

Charles Phelps Taft Research Center
at the University of Cincinnati
Faculty Release Fellowship Application

Each section (I-V) should be placed at the start of a new page. All required materials must be included in a single document, uploaded to the electronic submissions system, no later than 5PM on the published day of the deadline. This program requires a letter of support from the department head and an evaluator external to UC. Applicants should submit their application with enough time for the letters to be uploaded to the submissions system prior to the close of the deadline. Taft does not accept an obligation to review applications that have not received the required documents by the close of the deadline.

I. General Information

- a. Name: XXXX
- b. M#: XXXXXXXX
- c. Department: XXXXX
- d. Position: XXXXX XXXXXX
- e. Project title: "Social Dimensions of Wealth Inequality in Rural Subsistence Communities"
- f. Brief Summary of Requested Support: This requested award from Taft supports the organization, analysis, and publication of cross-cultural data that have been collected with funding support from the National Science Foundation. This award also supports the writing and submission of additional grant proposals to extend the project for additional field seasons with collaborators.
- g. Probable Results of a Grant (such as external funding, publications, and presentations): The primary products will be peer-reviewed journal publications and grant proposals to external funding agencies.
- h. Other Funding Applied For or Received for This Project (list source and amounts requested and awarded): Although the NSF award supports ongoing data collection, no other applications have been submitted to support applicant's work on organizing, analyzing, and publishing the data.

II. Project Proposal

Wealth inequality has been cited as a prominent concern for health and demographic outcomes in industrialized nations (Piketty and Saez 2014). Wealth inequality is not simply a feature of industrialized economies, however. Inequality is also evident in subsistence communities – economies in which most individuals are engaged in food production via small-scale farming, hunting, fishing, or herding animals. Anthropologists and economists have identified that the transmission of storable wealth from parents to offspring helps to explain the persistence of inequality in these settings (Borgerhoff Mulder et al. 2009).

Building on that literature, I am the principal investigator on a project that examines the sources of inequality in small, subsistence-oriented communities. The project is funded by the Interdisciplinary Behavioral and Social Science (IBSS) Program at the National Science Foundation (NSF). The specific aim of the project is to test a conceptual model that wealth inequality emerges from the structure of social networks in the communities (Kets et al. 2011). The model asserts that households can occupy an advantageous position in the network, capitalizing on ties to otherwise isolated peers. By leveraging this position, households can potentially buffer economic risks and accumulate greater wealth than households with less favorable positions.

To test this model, my co-investigators and I assembled a team of anthropologists who conduct research in subsistence-oriented communities around the world. Funded by the grant, the anthropologists collect standardized data on social support networks, wealth, kinship, education, and food insecurity among the households and individuals in their study communities. The diversity of sites is noteworthy, encompassing pastoralists, horticulturalists, foragers, and mixed economies. Including my site in Nicaragua, there are 40 study sites in the sample from a diverse range of countries (Brazil, Burkina Faso, Republic of the Congo, India, Mongolia, Papua New Guinea, etc.).

Social support networks and other variables are elicited via interviews. The fieldwork at each site occurs at two time points, several years apart. The longitudinal orientation of the project allows us to examine the extent to which inequality increases over time as a function of network structure. Fieldwork at each site generally takes five weeks to complete, which means that the final cross-cultural dataset will represent a total of over six years of anthropological research. With two exceptions, the collaborators have completed their first field season.

Upon completing their data collection, the collaborating anthropologists prepare their data in a standardized format and submit to a central repository. The volume of data is large. To support the project, a postdoctoral scholar has been hired by the Max Planck Institute for Evolutionary Anthropology. This postdoc will create a repository to organize the data, using automated scripts in R software to check for inconsistencies in the data, and following up with the collaborating anthropologists to resolve the inconsistencies. The long-term goal is that an anonymized version of the dataset will eventually be made available for other scholars to leverage toward related research questions. This goal reflects the commitment I share with the National Science Foundation to ensure an open, reproducible science that reduces inequities of access among the world's scholars (Nosek et al. 2015).

An imminent objective of the project is to organize and analyze data from the first season of fieldwork to advance a publication in which we examine the relationship between inequality and network structure. A prediction of the theory is that inequality increases as network structures become more “centralized” – a pattern in which most households maintain few meaningful ties to all but a few influential households. We will also consider alternative

explanations of the observed variation in wealth inequality, including variation related to heterogeneous educational attainment, ties to market economies, vulnerability to exogenous shocks, and demographic differences that distinguish the communities.

While on academic leave, I will work collaboratively on organizing and analyzing the data, and I will draft and submit a manuscript that summarizes the results and the contribution of our study to research on wealth inequality. I will also work with co-investigators to publish the details of the methodological advances that we have been developing to enhance the insights that can be gleaned from the assembled, cross-cultural dataset. These publications are in addition to the other responsibilities that I maintain as the principal investigator of the project, such as the supervision of the data collection, financial accounting, and compliance to ethical approvals. An additional goal while I am on academic leave is to spearhead the development of new grant proposals to NSF and the Templeton Foundation to extend the project to additional field seasons. The opportunity to record a decade's worth of social and demographic outcomes in rural communities undergoing substantial political and climactic changes is a chance that few anthropologists have had, and I plan to explore all available options to realize that opportunity.

In terms of the anticipated products that I will work on during the academic leave, the first product is a peer-reviewed journal article in which I work with my collaborators to assemble the cross-cultural dataset, analyze the data, and assess the theoretical model that the structure of social networks is a predictor of emergent wealth inequality in rural international communities. In keeping with the interdisciplinary orientation of the research team and the funding program at NSF, I anticipate directing the publication toward a multidisciplinary journal that accepts registered reports (e.g., *Nature Human Behaviour*). As noted above, a second paper to be submitted during the release is a methodological paper in which I work with my co-investigators to introduce and describe the methodological advances (particularly statistical methods) that we have implemented to account for the challenges of integrating data from 40 study sites into a unified analytical framework. This paper will also address the ethical challenge of balancing data transparency and the privacy of our interlocutors. Finally, another anticipated product is the aforementioned grant proposal to extend the project for an additional five years.

The schedule for the project involves working regularly at the Max Planck Institute for Evolutionary Anthropology, where I hold an affiliate position. This is beneficial because the anonymized data from the project are being housed on the institute's server, which also permits the fitting of statistical models to the large, cross-cultural dataset. During the academic leave, I will also return to Nicaragua for approximately six weeks in the winter of 2021 to collect the second season of field data for the project at my long-term field site among the indigenous Mayangna residents of the Bosawas Reserve. If the research supplement for this proposal is granted, I will extend my stay by an additional four weeks to pilot new observational methods for documenting household wealth that could enhance the aforementioned proposals to NSF and the Templeton Foundation.

In summary, this project represents an important step in my professional development. To an extent, the scope of this project is unprecedented, and it represents an opportunity for anthropologists to speak across disciplines to the questions of wealth inequality that occupy the attention of many social scientists. A Faculty Release Fellowship will provide time to make important progress on this goal via publications and grant proposals that allow this project to reach its full potential.

References

Borgerhoff Mulder, M., Bowles, S., Hertz, T., Bell, A., Beise, J., Clark, G., Fazzio, I., Gurven, M., Hill, K., Hooper, P.L., Irons, W., Kaplan, H., Leonetti, D., Low, B., Marlowe, F., McElreath, R., Naidu, S., Nolin, D., Piraino, P., Quinlan, R., Schniter, E., Sear, R., Shenk, M., Smith, E.A., von Rueden, C., Wiesnner, P. 2009. Intergenerational wealth transmission and the dynamics of inequality in small-scale societies. *Science* 326: 682-688.

Kets, W., Iyengar, G., Sethi, R. and Bowles, S., 2011. Inequality and network structure. *Games and Economic Behavior* 73: 215-226.

Nosek, B.A., Alter, G., Banks, G.C., Borsboom, D., Bowman, S.D., Breckler, S.J., Buck, S., Chambers, C.D., Chin, G., Christensen, G. and Contestabile, M., 2015. Promoting an open research culture. *Science* 348:1422-1425.

Piketty, T. and Saez, E. 2014. Inequality in the long run. *Science* 344: 838-843.

III. Budget

- a. Requested Research Supplement: An additional \$1,500 is requested to support extended fieldwork at my Nicaragua field site. Motivated by recent methodological work on the measurement of household wealth in subsistence-oriented societies (Kaiser et al. 2017), this project will develop methods for documenting perceptions of wealth inequality among interlocutors at my field site. In other words, how well do perceptions of wealth inequality correspond to documentable differences in household wealth, as indexed by variation in possessions? These methods entail asking informants where they think they stand in terms of standing relative to peers in the community. If this method could be efficiently and efficaciously implemented, it could provide a rich source of data to explain the outcomes that we are observing in terms of social network structure and demographic outcomes. Piloting this method will potentially enhance the grant proposals I submit to external funding agencies, particularly the Templeton Foundation. The research supplement will be used to offset per diem costs in the field, local assistants, and providing interlocutors with modest compensation for giving their time and participating in the project.

Kaiser, B.N., Hruschka, D. and Hadley, C., 2017. Measuring material wealth in low-income settings: A conceptual and how-to guide. *American Journal of Human Biology*, 29(4), p.e22987.

Budget outline:

Item	Explanation:	Cost:
M&IE per diem	\$20/day for 30 days of research	\$600
Local assistant services	\$15/day for translation services,	\$450
Participant compensation	Compensation for time in interviews	\$450

IV. Taft Grant History:

Please list your grant history with Taft for the last 5 years, in reverse chronological order. Please list project title, the name, date, and amount of award, as well as development of the project subsequent to the grant, e.g. publication.

“Longitudinal Research on Social networks, Health, and Emergent Wealth Inequality in Nicaragua”

March, 2019

Travel for Research: \$4,000

This project involved measurements of growth among indigenous Mayangna children to substantiate the assumption that growth varies as a function of household wealth.

Analysis is pending.

“The Fix Is In: Open Science and the Resilience of Anthropological Research”

September, 2018

Domestic Conference: \$1,200

This conference presentation addressed practices of “open science” and resulted in an invitation from *American Anthropologist* to submit an opinion piece, which is pending.

“Individuals, Residence Groups, and the Imbalance of Kinship: A Hierarchical Network Model”

September, 2017

Domestic Conference: \$1,200

This conference presentation led to a publication:

Kinship ties across the lifespan in human communities. *Philosophical Transactions of the Royal Society B*, 374(1780), p.20180069.

“Primordial Markets: Transitions from Kin-Based Food Sharing Networks to Commoditization”

April, 2017

Domestic Conference: \$1,200

This conference presentation led to a publication:

Family Ties: The Multilevel Effects of Households and Kinship on the

Networks of Individuals. *Royal Society Open Science*, 5(4), p.172159.

“Longitudinal research on social support networks and measures of well-being among indigenous Nicaraguans”

January, 2016

Travel for Research: \$4,000

This project led to publication:

Economic and demographic predictors of dietary variation and nutritional indicators in Nicaragua. *American Journal of Human Biology*, 30(4), p.e23125.

“Not the Sum of Its Parts: Organizational and Organizational Member Status”

November, 2015

International Conference: \$2,700

This project led to publication:

The effects of individual status and group performance on network ties among teammates in the National Basketball Association. *PLOS One*, 13(4), p.e0196013.

