

# HAWAII JOURNAL WATCH

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*Highlights of recent research from the University of Hawai'i and the Hawai'i State Department of Health*

## IS HISTORICAL TRAUMA A CLINICAL CONDITION OR A LIFE STRESSOR?

Indigenous populations are poorly represented in psychological research, but recently, researchers have increased efforts to understand historical trauma and racial trauma. Rachel L. Burrage PhD, MSW, of the UH Mānoa Myron B. Thompson School of Social Work, and colleagues investigated the literature on historical trauma in American Indians. They found that some researchers view historical trauma as a clinical condition and seek psychotherapeutic interventions to treat it, while other researchers view historical trauma as a life stressor and recommend community interventions to improve public health. Still other researchers view historical trauma as a critical discourse, meaning it is treated as a public narrative rather than a clinical or public health issue. Conflict between research approaches could be eased by clarifying these concepts and disentangling clinical issues from social issues, the researchers concluded. The article, [American Indian Historical Trauma: Anticolonial Prescriptions for Healing, Resilience, and Survivance](#), is published in *American Psychologist*.

## MEDICARE BENEFICIARIES WEIGH IN ON THE USEFULNESS OF A MEDICATION SUMMARY

Medicare rules require that beneficiaries in the prescription drug benefit program (Medicare Part D) are given a written summary of their medications called the Standardized Format (SF). Researchers including Karen Pellegrin PhD, MBA, of the Daniel K. Inouye College of Pharmacy conducted a national survey to ask recipients about the utility of the SF. Of the 434 respondents, less than half said the SF was “excellent” or “very good” at helping them correctly use their medications (45%) or helping them understand why they take their medications (42%). The SF should be designed with more flexibility, so that it can be integrated into health records and made available in a handy format, such as a wallet card, the researchers concluded based on survey responses on how to improve the program. The paper, [Findings from a National Survey of Medicare Beneficiary Perspectives on the Medicare Part D Medication Therapy Management Standardized Format](#), is published in the *Journal of Managed Care & Specialty Pharmacy*.

## AN UNUSUAL PRESENTATION OF SYPHILIS

In men, syphilis typically presents as a single painless ulcer, and most symptomatic patients have a “reactive” result on a test called the rapid plasma reagin (RPR). But in a new paper, researchers including Alan Komeya MPH, of the Hawai'i State Department of Health, report the case of a 19-year-old man who presented to the STD clinic with a few painless papules on the penis, and his RPR test was nonreactive. He was misdiagnosed as having a viral infection called molluscum contagiosum. He was referred to a dermatologist, but in the eight-week interim between clinic visits, the papules enlarged, ulcerated, and began healing. A biopsy then confirmed a syphilis diagnosis. A repeat RPR was now reactive as was a confirmatory antibody test. The man received the proper antibiotics, and his skin lesions resolved, but the case shows that with any genital lesions, clinicians should keep a high index of suspicion for syphilis. The paper, [Dermatologically Challenging Syphilis Presentation](#), is published in the *International Journal of STD & AIDS*.

## RISK FACTORS FOR PANCREATIC CANCER MAY VARY BY ETHNICITY

Well-known risk factors for pancreatic cancer, such as smoking, diabetes, and obesity, do not fully explain interethnic differences in incidence of this cancer, suggesting that genetic and biological factors are at work, show new findings from the Multiethnic Cohort Study. Researchers including Loic Le Marchand MD, PhD, of the UH Cancer Center, looked at data on 185,000 participants over an average of 17 years. There were 1,532 incident cases of pancreatic cancer. Native Hawaiians had a 60% increased risk and Japanese Americans had a 33% increased risk compared to European Americans, after taking into account known risk factors of the disease. The association between first-degree family history of pancreatic cancer and risk of pancreatic cancer was greatest for Japanese Americans and African Americans, whereas diabetes had the largest influence in Native Hawaiians, more than doubling their risk of pancreatic cancer. To better understand discrepancies in rates of pancreatic cancer, further research should include both behavioral and genetic data, the researchers wrote. The paper, [Interethnic Differences in Pancreatic Cancer Incidence and Risk Factors: The Multiethnic Cohort](#), is published in *Cancer Medicine*.

## THE ROLES OF ORC PROTEINS IN POLAR BODY FORMATION

During DNA replication, a protein complex called the Origin Replication Complex (ORC) is essential for initiating the first steps of replication at sites called DNA replication origins. New findings show that one ORC protein, ORC4, undergoes self-association to form larger units. Researchers including Hieu Nguyen, of the John A. Burns School of Medicine, isolated mouse oocytes and used 2 fluorescent constructs of mORC4, mORC4-EGF and mORC4-FIAsH to reveal that self-association is an intrinsic property of ORC4 and suggest that ORC4 can self-assemble into cage-like structures. These structures are thought to be important in the formation of polar bodies, which contain one set of chromosomes that must be expelled from the oocyte in order for further development of the oocyte to continue. More study is needed to track particles and investigate the molecular mechanisms of mORC4 dynamics, the researchers wrote. The paper, [Spatial and Temporal Resolution of mORC4 Fluorescent Variants Reveals Structural Requirements for Achieving Higher Order Self-association and Pronuclei Entry](#), is published in *Methods and Applications in Fluorescence*.

## INSULIN RESISTANCE LINKED TO LOWER ODDS OF ALZHEIMER DISEASE

Insulin resistance may be linked lower odds of developing Alzheimer Disease in older adults. Researchers led by Thomas Lee PhD, with UH Public Health, examined health records from 1,544 Japanese men participating in the Kuakini Honolulu-Asia Aging Study. The men's average age was 76, and men with type 2 diabetes were excluded. Men who had insulin resistance at baseline had lower odds of having Alzheimer disease 3 years later compared with men who did not have insulin resistance at baseline. The inverse association held even after adjusting for confounders such as hypertension. More research is needed on the roles of insulin and blood glucose levels in the development of neurocognitive disorders, the researchers wrote. The paper, [Late life Insulin Resistance and Alzheimer's Disease and Dementia: The Kuakini Honolulu Heart Program](#), is published in the *Journal of the Neurological Sciences*.