

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

NATURAL RESOURCES DEFENSE)
COUNCIL, INC.; CENTER FOR SCIENCE)
IN THE PUBLIC INTEREST; FOOD)
ANIMAL CONCERNS TRUST; PUBLIC)
CITIZEN, INC.; and UNION OF)
CONCERNED SCIENTISTS, INC.,)

Plaintiffs,)

v.)

UNITED STATES FOOD AND DRUG)
ADMINISTRATION; MARGARET)
HAMBURG, in her official capacity as)
Commissioner, United States Food and Drug)
Administration; CENTER FOR)
VETERINARY MEDICINE; BERNADETTE)
DUNHAM, in her official capacity as)
Director, Center for Veterinary Medicine;)
UNITED STATES DEPARTMENT OF)
HEALTH AND HUMAN SERVICES; and)
KATHLEEN SEBELIUS, in her official)
capacity as Secretary, United States)
Department of Health and Human Services,)

Defendants.)

11 CIV 3562 (THK)
ECF Case

**DECLARATION OF
LANCE PRICE, Ph.D.**

I, Lance Price, Ph.D., declare as follows:

1. I am a molecular microbiologist and epidemiologist. Since 2008, I have been on the faculty at the Translational Genomics Research Institute (TGEN), Division of Pathogen Genomics, in Flagstaff, Arizona. As an Associate Professor at TGEN, I direct two research centers: the Center for Microbiomics and Human Health and the Center for Food Microbiology and Environmental Health.

2. I received my doctoral degree in environmental health sciences from the Johns Hopkins University School of Public Health in 2006. There, I conducted research to characterize the public health risks associated with antibiotic use in industrial food-animal production.

3. I have an undergraduate degree in microbiology (1994) and a master's degree in biology from Northern Arizona University (2000). From 1997 to 2000, I studied antibiotic resistance in *Bacillus anthracis* and developed high-resolution DNA fingerprinting systems for anthrax and plague in the Keim Genetics Laboratory, in Flagstaff, Arizona.

4. One of my primary research interests is the public health impact of antibiotic use in food animal production. Since 2003, I have written many scholarly articles on the subject of antibiotic use in food animal production and antibiotic resistance, in addition to speaking extensively on the topic. In July 2009, I testified on the subject before a Congressional committee. I am familiar with the existing scientific literature on this subject and have conducted reviews of the scientific literature relevant to it.

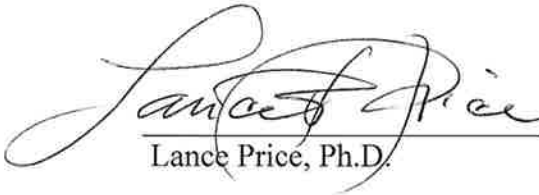
5. A more complete description of my educational and work experience, as well as a complete list of my publications, is appended as Exhibit A to this declaration.

6. Based on my familiarity with the scientific literature and my experience with researching the scientific literature on the public health impact of antibiotic use in food animal production, I have estimated the time required to conduct a search of the publicly available literature and other information (*e.g.*, scientific reports) on the scientific topics related to the safety for human health of nontherapeutic uses of penicillin and tetracyclines in animal feed. This estimate assumes an exhaustive search of the literature from 1977 to today and does not assume that any searches and analyses have been carried out previously. If I were devoting 20% of my time to guiding one graduate-level research assistant who was working full-time (40-hour

workweek), I estimate that we would need 60 days to conduct this search of the literature (30 days to gather electronic sources and 30 days to gather paper sources). If I were directing two graduate-level research assistants instead of one, and spending 20% of my work time on the task, we would need 30 days to complete the entire search.

I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed on May 23, 2012, at Flagstaff, Arizona.


Lance Price, Ph.D.