

# RESEARCH APPRENTICE PROGRAM

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PLANTING THE SEEDS OF KNOWLEDGE IN TOMORROW'S LEADERS TODAY



COOPERATIVE AGRICULTURAL RESEARCH CENTER  
PRAIRIE VIEW A&M UNIVERSITY  
PRAIRIE VIEW, TEXAS

# A MESSAGE:

DR. ALFRED L. PARKS

DIRECTOR

COOPERATIVE AGRICULTURAL RESEARCH CENTER

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When we began this program 25 years ago, we set out to nurture and foster the skills and ambitions of high school students in an effort to lead them to careers in agricultural research. Looking back on the Research Apprentice Program, we've succeeding in providing practical research skills and methodologies to nearly 1,000 students throughout the United States.

The Cooperative Agricultural Research Center (CARC) is the organizational unit within Prairie View A&M University's College of Agriculture and Human Sciences with the assigned administrative and management responsibilities for research in the college. We also conduct the Research Apprentice Program each summer. Our ongoing mission at CARC is to conduct research in applied, basic and social sciences to provide information and answers to problems which will help to improve the socioeconomic conditions of the clientele which we serve in Texas, the nation and the world, with basic emphasis being place on applied results.



Our RAP participants are high school juniors and seniors chosen based on their interests in agriculture and/or food sciences. The selected students are given hands-on experiences in research, information about related career opportunities and exposure to a wide variety of developmental insights into the science-base of food and agricultural research. The students' participation on workshops, research projects, field trips, seminars and classroom lectures is designed to enrich their experience in the program.

The CARC's optimistic outlook is one of improving our research productivity and the mentoring of students in the latest technology – an educated and informed student is our responsibility to our public. Educated and informed students enhance our goals of providing useful answers to problems facing our clientele of the future by developing human capital.



# THE GENESIS:

## LOOKING BACK AT THE RESEARCH APPRENTICE PROGRAM'S BEGINNING

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Historically, the 1890 institutions have been a pipeline for the production of minority (primarily African-American) students in the food and agricultural sciences. Prior to the late 1960s and early 1970s, the primary focus at these institutions was academic instruction. However, published studies in the late 1970s revealed that fewer and fewer black students were projecting agricultural science as a college major, and even fewer were pursuing advanced degrees in the agricultural sciences. In a related United States Department of Agriculture report it was stated that:

If the number of minorities with terminal degrees in the agricultural sciences is to be significantly increased, an impact must be made at the high school level. This intervention must be made at the high school level. It must be made in such a way that these young people will perceive that there is a future for them in food and agriculture disciplines. With the absence of minority role models for high school students, an overt effort must be made to project the role, purpose and challenge of research in food and agriculture. Awareness can be accomplished in part by providing an opportunity for apprenticeship with experienced investigators. Consequently, the Department of Agriculture with the participation of the Cooperative State Research Service (CSRS) and the Agricultural Research Service (ARS) initiated a

research apprenticeship program with the following objectives:

1. Recruit qualified minority students for appointments as research apprentices. The students will be of such caliber that they can benefit from the experience.
2. Provide a meaningful research experience through which the students will develop an insight into the science base of food and agriculture research.
3. Explore opportunities in the food and agricultural sciences as a part of the research apprenticeship. Participating students should develop an understanding of career choices which are available in our nation's food production and delivery system.

The Research Apprentice Program for Minority High School Students was first announced by the Administrator of the Cooperative State Research Service, Department of Agriculture in early 1982. The nationwide announcement was circulated to directors, state agricultural experiment stations, A-TRs, McIntire-Stennis Programs, research directors, Evans-Allen Programs, deans, schools of Veterinary Medicine and all participating research investigators currently conducting CSRS funded research projects.



# THE STRUCTURE:

## EXPLORING THE WAY RAP WORKS

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The Research Apprentice Program conducted by the Cooperative Agricultural Research Center at Prairie View A&M University has evolved greatly since the program's inception in 1982. The program's first year was a modest one, serving two students. The program has since grown to include 24 students each summer session.

The RAP participants hail from as close as Prairie View and surrounding areas within Texas to as far away as Chicago and California. The students descend on the campus for a total of six weeks. Accommodations are made for the participants in campus housing, enabling them to immerse themselves in the "college experience."



The RAP students' days are filled with enrichment activities and instruction. The curriculum for the RAP program contains activities and laboratory research designed to enhance the students' knowledge of plant and environmental, food, animal and socioeconomic systems. Each week, the students get a chance to see agriculture and science in action through field trips and other enrichment activities such as computer-based and college preparation assignments.

As the program enters its final weeks, the students are responsible for analyzing their research conducted with the oversight of CARC's scientists and specialists. Those findings are gathered and presented through oral presentations and posters. Each student is responsible for answering questions about their research, demonstrating mastery of their work. The presentations and posters are judged by faculty and staff. Winners are honored during the program's concluding ceremony.



# THE PEOPLE:

## WORKING TO MAKE RAP A SUCCESS

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**W**ith any successful educational effort, a strong staff and volunteers are essential to an effective experience. The Cooperative Agricultural Research Center carefully selects RAP staff that will strive for a successful program each year. These chosen people are committed to the success of the Research Apprentice Program and the success of its students.



Each year the Research Apprentice Program is led by a RAP coordinator. The coordinator is responsible for overseeing the day-to-day operations of the program. Coordinators have been people experienced in working directly with students through the field of education. The coordinator is responsible for ensuring the students make the most of their RAP experience. From managing the students' busy schedules to making sure their needs are met while in the program, the coordinators play a vital role.

The program also employs up to six counselors each year. The counselors are Prairie View students, some of whom are students in the Department of Agriculture and Human Sciences. These student counselors offer first-hand knowledge of university life and are a valuable resource to inquisitive RAP students. The counselors are housed on campus throughout the program, ensuring that the RAP students are never far from a watchful eye.



The faculty and staff of the Cooperative Agricultural Research Center also plays a role in the education of RAP students. Scientists, specialists and technicians spend time with the students in laboratories and lectures, instructing the students and offering glimpses into careers in agriculture disciplines. RAP students have the ability to learn from directly from our faculty and staff. Some of the RAP students have left the program with a clearer vision of their career path thanks to the insight they received from the professionals they interact with on a daily basis during the six-week program.

# THE RESPONSE:

## WHAT RECENT PARTICIPANTS HAVE TO SAY ABOUT RAP

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**A**t the conclusion of their six week session, the members of the 2008 Research Apprentice Program were asked for their thoughts on the Research Apprentice Program. Here's a sample of their thoughts about how the program impacted their lives and helped them to gain a clearer understanding of their future paths:



"I would like to go into Animal Sciences. It's a good field. Not only do you learn things, you make good money. You can live your life knowing that you don't have to switch careers."

- Marcus Reed, 16, Montgomery, Texas



"Agriculture has a wide variety of things inside of it. With my mind set on music, agriculture has really opened my eyes."

- Evan Turner, 16, Houston, Texas



"I learned that college life isn't that easy and I learned more about agriculture and people from different backgrounds."

- Panya Toney, 16, Waller, Texas



"I learned a lot. Agriculture is not just about farming and getting on your hands and knees. Being raised in a big city, I just thought it was about farming and animals. But it's a part of life. No matter what you do, there is an aspect of agriculture in it."

- Eric Evans, 16, Chicago, Illinois

# THE MEMORIES:

## LEAVING STUDENTS WITH A LASTING IMPRESSION

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COOPERATIVE AGRICULTURAL RESEARCH CENTER  
P.O. BOX 519  
MS 2008  
PRAIRIE VIEW, TEXAS 77446

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