



James Tyus

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Major:

Agricultural Biotechnology

Research Advisor(s):

Samuel Nahashon

Current Research:

- Genetic regulation of lipid metabolism and fat accretion
- Molecular characterization of the domesticated Guinea Fowl (cDNA library construction, karyotyping, gene expression profiling, comparative mapping)
- Hypothalamal control of appetite, satiety and adiposity
- Development of molecular markers to be used in subsequent poultry breeding trials (based on expressed sequence tags and single nucleotide polymorphisms)
- Floor space and cage density experiments

Long-term goals: (Future career)

I would like to make a meaningful contribution to our understanding of the mechanisms that drive nutrient metabolism and obesity in both livestock and humans. I would also like to spend several years training undergraduate and graduate students in the field. Ultimately, I would like to pursue a career in upper-level university administration; helping to shape policy and procedures that will narrow the academic/research gap between advantaged and limited-resource students.

Personal interests:

Writing and producing music, golf, pool, chess, gardening

Nano-Bio Core Research Goals:

I am looking forward to mastering new, powerful equipment and technologies. I also hope to help build bridges between students and faculty from various departments. I would also like to bring more attention to the work of students from Agricultural Sciences.