

Self-Statement (Thematic PR Draft)

I seek a merit salary action from Advisor Step VII to Step VIII. This Program Review document covers January 1, 2007 through September 30, 2009. I have an exceptional program that is distinguished by consistency, exceptional productivity, and balance. I contributed significantly to the California farming clientele, the University of California, and the sciences of plant pathology and agriculture. My expertise and accomplishments are recognized at local, regional, state, national, and international levels. I demonstrated leadership, creativity, and novel program aspects in my research, extension, affirmative action, and service activities. I have achieved an exceptional scientific and extension publication record (105 publications in this 3-year period). My program is consistent with high priority core issues of our division. I believe these many outstanding accomplishments qualify me for advancement to Step VIII.

Defining the mission

Mission goals: In accordance with my Position Description, my goals are to identify, investigate, and solve plant problems faced by the agricultural and horticultural industries of California. All crops face a challenging array of disease and production problems that reduce yields and quality. My goals also include contributing to a better understanding of the field biology and ecology of *E. coli* and other foodborne pathogens. I help clientele to better understand and manage these obstacles and to remain productive and competitive in national and world markets.

Context: Coastal California agriculture is an intensive, fast paced, diverse industry that in Monterey County consists of well over 50 crops valued at over \$3 billion and in Santa Cruz County consists of over 40 crops valued at \$0.4 billion. Both counties produce large volumes of high quality vegetable, strawberry, and horticultural commodities. Primary clientele consist of farmers, pest control advisors (PCAs), and other industry persons. I also focus particularly on limited resource, Spanish-speaking clientele who produce strawberries and other commodities. Because of my statewide reputation, I also provide research and extension services to clientele and fellow advisors outside of my assigned counties.

Assessing clientele needs: I assess the needs of clientele by holding discussions with clientele leaders, soliciting feedback and opinion from other industry personnel, incorporating findings from my diagnostic lab, and using information and advice from UC colleagues. I then select research and extension projects that address significant plant problems and issues faced by clientele. My diagnostic lab is an extremely valuable assessment tool, as clientele regularly submit plant samples for analysis; based on trends and findings from such samples, I am able to closely monitor developments in the field.

Fulfilling the mission

Research and extension: During this review period I demonstrated a prolific research and extension record. My research and extension agenda is structured on three major themes.

1. Managing plant diseases and enhancing agricultural productivity:
Identifying and managing new races of downy mildew on spinach
Characterizing and controlling new or invasive viruses of celery, lettuce, and other crops

Studying the epidemiology and control of sudden oak death disease in nurseries
Exploring host range and sources of Verticillium wilt in lettuce and spinach
Identifying new disease issues for minor vegetable and ornamental crops

2. Diseases and microbial soil ecology in strawberry:

Developing alternatives for soil fumigation
Characterizing and controlling new emerging diseases of strawberry
Implementing crop rotation and soil amendment strategies for disease control

3. Field biology and ecology of foodborne pathogens:

Develop field-based research information for the ecology and biology of *E. coli*
Contribute to the understanding and improved management of foodborne pathogens

These projects involved a broad range of crops (lettuce, spinach, celery, strawberry, numerous minor specialty crops, ornamentals, forest species), pathogen types (fungi, bacteria, viruses, enteric bacteria), environmental systems (field agriculture, nurseries, forest systems, organic agriculture) and issues (pesticide reduction, *E. coli* contamination and food safety, integrated disease management, economic viability of California commodities). For most of these projects I showed leadership by initiating projects, obtaining grants, creating research teams, and implementing change via education efforts. In support of my programs, for this 3-year period I presented 48 talks and published 105 scientific and extension articles.

Professional development and competence: I am highly motivated to improve my skills as a Farm Advisor. Of special note were my successful efforts to create new proficiency and expertise in virus vector (thrips) identification and in research with *E. coli*. I am a highly regarded professional in plant pathology, and am recognized at local, regional, state, national, and international levels. Notable activities include the following: invited to serve a second consecutive term on the APS Press editorial board (the book publishing board of the American Phytopathological Society); invited to give 16 presentations at professional meetings; asked by various scientific groups to review 47 journal manuscripts; co-chaired and organized one national and one international scientific conference; was a member on two other editorial boards and a national diagnostic network.

University and public service: During this period I rendered active service to the university and to the general public. I made notable contributions to community college programs in the area.

Affirmative action: Affirmative action is a component that is interwoven throughout my research and extension program. I particularly focused on limited resource, Spanish speaking strawberry growers. I speak Spanish, which assisted in my outreach efforts. I partnered with the California Strawberry Commission to further reach Spanish-speaking clientele. I showed excellent innovation by creating an affirmative action training curriculum for colleagues, and held a class on “Race, Science, and Medicine” for advisors in the region.

I believe my extensive and balanced program is consistent with standards for Step VIII Advisor.