basic sciences through community-level research, and by pooling resources from across the cancer continuum, GMaP/BMaP is fortifying efforts to conduct research and train future investigators in CHD, while bringing important scientific advances to underserved communities nationwide.

Efforts of the GMaP/BMaP Region VI initiative have been summarized in four consecutive posters presented at the NCI Cancer Health Disparities Program Meetings in Bethesda, MD, July 2011, the 4th AACR Conference on the Science of Cancer Health Disparities in Washington, DC, September 2011, the 12th Biennial Symposium on Minorities, the Medically Underserved, and Health Equity in Houston, TX, June/July 2012, and the 5th AACR Conference on the Science of Cancer Health Disparities in San Diego, CA, in October 2012. Further, the ICC is currently working to develop concepts for three papers that will be submitted to peer review journals. In the year ahead, the infrastructure and network established to date in Region VI will support a shift in focus to build capacity among trainees and early stage investigators to conduct CHD research.

GMaP Region VI welcomes partnerships with trainees and early stage investigators in the region interested in cancer health disparities research. For further information, please contact Hali Robinett MPH, at hali@cc.hawaii.edu or Heidi Harbach MPH, at hharbach@fhcrc.org.

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