BIOGRAPHICAL SKETCH

NAME Daniel J. Calac	POSITION TITLE Chief Medical Officer		
INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
San Diego State University, San Diego, CA Harvard Medical School, Boston, MA	B.S. M.D.	1995 1999	Biology Medical Candidate
University of Southern California/Los Angeles County, L.A., CA	Internship	1999-2000	Internal Med/Pediatrics
University of Southern California/Los Angeles County, L.A., CA	Residency	2000-2003	Internal Med/Pediatrics
Elizabeth Hospice/AAHPM Life Care Center of Escondido Fallbrook Hospital Palomar Hospital	Board Eligible	2012	Hospice/Palliative Medicine

A. Personal Statement

Since 2003 Calac has served as CMO of Indian Health Council, Inc. (IHC), a consortium of nine tribes located in North County San Diego. IHC provides on-site and outreach services and programs to nearly 5,000 clients and provides over 20,000 visits per year. He went on to receive his medical degree from Harvard Medical School and did both internship and residency in internal medicine and pediatrics at the Combined Internal Medicine/Pediatrics Residency Program at University of Southern California/Los Angeles County (USC-LAC). He is a Indian Health Service Scholarship recipient and has completed his service obligation of 4 years and an additional 14 years at Indian Health Council. Calac also serves his community by contracting part-time with The Elizabeth Hospice, providing hospice care and emotional support to both the terminally ill and their family members. He has served on the Advisory Board of Directors for California State University San Marcos and as a Governance Board Member, for a local All Tribes Charter School located on the Rincon Indian Reservation, and as a NIAAA Advisory Council member from 2015-2020.

He served as a co-principal investigator for the Preventing Underage Drinking by Southwest Indians Program sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Currently, he is a Principal Investigator with the California Native American Research Centers for Health (NARCH) whose goals are to increase the quantity and quality of research on the health of Native Americans in California and to increase the number of Native American students and faculty in California universities. He has served as the Principal Investigator for this project for the past 5 years and is committed to the fundamental mission of the project. He plays an active role in projects, in some as Dual-PI, and his commitment is further enhanced by providing shadowing/mentoring session for those students involved in the NARCH program and its individual projects.

The purpose for this research in this application addresses the health disparities among Native Americans and introduces methods utilizing community based participatory research to reduce these disparities and increase the health literacy of this population. My extensive knowledge of the community, culture and the implementation of Indian Health Service derived healthcare in a tribal setting underscores the necessity of this project's aims and more importantly, assists in bridging long

standing trust relationships that have persisted among the Native American community. In association with Roland Moore (Director of PIRE), Tina Chambers (University of California, San Diego Maternal fetal/alcohol research scientist), and other seasoned investigators, this application's projects continues to build capacity and strengthens relationships with academic partners to promote further studies within this high risk population. As a seasoned physician in Internal Medicine/Pediatrics/Hospice, a Native American community physician/scientist, and local community member enrolled in the Pauma Band of Luiseno Indians, I am uniquely positioned to provide perspectives on Native American health and research as the Principal Investigator for this project. Additionally, my active participation in several projects provided direct patient and research involvement that offers a unique translational slant to ongoing NARCH projects. I have accumulated significant experience in research design and theoretical application in the following projects: 1) Healthy Women: Healthy Native Nation; Screening, Brief Intervention, and Referral for Treatment for prevention of alcohol use in pregnancy in Native American Women of Child Bearing Age, 2) Acupuncture and Diabetic Peripheral Neuropathy among Native Americans, 3) CA-NARCH Student Project, 4) Fatty Liver in Native American Youth. Anticipating continued success with our academic partners and tenured colleagues, I plan to further address the health disparities within this community and reducing distrust of health associated research focusing on these health concerns.

B. RESEARCH/PROFESSIONAL EXPERIENCE AND HONORS

2003-present Chief Medical Officer, Indian Health Council, Inc.

2006-present Principal Investigator CA-NARCH

2008-present Board Eligible Hospice Physician

2003-present Board Certified/Eligible Internal Medicine

2003-present Board Certified/Eligible Pediatrician

Honors Awards

Association American Indian Physician, 2019
North County Times Volunteer of the Year, 2011
Massachusetts Medical Society Scholar, 1999
Arthur Ashe Foundation Fellow-Harvard AIDS Inst./NMF, 1999
Indian Health Service Scholarship Recipient
Community Service Award, Harvard Medical School – Office of Enrichment
Four Directions Summer Research Program Coordinator/Director

Activities

NIAAA Advisory Council Member, 2014-2019

KPBS Local Heroes 2014

Cal State San Marcos CA Indian Culture and Sovereignty Center Periodic Review Committee 2014, 2020 University of California, Riverside/AIAHPP (American Indians Accessing Healthcare Professions Program, 2021

Stanford University School of Medicine/Physician Assistant Clinical Mentor

Cal State University San Marcos Foundation Board Member

UC Riverside Keynote Speake, 32nd Annual Medicine Ways Conference May 11, 2013

UC Irvine School of Medicine Presentation on Diversity in Medicine 2012

Valley Center Health Fair Presentation on Medicine, May 2012

Relay for Life, National Cancer Society, June 2012, 2013

All Tribes American Indian Charter School Governance Board Member

Elizabeth Hospice CEO Advisory Council Raving Fans Award 2009

Indian Health Council Institutional Review Board

California Epi Center, Advisory Board Member

Native Threads Board of Directors
Pauma Band of Luiseno Indians – Voting Member
Pauma Band of Luiseno Indians Enrollment Chairman
Indian Health Service National Pharmacy and Therapeutics committee (former)
Tierra Miguel Steering Committee- former
NARCH (Native American Research Centers for Health) Member
Four Directions Summer Research Program Member
Judge Baker School, Student Mentor (former)
San Diego Youth Empowerment Program, Coordinator (former)
Minority Medical Education Program, University of Washington (former)
Escondido Engineering, Inc., Land Surveyor (former)

C. SELECTED PEER-REVIEWED PUBLICATIONS

- Gilder, D.A.; Luna, T.; Calac, D.; Moore, R.; Spillane, N.; Venner, K.; Ehlers, C.; and Monti, P. "Acceptability of motivational interviewing to reduce underage drinking in a Native American community," <u>Substance Use & Misuse</u>, 46:836-842, 2011. **PMCID: PMC3075848**
- Lee, Juliet P., Calac, Daniel, Montag, Annika, Brodine, Stephanie, Luna, Juan A., Flores, Rosalie Y., Gilder, David A., and Moore, Roland S.. "American Indian student involvement in tribal community-based research: Underage drinking prevention among rural Native Californians." <u>Journal of Rural Community Psychology</u>, 14(2), 2011. Open access article at http://www.marshall.edu/jrcp/ARCHIVES/V14N2/14.2%20-%20Lee%20and%20Moore.pdf) NIHMSID # 467520
- 3. Moore, Roland S., Jennifer Roberts, Richard McGaffigan, Dan Calac, Joel Grube, David A. Gilder, and Cindy L. Ehlers. Implementing a reward and reminder underage drinking prevention program in convenience stores near Southern California American Indian reservations. American Journal of Drug and Alcohol Abuse, 38(5):456-460, 2012. **PMCID: PMC3445436**
- Morton DJ, Proudfit J, Calac D, Portillo M, Lofton-Fitzsimmons G, Molina T, Flores R, Lawson-Risso B, Majel-McCauley R. Creating research capacity through a tribally based institutional review board. <u>American Journal of Public Health</u>, 103(12):2160-4, 2013. **PMCID: In Progress**
- 5. Gilder, David A., Juan A. Luna, Jennifer Roberts, Daniel Calac, Joel W. Grube, Roland S. Moore, and Cindy L. Ehlers "Usefulness of Screening for Underage Drinking in an American Indian Rural Community Health Clinic." American Indian and Alaska Native Mental Health Research, 20(2):1-26, 2013. PMCID: PMC3788675
- 6. Gorman JR, Clapp JD, Calac D, Kolander C, Nyquist C, Chambers CD. Creating a culturally appropriate web-based behavioral intervention for American Indian/Alaska Native women in Southern California: the healthy women healthy native nation study. American Indian and Alaska Native Mental Health Research, 20(1):1-15, 2013. PMCID: In Process
- 7. Montag A, Clapp JD, Calac D, Gorman J, Chambers C. A review of evidence-based approaches for reduction of alcohol consumption in Native women who are pregnant or of reproductive age. <u>American Journal of Drug and Alcohol Abuse</u>, 38(5):436-443, 2012. **PMCID: In Process**

D. Contribution to Science

1. American Indian/Alaska Native Alcohol and Drug Problem Prevention. Historical background: Ongoing research in Al/AN communities has shed some light on a persistent social issue of alcohol and drug misuse. Recently, novel methods of research engagement have lessened barriers between researchers and communities at risk to address these priority concerns. Central findings: Clinically, I have dedicated my career to the overall health of Al/AN populations as healthcare leader within the Southern California Area. In conjunction with academic partners via NIH – NARCH funded mechanism, there has been and continues to be marked progress in addressing alcohol and drug abuse in the community. As a pediatrician, adolescents are at a particularly high risk stemming from many social, cultural, geographic, and economy based sources. Addressing underage drinking has focused resources on the root of this social dilemma through community partnerships on reservation lands. Influence of findings: Still a persistent problems despite half a millennia of experience with alcohol and drugs, tribal health care entities and governments have previously turned a "warm shoulder" to substance abuse in the community. Based

on documented evidence collected in the community and by the community, sovereign nations are better equipped to address the public health dilemma prospectively. Specific roles: As a clinical lead and new investigator, I have partnered with world class researchers to address these ongoing concerns. My specific roles have included PI, clinical lead, and cultural expert. Exemplar publications:

- a. Moore RS, Roberts J, McGaffigan R, Calac D, Grube JW, et al. Implementing a reward and reminder underage drinking prevention program in convenience stores near Southern California American Indian reservations. *Am J Drug Alcohol Abuse*. 2012 Sep;38(5):456-60. PubMed PMID: <u>22931080</u>; PubMed Central PMCID: <u>PMC3445436</u>.
- b. Gilder DA, Luna JA, Roberts J, Calac D, Grube JW, et al. Usefulness of a survey on underage drinking in a rural American Indian community health clinic. Am Indian Alsk Native Ment Health Res. 2013;20(2):1-26. PubMed PMID: 23824640; PubMed Central PMCID: PMC3788675.
- 2. Cultural Morbidity: Obesity and Cultural Awareness. <u>Historical background</u>: Al/AN represent one of the highest indigenous groups plagued with obesity. Obesity has become a cultural norm in many communities and many are ill equipped to deal with the root problem of nutrition much less any efficient intervention to lessen its effect. <u>Central findings</u>: Through a web-based training platform, individuals of different nationalities were asked to participate in a video targeting other health care providers. <u>Influence of findings</u>: Obesity and the magnitude of the problem was conveyed in a "teachable moment" to help sensitize future health care workers to barriers to care. <u>Specific roles</u>: As a cultural expert, a board certified pediatrician, and a practicing clinician, my role covered different facets of the teaching video addressing obesity in Al/AN communities.
- 3. Clinical Interventions: Diabetic Neuropathy and Acupunture. Historical background: Al/AN have an approximate risk of 50% in developing diabetes in current clinical environment. Decreased sensation and repercussions of limb injury and amputation is a major clinical probem that exacerbates the overall heatlh care of this population. Central findings: In collaboration with colleagues, I have partnered in the planning, implementation, and recruitment for a study assessing the prevalence of diabetic nerve disease (neuropathy) and the subsequent use of acupuncture as a treatment modality. Influence of findings: Major benefits of this study have focused on limb preservation. Cultural, social, and economic repercussions of limb loss play a heavy toll on people affected by limb loss. Behavioral health impacts contribute to the considerable wellness burden this community. Specific roles: I functioned a clinical lead, recruitment, clinical evaluator, and project investigator. Exemplar publications: Pending
- 4. Alcohol and related problems Native American Women of Child Bearing Age. <u>Historical background</u>: The teratogenicity of alcohol-related problems has been recognized world wide. Efforts to address alcohol consumption in at risk populations have been a struggle; especially in populations at risk like Al/ANs. <u>Central findings</u>: Community based participatory research models were utilized to address alcohol use in a Al/AN demographic of women ages 18-45 years. Through data collection and resultant comparative findings, community awareness on types, content, quantity and pervasiveness of alcohol consumption was elicited. <u>Influence of findings</u>: These findings were shared with participants, community leaders and health care professionals to provide translational research back to the community. <u>Specific roles</u>: I have served as clinical/cultural expert/lead and Project Investigator. <u>Exemplar publications</u>: Pending

C. RESEARCH SUPPORT (ONGOING OR COMPLETED DURING THE LAST 3 YEARS) Ongoing:

5. Multilevel Prevention of Commercial Tobacco-Related Harms on Rural California Tribal Lands 2017 -2021

Roland Moore, Ph.D., Daniel Calac, MD, Lisa Brucks, MPH Voluntary clinic-based cessation for commercial tobacco use by adults in conjunction with reducing youth access and exposure to commercial smoke/vape products. Incorporates a respectful approach to ceremonial in use in cultural practices. Active participation of Community Advisory Board supplements guidance to provide recommendations and ensure projects are accomplished harmoniously with the local cultures.

Role: Co-Investigator

6. SHAPing Native Health STI and HIV Awareness Prevention for Native Health 2017 -2021

Tommi Gaines (Study PI), Richard Armenta (Co PI), Daniel Calac (Co- Investigator) Promotes understanding how the local American Indian consortium served by a local southern American Indian clinic perceive themselves to be at risk for becoming infected with STIs and HIV. Further enhances understanding to identify strategies for delivering prevention education. Central components are Key Informant (KI) interviews and Focus Groups Discussion in conjunction with Anonymous behavioral health surveys.

Role: Co-Investigator

7. Healthy Native Nation Family Support Program 2017 -2021

Annika Montag, PhD (PI), Daniel Calac, MD (co-investigator)

Early intervention of child developmental delays improves a child's developmental trajectory and outcome. This program also reduces the need for costly interventions later and empowers the family and promotes advocacy for an high risk population

Role: Co-Investigator

8. U26 IHS 300004 (Calac, PI)

09/01/13 - 08/31/17

Indian Health Service/National Institutes of Health Native American Research Centers for Health III

The major goal of this project is to address concerns particular to American Indian/Alaska Native communities regarding medical research by providing funding to Al/AN Tribes or tribally based organizations to create partnerships with research institutions and conduct high quality biomedical, behavioral and health services research that will be relevant to the needs of Tribes.

Role: PI/Program Director

9. R01-AA016479 (Moore)

09/01/06-08/31/14

NIAAA

"Preventing Underage Drinking by Southwest California Indians"

This cooperative agreement between the Prevention Research Center, the Scripps Research Institute, and the Indian Health Council has a primary goal of developing and enriching the capacity of the Indian Health Council and affiliated coalitions to address the problem of underage drinking in their communities. Staff from these three institutions will conduct a series of training sessions for coalition members, reservation leaders, and interested community members on techniques for environmental prevention of alcohol problems and training for IHC physicians and staff on Motivational Intervention for intervention with youth who have emerging alcohol use and alcohol-related problems.

Role: Subcontract PI

Completed:

U26 İHS 300004 (Calac, PI)

09/01/09 - 08/31/13

Indian Health Service/National Institutes of Health Native American Research Centers for Health III

The major goal of this project is to address concerns particular to American Indian/Alaska Native communities regarding medical research by providing funding to Al/AN Tribes or tribally based organizations to create partnerships with research institutions and conduct high quality biomedical, behavioral and health services research that will be relevant to the needs of Tribes.

Role: Pl/Program Director