

# Managing Undergraduate Research Teams: The Vaccination Research Group

Bernice L. Hausman

Edward S. Diggs Professor in the Humanities

Virginia Tech and the Virginia Tech Carilion School of Medicine

[www.vaccination.english.vt.edu](http://www.vaccination.english.vt.edu)

# Starting out

- Spring 2010, finishing one project but without enough time to begin substantial research.
- “Vaccine Refusal” as topic of interest (medical controversy in public sphere).
- Support from departmental research center: space and a graduate assistant to support the project.
- Wanting to develop a model of “humanities lab” research teams for undergraduates.
- Medicine and Society minor provided interested undergraduate students eager for a different kind of research experience (i.e., not cleaning beakers or simply doing what they are told to do).

# Barriers to Undergraduate Research Teams in the Humanities

- The humanities tradition of the lone researcher whose independent and schooled discernment is valued.
- Perception that meetings are a waste of time.
- Difficulty trusting undergraduates to be thorough in collecting and analyzing documents (see the lone researcher tradition, above).
- Difficulty developing substantive tasks for undergraduate researchers to accomplish that will meaningfully move project along—that is, tasks that are more than “checking sources” or minor editing.

# Spring 2010

- Students would do original research—this was facilitated by the fact that I didn't know much about the topic, so the purpose of the research group was to establish what the issues were and how they were being addressed in scholarship.
- Annotated bibliographies of specific topics (autism and vaccines, vaccine mandates, global concerns, vaccination on the Internet).
- Reflective writing about findings; weekly meetings to keep us on track and discuss what we were seeing in the research.
- Graduate assistant graded student work and helped them with research skills.

# Spring 2010 Outcomes

- Graduate assistant commented to me that the students really performed when they figured out that I was interested their original research insights. (Her actual comment to me was something like “they are blown away when you pay attention to what they are saying and write it down.”)
- We developed the concept of “alternative health literacy” during one eventful meeting.
- The graduate assistant and I went on to write up an NIH proposal in June of that year, based on the concept of “alternative health literacies.” Our proposal was reviewed and scored, although not funded. It was based on the original research conducted by the undergraduates that semester.
- This experience proved to us that working with undergraduates in research teams could produce really valuable research outcomes.

# As the Research Group Developed

- Success hinged on the fact that students did original research and we discussed the findings together. Often the students worked independently alone or in smaller groups.
- The graduate assistant and I supported their efforts and guided them. Sometimes we redirected them when their conclusions did not seem to be supported by the evidence, but for the most part the students did good work in finding relevant material and summarizing it.
- More difficult were students' individual efforts to interpret the materials. Students often did not have the theoretical backgrounds in the humanities to provide frameworks for analysis (these students, gleaned from the Medicine and Society minor, were usually biology, biochemistry, or psychology majors). Much of our conversations during our meetings concerned interpretive models. We also read theoretical articles to help build frameworks.
- Students often needed support in writing. Thus, the assistance of the graduate student was crucial in ensuring that the research group did not become a third class for me.
- Students gained experience in developing IRB protocol proposals.

# Important Outcomes

- Collaboration in 2011 with colleagues in public health to study H1N1 vaccine uptake in rural health district in Virginia. Undergraduates were not involved in the study, but graduate students were. Funded by Virginia Department of Health.
- Yearly online seasonal flu surveys of students. Findings from these studies influenced a similar study as part of the H1N1 study and were included in the graduate assistant's dissertation research.
- Students have moved on to jobs at the FDA as well as research positions while in medical or graduate school (a number of students have entered MPH programs as well as medical school).
- Graduate assistant wrote a dissertation on vaccination controversy that received the best dissertation award in Education, Business, Social Sciences, and Humanities at Virginia Tech, 2014. Currently she is an assistant professor at George Mason University.

# As the VRG Matured

- Developed specific research outcomes to be displayed on the website: media analysis reports and information sheets. These are targeted toward the general Internet user seeking balanced information about vaccination, vaccine controversy, and emerging infectious diseases.
- Developed a website (this particular activity has proved to be very interesting but also a trial, because I relied on professional writing students to develop and maintain the site, as well as to formally edit and design the documents).
- Eventually moved toward research outcomes that could be published as coauthored articles in peer-reviewed journals.
- Began assigning tasks to students that would directly support my own independent research efforts.
- Included undergraduate students in the development, conduct, management, and interpretation of qualitative interview studies.



# Publications

Lenny Grant, Bernice L. Hausman, Margaret Cashion, Nicholas Lucchesi, Kelsey Patel, and Jonathan Roberts. (2015). **Vaccination persuasion online: A qualitative study of two provaccine and two vaccine skeptical websites.** Journal of Medical Internet Research, 17(5), e133. <http://www.jmir.org/2015/5/e133/>

Bernice L. Hausman, Mecal Ghebremichael, Philip Hayek, and Erin Mack. (2014). **'Poisonous, Filthy, Loathsome, Damnable Stuff': The rhetorical ecology of vaccination concern.** Yale Journal of Biology and Medicine, 87(4), 403-416. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4257028/>

Heidi Y. Lawrence, Bernice L. Hausman, and Clare J. Dannenberg. (2014). **Reframing medicine's publics: The local as a public of vaccine refusal.** Journal of Medical Humanities, 35(2), 111-129. <http://www.ncbi.nlm.nih.gov/pubmed/24682632>

# Latest Projects

- Study of inflammatory reporting on vaccination controversy in *Time magazine*, the *New York Times*, and *Mother Jones*, as well as study of reporting on Disney measles outbreak 2014-15. (These studies have been helpful for me now as I write a book on vaccination controversy.)
- Two ongoing qualitative interview studies of health beliefs and vaccination. These studies are now being conducted with graduate students (STS, public health, and rhetoric). (It is very difficult to conduct these studies with changing groups of undergraduates every semester and because I am currently on leave, I was reluctant to take on any undergraduates this year. In addition, I no longer have regular graduate student support to supervise the undergraduate teams.)

# The Future of the VRG (?)

- In July I take on the role of chair of the English department, so the future of the VRG as an undergraduate collaborative research endeavor is unclear.
- In part, it depends if the center originally supporting the VRG changes will take it on again as a center project. Thus, the message here is that in losing crucial structural support for the research group, I've been able to hang on and continue it in a more limited fashion, but I'm not certain how much longer it can continue. These developments demonstrate how important departmental support for these groups is.
- The shift to qualitative interview research does not make undergraduate involvement impossible, but complicates it if the students are only committing to one semester.
- As I focus on my own research goals (book manuscript), leading a team of undergraduate researchers on this topic is less appealing. The VRG, now composed of graduate students and colleagues, operates as an important sounding board for my developing ideas.

# Some of the Fun Things We've Done

- A “public service announcement” video that we used in an IRB-approved survey to gauge what would be persuasive to college students concerning HPV vaccination:  
<https://www.youtube.com/watch?v=iB35J9NCAPc>
- The VRG website: [www.vaccination.english.vt.edu](http://www.vaccination.english.vt.edu)
- Thanks! bhausman@vt.edu | vaccine@vt.edu