

Science, Engineering and Mathematics at the Timbuktu Academy

(SEM-Timbuktu Academy)

“The Science of Creating Educational Value Added”



APPLICATION PACKET

- Challenge 2000 (Challenge)
- Summer Science Institute (SSI)
- Summer Bridge Institute (SBI)
- Undergraduate Research Program (URP)

**Southern University and A & M College
Baton Rouge, Louisiana 70813**

OVERVIEW

The Timbuktu Academy is an undergraduate and pre-college, research and mentoring program for students in engineering, physics, and chemistry. The Academy is supported primarily by funding from the Department of the Navy, Office of Naval Research. The funding level of this project, from the fall of 1993 to the summer of 1998, amounts to \$584,000 per year. The current funding level of this project is \$577,000 per year for a three-year base with a two-year option. Additional funding for Academy activities comes from the National Science Foundation (NSF), the Physics Laboratory of the National Institute of Standards and Technology (NIST), the Department of Energy (DOE), the National Aeronautics and Space Administration (NASA), and Southern University and A & M College.

COMPONENTS OF THE SEM-TIMBUKTU ACADEMY

- (1) **Summer Science Institute (SSI)** for twenty (20) high school students (rising 12th graders).
- (2) **Challenge 2000** for twenty (20) high school students (mainly rising 10th, 11th, and 12th graders)
- (3) **Summer Bridge Institute (SBI)** for thirty (30) high school graduates, who enroll in the Honors College as prospective physics, engineering, or chemistry majors **at SUBR**
- (4) **Undergraduate Research Program (URP)** for 20 engineering, 20 physics, and 10 chemistry majors **at SUBR**
- (5) **Professional Educational Service (PES)** for training and pre-college informational outreach, publications and presentations

SSI and Challenge 2000 are six-week residential programs that entail academic enrichment in chemistry, physics, mathematics, English and computer science, and ACT preparation. SBI is an eight-week residential program that follows the University summer schedule. SBI scholars enroll in honors courses and engage in research with university faculty. SBI is a bridge for participants from pre-college to undergraduate studies. URP is the undergraduate, mentoring and research component of the Academy. Academy scholars pursue degrees in physics, engineering, and chemistry. Students accepted into SBI and URP are expected to pursue advanced degrees (M.S./Ph.D.) in chemistry, physics, engineering after graduation. As mandated by the principal granting agency, this program does not support students in the pre-medical sciences, nor does it support students who plan to obtain professional degrees in the medical sciences.

LEVELS OF SUPPORT

SSI and Challenge 2000 participants receive room and board, and some other forms of support. SBI participants receive paid tuition, room and board, and a stipend of \$1,500.

NOTE: Acceptance of the SBI and URP award is your commitment to attend SUBR as a physics, chemistry, or engineering major and pursue a Ph.D. degree in these disciplines or directly related ones, upon the completion of the B.S. program. Up to \$5,000 per year is available for undergraduate scholars in the Undergraduate Research Program (URP). Other incentives for URP scholars include research experience, summer research internships, computer access, and travel to scientific and technical conferences.

Your completed application, official transcript, complete ACT/SAT score report, essay, and three letters of recommendation should be sent to:

Diola Bagayoko, Ph.D., Director
Timbuktu Academy
Southern University and A & M College
P. O. Box 11776
Baton Rouge, LA 70813

NOTE: The GPA and ACT scores of the scholars admitted into the Academy in 1993 were in the ranges of 3.0 – 4.0/4.0 and 24 – 33, respectively. The minima were 3.0/4.0 and 24, respectively.

THE POSTULATE OF THE TIMBUKTU ACADEMY

There is no known limit to what a given person can learn or discover, even though what a person learns or discovers is partly determined by that person's DETERMINATION, FOCUS, COURAGE, and PERSEVERANCE.

IMPORTANT NOTE: Students applying for the Summer Bridge Institute (SBI) or for the Undergraduate Research Program (URP) must also apply for admission at Southern University and A & M College – Baton Rouge (SUBR) – for the summer and the fall semesters. They are also urged to apply for the Louisiana Tuition Assistance Program (TAP) if they clearly or remotely meet the financial status requirements and are Louisiana residents.

Failure to apply timely for admission at SUBR will result in the rescinding of any SBI or URP award, as the latter can only be consummated for students officially enrolled at SUBR. An application may be obtained from most high school guidance counselors or by writing to the Office of Admissions, Room 113 T. H. Harris Hall, Southern University and A & M College, Baton Rouge, LA 70813 or (225) 771-2430.

ELIGIBILITY

The academy is looking for deserving high school and undergraduate students interested in physics, chemistry, or engineering with an excellent record of academic achievement, leadership skills, and community service. Judgement, character, and particularly intellectual accomplishments are among the criteria for selection. Students selected to participate in SSI must have a minimum GPA of 3.0/4.0 and an ACT composite minimum of 18. SBI and URP scholars must meet the same GPA requirement and have an ACT composite minimum of 24. Minority and non-minority students are urged to apply. U.S. citizenship is required.

DEADLINES:

The deadline for the receipt of all the materials is February 25, each year, for high school students; rolling admission thereafter.

Applications are available from the following:

Mrs. Karen D. Simms, Instructor – Timbuktu Academy
P. O. Box 11776 – Baton Rouge, LA 70813
Voice: (225) 771-2730 Fax: (225) 771-4341
e-mail: ksimms@phys.subr.edu

Directors of the Timbuktu Academy are listed below.

Diola Bagayoko, Ph.D., Director – Timbuktu Academy
P. O. Box 11776 – Baton Rouge, LA 70813
Voice: (225) 771-2730 Fax: (225) 771-4341
e-mail: bagayoko@phys.subr.edu or bagayoko@aol.com

Reza M. Mirshams, Ph.D., Co-Director – Timbuktu Academy
SUBR - Department of Mechanical Engineering – Baton Rouge, LA 70813
Voice: (225) 771-2525
e-mail: mirshams@cluster.engr.subr.edu

Ella L. Kelley, Ph.D., Co-Director – Timbuktu Academy
P. O. Box 11776 – Baton Rouge, LA 70813
Voice: (225) 771-3990 Fax: (225) 771-2282
e-mail: elkchem@aol.com