

Academic Perspective on the State of Entomology in Academia and What It Takes to Excel Today and Survive in the Future

Rick Roush



THE UNIVERSITY OF

MELBOURNE

Full Disclosure: Background

- **Genetics & Entomology at UCD and UCB**
- **Texas A&M, Mississippi State**
- **Cornell University**
- **University of Adelaide, including Director of National Weed Mgt Centre**
- **Director, UC IPM (2003-2006)**
- **Dean, University of Melbourne**

Key Int'l Trends in Academia

- **Funding harder to earn (T&R)**
- **Depts getting merged and larger**
- **Philanthropic support critical**
- **Metrics for research funding, citations, teaching (student surveys), University rankings**
- **On-line education may change tertiary education dramatically**

Every Academic Needs To Be A Triple Threat

- **Strong Researcher**
- **Highly Effective and Engaging Teacher
(beyond entomology, biology or ag)**
- **Engaged in Knowledge Partnerships/
Transfer:**
 - **Must sell science generally and
one's own science in particular**
 - **Media training essential !!**



THE UNIVERSITY OF
MELBOURNE

Lessons from University of Melbourne and School of Land and Environment (MSLE)

- **Importance of University Rankings and Strategies**
- **Advancement/Development**
- **Land grant model**
- **Online education**



Rankings: THE and SJTU?

- **Times Higher Education**
Teaching 30%, Research (volume, income, reputation) 30%, citation 30%.
- **QS World: 50-60% reputational**
- **Shanghai Jaio Tong (SJTU) Academic Ranking of World Universities (ARWU)**

Land Grant Model

- **Does not exist overseas**
- **Living without Land Grant Universities reminds one of their enduring value**
- **Reinforces the importance of applied research informing basic & *vice versa***

On-line Education

- **Massive Open Online Courses (MOOCs): 300,000 for 7 courses!**
- **Coursera** (Daphne Koller/Andre Ng)
- **Entomology won't have the massive draw of business, law, engineering**
- **Blended learning model on campus and off**

Every Academic Needs To Be A Triple Threat

- **Strong Researcher**
- **Highly Effective and Engaging
Teacher (beyond entomology and
on-line)**
- **Engaged in Knowledge Transfer:
Must sell science generally and
one's own science in particular**