

# A Generalist Degree in Plant Health: Present and Future

Start –up of the DPH Program at the University of Nebraska-Lincoln

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# History

- Concept of Doctors of Plant Medicine and/or Plant Health go back to more than 60 years ago.
- First formal program: University of Florida-Gainesville. Initiated in 1999 after 20 year effort.
- Second formal program: University of Nebraska-Lincoln. Initiated in 2009 after 4 year effort.

# DPM/DPH Parallels

- Dr. Veterinary Medicine (individuals, populations)
- Dr. Human Medicine (General Practitioner; individuals)
- Dr. Public Health (populations)

# Background

- Requests for program from private industry, state and federal government representatives.
- Concern in department about pending retirements of generalists.
- Changes in agricultural practices in state, region, world.
- Student interest prior to program initiation.



# Program Goals

- Provide training for plant doctors to prevent, diagnose and manage plant and crop problems.
- Prepare students for interesting and rewarding careers
- Assist growers with best integrated pest, pathogen and agronomic management practices



# Program Requirements

- B.S. or B.A. Degree in biological or related field
- Coursework of 100 hours
- Internships of 20 hours (total; negotiable)
- Participation in research project





# Curriculum: DPH

- Pest and Pathogen Foundations (plant pathology, entomology, weed science (47 credits)
- Plant and Soil Science Foundations (9 credits)
- Quantitative tools (8 credits)
- Law, Policy and Leadership (3 credits)
- Internships and Project (20 credits)
- Electives

# Careers/Jobs

- All of Florida's graduates have positions in: Private industry (e.g. winery)
  - Conservatory
  - Landscape Management
  - Extension
  - State/local government
  - Federal government (e.g. APHIS-PPQ)

# University Resources

- Director (2005-2008, me; 2009- G. Hein)
- Administrative assistant
- Start-up funds
- Space
- Limited student aid
- Limited tuition relief
- Faculty committments

# Challenges to DPH Program

- Student financial support (restrictions)
- Faculty recognition (time, money)
- Physical space, labs, equipment
- Director with fund-raising skills
- Degree acceptance in the marketplace
- Eligibility for external support (e.g. Foundation for Environmental Agricultural Education ; FEAE)

# DPM/DPH Programs Outside the USA

- Japan. Hosei University/University of Tokyo , B.S.
- South Korea. Chungbuk National University; Dept. of Plant Medicine, M.S., Ph.D.
- Taiwan. National Taiwan University, M.S., Natl Chiayi Univ. , B.S., Natl. Pingtung Univ. of Sci. Tech., Dept. Plant Med., M.S.

» R. McGovern

# Role of APS

- Publicize current programs
- Urge equity in student financial support in institutions, state and federal funding
- Offer members opportunity to support programs through sessions, Foundation support
- Re-invent multi-disciplinary association to support concept and programs ( ICPP; Am. Assn. Plant Health/Medicine)

# The Future

- “The plant health movement has the potential to effect the greatest change in world agriculture since the Green Revolution, and the DPH/M to become plant agriculture’s most important single degree program”.

J.A. Browning. Ann. Rev. Phytopath. 1998

36:1-24.