

Geography of Health and GIS Analysis (GoH) Research Group, Jan 2019

Subgroup description: Housed at the O'Brien Institute for Public Health, the Geography of Health and GIS (geographic information systems) Analysis Research Group studies the relationships between health and place and the interactions of people and the environment to better understand spatial patterns and diffusion of disease, environmental exposures and accessibility of health-care services to identify risks and ultimately improve health and care delivery.

The Geography of Health and GIS Analysis Research Group serves as a hub to connect geographical expertise with health research in practice, enhance spatial literacy and expand the use of GIS for better decision making in health-care delivery throughout Alberta.

A) People

1. Current number of members:

There are approximately 40 – 50 members. There have been 5-10 additions every year, but members also come and go (e.g., students). Overall, the number has been relatively stable.

2. Thought leaders of your subgroup:

There are two co-leads of this group: Dr. Stefania Bertazzon (U of C Geography Department) and Dr. Alka Patel (Alberta Health Services and Department of Community Health Sciences). Dr. Rizwan Shahid and Dr. Nigel Waters are also key thought leaders within this group.

- **3. Member 'phenotypes' and approximate numbers** (*eg.*, trainees, community partners, affiliations): Our membership spans members of the Department of Community Health Sciences, Medicine, Geography, Veterinary Medicine as well as employees of Alberta Health Services. Students and trainees are a variable, yet significant portion of the membership.
- **4.** How new members find your subgroup (*eg.* website, active recruitment, events, word-of-mouth): Our group is contacted primarily through the OIPH website and through word of mouth. There is active recruitment of students by current group members. Outside of students there is limited active recruitment.
- Gaps in membership that subgroup wants to fill: Currently there are no gaps that we are trying to fill in terms of group membership.

B) Activities

- 6. Events/activities of your subgroup:
 - a. Previous:
- November 14, 2018: Health GIS: STAR (Spatial Thinking in Applied Research), A GIS Day event
- March 16, 2018: GIS and EMS Utilizing Geospatial Data for EMS Response and Planning, with Tyler Selby
- Dec. 1, 2017: Modelling Air Quality in Calgary using Land Use Regression, with Isabelle Couloigner
- Nov. 15, 2017: GIS Day: Keynote speakers Dr. Nigel Waters, Dr. Judy Seidel and Davor Gugoli
- April 7, 2017: <u>Type and Proximity of Green Spaces are Important for Preventing</u> Cardiovascular Morbidity and Diabetes, with Roland Ngom
- Nov. 25, 2016: Integrating Local Spatial and Dynamic Simulation to Model Childhood Obesity, with <u>Rizwan Shahid</u>
- Feb. 26, 2016: <u>Techniques, Theory and Practice for a Spatial Turn in Health Research, with Michael</u> <u>Goodchild</u>
- May 8, 2015: Spatial Epidemiology Case Studies from George Mason University, with Dr. Nigel Waters
- Nov. 1, 2013: <u>Development of Functional Geographic Areas and Related Components for Health Services</u> <u>Planning, with Dr. Judy Seidel</u>
- Jan. 25, 2013: Geography Matters: GIS, Maps, and Geography of Health, with Dr. Stefania Bertazzon
- Jan. 5, 2013: Geography of Health and GIS Analysis Workshop
- Nov. 25, 2011: <u>Geographic Systems and Population Health Research: Examples from Spatial Injury</u> <u>Surveillance, with Dr. Nadine Schuuurman</u>
 - b. Planned:
- January 11, 2019: Ethics in GIS, with Natalie Ludlow
- November 2019: GIS Day (in discussion with group)
- 7. Method and frequency of subgroup communications (including any mass communication channels to engage with its members (*eg.* Events, newsletter, Basecamp, *etc.*) and externally-facing communication tools (*eg.* Brochures, web page, social media channels, podcasts, public-facing events, *etc.*):

In addition to the planned events within the GoH group, we meet quarterly in person to communicate on upcoming research opportunities and updates on current work. During these meetings we also discuss suggestions for future events. Throughout the year we communicate with our group on potential

conferences and workshops of interest that are occurring internationally. This year with the support of OIPH (Michael Wood) we finalized our subgroup pamphlet (see attached) and web page (https://obrieniph.ucalgary.ca/geography-of-health-GIS).

8. Academic outputs and societal impacts leveraged by subgroup (general description/estimated numbers sufficient):

There have been several papers, posters and presentation that have been worked on collectively by members of the subgroup (~5). Our GIS Day event involves members of the industry, government and University creating an environment of creative exchange of ideas and potential for creating new relationships.

C) Operations

- **9.** Administrative human resources for your subgroup: There are no dedicated HR resources for this subgroup.
- 10. O'Brien human resources upon which your subgroup relies:

We rely heavily on OIPH resources for general administrative and communication support. In the past year Jamie Day, Marie-Claude Proulx, Angela Taylor and Michael Wood (in addition to others) have provided support to our group in terms of setting up events and helping us build our group communications (pamphlet and webpage). We will require the continued support of OIPH to update our webpage as events are added. In addition, the \$2000 fund that supports our group allows us to hold larger events such as GIS day.

11. Entities other than O'Brien Institute supporting subgroup, and type of support (*eg.* financial, HR, etc): Applied Research and Evaluation Services (AHS) provides additional administrative and in kind support of resources as needed. There are several students from the Department of Geography who also provide in kind support as needed to help support group events.

12. Approximate yearly expenditures of subgroup:

Since its inception we have not extended beyond our allotted budget of \$2000/year. In the future, in order to invite higher profile international speakers to OIPH, we may require additional funds.

D) Other feedback (strategic questions, advice)

No specific questions or advice at this time. We are very appreciative of the support we receive from OIPH to maintain this research sub-group. We have received informal feedback from our members that they find value in having a group that brings together minds from across different organizations with an interest in Health Geography. We hope to maintain and grow this group based on the needs of the membership.

Submit completed template to dayj@ucalgary.ca