



The AMP

Connector

A newsletter for the Xavier/UNCF Alliance for Minority Participation (XUAMP)

"A mind is a terrible thing to waste"

Volume 4, No. 1/Winter 2000

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Technology gap called issue for black colleges

Anyone who ever wondered why programs such as **The College Fund's XUAMP** are important to the future of black students need only refer to a recent study that found that students at historically black colleges and universities have less access to computer technology than most other students and, thus, less chance of getting today's cutting-edge technology jobs.

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Summer Bridge program at Jarvis-Christian offers computer skills

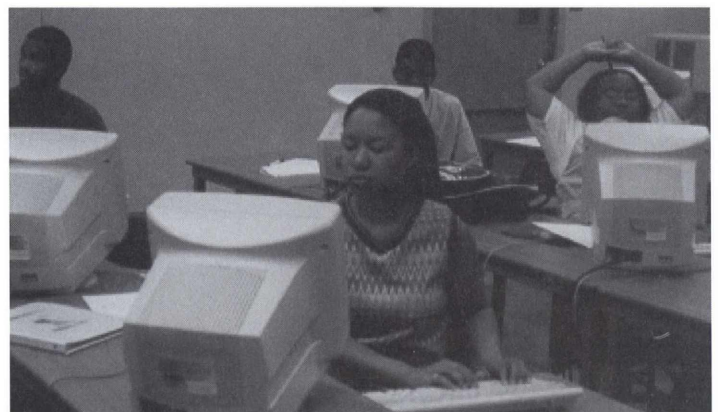
Combining an existing summer enrichment program with the AMP **Summer Bridge** concept spelled success for students at **Jarvis Christian College**, Hawkins, TX, this past summer.

"Jarvis Christian College used the well-developed and successful policies and procedures of its Advanced Summer Enrichment Program (ASEP) to deliver a first-rate Summer Bridge program for our AMP scholars," said Dr. **Beimnet Teclezghi**, campus coordinator of the Jarvis Christian AMP. "We integrated the AMP Summer Bridge program with our existing ASEP to prepare recent high-school graduates for college-level study and motivate students to become self-learners through interactive use of scientific methods."

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The 10 Jarvis Christian College AMP students who participated in the summer 1999 program aimed at enhancing math and basic English skills .



Jarvis Christian College's AMP students get down to work during the computer segment of their 1999 Summer Bridge program.

Study, continued

The study was released last April during the 1999 annual conference of the National Association for Equal Opportunity in Higher Education (NAEOHE) in Washington, DC. The Executive Leadership Foundation in Washington, DC, which is supported by senior African-Americans in major corporations around the country, paid for the study.

The problem can be seen in the fact that a listing of "America's 100 most-wired colleges" in *Yahoo! Internet Life* magazine did not include a single historically black college or university, said Larry Blackwell of WANlink Communica-

tions, Atlanta, GA, during the conference.

The study found that:

- 12.5 percent of students and 71 percent of faculty members had personal computers in black institutions; more than 75 percent of students and 100 percent of faculty members had PCs at the "most-wired" schools;

- about 63 percent of buildings at black colleges were wired for modern technology such as voice, data and video systems, compared to 100 percent of all buildings at the wired colleges;

- about 10 percent of classes at black colleges used e-mail or the Internet compared to more than 50 percent at the other colleges.

All is not bad news, however. "Things have

improved," Ramon Harris, technology director for the Executive Leadership Foundation, told conference participants. Harris warned that such progress, though, "is like the auto industry – as you move ahead, the competition also keeps moving ahead."

Among the black institutions cited by conference participants as leading the way in technology for their peers were Florida A&M, Howard University, Livingstone College, Stillman College and Johnson C. Smith University. ■

NSF/UNCF calendar


Deadline

Open

Qualified scientists and engineers, especially women, minorities and people with disabilities may submit proposals at any time for NSF **Computer and Information Science and Engineering (CISE) Directorate** programs. Allow six months for processing. CISE programs improve fundamental understanding of "computing and information processing" in the broadest sense; enhance training of scientists and engineers to contribute to that understanding; and encourage and facilitate using state-of-the-art information technologies and computational techniques in scientific and engineering research. Contact: NSF, 703/306-1234.

Provider

National Science Foundation (NSF)



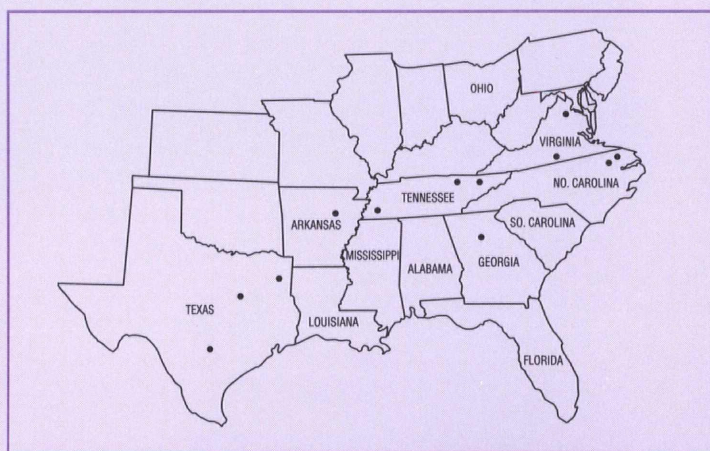
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The AMP Connector is published by **The College Fund/UNCF** to report on activities and participants of the **Xavier-UNCF Alliance for Minority Participation (XUAMP)** and **Mid-South AMP**, which are sponsored by the **National Science Foundation**.

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Faculty profile – Jarvis Christian XUAMP professors represent diverse backgrounds

Just as diversity is a catchword for business today, it could as easily be the word for the math, engineering and science instructors committed to the XUAMP at **Jarvis Christian College** in Hawkins, TX. Here are highlights of the academic backgrounds and specialties of Jarvis Christian's dedicated XUAMP faculty, who bring an eclectic mix of international backgrounds and business expertise to the program.

▲ **Beimnet Teclezghi** has a Ph.D. in math from the University of Arkansas and wrote his dissertation in "Symmetric Semigroups." He earned his MS in math at Addis Ababa University and a BS in math from Asmara University in his native Eritrea. He also earned a certificate of participation by participating in the workshop of dynamical systems from the Geometry International Center for Theoretical Physics in Trieste, Italy.

Teclezghi has been an assistant professor in the Jarvis Christian Division of Arts and Sciences since 1996, teaching 12 credit hours per semester in algebra, trigonometry, calculus, discrete math, linear algebra, geometry and differential equations. He advises students in math and pre-engineering and has chaired the Winter 2000

Curriculum Committee of the college and reviewed the math curriculum.

Before coming to Jarvis Christian, Teclezghi was a lecturer in mathematical sciences at the University of Arkansas and a graduate assistant there as well. He has been a lecturer and assistant lecturer in math at Asmara University and a graduate assistant at Addis Ababa University, and did tutoring in mathematical sciences and athletics at the University of Arkansas.

Among the honors Teclezghi has earned are the John Faye Keese Award for Outstanding Graduate Teaching Assistant and John C. Massie Graduate Fellowship for Outstanding Research, both while at the University of Arkansas, and was nominated for PIPER Professor while at Jarvis Christian. He served as a member of the Substantive Change Committee for Brevard College in Brevard, NC, for the Association of Colleges and Schools.

Teclezghi has presented papers in six sessions of professional association meetings. Among his publications have been articles in the *Journal of Algebra*, *American Mathematical Society* and *Communications in Algebra* on topics such as finite symmetric

inverse semigroups and endomorphisms of finite Full transformation semigroups.

▲ Currently an assistant professor in chemistry at Jarvis Christian, **Glendora Carter** served as an assistant professor in freshman studies there from 1984-1990 and was a post-doctorate fellow in cell biology at Vanderbilt University in Nashville, TN, from 1996-1998

before returning to Jarvis Christian.

Carter has a BA in biology from Texas Woman's University; MS in chemistry from East Texas State University; and Ph.D. in biochemistry from Meharry Medical College.

Carter has co-published widely in the publications such as the

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Student profile – XUAMP student enjoys the learning process

N**aiisha Gray** came to UAMP campus **Jarvis Christian College** from Sacramento, CA, already primed to focus on an educational and professional career in computers. She is taking a dual degree in computer science and computer engineering, and had a taste of the XUAMP environment even before coming to college.

"I did computer work before college through the Business, Education and Technology (BET) Academy," explained Gray. "The program was like having a business major while in high school – sort of a school-within-a-school. We had mentors and visited them

at their jobs to see how classwork applied to the workplace."

Gray also participated in the Advanced Summer Enrichment Program (ASEP) at Jarvis Christian last summer, before formal classes began. That program, she noted, "was a good preparation for college – it helped me establish a starting GPA of 3.86."

Although she could not pinpoint the reason she developed an interest in computers, Gray recalled that she did have a strong family role model: "My father works in computers with the phone company," she said. "I've gone to work

Continued on page 5

Faculty profiles, continued

Annals of the New York Academy of Sciences, Proceedings of the American Association for Cancer Research, FEMS Microbiology Review, Circulatory Shock and Journal of Food Sciences. She is a member of the ASBMB/Biophysical Society, American Association of University Women, American Chemical Society, National Education Association, American Association of Cancer Research and Sigma Xi.

Carter's thesis research focused on the signaling pathway(s) of the cytokine, interleukin-11, which she said "is associated with triggering growth and differentiation in erythroleukemic cell lines." She also has practical hands-on experience with methods of protein purification and analysis, among other efforts.

▲ **Syed M. Muniruzzaman**, assistant professor of biology, also brings an international perspective to the Jarvis Christian XUAMP. He earned his Ph.D. in applied microbiology at the University of Kagawa, Japan, and his MS in microbiology and BS with honors from Dhaka University in Bangladesh. He began his academic career as a research fellow at Dhaka University and was a teaching assistant in applied microbiology and enzy-

mology at Kagawa University; a postdoctoral fellow in biochemistry at the University of Arkansas for Medical Sciences; and postdoctoral research associate in biochemistry at the University of Texas Health Center before coming to Jarvis Christian in 1998.

In addition to his XUAMP involvement, Muniruzzaman is director of the UNCF-TCWQR coordinated water quality research project. He received \$46,000 by the Houston Endowment for that project for 1999 and 2000. He supervised MS students, undergraduate students, summer and rotation students, and a laboratory technician. He also has served on Jarvis Christian's Minority Biomedical Research Program and the Minority Science and Engineering Improvement Program, and as faculty advisor for pre-med, nursing and biology students.

Muniruzzaman is a member the American Society for Microbiology, Japanese Society for Engineering and Bioengineering, Bangladesh Society for Microbiology and Bangladesh Society of Botany. His publications include research in the Journal of Fermentation and bioengineering, World Journal of Microbiology and Biotechnology, Bangladesh Journal of Botany and Bangladesh Journal of Microbiology.

▲ As an early retiree of IBM, **R. Carl Jackman**, professor of math and

physics at Jarvis Christian, brought a strong business perspective to college and to its XUAMP activities when he entered academia there in 1994. He earned a BS in physics from the University of Rhode Island and MS in physics from the Ohio State University. He also has done undergraduate and graduate studies in education at the University of Rhode Island and Texas Woman's University, as well as graduate studies in math, engineering and physics at the University of Houston and graduate work in divinity at the South Western Baptist Theological Seminary.

Jackman has taught high-school physics and chemistry and was an instructor and assistant instructor in physics at Ohio State University. He has been a science fair judge, an invited seminar speaker at Johnson Space Center and research in relativistic quantum field theory at the National Science Foundation. He is a member of the American Physical Society and Sigma Pi Sigma, the physics honor society.

He worked in space program technology as a professional staff member, at TRW from 1966-1974 and at IBM from 1974-1992, with responsibilities in space station software assurance, software quality assurance and development, earth resources analysis and special studies, radar image reconstruction,

shuttle application design, Skylab momentum management, interplanetary propagation, generalized iterator development and lunar abort analysis. He has received project awards and mementos of appreciation from NASA, IBM and AIAA.

▲ Yet another international figure at Jarvis Christian is **Dalsang Chung**, assistant in business administration. He has a BA in English from Chung-Ang University in Seoul, Korea; MBA from Minnesota State University; and doctorate in business administration in management information systems from Mississippi State University, writing his dissertation on "An Empirical Cross-Cultural Study of Ethics in the Area of Digital Media."

Before coming to Jarvis Christian, Chung taught money, banking and advanced statistics at Mississippi State University. He received a scholarship from the International Business Strategic Program and has made professional presentations to the TIMS/ORSA National Meetings, Northeast Decision Sciences Institute regional meetings, Institute for Operation Research and Management Science national meetings, Annual Cross-Cultural Meeting and others. He is a member of the decision Science Institute, Institute for Operations Research and Management Sciences and Association for Computing Machinery. ■

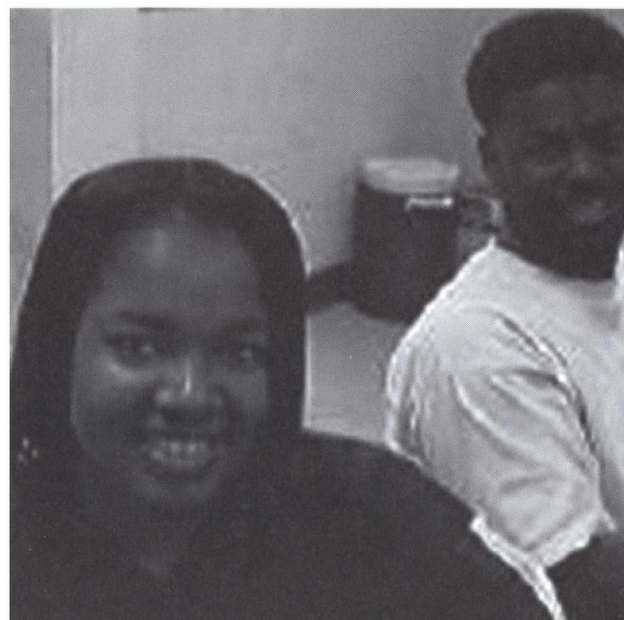
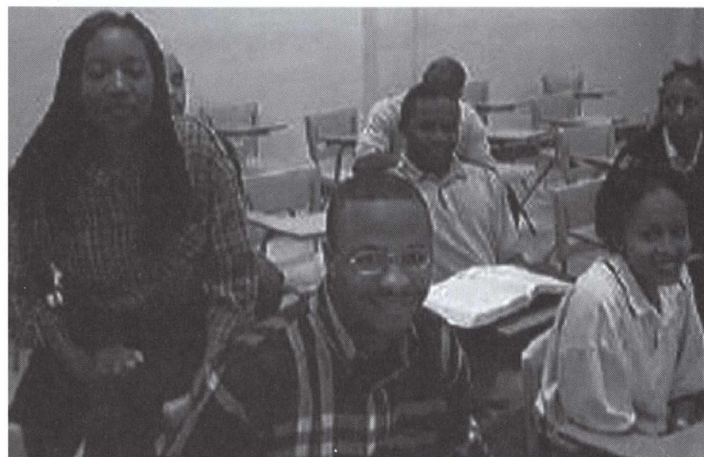
Campus highlights –

Wiley XUAMP grads cover the gamut of science, math and engineering studies

*Congratulations to seniors **James Bolton** (right, center front) and **Veta Jamison** (below, left), XUAMP participants at **Wiley College** who both graduated in biology in 1999.*



*Wiley's 1999 AMP students included: (front row, l to r) **Patryce Hall**, sophomore, Biology major; **Latasba Gadberry**, sophomore, Biology major; **Anastasia Lyons**, senior, Chemistry major; **Channae Goodwine**, junior, Biology major; (second row) **James Bolton**, senior, graduated in Biology; **Brooke Woodard**, sophomore, Chemistry major; **Brian Jones**, junior, Chemistry major; and (third row) **Donnetrus Hill**, senior, Biology major, and **Clarence Jackson**, junior, Biology major.*



Student profile, continued

with him and had a chance to play around with the computers."

Despite her heavy-duty dual major, Gray is no techie geek. In addition to her demanding academic courseload, she also is on the dance team and plays piano for the concert and gospels choirs at Jarvis Christian.

For Gray, participating in XUAMP promises to greatly enhance the college experience. "I think I'll find it valuable, and I'm already having a whole lot of fun in the program," she said. "Our advisor, Dr. Teclezghi, is a great guy. He's let us know that he'll be taking us on field trips and will help with scholarships. I'm looking forward to a good experience." ■

Keep us posted!
The *XUAMP Connector* wants to hear from faculty and students!

Let us know what you think about the program and how it benefits participants.

Send material to Ms. Courtney Byrd at The College Fund (see box, page 2 for address).

Summer Bridge, continued

Among the students recruited to study science, mathematics or engineering at Jarvis Christian in the 1999 summer program were 10 AMP students. "We placed the AMP students in developmental mathematics or college algebra, to ensure they would have a foundation for enrolling in the fields of sciences, mathematics or engineering," said Teclezghi.

"To improve their communication skills, the students also took a course in critical thinking and writing, which helped them use several expository aims and patterns of development, emphasizing the key steps in organizing and writing expository essays. The course also facilitated an understanding of grammar, rhetoric and usage."

Students had a demanding schedule in this Summer Bridge program. In the mornings, they participated in weekly modules in biology, chemistry, computer science, mathematics and physics, with an emphasis on process over content or information *per se*.

"Study skills infused in these sessions, such as note-taking, time management, test-taking and collaboration, reinforced the academic preparation," said Teclezghi.

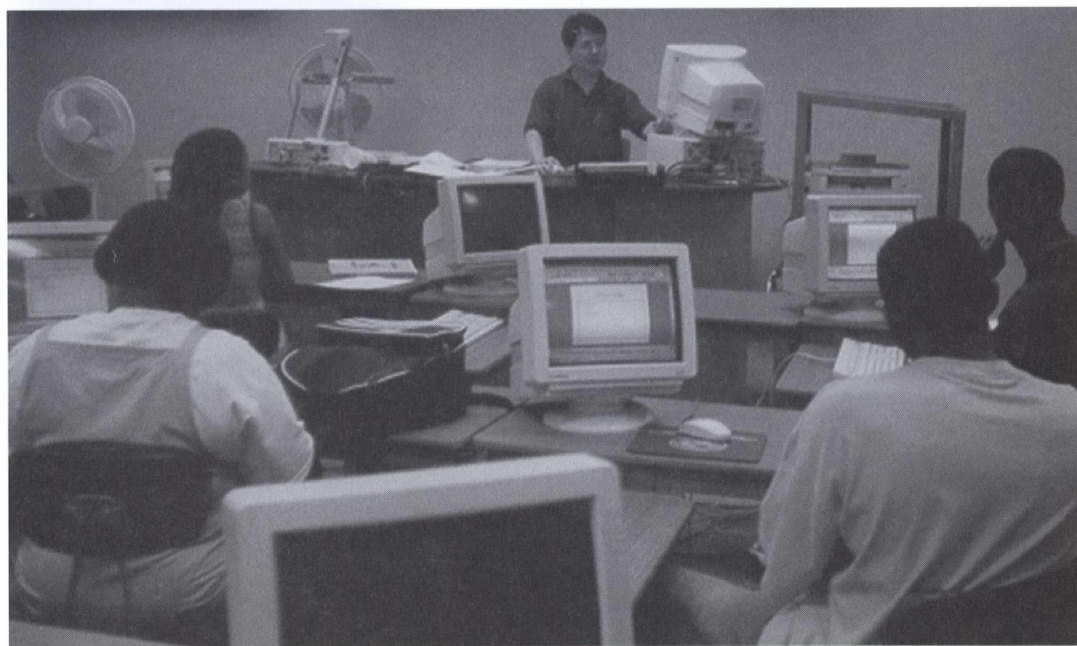
They spent the afternoon hours in classes in math and English with the other ASEP students.



Dr. Beimet Teclezghi (above, center) with six of Jarvis Christian's Summer Bridge students during the concluding luncheon.



AMP student receives certificate from the vice president of Jarvis Christian College during Summer Bridge concluding luncheon (left).



Dr. Dolsung Chung, assistant professor in the Business Administration program, gives AMP students guidance in computer information.

The final week featured an interdisciplinary experience, using weekly assessment findings to modify activities and address the students' specific needs. Activities included a field trip to the University of Texas Health

Center and the Oil Museum at Kilgore, and participating in a seminar led by an expert in biomedical research.

The students each earned six college credit hours through their Summer Bridge studies,

which meant they could take more science and math courses this fall.

At the end of the program, the students all received certificates of participation — as well as academic credits and new skills. ■