

Spring 2017
Anthropology of Infectious Disease

Dr. Kevin Bardosh
Department of Anthropology &
Emerging Pathogens Institute
kevinbardosh@ufl.edu

ANG6930: 2490. 3 credit hours

Meeting Times: Monday Periods 6-8, 12:50pm to 3:50pm

Location: Emerging Pathogens Institute & Matherly Hall, Room 0012

Description: This graduate seminar advances a critical medical anthropology perspective on infectious disease emergence, transmission, prevention and control. The course broadly investigates how complex interactions between social, cultural, political, economic, and ecosystem dynamics influence the natural history of infectious disease and public health efforts to understand and control them. The seminar will focus on contemporary problems and issues, with a strong emphasis on inter-disciplinary thinking, methodological innovation, social justice and activism. The first part of the seminar will explore general theoretical and conceptual trends in anthropological research on the emergence and transmission of infectious disease, including expert and local understandings of infection and spread and broader political economy drivers. The second part will focus on the discourses and biopolitics of medicine and public health intervention as they relate to systems of surveillance, treatment, prevention and epidemic containment. We will explore counter-narratives to the hegemony of science and technology, including the role of local communities and the need to address health inequalities and structural factors, such as water, hygiene, sanitation and housing. Lastly, the course will turn to broader questions of policy and governance, including challenges with vertical initiatives, the elimination narrative and efforts to prevent the next global pandemic. The seminar will provide a forum for students in anthropology, geography, sociology, development studies, public health, medicine and other disciplines to critically reflect on the social and political lives of infectious disease, and to explore pathways for novel anthropological engagement.

Course Objectives:

- Generate conceptual and theoretical insight into the study of infectious disease from a critical anthropological perspective;
- Further student knowledge and learning of how infectious diseases are interwoven into broader social, cultural, political, economic and ecosystem dynamics, and the implication for such understandings;
- Further student knowledge and learning on the biopolitics of public health intervention, policies and systems for both endemic and emerging diseases;
- Build insight into the importance of anthropological research as a pathway for health activism and social justice.

Seminar Structure:

The course is organized as a graduate seminar and students are expected to critically engage with the weekly readings and be actively involved in class discussion. Each week the seminar will follow the same general format: it will begin with a short introductory presentation by the instructor on the major theme of the week, followed by a general class discussion (led by a student) and, finally, a student presentation on a specific pathogen.

All students will be expected to write a two-page (double-spaced) critical reflection of the readings each week. This will be handed in at the end of each class. The weekly personal reflection should draw upon at least two of the weekly readings and raise two questions for general discussion; these can include critiques of the readings, methodological questions, broader considerations, etc. These should not be exhaustive – the more specific and focused, the better. One student will then lead the discussion of the weekly reading and the class will participate in the general discussion that follows (this student does not need to submit the personal reflection that week). The course readings will be cumulative and it is expected that students will draw upon previous readings in the general discussion to make connections between course content (students can draw upon past readings in the weekly personal reflection, if relevant).

The general class discussion will be followed by a student PowerPoint presentation each week. These presentations should be brief (about 20 minutes) and focus on a broad overview of a specific infectious disease, as understood by biomedicine. The presentation should include a short discussion of the ecology, biology, clinical features and epidemiology of the infectious disease. It should then be followed by a more detailed analysis of a) how these are influenced by the social determinants of health and illness; and/or b) challenges in current approaches to diagnose, treat, prevent and/or control the pathogen. The presentation should end with 2 to 3 questions for the class to discuss, with some relevance to the week's reading. The student should distribute a 2-page outline of the presentation, with at least 5 references, to the class beforehand. Feel free to contact the instructor for suggestions and further guidance.

Grading Methods: The assessment will include an individual course paper, class participation, weekly writing reflections and the class presentation.

In consultation with the instructor, each student will identify a research topic that meets his/her professional goals and objectives, and intersects with the objectives and content of this course. This paper will be between 5,000 and 6,000 words, excluding references and figures. The paper will be due on the last day of class. Students need to submit a rough draft of their essay (a detailed outline or a full draft) before March 6th for comment and input by the instructor.

Students will also be graded based on their weekly writing reflection, which will be handed in after each class. Student grades for this component will be based solely on the top 8 weekly reflections provided by the student. Class participation will be assessed

based on class attendance, the level of class dialogue and the level of preparedness shown during the week the student leads class discussion. Lastly, the student will be evaluated based on the individual oral presentation. This will be explained in more detail in class.

Evaluation:

Weekly writing reflection = 20% (top 8 included in the assessment)

Individual oral presentation = 15%

Class participation = 15% (Based on in class dialogue)

Research paper = 50%

Text/Readings: Readings will be assigned from the anthropology, social science and public health literature. These will be sent by email to the class in PDF form. Most readings will be journal articles available online through the UF library system. **Students are expected to read the assigned readings each week. Assigned readings are marked with a (***)**, while recommended readings are not. Selected students will be required to critique an article and lead a discussion each class. The format for this will be explained in class.

General texts (recommended, but not required; available on Amazon) include:

Bardosh, K. (2016) *One Health: Science, Politics and Zoonotic Disease in Africa*. Routledge: London.

Barrett R. and Armelagos, G. (2013) *An Unnatural History of Emerging Infections*. Oxford University Press: Oxford.

Biehl, J. and Petryna, A. (eds) (2013) *When People Come First: Critical Studies in Global Health*. Princeton University Press: Princeton

Briggs, C. L. and Mantini-Briggs, C. (2003) *Stories in the Time of Cholera: Racial Profiling During a Medical Nightmare*. University of California Press: Berkeley CA.

Brown, P. J., & Inhorn, M. C. (2013). *The Anthropology of Infectious Disease: International Health Perspectives*. Routledge: London.

Dingwall, R., Hoffman, L. M. and Staniland, K. (eds) (2013) *Pandemics and Emerging Infectious Diseases: The Sociological Agenda*. John Wiley & Sons: Chichester.

Dry, S. and Leach, M. (2010) *Epidemics: Science, Governance and Social Justice*. Earthscan: London

Herring, A. and Swedlund, A. (2010) *Plagues and Epidemics: Infected Spaces Past And Present*. Berg: Oxford

Keshavjee, S. (2014) *Blindspot: How Neoliberalism Infiltrated Global Health*, University of California Press, Berkeley CA

Lakoff, A. and Collier, S. J. (2008) *Biosecurity Interventions: Global Health and Security in Question*. Columbia University Press: New York NY.

Singer, M. (2015) *Anthropology of Infectious Disease*. Left Coast Press: Walnut Creek, California.

Grading: The grading scale for this course consists of the standard scale below:

90% - 100% = A
85% -89.9% = B+
80% -84.9% = B
75% -79.9% = C+
70% -74.9% = C
65% -69.9% = D+
60% - 64.9% = D
Below 60% = E

Class Attendance: Class attendance is mandatory for students. Excused absences follow the criteria of the UFL Graduate Catalogue (e.g., illness, serious family emergency, military obligations, religious holidays), and should be communicated to the instructor prior to the missed class day when possible. UFL rules require attendance during the first two course sessions, and students also must attend the final two course sessions of student presentations for this class. Missing three scheduled sessions will result in a failure. Regardless of attendance, students are responsible for all material presented in class and meeting scheduled due dates for class assignments. Finally, students should read the assigned readings prior to the class meetings, and be prepared to discuss the material except for the first class session.

Policy on Make-Up Work: Students are allowed to make up work as the result of illness or other unanticipated circumstances warranting a medical excuse and resulting in the student missing a homework or project deadline, consistent with College policy. Documentation from a health care provider is required. Work missed for any other reason will receive a grade of zero.

Accommodations for Students with Disabilities: Students requiring accommodations must first register with the Dean of Students' Office. The Dean of Students' Office will provide documentation to the student who must then provide this documentation to the faculty member when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

Seminar Outline and Reading Assignments

January 9: Seminar Introduction

- Overview of the course and syllabus
- Discussion of grades and student expectations
- Discussion of student goals and career objectives

Readings:

*** Harper, I., & Parker, M. (2014). The politics and anti-politics of infectious disease control. *Medical anthropology*, 33(3), 198-205.

*** Parker, M., & Harper, I. (2006). The anthropology of public health. *Journal of Biosocial Science*, 38(01), 1-5.

Manderson, L. (1998). Applying medical anthropology in the control of infectious disease. *Tropical Medicine & International Health*, 3(12), 1020-1027.

January 16: Theoretical and Conceptual Perspectives on the “Pathogenic World”

- Introduces key themes and issues from the anthropological literature
- Discusses the variable “narratives” and “regimes” in global health
- Introduces the role of applied anthropology in infectious disease control

Readings:

*** Singer, M., & Clair, S. (2003). Syndemics and public health: reconceptualizing disease in bio-social context. *Medical anthropology quarterly*, 17(4), 423-441.

*** Leach, M., & Scoones, I. (2013). The social and political lives of zoonotic disease models: narratives, science and policy. *Social science & medicine*, 88, 10-17.

*** Farmer, P. (1996). Social inequalities and emerging infectious diseases. *Emerging infectious diseases*, 2(4), 259.

Janes, C. R., & Corbett, K. K. (2009). Anthropology and global health. *Annual Review of Anthropology*, 38, 167-183.

Lakoff, A. (2010). Two regimes of global health. *Humanity: An International Journal of Human Rights, Humanitarianism, and Development*, 1(1), 59-79.

January 23: Human Behavior and the Social Determinants of Infection

- Explores the role of human behavior in infectious disease transmission
- Discusses the importance of exposure, clustering and social difference
- Deconstructs the notion of “risk factor” in epidemiological models

Readings:

*** Aagaard-Hansen J, Claire L: Neglected tropical diseases: equity and social determinants. In *Equity, Social Determinants, and Public Health Programmes*. Edited by Blas E, Anand SK. Geneva: WHO Press; 2010:135–157.

*** Richards, P., Amara, J., Ferme, M. C., Kamara, P., Mokuwa, E., Sheriff, A. I., Suluku, R. and Voors, M. (2015) Social pathways for Ebola virus disease in rural Sierra Leone, and some implications for containment, *PLOS Neglected Tropical Diseases*, vol 9, no 4, doi: 10.1371/journal.pntd.0003567

*** Wolf, M. Rethinking Urban Epidemiology: Natures, Networks and Materialities. (2016) *International Journal of Urban and Regional Research*, in press.

Dzingirai, V., Bett, B., Bukachi, S., Lawson, E., Mangwanya, L., Scoones, I., et al. (2016). Zoonotic diseases: who gets sick, and why? Explorations from Africa. *Critical Public Health*, 1-14.

Inhorn, M. C., & Brown, P. J. (1990). The anthropology of infectious disease. *Annual review of Anthropology*, 19, 89-117.

Schoepf, B. G. (2001). International AIDS research in anthropology: taking a critical perspective on the crisis. *Annual Review of Anthropology*, 335-361.

January 30: Structural Violence and Political Economy

- Discusses the concept of “structural violence”
- Introduces the scholarly work on the political economy drivers of infectious disease
- Discusses practical policy options and challenges

Readings:

*** Dixon, M. W. (2015). Biosecurity and the multiplication of crises in the Egyptian agri-food industry. *Geoforum*, 61, 90-100.

*** Nguyen, V. K., & Peschard, K. (2003). Anthropology, inequality, and disease: a review. *Annual Review of Anthropology*, 447-474.

*** Wilkinson, A., & Leach, M. (2014). Briefing: Ebola—myths, realities, and structural violence. *African Affairs*, adu080.

Farmer, P. (2004) An anthropology of structural violence. *Current Anthropology*, 45(3), pp305–325.

February 6: Ethnographies of illness

- Introduces the importance of local illness categories
- Discusses the role of local understandings for public health

Readings:

*** Geissler, P. Wenzel. 1998. 'Worms are our life.' Understandings of worms and the body among the Luo of western Kenya. *Anthropology and Medicine* 5:63-79.

*** White, C. (2005). Explaining a complex disease process: talking to patients about Hansen's disease (leprosy) in Brazil. *Medical anthropology quarterly*, 19(3), 310-330.

*** Weiss, M. G. (2001). Cultural epidemiology: an introduction and overview. *Anthropology & Medicine*, 8(1), 5-29.

Agyepong, I. & Manderson, L. (1999). Mosquito avoidance and bed net use in the Greater Accra Region, Ghana. *Journal of Biosocial Science*, 31(1), 79-92.

Ramdas, S. (2012). Cruel disease, cruel medicine: self-treatment of cutaneous leishmaniasis with harmful chemical substances in Suriname. *Social Science & Medicine*, 75(6), 1097-1105.

Talaat, M., Watts, S., Mekheimer, S., Ali, H. F., & Hamed, H. (2004). The social context of reproductive health in an Egyptian hamlet: a pilot study to identify female genital schistosomiasis. *Social science & medicine*, 58(3), 515-524.

February 13: Vectors, Reservoirs and the Environment

- Introduces ecosystems approaches to public health, and the implications for anthropology

Readings:

*** Nading, A. M. (2013). Humans, animals, and health: From ecology to entanglement. *Environment and Society: Advances in Research*, 4(1), 60-78.

*** Paige, S. B., Malavé, C., Mbabazi, E., Mayer, J. and Goldberg, T. L. (2015) Uncovering zoonoses awareness in an emerging disease “hotspot”, *Social Science & Medicine*, vol 129, pp78-86, doi: 10.1016/j.socscimed.2014.07.058

*** Tschakert, P., Ricciardi, V., Smithwick, E., Machado, M., Ferring, D., Hausermann, H., & Bug, L. (2016). Situated knowledge of pathogenic landscapes in Ghana: Understanding the emergence of Buruli ulcer through qualitative analysis. *Social Science & Medicine*, 150, 160-171.

Valdez-Tah, A., Huicochea-Gómez, L., Ortega-Canto, J., Nazar-Beutelspacher, A., & Ramsey, J. M. (2015). Social representations and practices towards triatomines and Chagas disease in Calakmul, Mexico. *PloS one*, 10(7), e0132830.

Wood, J. L., Leach, M., Waldman, L., MacGregor, H., Fooks, A. R., Jones, K. E., et al. (2012). A framework for the study of zoonotic disease emergence and its drivers: spillover of bat pathogens as a case study. *Phil. Trans. R. Soc. B*, 367(1604), 2881-2892.

February 20: Local Responses to Interventions

- Introduces anthropology literature on local resistance to biomedical interventions
- Discusses the shortcomings of current public health campaigns, and the contribution of anthropology

Readings:

*** Briggs, C. L. (2005). Communicability, racial discourse, and disease. *Annu. Rev. Anthropol.*, 34, 269-291.

*** Bardosh, K. (2015). Achieving “Total Sanitation” in Rural African Geographies: Poverty, Participation and Pit Latrines in Eastern Zambia. *Geoforum* 66:53-63.

*** Closser, S., Rosenthal, A., Maes, K., Justice, J., Cox, K., Omidian, P. A., et al (2016). The global context of vaccine refusal: Insights from a systematic comparative ethnography of the global polio eradication initiative. *Medical anthropology quarterly*, in press.

Fairhead, J., Leach, M. and Small, M. (2006) ‘Where techno-science meets poverty: Medical research and the economy of blood in The Gambia, West Africa’, *Social Science & Medicine*, vol 63, no 4, pp1109-20

Parker, M., & Allen, T. (2011). Does mass drug administration for the integrated treatment of neglected tropical diseases really work? Assessing evidence for the control of schistosomiasis and soil-transmitted helminths in Uganda. *Health research policy and systems*, 9(1), 1.

Poltorak, M., Leach, M., Fairhead, J. and Cassell J. (2005). 'MMR' talk and vaccination choices: an ethnographic study in Brighton." *Social Science and Medicine* 61:709-719.

Yahya, M. (2007). Polio vaccines—"no thank you!" barriers to polio eradication in Northern Nigeria. *African Affairs*, 106(423), 185-204.

February 27: The Hegemony of Magic Bullets and Positivist Science

- Discusses the continued dominance of technological solutions to infectious disease
- Discusses the shortcomings of positivist science in addressing the challenges of prevention and control

Readings:

*** Allen, T., & Parker, M. (2016). Deworming delusions? Mass drug administration in East African schools. *Journal of biosocial science*, 48(S1), S116-S147.

*** Beisel, U. (2015). Markets and Mutations: mosquito nets and the politics of disentanglement in global health. *Geoforum*, 66, 146-155.

*** Biruk, C. (2012). Seeing like a research project: Producing "high-quality data" in AIDS research in Malawi. *Medical anthropology*, 31(4), 347-366.

Nading, A. M. (2015). Chimeric globalism: Global health in the shadow of the dengue vaccine. *American Ethnologist*, 42(2), 356-370.

Lorway, R. and Khan, S. (2014) 'Reassembling epidemiology: Mapping, monitoring and making-up people in the context of HIV prevention in India', *Social Science & Medicine*, vol 112, pp51-6

March 6: No classes – Spring Break ----- DRAFT OF YOUR ESSAY IS DUE!!!

March 13: The "Forgotten Foundations" of Health

- Introduces efforts to address the social determinants of infectious disease
- Discusses the promise and challenges with scaling-up such interventions

*** d'Alessandro, E. (2015). Human activities and microbial geographies. An anthropological approach to the risk of infections in West African hospitals. *Social Science & Medicine*, 136, 64-72.

*** Espino F, Koops V, Manderson L: Community participation and tropical disease control in resource-poor settings. Geneva: WHO Press; 2004.

*** Mazzeo, J., & Chierici, R. M. (2013). Social Foundations for a Community-Based Public Health Cholera Campaign in Borgne, Haiti. *Human Organization*, 72(4), 312-322.

Atkinson, J. A., Vallely, A., Fitzgerald, L., Whittaker, M., & Tanner, M. (2011). The architecture and effect of participation: a systematic review of community participation for communicable disease control and elimination. Implications for malaria elimination. *Malar J*, 10(1), 225.

Kendall, C. (1998). The role of formal qualitative research in negotiating community acceptance: the case of dengue control in El Progreso, Honduras. *Human organization*, 57(2), 217-221.

Pérez, D., Lefèvre, P., Castro, M., Toledo, M. E., Zamora, G., Bonet, M., & Van der Stuyft, P. (2013). Diffusion of community empowerment strategies for *Aedes aegypti* control in Cuba: a muddling through experience. *Social science & medicine*, 84, 44-52.

Person, B., Knopp, S., Ali, S. M., A'kadir, F. M., Khamis, A. N., Ali, J. N., et al. (2016). Community co-designed schistosomiasis control interventions for school-aged children in Zanzibar. *Journal of biosocial science*, 48(S1), S56-S73.

March 20: Treatment, Compliance and Markets

- Introduces the complex social and political processes involved in medication and treatment, including issues of patient compliance
- Discusses the turn towards the private sector in global health, and the implications of pharmaceutical markets for infectious disease

Readings:

*** Amoussouhoui AS et al. (2016) Steps Toward Creating A Therapeutic Community for Inpatients Suffering from Chronic Ulcers: Lessons from Allada Buruli Ulcer Treatment Hospital in Benin. *PLoS Negl Trop Dis* 10(7): e0004602. doi:10.1371/journal.pntd.0004602

*** Harper, I. (2010). Extreme condition, extreme measures? Compliance, drug resistance, and the control of tuberculosis. *Anthropology and Medicine*, 17(2), 201-214.

*** Towghi, F. (2013). The biopolitics of reproductive technologies beyond the clinic: Localizing HPV vaccines in India. *Medical anthropology*, 32(4), 325-342.

Kim, J. Y., Shakow, A., Mate, K., Vanderwarker, C., Gupta, R. and Farmer, P. (2005) 'Limited good and limited vision: Multidrug-resistant tuberculosis and global health policy', *Social Science & Medicine*, vol 61, no 4, pp847-859

Palmer, J. J., Kelly, A. H., Surur, E. I., Checchi, F., & Jones, C. (2014a). Changing landscapes, changing practice: Negotiating access to sleeping sickness services in a post-conflict society. *Social Science & Medicine*, 120, 396-404.

March 27: Health Systems and Vertical Initiatives

- Introduces the longstanding debate between vertical and horizontal approaches to infectious disease control

Readings:

*** Béhague, D. P., & Storeng, K. T. (2008). Collapsing the vertical-horizontal divide: an ethnographic study of evidence-based policymaking in maternal health. *American Journal of Public Health*, 98(4), 644-649.

*** Berry, N. S. (2014). Did we do good? NGOs, conflicts of interest and the evaluation of short-term medical missions in Sololá, Guatemala. *Social Science & Medicine*, 120, 344-351.

*** Kelly, A. H., MacGregor, H., & Montgomery, C. M. (2017). The publics of public health in Africa. *Critical Public Health*, 27(1), 1-5.

*** Storeng, K. T. (2014). The GAVI Alliance and the 'Gates approach' to health system strengthening. *Global public health*, 9(8), 865-879.

Prince, R. J., & Otieno, P. (2014). In the shadowlands of global health: Observations from health workers in Kenya. *Global public health*, 9(8), 927-945.

April 3: Elimination Narratives

- Discusses challenges of policy and practice related to large-scale elimination programs, and the role of ethnographic research as 'critique'

Readings:

*** Kelly, A. H. and Beisel, U. (2011) 'Neglected malarial: The frontlines and back alleys of global health', *BioSocieties*, vol 6, no 1, pp71-87

*** Koski-Karell, V. (2016). Haiti's progress in achieving its 10-year plan to eliminate cholera: hidden sickness cannot be cured. *Risk Management and Healthcare Policy*, 9, 87-100.

*** Taylor, S. (2016). In pursuit of zero: Polio, global health security and the politics of eradication in Peshawar, Pakistan. *Geoforum*, 69, 106-116.

Smith, C., & Whittaker, M. (2014). Malaria elimination without stigmatization: a note of caution about the use of terminology in elimination settings. *Malaria journal*, 13(1).

April 10: Biosecurity and Pandemic Preparedness

- Discusses the priorities and scholarly critiques associated with the global health security agenda
- Introduces the notion of pandemic prevention

Readings:

*** Briggs, C. L., & Nichter, M. (2009). Biocommunicability and the biopolitics of pandemic threats. *Medical Anthropology*, 28(3), 189-198.

*** Brown, H., & Kelly, A. H. (2014). Material proximities and hotspots: Toward an anthropology of viral hemorrhagic fevers. *Medical anthropology quarterly*, 28(2), 280-303.

*** Calain, P. (2007a) 'From the field side of the binoculars: A different view on global public health surveillance', *Health Policy and Planning*, 22(1), pp13-20

Caduff, C. (2014). On the Verge of Death: Visions of Biological Vulnerability*. *Annual Review of Anthropology*, 43, 105-121.

Füller, H. (2016). Pandemic cities: biopolitical effects of changing infection control in post-SARS Hong Kong. *The Geographical Journal*, 182(4), 342-352.

Hinterberger, Amy, and Natalie Porter. "Genomic and viral sovereignty: Tethering the materials of global biomedicine." *Public Culture* 27.2 76 (2015): 361-386.

Servitje, L. (2016). H5N1 for Angry Birds: Plague Inc., Mobile Games, and the Biopolitics of Outbreak Narratives. *Science Fiction Studies*, 43(1), 85-103.

April 17: Methodological Reflections and Activist Anthropology

- Reflects on the course content, with particular focus on 'activist anthropology'
- Discusses student learning experiences and future career/scholarly trajectories and possibilities
- Research paper is due.

Readings:

*** Adams, V., Burke, N. J., & Whitmarsh, I. (2014). Slow research: Thoughts for a movement in global health. *Medical Anthropology*, 33(3), 179-197.

*** Bardosh, K., Inthavong, P., Xayaheuang, S., & Okello, A. L. (2014). Controlling parasites, understanding practices: The biosocial complexity of a One Health intervention for neglected zoonotic helminths in northern Lao PDR. *Social Science & Medicine*, 120, 215-223.

*** Pigg, S. L. (2013). On sitting and doing: Ethnography as action in global health. *Social Science & Medicine*, 99, 127-134.