

Pre-med student asks: Will flu outbreak history repeat itself?

Part of a series profiling undergraduate researchers provided by University of Pittsburgh Office of the Provost.

By Niki Kapsambelis

All her life, Jacqueline Doamekpor has wanted to become a doctor. But even if that were impossible, she could spend a lifetime satisfying her intellectual curiosity.

A 2007 candidate from the College of Arts and Sciences, Doamekpor will receive a degree in History and Philosophy of Science and enroll in medical school for the fall. The end of her undergraduate career is bittersweet, because it marks the end of an era when she was able to explore the many topics that stir her interest.

“Part of me feels like I could be in college forever,” she says wistfully. “You learn so much valuable information, and it’s a really special time when I can sink my teeth into whatever I want to learn about.”

For her project as a Brackenridge Fellow in the Honors College, Doamekpor decided to compare the current development of the avian flu vaccine program to the public health conundrum surrounding the swine flu outbreak of 1976, or as she termed it in the title of her project, the “swine flu vaccine debacle.”

In 1976, responding to an epidemic of respiratory infections—including the death of an Army recruit at Fort Dix, New Jersey—President Gerald Ford launched the National Influenza Immunization Program. Vaccines were quickly produced, but 41 people died as a result of their immunizations, and another 54 developed neurological paralytic disease. The program was suspended a few months after its inception, and the feared pandemic of swine flu never materialized.

Fast-forward to 2007, when Doamekpor was looking for a project that would satisfy her interest in public health policy. Avian flu was a hot topic; she approached one of her professors, Jonathon Erlen, to serve as her adviser. It was Erlen who suggested that Doamekpor look into the swine flu affair and loaned her books on the topic.

“She’s an absolutely outstanding student who really enjoys the history of medicine,” says Erlen, an assistant professor in the Graduate School of Public Health who also holds adjunct positions in the departments of history and sociology. “The importance of the field is multifaceted. It gives people a broader perspective on their technical science.”

Erlen, a regular faculty member for Honors College, agreed to serve as Doamekpor’s adviser. She began by reading the books he suggested and went on to pore through journal articles about the two flu outbreaks, as well as watch videos and read newspaper clippings.

“We have an excellent library in terms of journal holdings. So she was able to get her hands on original documents describing perceived success [and] perceived failures,” Erlen says.

Doamekpor’s objectives were to get background and current information on the two outbreaks and identify reasons for the failure of the swine flu vaccination program. She also compared and contrasted the two strategies.

“In a nutshell, I’ve been finding that the poor decision-making elements present in the swine flu vaccine program aren’t present in the strategy now,” she says. “Research is more thorough ... People now are more savvy, and they question things more.”

As part of the Brackenridge Fellow program, Doamekpor gave a 45-minute PowerPoint presentation during a retreat in Johnstown, Penn., in July 2006. She also turned in a paper, but she continues to do research for her own knowledge. In medical school, she hopes to continue pursuing her interests in health policy, biomedical research, and investigations of health disparities.

Raised in Akron, Ohio, the daughter of immigrants from Ghana, Doamekpor was attracted by Pitt’s reputation as a research hub. She also liked the University’s proximity to hospitals, where she has volunteered as an ambassador, talking to patients about their concerns.

“A lot of times they don’t want to bother doctors and nurses,” she explains. “It gave me a lot of experience, and I got to see up close what clinical practice is like.”

In addition to her work as a volunteer ambassador, Doamekpor also plays piano, mentors minority students, serves as a student coordinator for the Summer Premedical Academic Enrichment Program and has participated in the School of Medicine’s summer biomedical research program. A member of Phi Beta Kappa, she has tutored fellow students in chemistry, biology, physics, Spanish, and logic. In her spare time, she has encouraged friends to involve themselves in research projects of their own.

“The key is to be passionate about what you’re researching,” she says.



Brackenridge Fellow Jacqueline Doamekpor and Professor Jonathon Erlen in the University Honors College in the Cathedral. (Photo by Mike Drazdzinski)

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