

# Toxic Trespass

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*UC Davis nominee for the Mellon New Directions Fellowship*

*“If you have come to help me, you are wasting your time. But if you have come because your liberation is bound up with mine, then let us walk together...”*

- Aboriginal artist, Lila Watson

## **Summary**

Working at the interstices of environmental justice, Native American and indigenous studies, and cultural anthropology, I would use a New Directions fellowship to explore the concept of “toxic trespass” for building new transnational alliances based on mutual vulnerabilities to environmental hazards. In various ways, indigenous peoples offer unique insights and leadership into the cutting edge environmental health sciences on toxic exposures. To become a more productive interlocutor between these two communities, I propose to spend a year at the University of California, Davis (UCD) taking classes in basic toxicology, exposure and risk assessment, and environmental epidemiology. My first goal is to enhance the scientific rigor of my ongoing research collaborations with the Q’eqchi’ Maya people of Guatemala and Belize, who confront a striking number of environmental conflicts from pesticide exposure and extractive industries. This training will also jumpstart my next major ethnographic project on ordinary people’s cultural perceptions of the risks associated with toxic chemicals in everyday life. For this, I need to understand more about unfolding academic, regulatory, and nonprofit research on the cumulative, synergistic, and epigenetic effects of chronic, low-dose toxic exposures. My conjecture is that until privileged people become more concerned about the invisible trespass of synthetic chemicals from the built environment and consumer products into their bodies, little will be done to address the greater environmental injustices faced by indigenous and other marginalized peoples. Finally, as director of the UCD Indigenous Research Center of the Americas (IRCA), I will leverage my “new direction” to connect other native communities endangered by toxic threats to allied environmental health scientists, lawyers, and journalists who might provide expert advice, data, stories, and testimony in support of indigenous environmental justice.

## Introduction

On September 18, 2015, two masked assailants gunned down a friend of friends, Rigoberto Choc on his county courthouse steps. A young Q'eqchi' Mayan-speaking schoolteacher from Petén, Guatemala—the region where I have worked since 1993—Rigoberto was the first to travel to the capital to denounce a palm oil plantation for dumping an illegal pesticide (malathion) into the Río Pasión. He described the watershed disaster as an “ecocide” (*ecocidio*), a carefully chosen word that harkens the history of genocide of Maya peoples during Guatemala’s civil war (1960-1996). While Guatemala’s Ministry of Environment responded by assigning biologists to inventory, weigh, and value the two dozen fish species killed over a hundred miles, no one assessed the public health impacts on the twelve thousand people who depend on this river for drinking water, laundry, bathing, and food.

Lacking state recognition and living in remote regions with poor communication and insecure land tenure, indigenous peoples find themselves disproportionately on the frontlines of environmental conflict and pollution. With five percent of the world’s population, indigenous peoples accounted for forty percent of the 185 grassroots environmental activists like Rigoberto who were murdered last year for opposition to extractive industries and plantation agriculture (Global Witness 2016). Indigenous territories are now home to 90% of the world’s unmined gold, 80% of its nickel, more than 60% of its copper, and about half of coal reserves (Johansen 2003). Comparable to colonial-era epidemics that decimated native peoples before and alongside the onslaught of European militaries, contamination from contemporary extractive industries trespasses silently into indigenous bodies like a twenty-first century smallpox.

To halt intrusive infrastructure like hydropower dams, roads, and pipelines, indigenous groups have successfully invoked a legal principle called “free prior informed consent” or FPIC, affirmed in the 2007 UN Declaration on the Rights of Indigenous Peoples.<sup>1</sup> While collaborating with Q’eqchi’ leaders in 2008 to apply this principle in their territory against a World Bank-funded project, I happened to be diagnosed with an aggressive, environmentally-induced lymphoma. From the chemotherapy drip came an idea that I have been nursing ever since: the potential use of the FPIC principle to draw attention to the nonconsensual presence of synthetic chemicals in the bloodstreams of indigenous peoples . . . and virtually everyone else on the planet.

With this fellowship, I would devote a year of focused study in toxicology and epidemiology to become a more productive interlocutor between indigenous environmental justice struggles and environmental health scientists. For their political and legal cases, native leaders need more hard data from toxicologists, air quality specialists, hydrologists, soil scientists, epidemiologists, and other technical experts that abound at an R1 university like mine. As a cultural anthropologist, I can offer to environmental scientists essential contextual background and support with the protocols and ethics of engagement with native peoples.

In turn, the exposure of indigenous peoples to readily identifiable external pollutants in remote or rural areas, heretofore isolated from general urban pollution, presents unique opportunities for environmental health research. Indigenous peoples are critical environmental justice subjects in their own right, but also sentinels for the rest of the world. Elsewhere, the human population is so awash in synthetic chemicals that it becomes very hard to prove causality and corporate accountability for cancer and other illnesses related to environmental exposures, as

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<sup>1</sup> Indeed, the issue of informed consent is at the cornerstone of Standing Rock Reservation’s current legal injunctions against the Dakota Access Pipeline, which has drawn protestors from an unprecedented 280 tribes to the Sacred Stone Camp to help stop what Lakota prophecy calls the “black snake.”

this macabre cartoon captures.



Reprinted with permission from Conant and Faden (2008)

Cutting through these complexities, grassroots etiologies of disease can, in turn, push science in unexpected directions. Throughout the history of the environmental justice movement, community leaders, housewives, teachers, preachers, and others have methodically mapped, surveyed, and swapped stories about commonalities of exposure and illness. When not suppressed by entrenched powers and when experts are willing to listen, such first-hand, observational data can strengthen understanding of environmental problems.<sup>2</sup>

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<sup>2</sup> In comparable advance of climate science, indigenous Arctic hunters noticed subtle changes in the ice and climate of the places on which their livelihoods depend (Krupnik and Jolly 2002). The environmental justice literature has similarly recognized local knowledge as “popular epidemiology” (Brown 1992), citizen science (Nader 1996), “street science” (Corburn 2005), and “activist knowledge” (Martinez-Alier et al. 2014).

In other ways, too, indigenous peoples offer environmental health scientists unique insights into the “exposome,” a term that Wild (2005) coined for the environmental equivalent of mapping the genome. Under this umbrella, scientists are developing methods to measure cumulative, multi-pollutant exposures, as well as the socio-economic and psychological contexts affecting the body’s internal or epigenetic responses (Miller 2013). Shaking classic assumptions in Western pharmacology and toxicology that the “dose makes the poison” are two inter-related areas of research, whose relevance to native peoples is highlighted below.

*1. Body Burden.* Through the 1990s, regulators mostly tested for single synthetic chemicals in air, water, and consumer products, but not how pollution travels into living bodies, nor how multiple chemicals interact as “cocktails” inside us. Frustrated with this, Ken Cook, director of the nonprofit Environmental Working Group, had a 1999 epiphany that if low cost screenings allowed average people to “see” an inventory of their synthetic body burden, they might support stronger pollution standards (Smith and Lourie 2009). With cosmetics products alone, the typical woman exposes herself to 168 synthetic chemicals before breakfast, most of them never even tested for basic toxicity. Joining this research, the Centers for Disease Control (2009) found almost universal presence of at least two hundred synthetic chemicals in ordinary people’s blood. British scientists then revealed in 2005 an astounding number of toxic chemicals lurking in the umbilical cords of European newborns. Public shock at the “pre-pollution” of babies led the European Parliament to overhaul its risk assessment and registration processes in 2006.

Preliminary body burden analysis among native peoples suggests that diseases like type 2 diabetes previously assumed to be “lifestyle” problems may, in fact, be more

related with chronic exposure to organic pollutants like PCBs, DDT, and dioxin.<sup>3</sup> True, the Tohono O’odham nation of southern Arizona, which suffers among the highest rates of diabetes in the world (1 in 4), shifted their diets away from traditional foods, but they have also faced decades of pollution from a hazardous waste recycling plant, as well as a history of copious DDT spraying for industrial cotton cultivation on their lands (Schertow 2010). Further south in Yaqui territory, Guillette (1998) found striking developmental differences between two groups of Yaqui children who otherwise shared diets and cultural practices; however, valley preschoolers residing near agricultural spraying showed significant delays in cognition, memory, and hand-eye coordination when compared with foothill children not exposed to pesticides.

2. *Low dose exposure.* As with the above, neurologists, endocrinologists, allergists, and other environmental physicians have long suspected that tiny toxic exposures can trigger changes in gene expression. A similar paradigm shift is now gaining traction in oncology. A high-level panel known as the Halifax Project recently concluded that low dose and chronic exposures to chemicals not previously considered mutagens may nevertheless transform normal cells stepwise into aggressive cancer cells (Goodson III 2015). This “multiple-hits” model would suggest that in addition to the virtually unregulated “complete” carcinogens that can single-handedly cause tumors, we are vulnerable to thousands more “partial” carcinogens.

Adding intricacy to complexity, it is not always *how much* of a substance to which an individual is exposed, but often how *sensitive* or *sensitized* that particular

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<sup>3</sup> To give another illustrative statistic: cancer deaths among Native Americans in the US rose 10 percent between 1973-1990 while increasing only 4 percent in the general population (Baker 1997).

individual may be—whether through genes, diet, contextual stress, or even historical trauma. For instance, Physicians for Human Rights found health morbidities associated with lower than expected mercury levels in Mam Maya communities near Guatemala’s open-pit Marlin gold mine. Through local knowledge and cultural epistemologies, Basu and Hu (2010) surmised that the *collective* stress of territorial despoliation may have lowered the threshold at which symptoms appear.

## **The New Direction**

As a person sensitized myself to multiple chemicals after starting my academic career in a sick university building, I discovered that even “book collar” workers can suffer occupational hazards (Murphy 2006) and gained a new perspective on the hidden dangers of petrochemicals in something as ubiquitous and banal as carpet glue. Temporarily unable to travel for fieldwork after my 2008 cancer treatment, I began to reinvent my research from village-grounded work on Guatemala’s agrarian frontlines towards broader research and advocacy on corporate and development threats to indigenous peoples. Building on grassroots leaders’ interest in my first two ethnographies, I continue to advise several indigenous and environmental organizations across Guatemala and Belize. Through my Q’eqchi’ Scholars Network, I am regularly called to brief journalists, donors, and allied nonprofits on the context and history of Q’eqchi’ resource conflicts. Now through my directorship of the Indigenous Research Center of the Americas, I am developing other projects at UCD to connect allies, scholars and scientists with indigenous communities throughout the hemisphere.

The “oncopologie” of cancer initially felt too raw to tackle as an ethnographer, but eight years into remission, I am ready to pursue research about mutual vulnerabilities to toxic trespass. I, of course, recognize and affirm the central tenet of environmental justice research—that



pollution and other hazards differentially affect people of color, the poor, and indigenous groups. Yet, my hypothesis is that until a shift occurs in privileged people's cultural perceptions of chemical exposure in ordinary life, little will be done to resolve the even greater environmental injustices with which marginalized peoples contend. So long as wealthy suburbanites remain unconcerned about formaldehyde off-gassing from cribs made with particle board, they are unlikely to care about shocking formaldehyde levels in FEMA trailers re-gifted to Native American reservations after they made Hurricane Katrina evacuees ill. Although divergent interests and ideologies drive the ecologies of the poor and the privileged (Guha and Martinez-Alier 1997), growing evidence suggests that national and transnational environmental alliances almost always strengthen local struggles. I hope that by suturing the literatures of environmental justice, anthropology and indigenous studies, toxicology, and the popular "green living" genre, I can help to inform new constituencies concerned about environmental health. As a cultural anthropologist, this represents a decided shift in ethnographic voice away from "difference" and towards an emphasis on the power of alliances, solidarity, and transnational social movements.

## **Plan**

Tapping into the expertise of world-renowned environmental health researchers at UCD, my goal for the fellowship year is to become more conversant in three key technical areas: (1) exposure and risk assessment, (2) environmental epidemiology, and (3) GIS mapping to be able to illustrate connections between #1 and #2. I will devote the first summer to prerequisite chemistry background through a combination of self-study and summer and online extension classes. With additional help from student tutors throughout the 2017-18 academic year, I will pursue parallel tracks in toxicology and epidemiology (see budget for specific courses).

My Fridays will be reserved for discussing possible lines of indigenous collaboration with UCD labs and research institutes, as well as the many Bay Area and Sacramento nonprofits that translate science into action (see budget narrative for detailed list). Video conferencing equipment will allow virtual attendance of seminars and lectures around the world and connections with key organizations like Indigenous Environmental Network. Each quarter I will arrange to attend a major professional meeting (see budget narrative for the chosen conferences).

Two final summer 2018 tours will help me to review, synthesize, and engage my new knowledge. I will use a short New England trip to reconnect with risk experts at Clark University; renew connections at Yale; and meet with documentary filmmakers, journalists, and writers working in the Boston and New York areas. I will wrap up the fellowship in Europe where body burden research has so profoundly transformed EU regulatory frameworks. The University of Utrecht offers a short summer course in Toxicology that will consolidate my UCD studies. The Netherlands then provides railway connections to the UN Environmental Programme in Switzerland; the International Agency for Research on Cancer in France (now directed by exposomics innovator, Christopher Wild); and finally to Spain (Autonomous University of Barcelona) to meet with those leading the Environmental Justice Atlas ([www.ejatlas.org](http://www.ejatlas.org)), unparalleled in its genre.

As a cultural anthropologist, I would be remiss if I did not take advantage of an “insider” year among scientists to observe and take fieldnotes about the ways in which culture permeates risk perception. Before the first summer, I will familiarize myself with new text analysis software for more efficient documentation of the cultural assumptions and power hierarchies embedded in the ways that scientists and policymakers discuss cost-benefit equations about risk (Douglas and Wildavsky 1983; Shostak 2013).

## Selected Works Cited

- Baker, Lois. 1997. Growing Cancer Threat Among Native Americans Receiving Scant Attention. University of Buffalo: UB and Roswell Park Cancer Institute.
- Basu, Niladri, and Howard Hu. 2010. Toxic Metals and Indigenous Peoples Near the Marlin Mine in Western Guatemala: Potential Exposures and Impacts on Health. Physicians for Human Rights.
- Brown, Phil. 1992. Popular Epidemiology and Toxic Waste Contamination: Lay and Professional Ways of Knowing. *Journal of Health and Social Behavior* 33 (September):267-81.
- CDC. 2009. Fourth National Report on Human Exposure to Environmental Chemicals: Executive Summary. Atlanta, Ga.: Department of Health and Human Services, Centers for Disease Control and Prevention, and National Center for Environmental Health.
- Conant, Jeff, and Pam Faden. 2008. *A Community Guide to Environmental Health*. Berkeley: Hesperian Foundation.
- Corburn, Jason. 2005. *Street Science: Community Knowledge and Environmental Health Justice*. Cambridge, Ma.: MIT Press.
- Douglas, Mary, and Aaron Wildavsky. 1983. *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers*. Berkeley: University of California Press.
- Global Witness. 2016. On Dangerous Ground: 2015's Deadly Environment, the Killing and Criminalization of Land and Environmental Defenders Worldwide. London.
- Goodson III, William H. et al. 2015. Assessing the Carcinogenic Potential of Low-Dose Exposures to Chemical Mixtures in the Environment: The Challenge Ahead. *Carcinogenesis* 36 (Supplement 1):S254-S296.
- Guha, Ramachandra, and Joan Martinez-Alier. 1997. *Varieties of Environmentalism: Essays North and South*. London: Earthscan Publications.
- Guillette, Elizabeth A., María Mercedes Meza, Maria Guadalupe Aquilar, Alma Delia Soto, and Idalia Enedina. 1998. An Anthropological Approach to the Evaluation of Preschool Children Exposed to Pesticides in Mexico. *Environmental Health Perspectives* 106 (6):349-53.
- Johansen, Bruce E. 2003. *Indigenous Peoples and Environmental Issues: An Encyclopedia*. Westport, Ct.: Greenwood Press.
- Krupnik, Igor, and Dyanna Jolly, eds. 2002. *The Earth is Faster Now: Indigenous Observations of Arctic Environmental Change*: Arctic Research Consortium of the United States; Arctic Studies Center, Smithsonian Institution.
- Martinez-Alier, Joan, et al. 2014. Between Activism and Science: Grassroots Concepts for Sustainability Coined by Environmental Justice Organizations. *Journal of Political Ecology* 21:19-60.
- Miller, Gary W. 2013. *The Exposome: A Primer*. Oxford, UK: Academic Press, Elsevier.
- Murphy, Michelle. 2006. *Sick Building Syndrome and the Problem of Uncertainty*. Durham, NC: Duke University Press.
- Nader, Laura. 1996. *Naked Science: Anthropological Inquiry into Boundaries, Power, and Knowledge*. New York: Routledge.
- Schertow, John. 2010. Bitter Sweet or Toxic? Indigenous People, Diabetes and the Burden of Pollution. *The Dominion, News From the Grassroots*, February 2.
- Shostak, Sara. 2013. *Exposed Science: Genes, the Environment, and the Politics of Health*. Berkeley, CA: University of California Press.
- Smith, Rick, and Bruce Lourie. 2009. *Slow Death by Rubber Duck: The Secret Danger of Everyday Things*. Berkeley, Ca.: Counterpoint.
- Wild, Christopher Paul. 2005. Complementing the Genome with an 'Exposome': The Outstanding Challenge of Environmental Exposure Measurement in Molecular Epidemiology. *Cancer Epidemiology, Biomarkers & Prevention* 14 (8):1847-50.

## LIZA GRANDIA

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### ***EDUCATION***

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- PhD University of California at Berkeley, Anthropology. 2006.  
*Dissertation:* “Unsettling: Land Dispossession and Enduring Inequity for the Q’eqchi’ Maya in the Guatemalan and Belizean Frontier Colonization Process” supervised by Laura Nader (advisor and chair), William Hanks, and Michael Watts
- BA Yale University, Women’s Studies, *summa cum laude* and Phi Beta Kappa. 1996.  
*Senior Thesis.* “From Dawn ‘Til Dawn: Valuing Women’s Work in the Petén, Guatemala,” awarded Yale’s Steere Prize for the best scholarly work engaging feminist theory

### ***RESEARCH INTERESTS***

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Q’eqchi’ Maya, Guatemala, and Mesoamerica; food sovereignty, peasants, and agrarian change; international development; corporate trade and globalization; social movements; hegemony and cultural control; neoliberalism and consumer capitalism; the commons; biodiversity conservation; GMOs and maize; environmental justice; politics of cancer; cultural perceptions of toxic chemicals in everyday life

### ***LANGUAGES AND FIELDWORK***

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***Languages:*** Spanish – fluent (written and spoken); Q’eqchi’ Maya – proficient (written and spoken); Portuguese – beginning (written and spoken).

***Fieldwork:*** approximately 7 years since 1993, primarily in Petén, Izabal, and Alta Verapaz, Guatemala; but also Toledo, Belize; and Olancho, Honduras.

### ***EMPLOYMENT***

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#### **University of California-Davis, Department of Native American Studies**

***Associate Professor*** (2012-present). Teaching and mentoring Ph.D. and undergraduate students in an interdisciplinary program with a hemispheric focus on indigenous peoples of the Americas.

- Indigenous Research Center of the Americas, **Director** (2012- )
- Native American Language Center, **Associate Director** (2012- )
- Co-Undergraduate **Major Advisor** (2013- )
- Hemispheric Institute of the America, **steering committee** (2012- )
- Affiliated Faculty, **Executive Committee**, International Agricultural Development (2015- )
- Affiliated Faculty, Community and Regional Development (2015- )

#### **Clark University, Department of International Development Community and Environment**

***Assistant Professor*** in the International Development and Social Change Program (2007-2012).

Taught and mentored undergraduate & Masters level students in an interdisciplinary program at a small research university with a strong emphasis on liberal arts education.

#### **Yale University, *Postdoctoral Fellow*** in the Program in Agrarian Studies (2006-07 academic year).

One of five independent research fellows selected annually for this prestigious program established by James C. Scott to host a weekly interdisciplinary colloquia critiquing experimental papers presented by internationally renown and emergent scholars and the fellows themselves.

**ProPetén** (1993-present). Petén, Guatemala. www.propeten.org, a Guatemalan environmental non-profit.

- **Founding board member - President** (2003-05), **Secretary** (2002-03), **Emeritus** (2005-onward)

Led the organization through its separation from Conservation International in 2002. Worked with others to bring the organization back to financial stability and develop a new strategic focus. Elected emeritus by the governing assembly in recognition of distinguished board service. Continue to provide support and advice in strategic planning, management, fundraising, and project development for this organization, Guatemala's second oldest environmental nonprofit.

- **Founder and Coordinator, "Remedios" Program in ProPetén, Petén, Guatemala** (1996-2000)

Established one of the first integrated health, population, and conservation initiatives in Central America. Raised almost a million dollars for this program and partner institutions. Managed a staff of 10 with projects in: primary and reproductive health, demographic analysis, ethnobotany and the revitalization of traditional medicine, and organic agriculture. By bringing together conservation and health organizations into an unusual alliance, in just three years, the program established reproductive health care services for half a million underserved people and lowered the region's fertility from 6.8 in 1999 to just 4.3 in 2009—a demographic transition that took Guatemala more than four decades.

- **Intern and volunteer researcher, Washington, DC** (May-June 1994); **New Haven, CT** (Fall 1994)

Wrote an investigative report on a proposed World Bank (IFC) loan to finance an oil pipeline and increased drilling in Laguna del Tigre National Park, which led to a successful campaign to pressure the company to establish a \$250,000 annual trust fund for the park.

- **Field extensionist, Petén, Guatemala** (June-December 1993, Summer 1995)

Lived and worked in a settler village inside the Maya Biosphere Reserve, coordinating projects in gender, community development, education, and natural resource management.

## **GRANTS AND FELLOWSHIPS**

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### **Selected Grants:**

- 2016. Grant for New Research Initiatives from the UC Davis Committee on Research. "Mosaics Network: Conservation of the Maya Forest 'Leftovers'" (\$25,000).
- 2013. Co-author & advisor to grant from Inter-American Foundation to the Association of Peasant and Indigenous Communities for the Integrated Development of Petén (ACDIP) titled "Proyecto Xeel," ("The Leftovers") for community organizing to defend indigenous territory from land grabbing (\$190,000 over 3 years; recently renewed for another 3 years).
- 2013. Grant from GIZ/Proselva (German cooperation agency) to publish a "popular" version of the World Bank monograph, "Tierra e Igualdad" (\$5,000) in Q'eqchi' and Spanish.
- 2012. Donation from the Maya Educational Foundation to distribute a hundred copies of my book to schools and Maya political authorities in southern Belize (\$1,500).
- 2011. Co-principal Investigator. Impact Evaluation of the Petén Land Administration Project, Phase I. Grant from the World Bank Trust Fund for Environmentally and Socially Sustainable Development administered through the World Bank's Latin America and Caribbean Region, Agriculture and Rural Development Unit (LCSAR) and ProPetén (\$200,000).
- 2010. Land Deals Politics Initiative. Small grant for research on genetically modified corn in northern Guatemala. White paper published online (\$2,000).
- 2008. Grants from Oxfam-Great Britain (£5,000) for the publication of my book, *Tz'aptzooq'eqb'*, and from Oxfam International for the production of a parallel ethnographic film, administered by ProPetén (\$5,000) to supplement an anonymous donation for the Spanish translation (\$2,000).

**Fellowships:**

- 2012 (declined due to move to UC Davis). Fulbright-Canada Visiting Research Chair in International Development Studies at McGill University. “Dandelions or Cancer: Exploring Risk, Sovereignty, and the Rule of Law in Dow Chemical’s NAFTA Challenge of the Canadian 2,4-D Bans.”
- 2001. National Science Foundation (NSF) Fellowship. Three-year graduate fellowship (tuition, living stipend, and dissertation research funds).
- 1999. Berkeley Fellowship. The university’s most competitive three-year fellowship (tuition and living stipend).
- 2000. Environmental Leadership Fellowship. Selected for the inaugural class of this three-year national program. Continued affiliation as a Senior Fellow.
- 1997. Fulbright Fellowship to Guatemala (a year-long living stipend and research funds for a project investigating population, gender and environment dynamics in Petén).

**BOOKS**

- (Manuscript underway). *Kernels of Rebellion: Maize, Food Citizenship, and Political Agency*. With an advance contract offer from University of Washington Press.
- 2012. *Enclosed: Conservation, Cattle, and Commerce among the Q’eqchi’ Maya Lowlanders*. Seattle: University of Washington Press, Culture, Place and Nature Series, 266 pages.
- 2009. *Tz’aptzooq’eb’: El Despojo Recurrente al Pueblo Q’eqchi’*. Guatemala City: Siglo XXI Editores with AVANCSO (Asociación para el Avance de las Ciencias Sociales en Guatemala), 454 pages.

**MAJOR REPORTS**

- 2013. Panti, Y., L. Grandia, A. Che. *¿Y Pa’ Dónde Trabajar?* (Spanish) *Ut B’aar Anchal li K’anjelak* (Q’eqchi’ translation). Magna Terra: Guatemala City, 40 pages.
- 2012. Grünberg, Georg, L. Grandia, B. Milian and research team. *Tierra e Igualdad: Desafíos para la Administración de Tierras en Petén, Guatemala*. World Bank: Guatemala City, 157 pages.
- 2012. Ybarra, Megan, O. Obando, L. Grandia, and N. B. Schwartz. *Tierra, Migración y Vida en Petén, 1999-2009*. Guatemala City: CONGCOOP/IDEAR (Coalition of NGO and Cooperatives in Guatemala / Institute of Agrarian and Rural Studies). 106 pages.
- 2004. *Qa Xe’ Qa Toon* (“Our Roots, Our Trunk”). Three volume series plus a 5-hour documentary film series on Q’eqchi’ traditional knowledge produced for the Sarstoon Temash Institute for Indigenous Management in southern Belize. 199 pages.
- 2001. (Grandia, L., N. B. Schwartz, A. Corzo, O. Obando and L. Ochoa). *Salud, Migración y Recursos Naturales en Petén: Resultados del Módulo Ambiental en la Encuesta de Salud Materno Infantil 1999*. Instituto Nacional de Estadística, USAID y Measure/DHS. Guatemala. 176 pages.

**REFEREED ARTICLES & BOOK CHAPTERS**

- (In press for early 2017). “Strange Bedfellows: Residual and Emergent Resistance to the 2014 Monsanto Law in Guatemala.” *Journal for the Study of Religion, Nature, and Culture*.
- (In press). “Ecocide in the Americas: Martyrs and Movements.” Featured article for *Brújula*, special edited volume on “Environmental Justice, Political Resistance, and Social Movements: Defying Ecological Degradation in Latin America,” 11: pages TBD.

- 2015. “Slow Ethnography: A Hut With a View.” *Critique of Anthropology*, 35(3): 301-17.
- 2014. “Modified Landscapes: Vulnerabilities to Genetically Modified Corn in the Political Economy of Basic Grain Production in Northern Guatemala.” *Journal of Peasant Studies*, 41(1); 79-105.
  - Reprinted in a special virtual issue (2015) “Greening Agrarian Studies,” celebrating the 40th anniversary of *Journal of Peasant Studies*.
- 2014. “On Dispossession: The Work of Studying Up, Down, and Sideways in Guatemala’s Maya Land Rights Movements” in *Up, Down, and Sideways: Anthropologists Trace the Pathways of Power*, eds. Rachael Stryker and Roberto Gonzalez. Brooklyn, NY: Berghahn Books.
- 2013. “Road Mapping: Megaprojects and Land Grabs in the Northern Guatemalan Lowlands” for a special volume on “Governing the Global Land Grab,” eds. W. Wolford, S.M. Borras, Jr., R. Hall, I. Scoones, and B. White, *Development and Change* 44(2): 233-59.
- 2009. “Raw Hides: Hegemony and Cattle in Guatemala’s Northern Lowlands” in a special edited volume, “Land, Labor, Livestock and (Neo)Liberalism: Historical and Contemporary Transformations in Pastoralism and Ranching,” ed. Nathan Sayre. *Geoforum* 40: 720-31.
- 2007. “Between Bolivar and Bureaucracy: Biodiversity Conservation and the Lost Potential of the Mesoamerican Biological Corridor” in a special edited volume, “Engaging Neoliberal Conservation,” eds. Jim Igoe and Dan Brockington, *Conservation and Society* 5(2): 478-503.

## ***NON-REFEREED CHAPTERS AND ARTICLES***

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- (Under review). “Trickster Ecology: Climate Change and Conservation Pluralism in Guatemala’s Maya Lowlands” in *Churches and Cosmologies: Religion, Environment and Social Conflict in Contemporary Latin America*, eds. Evan Berry and Robert Albro. University of Wisconsin Press.
- 2013. Interview with Markus Zander. “Weit Ab Von Der Realität: Wie Aktivistinnen der Weltbank die Konsequenzen Ihrer Handlungen in Der Realität Aufzeigen.” (From the Far Reality: How World Bank Activists Demonstrate the Consequences of Your Actions). *Lateinamerika-Nachrichte* 467:18-19.
- 2013. Milian B. and L. Grandia. “Inheriting Inequality: Land Administration and Agrarian Structure in Petén, Guatemala.” Online proceedings of the annual World Bank Conference on Land and Poverty, Washington, DC.
- 2012. “Imagining a New Wildlife Politics: Conservation Contrarians and Corporate Elephants in the Room.” *Journal of International Wildlife Law and Policy* 15(1): 95-114.
- 2010. “Rigoberta Menchú and the Story of All Poor Guatemalans (2008) by David Stoll.” *Delaware Review of Latin American Studies* 11(1): <http://www.udel.edu/LAS/Vol11-1Grandia.html>.
- 2009. “Silent Spring in the Land of Eternal Spring: The Germination of a Conservation Conflict.” *Current Conservation* 3(3): 10-13.
- 2009. “Milpa Matters: Maya Communities of Toledo v. Government of Belize” in *Waging War, Making Peace: Reparations and Human Rights*, eds. Barbara Rose Johnston and Susan Slyomovics. Walnut Creek, Ca.: Left Coast Press. 153-182.
- 2007. “Los Motivos Detrás de Los Programas de Tierras de los Bancos Multilaterales de la Perspectiva Q’eqchi’” in *Gobernabilidad Ambiental y Desarrollo Sostenible en Petén*, ed. FLACSO. Guatemala City: Facultad Latinoamericana de Ciencias Sociales y Fundación Ford. 247-255.
- 2005. “Appreciating the Complexity and Dignity of People’s Lives: Integrating Population-Health-Environment Research in Petén, Guatemala.” *FOCUS*. Report of the Woodrow Wilson International Center for Scholars, Environmental Change and Security Program. Issue 10 (November): 12 pages.

- 2001. “Look At The World Through Women’s Eyes: On Empathy and International Civil Society” in *Identity Politics in the Women’s Movement*, ed. Barbara Ryan. NY: New York University Press. 291-304.
- 1999. “From Dawn ‘Til Dawn: Valuing Women’s Work in Guatemala’s Petén” in *Thirteen Ways of Looking at a Tropical Forest*, ed. James Nations. Washington, DC: Conservation International. 39-46.
- 1999 (Grandia, L. and M. Fort). “Population and Environment in the Petén, Guatemala” in *Thirteen Ways of Looking at a Tropical Forest: Guatemala’s Maya Biosphere Reserve*, ed. James Nations. Washington, DC: Conservation International. 85-91.
- 1998 (Reining, C., C. Soza and L. Grandia). “Illuminating the Petén’s Throne of Gold: The ProPetén Experiment in Conservation-Based Development” in *Timber, Tourists, and Temples: Conservation and Development in the Maya Forest of Belize, Guatemala, and Mexico*, eds. Richard Primack et al. Washington, DC: Island Press. 365-388.

## ***ETHNOGRAPHIC FILMS***

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- 2009. "Territorio: El Camino a las Raíces" (Li Qana’aj: Li B’e Re Xtawb’al li Qaxe’, Territory: the Road to our Roots), a documentary film in Q’eqchi’ Maya (with Spanish & English subtitles) based on my book, *Tz’aptzooq’eb’*. One of four films nominated at the XII Festival Icaro (the largest Central American film and television festival) for achievements in the category of “Food Security.” 38 minutes.
- 2004. “Stories & Skills of the Sarstoon Temash.” Filmed and edited a 5-hour DVD of 35 traditional stories and folktales recorded with elders from the Sarstoon Temash villages, additional DVDs of women’s and men’s traditional skills, soon to be reproduced online.

## ***LEADERSHIP AND PUBLIC-ENGAGEMENT***

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- Q’eqchi’ Scholars Network (**founder and coordinator**, 2005-present), 70+ members
- Maya Forest Network (founding, in process, 300+ prospective members)
- 2009 (June), 2007 (February), 2006 (Fall). Affidavits as an Expert Witness. For submission to the Supreme Court of Belize on behalf of the Maya peoples of Toledo. University of Arizona and University of Toronto Law Clinics. 15-25 pages each. Cited by the Chief Justice in his final judgment.
- Multiple op-ed pieces on the DR-CAFTA and other topics.

## ***TEACHING***

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### **Current teaching portfolio at UC-Davis:**

- Introduction to Native American Studies (NAS 001)
- Corporate Colonialism (NAS 121)
- Native Foods and Farming of the Americas (NAS 123)
- Indigenous Mesoamerica (NAS 133b)
- Community Development for Sovereignty and Autonomy (NAS 212)
- Colonialism, Neoliberalism, and Indigenous Self Determination (NAS 220)
- Social Justice Laboratory (NAS 193, proposed)
- First Year Seminar: Toxics in Everyday Life

### **Previous portfolio at Clark University:**

- Controlling Capitalism (ID 258)
- Peasants, Rural Development and Agrarian Change (IDCE 30256)
- Introduction to Socio-Cultural Anthropology (ID 120)
- International Development Project and Program Management (IDCE 361)
- Aid and Empire (IDCE 30273)