

**Preliminary Examination for Sunil Aggarwal
November 11, 2005**

Please answer either “a” or “b” from each of the following questions. Please do not exceed 10 pages of text per question, excluding references. Please include citations in the text where appropriate, and include a list of references after each question. Your answers are due at 5 pm on Friday, November 18th. You should email your answers to me; however, please check with Drs. Morrill and Zum Brunnen for their preferences.

I. Answer either “a” or “b”:

a) How can medical geographers contribute to the clarification and public policy formation regarding the use of psychoactive drugs/chemicals be they naturally occurring or synthetic? Is or are there spatial dimensions that are of use in this regard?

b) As a geographer how would you design a study to test rigorously your assertion that "drug abuse" is often just a social/legal construction?

2. Answer either “a” or “b”:

a) Explain how your area of interest follows from, or is an example of the traditions of medical geography.

b) What is broadly known about the geographic distribution of different classes of drugs" - alcohol, cannabis, heroin, methadone, etc etc. in the US? Do these appear to be correlated with other characteristics of populations?

3. Answer either “a” or “b”

a) You have frequently argued (correctly) that cannabinoids are effective analgesics. However, there have been no head-to head clinical studies comparing cannabinoids with more readily available treatments such as morphine sulfate, methadone, oxycodone, etc. Please propose a study design for a head-to-head comparison of a cannabinoid, morphine, and methadone for patients with multiple sclerosis. Adhere to the principles of randomized clinical trials. Make sure that you specify the inclusion criteria, exclusion criteria, and study endpoints.

b) What is known about the geography and epidemiology of pain in the population as a whole in the United States? Propose a research agenda for what is unknown.?