

(人類生態学特論 I)

Lecture Schedule of Human Ecology I, 2010 (for Graduate Course)

April 12, 2010

The course will be a journal club, in which we will discuss selected papers relevant to the field of human ecology, which deals with the interaction between human population and their environment in a broad sense, hence, is one of the basic foundations of International Health. Asian and Oceania perspectives will be also emphasized. Each student is required to do a 30 minutes presentation to summarize/comment on one paper/chapter during the course. The presentation should be in English; handout is required, and a projector (for Powerpoint presentation) is available. In each week, two papers dealing with one of the six sub-areas (as listed below) will be presented and discussed. Credit will be given based on presentation and participation to the discussion.

Those who are interested in taking the course **should contact Prof. Watanabe or Dr. Umezaki** through e-mail or fax **by April 23th (Friday)**, and **indicate which sub-area you are interested** in to present a paper (please also indicate your second priority area, perhaps we need to make adjustment). Then, fixed schedule with reading assignments will be announced by April 28th (Wednesday).

Date and time: Friday 9:30 -- 12:00 a.m.

7 weeks between May 7- July 9 (no class on June 4 and June 25)

Room: Meeting Room of Department of Human Ecology

(E604, 6th floor at Annex of Med. No.3 building 医学部 3 号館別棟)

Sub-areas:

- 1. food survey and nutrition, 2. Demography survey**
- 3. Activity and behavior, 4. GIS use in health sciences**
- 5. biomarkers and health/environmental risks, 6. Ecology of diseases**
- 7. Cities, urbanization and health, 8. Sustainability and health**

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Please indicate your preference for the area (and a paper). Final assignment of the papers will be determined by us, and depending on the number of the students, you might be assigned a paper which is not of your choice.

Papers with # mark is available at Human Ecology Department. Other papers should be available through e-journal site.

1. Food survey and nutrition,

Ulijaszek SJ and Strickland SS. Nutritional studies in biological anthropology. In: Lasker GW and Mascie-Taylor CGN (eds) Research strategies in human biology. Cambridge Univ Press, 1993.

#McDade et al. (in press) Early origins of inflammation: microbial exposures in infancy predict lower levels of C-reactive protein in adulthood. Proceedings of the Royal Society B (Biological Sciences), doi:10.1098/rspb.2009.1795.

2. Demography survey

Lu Y. et al. Test of the 'healthy migrant hypothesis': a longitudinal analysis of health selectivity of internal migration in Indonesia. Social Science and Medicine, 67: 1331-1339, 2008.

Gage TB. Demography. In Stinson S et al. (eds), Human Biology: An Evolutionary and Biocultural Perspectives. Wiley-Liss, pp. 507-551, 2000.

3. Activity and behavior

#Sallis, J.F., Conway, T.L., Prochaska, J.J., McKenzie, T.L., Marshall, S.P., & Brown, M. (2001). The association of school environments with youth physical activity. American Journal of Public Health, 91, 618-620.

#Frank, L.D., Andresen, M.A., & Schmid, T.L. (2004). Obesity relationships with community design, physical activity, and time spent in cars. American Journal of Preventive Medicine, 27, 87-96.

NOTE: A student who selected either of the papers in “activity and behavior” is requested to summarize the information of “Active Living Research (<http://activelivingresearch.org/>)” and “IPEN (<http://www.ipenproject.org/index.htm>).

4. GIS use in health sciences

Sasaki S. et al. Impact of drainage networks as social infrastructure on cholera outbreaks in an inland urban city in Zambia. American Journal of Public Health, Vol.99, No.11, pp.1982 – 1987, 2009.

Sasaki S. et al. Spatial analysis of risk factor of cholera outbreak for 2003–2004 in a peri-urban area of Lusaka, Zambia. *American Journal of Tropical Medicine and Hygiene*, Vol.79, No.3, pp.414 – 421, 2008.

NOTE: *A student who selected either of the papers in “GIS use in health sciences” is requested to summarize the concept of Geographic Information System and Spatial Statistics.*

5. biomarkers and health/environmental risks,

Brantly et al. Comparative health risk assessment: a method for setting priorities in environmental health In: Shahi et al. (eds) *International perspectives on Environment, Development, and health (Toward a sustainable world)* Springer, 1997

-The environment-development-health interface Shahi GS et al. 3-20, In: Shahi et al. (eds) *International perspectives on Environment, Development, and health (Toward a sustainable world)* Springer, 1997

#-A historical perspectives Shahi et al. 21-50 In: Shahi et al. (eds) *International perspectives on Environment, Development, and health (Toward a sustainable world)* Springer, 1997

* Somers, CM et al. Reduction of Particulate Air Pollution *Lowers* the Risk of Heritable Mutations in Mice. *Science* 304, 1008, 2004

* Jarup L and Akesson A: Current status of cadmium as an environmental health problem. *Toxicology and Applied Pharmacology*, 238, 201-208.

6. Ecology of diseases

* Mascie-Taylor CGN and Karim E: The Burden of Chronic Disease, *Science* 302, 1921-2, 2003.

* Dorea, JG: Cassava cyanogens and fish mercury are high but safely consumed in the diet of native Amazonians. *Ecotoxicology and Environmental Safety* 57, 248-56, 2004

* Sanderson WC and Scherbov S: Average remaining lifetimes can increase as human populations age, *Nature* 435, 811-813

* Gluckman PD and Hanson MA: Living with the past: Evolution, development, and patterns of disease. *Science* 305, 1733-6, 2004

7. Cities, urbanization and health,

Marks, GC: Changing nutritional health in South East Asia. In: Ohtsuka and Ulijaszek (eds) *Health Change in the Asia-Pacific region*, Cambridge University Press, 2007

Ewing R et al.: Relationship between urban sprawl and physical activity, obesity, and morbidity. In: Marzluff JM et al.: *Urban Ecology: An International perspective on the Interaction between Humans and Nature*. Springer, 2008. P.567-583.

8. Sustainability and health

* Rockstrom et al. A safe operating space for humanity. Nature 461, 472-475, 2009.

* Wilkinson et al.: Public health benefits of strategies to reduce greenhouse-gas-emissions; household-energy Lancet , Nov 2009 issue , p.9-21.

Grambsch A and Menne B: Adaptation and adaptive capacity in the public health context. In; Climate change and human health – Risks and responses. WHO, 2003 P.220-236