

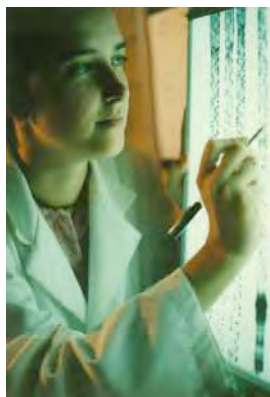
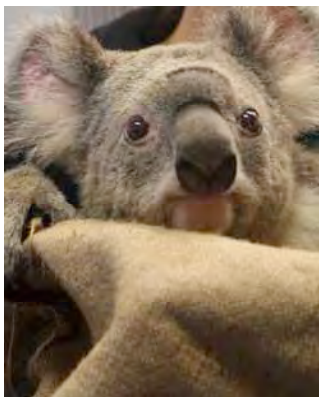
Enhancing postgraduate learning & teaching: PhD Summer School in Dairy Science



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The problem

- The veterinarian scientist is an endangered species (Witter, 2005)



Can we fix it?

- Can we “rescue the veterinary scientist from extinction” by establishing an international scientific network between PhD students and academic staff?

International Program Development Funds - 2009

- The aim of the proposal was to establish an international PhD training program based on **research collaboration** between the USYD and the University of Padova.

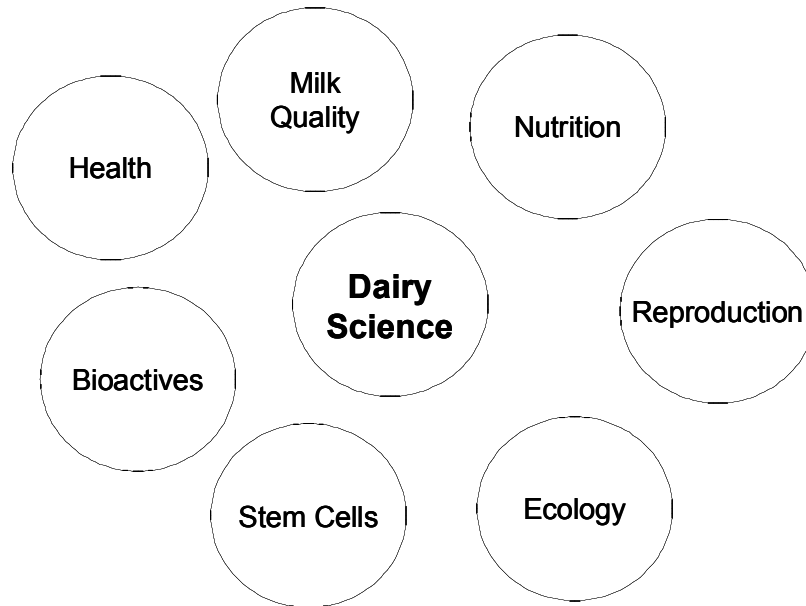
The Summer School

- We have provided an enhanced **social networking** for international students including links with **international** and **national staff**
- Students were able to participate to a number of learning modules within a carefully planned program
- Particular emphasis was placed on the quality of the **learning experience** provided and in maintaining and improving the **academic standard** of the Summer School.

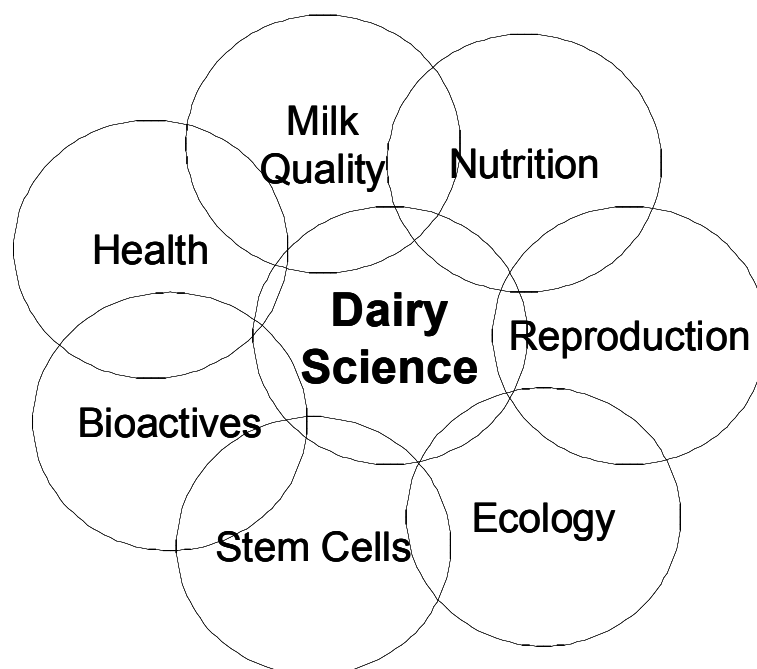
An holistic approach...

- The key to the contribution that international academic networks make to regional and local challenges in social responsiveness is the realization of the **value of comparative and multidisciplinary studies.**

Multidisciplinary in Dairy Science



Multidisciplinary in Dairy Science



Our approach

- Advance **international cooperation between research institutions** as this would result in
 - A better use of **resources**
 - a greater **research output**, and
 - would offer a better **learning experience** to postgraduate students.

Learning Objectives

- Outline the differences in dairy production systems in Italy, Australia and around the world;
- Identify how the various husbandry and management techniques can impact on dairy cows' welfare and production and recommend procedures to minimize these impacts;
- **Communicate and interact** competently with fellow PhD students, scientists and producers;
- **Develop a scholarly and integrative approach to research** in animal and veterinary science;

Topics

1. Dairy production systems in Italy and Australia
2. Stem cells in animal and veterinary science
3. Milk quality
4. Alternative use of milk and milk by-products
5. Reproductive wastage in dairy cows
6. Health management of the dairy herd
7. Evaluation of feed and diets of dairy cows
8. Ecology of farming systems

International Speakers

- Prof **Anthony Capuco**, Bovine Functional Genomics Lab, Beltsville, MD, USA
- Dr **Didier Dupont**, INRA, Rennes, France
- Prof **Michael Doherty**, School of Agriculture, Food Science & Veterinary Medicine, Dublin Ireland
- Prof **Karl Fent**, University of Applied Sciences, Muttenz, Swiss Federal Institute of Technology (ETH), Zürich, Switzerland

Reproductive wastage in dairy cows

- **Group activity:** students were divided in groups and had to develop a research proposal that will address on the issues identified during the general discussion
 1. Embryo mortality
 2. Nutrition and reproduction
 3. Genetics
 4. Assisted Reproductive Technologies
- **Oral presentation of research proposals**
- **SWOT analysis**
- **General discussion and conclusions**

Reproductive wastage in dairy cows

- I really **enjoyed the group activities** as I believe that today's activities gave us a very good example of what research is about (communication, multidisciplinary approach)
- We **learned so much from the others** because we shared our opinions and thinking
- It was a **good learning opportunity** in expanding how we think about our research
- The group activity was very challenging (preparing a research project in a field different from the one we work in)

Reproductive wastage in dairy cows

- Good use of different skills within the team
- SWOT analysis useful exercise
- **Adapting our knowledge to a new field** is very useful
- **Group activities** like this should be done more frequently
- **In Italy we don't do this kind of activities but I think that it is better than theory lectures**

Evaluation

- I found the PhD Summer School a **useful** part of my **learning experience** (3.73)
- I found the PhD Summer School **intellectually stimulating** (3.73)
- The PhD Summer School has **sharpened my analytical skills** (3.6)
- The PhD Summer School has **stimulated my enthusiasm for further learning** (3.67)
- I felt I benefit from being in contact with active researchers (3.8)
- The **teaching staff worked hard** to make their subject interesting (3.79)

Evaluation

- The teaching staff of this course motivated me to do my best work (3.67)
- The PhD Summer School **program was good** (3.9)
- The **learning outcomes** of the PhD Summer School were clear to me (3.67)
- Overall, I was satisfied with the quality of this course (3.33)

Feedback from participants

- “Outstanding **people**, presentations and **opportunities**”,
- “Great group of people, good **science**, positive **atmosphere**”,
- “Good program, possibility to see researchers of other countries how perform their research, possibility to speak with foreign PhD students, to see the **different aspects** from ours”, and
- “**Contacts**, the name of the game, this was on **outstanding scaffold** to become involved in the **broader research culture**”.

Overall, I was satisfied with the quality of this course

- Yes, the satisfaction level is high, I think that the overall work done was of a high quality, both professors and PhD students
- Outstanding people, presentations and opportunities
- Definition more properly suitable could be "challenging and active"

Overall, I was satisfied with the quality of this course

- I'm sorry, the course was very well organized, but it is not useful obligated all PhD students of our school to participate. **I wasted time that I could spend to work on my project**
- Yes, the program was good but I repeat myself we have been **obligated** to frequent the Summer School and it is a **waste of time** for PhD students not studying in the dairy "world"

Outcomes (so far)

- One of our PhD students will visit Tony Capuco's lab
- Two PhD students from Padova have attended the DRF Symposium in September
- ARC linkage (2010)
- PhD Cotutelle Program USDY ↔ Uni Padova

Some long term goals

Our hope is that the increased internationalization of postgraduate programs like the Summer School in Dairy Science would

- promote the submission of **international grant applications**
- facilitate the **recruitment** of new staff
- would provide the dairy industry with true **international leaders**