

May 4, 2012

AGRICULTURAL CAREERS HAVE BRIGHT FUTURE

With high school graduations in May it is always interesting to see where graduates are going to school and what areas that interests them. We are so connected to agriculture in Nebraska there are many future jobs that will be associated to the food chain in some way or another. Recently, UNL Educator Paul Hay updated an older column of mine about the College of Ag Sciences and Natural Resources at UNL and here is the interesting update.

Dr. Ronnie Green, Harlan Vice Chancellor for the Institute of Agriculture and Natural Resources, expresses his excitement about agriculture's future, Innovation Park and Nebraska's place in meeting the potential needs of agriculture with food related research. The purpose of Nebraska Innovation Campus is to develop a premier private/public-sector sustainable research campus, which capitalizes on research growth and expertise of University of Nebraska-Lincoln faculty. Agricultural research will be a key focus on this campus.

The world's population reached one billion in 1804, two billion in 1927, three billion in 1960, four billion in 1974, five billion in 1987, and six billion in 1999. It is projected to reach seven billion by late 2011 and around eight billion by 2025. By 2045-2050, the world's population is currently projected to reach around nine billion. In a short period of time the world will need to increase the world food supply by 70%. The need to increase our technology advances in agriculture to increase food reserves is key. No longer can we leave agriculture knowledge on the shelf at universities. There is a need to develop interdisciplinary links between numerous university disciplines and the agricultural industry.

A college degree in agriculture and related science studies is becoming more important. The enrollment at the College of Agricultural Sciences and Natural Resources (CASNR) is up for the challenges and has experienced more than 40% growth in the last five years. Nutrition Sciences, Agronomy, Agribusiness, Animal Sciences, Community Development and Education Fields and Rural Health Fields, to name a few, need more youth with four-year degrees. All of this while less than 2% will be involved in farm production.

Employment of agricultural and food scientists is expected to grow by 16 percent by 2018, faster than the average for all occupations. Job growth will stem primarily from efforts to increase the quantity and quality of food produced for a growing population. Additionally, an increasing awareness about the health effects of certain types of foods and the effects of food production on the environment, will give rise to research into the best methods of food production.

Emerging biotechnologies will continue to play a large role in agricultural research, and applying these advances will provide many employment opportunities for scientists. Plant breeding work and the detailed use of genomics is creating agricultural products with higher yields, better quality and resistance to pests and pathogens. New developments will also be used to improve the nutritional quality and safety of prepared food products bought by consumers.



Food research will continue to address heightened public awareness of diet, health, food safety, and biosecurity, preventing the introduction of infectious agents into herds of animals. Advances in synthetic biology and nanotechnology will change the way we purchase and prepare foods in the future. Food has never been safer than it is today and we are just a new dawn of the utilization of technology to set new standards of safety.

Agriculture has huge challenges ahead and a very bright employment future for talented young people. Look into the opportunities for a new or renewed career at <http://casnr.unl.edu/>.

Randy Pryor, Extension Educator
University of Nebraska-Lincoln Extension in Saline County
306 West 3rd Street, Wilber, NE 68465
Phone (402) 821-2151 • Fax (402) 821-3398 • e-mail: randy.pryor@unl.edu