Creating Graduate Programs that Transcend Disciplines

Marilyn E. Scott
Institute of Parasitology
School of Environment
A Bit of Background

• Guatemala and Nicaragua mid 80’s
  - Through the lens of a parasite ecologist, a nutritionist, and a pediatric gastroenterologist

• Colombia early 90’s
  - Centro de Investigaciones Multidisciplinarias en Desarrollo (working with social scientists)

• Nutrition-infection research program
  - Interdisciplinary training of young researchers

• McGill School of Environment
  - Developing a truly transdisciplinary graduate curriculum
Effective Interdisciplinary Collaboration

- Mutual respect
- Shared goals
- Appreciation of different realities
- Recognition of beneficial nature of synergism
- Desire to learn outside area of expertise
- Commitment to this as an “added” work load
How to Meet the Special Challenges

• Interdisciplinary programs take longer
  – Often requires more course work
  – Longer time to develop research proposal

• Value of “ad personam” degrees

• Challenge of multiple supervisors and multiple research environments
Transdisciplinarity

Mixture vs blend
A Transdisciplinary Graduate Curriculum

• What formation does a student need to truly succeed in a transdisciplinary manner?
• Is transdisciplinarity defined by ability to cite information from multiple disciplines?
• Or is it a way of thinking, an approach to learning, a way of experiencing the “world”?
• Should the structured learning opportunities (ie courses) focus more on skills as applied to content, rather than the content per se?
How to Meet the Special Challenges

• Breaking down assumptions
  - Role of supervisor
  - Degree of independence
  - Time expectations
  - Course expectations

• Modeling transdisciplinarity
  - Integrated courses
  - Fully collaborative supervision of research