Non-traditional career pathways for animal science students

Sylvia P. Poulos, PhD, RD/LD The Coca-Cola Company, Atlanta, GA <u>sypoulos@na.ko.com</u> 1.404.676.3586 Traditional careers for animal scientists Times they are a changin'

Perspectives and learnings from my career path to date.

Have you considered careers in....?

Preparing for happiness and a successful career

Where do I look for these jobs?

Traditional careers for animal scientists

- Domestic animal production and management, research, sales, service, business, and education.
 - Producers, farms
 - Feed and supplement companies
 - Academia
 - Equipment companies
 - Agriculture advocacy- councils, 4H, extension, etc.
 - Veterinary medicine requiring further education.

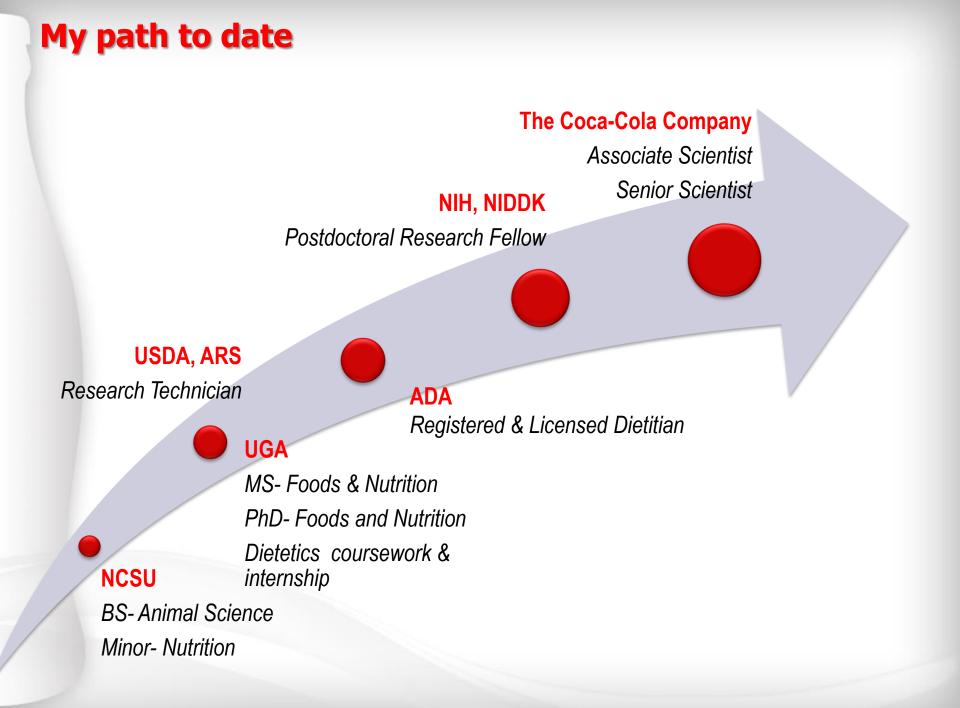


Some of the global changes impacting animal science

- Biotechnology- advances change efficiency, production practices and requirements, and human meat consumption.
- Consumer demands- "green", "environmentally friendly/sound practices", "healthy", etc.
- Governance- requirements for traceability of foods/feeds, increased food safety legislation, supplement/additive restrictions, etc.



- Resource competition- biofuels, land allotment, water availability, etc.
- Population shifts- Growing human population with shift in age, location, and affluence is shifting the global requirement for protein foods.



The Coca-Cola Company?

- Largest non-alcoholic beverage company
 - Carbonated beverages, juices, juice drinks, mixers, waters, sports beverages, energy drinks, teas, dairy, coffees, beverage concentrates
 - 3,300 products
 - 500 brands
 - 14 billion dollar brands
- 92,800 associates globally
- Operations in over 200 countries
- 1.6 billion servings consumed daily

Global Nutrition Research

- What is my role?
 - Identify and evaluate potential ingredients and delivery technologies to improve the health and wellness of consumers
 - Meet suppliers and scientists, conduct literature reviews, develop product protocepts, conduct pre-clinical evaluation, plan and sponsor clinical trials
 - Coordinate with other scientists, regulatory affairs, product developers, claims substantiation groups, purchasing, legal, marketing, brand divisions....both locally and globally

Scientific Functional Expertise Common in Food Companies

- Biochemistry
- Organic Chemistry
- Flavor Chemistry
- Process Science
- Analytical Chemistry
- Microbiology
- Sensory Science
- Platform Integration
- Clinical Evaluation

- Product development
- Science & regulatory affairs
- Sensory evaluation
- Food safety, QA/QC
- Materials and packaging Science
- Process engineers

Potential strengths of an animal science background

- Animal production process involves breeding/genetics, reproduction, growth, feeds and environment, raw products, consumer products
- Your broad education provides basic understanding of
 - various scientific and agriculture arenas
 - soils, crops, genetics, microbiology, biochemistry, consumer foods (milk, meat), molecular biology, etc
 - management
 - integrative processes
 - implications of change
 - communication

Your strengths applied to alternative locations

- Global organizations with interest in food security
 - United Nations (Food and Agricultural Organization, World Food Program), USAID, WorldBank, PeaceCorps, humanitarian organizations, NGOs.
 - Example:
 - Livestock project manager- CNFA
 - Animal husbandry- PeaceCorps
 - Project coordinator, animal health- FAO
 - Livestock coordinator, project manager- Heifer Int.







Your strengths in new areas

- Agriculture & Natural Resources
- Environmental Sciences
- Law (Animal Welfare, Environmental)
- Psychology
- Science Technology
- Customs and Inspection services

Your strengths applied to alternative settings

- Alternative corporate settings-
 - food ingredients (may differ from feed suppliers), pharmaceutical companies, military, civil service, etc.
 - Examples:
 - Veterinary food inspection specialist
 - Medical science liaison
 - Regulatory affairs
 - Microbiologist
 - Quality manager
 - Research scientist
 - Food safety auditor
 - Plant manager

Capitalize on your individual strengths and likes

- Consider your preference for:
 - Prevention vs treatment,
 - Production vs pet vs exotic,
 - Training vs production vs conservation
 - Location, institution size and type
 - Advancement potential compared to your intentions
 - Quality of life
 - Pay and benefits

Example

- You enjoy traveling, don't want to do lab or animal work anymore, are detail-oriented...
 - Have you considered being a clinical research associate?

Job duties

- developing, writing, presenting trial protocols;
- designing data collection forms;
- managing ethics and regulatory authority applications and approvals;
- working with study centers and staff;
- data verification, filing, collating, archiving;
- writing reports and manuscripts.

Your strengths applied to alternative species and careers

- Experience conducting trials in production animals may be useful in conducting human clinical trials.
 - Frequently listed positions
 - Biostatistician
 - Study manager/coordinator
 - Clinical data analyst
 - Clinical trial monitor
 - Clinical trial auditor
 - Research site manager

Example

- You enjoy applying science to the food/feed industry and would enjoy an office environment with a variety of people...
 - Have you considered science in the **food industry**?
 - Job types:
 - Technical sales
 - Statistician
 - Sensory
 - Nutritionist
 - Project management
 - Product development
 - Procurement, supply chain
 - Regulatory affairs
 - QA/QC
 - Technical advisement to business.

Final thoughts...

Like everything else, the animal science field evolves and we must adapt and evolve to be successful.

