Major renovations are now under way at Guilford County’s largest classroom,” said Dr. M. Ray McKinnie, administrator and associate dean for the Cooperative Extension Program at N.C. A&T.

That classroom, said McKinnie, is also known as the University’s Farm — 567 acres of laboratory space for use by students and the teaching, research and Cooperative Extension faculty.

“Many people see the farm as a farm,” said McKinnie, who is also a member of the farm task force. “But the farm is an extension of the classrooms and research labs for the SAES. The farm is to the SAES what the stage is to a theatre student.”

In an effort to improve the farm facilities, over $3 million has been earmarked — $1.8 million from the Higher Education bonds, passed two years ago; the remainder from a combination of other sources. Bond monies are being used to build a new dairy and poultry unit, with work to begin soon.

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Funding from the USDA’s 1890 Facilities Grant Program is being used for three new barns for beef cattle and waste management. USDA funds will also create a new farm entrance that clearly showcases the farm.

The comprehensive facilities upgrade at the A&T farm is augmented by a new agreement between A&T and one of its corporate partners, John Deere. Deere is providing tractors and other equipment for the farm, and bringing in new, state-of-technology replacements for each piece of equipment after 250 hours of use.

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Three School of Agriculture and Environmental Sciences researchers, Drs. Mohamed Ahmedna, John Allen and Salam Ibrahim, have patents pending on inventions with applications in food safety and human and animal health. They were recognized for their inventions at North Carolina Agricultural and Technical State University’s annual Faculty Innovators Recognition Luncheon in November.

Ahmedna is developing a portable fiber optic biosensor to give food inspectors a means for instantly detecting common food pathogens, thereby helping to safeguard public health and enhance food quality. Such a device would represent a significant improvement over present detection methods, which can require two to six days before the presence of pathogens can be confirmed in a sample. The new device could eliminate costly meat recalls and reduce occurrences of food borne illnesses. It would be portable and include a probe sensitive to specific pathogens, as well as a display indicating the concentrations of bacteria. Ahmedna is focusing on perfecting the sensor to detect salmonella and campylobacter bacteria for the benefit of North Carolina’s poultry industry. Once that technology is developed, it will be possible to modify it for detecting E. coli and other pathogens.

Allen’s invention is a product of genetic engineering and an outgrowth of his earlier patent on Protein V, a compound found in a rare form of bacteria which he discovered several years ago. His second patent will include the method and devices for isolating and purifying Protein V for its use as a biotechnological tool used in research and in the development of therapeutic agents.

Ibrahim has created an all-natural preservative that prevents the growth of E. coli bacteria or other pathogens capable of causing food borne illnesses. The anti-microbial product could have other beneficial effects, since it consists of spices and beneficial bacteria known to promote health and aid digestion. When fully developed, the product could be an alternative to irradiation or chemical means of safeguarding processed foods or ground beef.

The bulk of Ibrahim’s active research program concentrates on the growing field of probiotics — the science of creating live, microbial foods that can boost immunity and fight infection. Much of his work concentrates on beneficial bacteria, such as those found in yogurt, especially bifidobacteria and lactobacillus.
A&T Collaborates with Rep. Eva Clayton on New Leadership Center

A&T Cooperative Extension’s landmark leadership development programs, Community Voices and Voices Reaching Visions, will be major components at the Buck Spring Regional Leadership Excellence Center, a new continuing education facility in Warren County.

The new Center will also provide A&T Extension with a satellite facility for extending programming in agriculture, youth development, family resource management and other areas.

The drive to secure funding for the new Center has been led by retiring Congresswoman Eva Clayton, who has represented North Carolina’s First Congressional District since 1992. The high-profile role for A&T in Center plans is a fitting finale for a long and successful partnership between Clayton and the School of Agriculture and Environmental Sciences.

“Although it’s going to be first and foremost a fantastic educational and economic resource for a part of our state that needs it desperately, this center is also going to be a lasting tribute to Congresswoman Eva Clayton’s legacy of support for rural North Carolina and North Carolina A&T State University,” says Dr. Alton Thompson, dean of the SAES. “She has tirelessly worked to ensure that the needs and concerns of A&T and our sister institutions were communicated to federal decision-makers.”

Plans for the Buck Spring Center include a classroom complete with Internet access that will be used for outreaches from North Carolina State University and Vance-Granville Community College in addition to A&T. The Buck Spring Center will provide much-needed business incubator space and job training programs. The Center will also be designed to accommodate after-school programs, to provide visitor information to tourists, and to host an array of recreational activities.


Dr. John O’Sullivan, A&T Extension’s farm management and marketing specialist, has been elected to serve as president-elect of the North Carolina Association of Cooperative Extension Specialists for the coming year, and Extension’s family resource management specialist, Dr. Claudette Smith, has been named to the organization’s board of directors.

Dr. Alton Thompson, dean of the SAES, is the coauthor of two chapters in a book published in August. The Social Risks of Agriculture: Americans Speak Out on Food, Farming and the Environment provides an overview of how Americans perceive and value farmers, and examines public opinion with regard to a number of agricultural issues. Thompson contributed to the chapters on, “Public Perceptions of Government’s Role in Agriculture and Farming,” and “Agriculture’s Social Risks and Directions.”

Dr. G. B. Reddy and other researchers working at the swine unit at the A&T farm have added an interesting new variable to their research into the use of a series of ponds, marshes and water-loving plants to remove phosphorous, nitrogen and other “problem-nutrients” from water contaminated by swine waste. They’ve added another plant to the mix — duckweed — which holds promise as a source of fertilizer and livestock feed, in addition to working along with cattails and other riparian plants to remove phosphorous and nitrogen from water. Duckweeds are flowering plants that grow rapidly while floating in still or slow-moving fresh water.

Benjamin Forbes, program assistant for the SAES Agricultural Research Station, has been elected vice-president of the Users and Screeners Association of Federal Excess Personal Property, Inc., an organization established to promote the transfer of excess property among federal agencies. Forbes was first appointed to the association in 1992, and he has since been the pipeline for SAES acquisitions of more than $2 million worth of vehicles, lab equipment, office furniture and other excess property that was no longer in use at other federal agencies.

Pictured are lifetime members of the School of Agriculture and Environmental Sciences Alumni Society. SAES is the only school on campus with its own alumni society. Part of the SAES Alumni Society mission is to raise money for scholarships. This year the group awarded two scholarships totaling $2,500, to two students — Lance D. Blackwell, a Landscape Architecture major from Florida, $1,500; and Kristin C. King, an Animal Sciences major from Greensboro, $1,000. Organized in November 2001, the group already has more than 90 members, including 25 lifetime members. James C. Kearney, ’65, serves and the Alumni Society’s chairman.
on the move

North Carolina A&T State University School of Agriculture and Environmental Sciences Newsletter
Produced by the Agricultural Communications Unit

Dr. James C. Renick, Chancellor
Dr. Alton Thompson, Dean of Agriculture and Environmental Sciences
Dr. M. Ray McKinnie, Associate Dean, Administrator Cooperative Extension Program
Dr. Carolyn Turner, Associate Dean, Agricultural Research Center

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calendar

SAES Alumni Society Graduation Luncheon - December 2002
December graduates will be honored by the SAES Alumni Society, call Azell Reeves, (336) 334-7979 for more information.

Saturday, Jan. 11, 2003
Science Project Workshops
Extension specialists Bob Williamson and Ellen Smoak will be conducting workshops on “Keeping the Science in Your Science Projects” (targeting grades 5-8) on Saturday, Jan. 11, at Coltrane Hall. There will be a workshop for youths from 10-11 a.m., and one for teachers and parents from 1:30-2:30 p.m. To register, call Smoak or Williamson at (336) 334-7956.

Jan. 29-31
New Gene Discovery Workshop
Open to students and faculty. Call Milli Worku at (336) 334-7536 for more information.

MARK YOUR CALENDARS:

SAES Industry/Agency Roundtable Breakfast - March 2003
SAES Career Expo - March 2003
Small Farms Week 2003 - The last week in March
SAES Student Recognition Awards Banquet - April 2003
National Institutes of Health NCBI Bioinformatics Workshop - April 2003