#### BIOMEDICAL SCIENCE CAREERS PROJECT

#### Spring 1996 Volume 2 Number 3

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#### Mentoring Profile: Anthony A. René, Ph.D.

As Assistant Director for Referral and Liaison at the National Institute of Health's (NIH) National Institute of General Medical Sciences (NIGMS), Anthony A. René, Ph.D., oversees programs that offer internship opportunities for underrepresented minority students in high school, college and graduate school, as well as post-graduates and fullfledged investigators. Much of his time is spent responding to students' questions and acting as a bridge between students and the researchers who might be able to provide them with invaluable research experience in their laboratories.

That alone would be a full-time job. But there's another part of René's job that he devotes significant time to—visiting academic institutions and talking to students at different stages of their education about the research opportunities that may be theirs for the asking—if they only knew about them.

Since 1989, the NIH has offered Research Supplements for Underrepresented Minorities in the biomedical and behavioral sciences—a program that is distinct from the myriad others sponsored by the NIH. "The first thing I tell students," René emphasizes, "is that these programs were not designed to exclude anyone. Rather, they were designed to provide opportunities for students who have not had them—such as African

Americans, Hispanic Americans and Native Americans."

Through this program, NIH places approximately 1,200 minority students and investigators each year during the summer (summer internships) and during the academic year.

The tricky part is finding out about the opportunities, which is why René spends so much of his time phoning and visiting college campuses.

Whether students meet René when he comes to their schools, or call his office in Bethesda, Maryland, René begins by giving them a list of investigators at an



Anthony A. René, Ph.D.

institution in their geographic area who are working on NIH-sponsored projects and who might be able to take them on as interns. The next step is for the student to call the investigator he or she wants to work with. "I always tell students to give my name to the investigator, too," he says. "Many of them don't know about the program and therefore may be reluctant to take on an intern. So I fill them in and tell them what they need to do to get the money to pay the student."

From the student's perspective, the hardest part is making the initial contact. From there, there are no for-

# 1996 BSCP Conference

#### **Student Perspectives**

#### A Mentoring Day, by Nereida Ralda

There was a blizzard running through the City of Boston on Saturday, February 3. Though it kept a lot of people



Nereida Ralda

at home, there were still those who made it to the third annual Biomedical Science Careers Conference; those who knew that this conference would change and shape people's lives—including mine.

I've always had a particular interest in science, and after

taking Earth Science and Biology my interest grew even bigger. Then my curiosity led me to join the Project Success Summer Program, which totally changed my view on careers in science. But in the back of my head there was still more I wanted to know and see and that's why I wanted to participate in the BSCP Conference.

I never really thought of needing a mentor until I realized that I was truly lost. Lost in the sense that I knew my love for science and I didn't know where to use it for action to benefit not only me but others around me. It has been really hard for me to find a mentor because you think of your parents as being your mentors, but sometimes they don't understand the struggles you go through in high school and in higher education when they have had a poor level of education themselves.

I didn't know how to apply my interest in science and was worried that all this interest would be in me and that only I would know about it and that nobody would help me realize it. Then when I went to the Conference I was overwhelmed by the many people who were willing to mentor me into the right path. I met with college students, people working in the Science department and young people just like me interested in pursuing a science career.

I met a high school senior at the Conference who I call and talk to. He is a friend who gives me advice and will listen to me. He makes me feel that I am not the only one interested in science. Neither of us knows what we want to do, but it is nice to have someone who shares the same ideas. •

# An Experience to Remember by Wilfred F. Mbacham, DS, Graduate Student in Tropical Public Health, Harvard School of Public Health

When I received the announcement for the Biomedical Science Careers Conference, I brushed it off under the pretext that I was too busy with papers and experiments to attend. But as head of the Minority Biomedical Scientists at Harvard, it was my responsibility to let my colleagues know about the event. So I sat up late that night to generate an electronic mail message to my colleagues. The next day, I found an application form that had been faxed to me by the office of Faculty Development and Diversity, and I reluctantly decided to register.

On February 3, I sluggishly walked into the Boston Park Plaza Hotel and was immediately impressed. My name tag was waiting for me at the perfectly organized registration table, along with a packet of information about the conference agenda, advisors and student atten-

dees. They even had business cards with my name.

As I walked to my assigned table, I saw Dr. Ron David, from the [Harvard] Kennedy School of Government. I have held Dr. David in high esteem ever since I heard him speak at a Black History Month event that I organized at the School of Public Health when I was chair of the Minority Student Health Organization in 1993 – 94. At that time, I was impressed by his practicality in addressing health matters and his vision on health policies.

When I checked my table assignment, I discovered to my surprise that I was at the same table as Dr. David. As I pulled back the chair to sit down, he addressed me by name and the word "Welcome" seemed to have a different meaning. "I am your assigned mentor," he told me, and suddenly the whole concept of the gathering took on a deeper meaning. "What a perfect match," I murmured.

Since coming to the United States some four years ago, I had never been in a gathering with so many black people. An incredible assembly of role models came to share their experiences for the benefit of young students and burgeoning professionals. That it was such a racial mix lent support to the notion and reality of a global village with interdependent persons. No other forum could have made me feel more empowered. It felt like home (Cameroon) again. It was so gratifying to be at such an assembly of intellectuals, sharing practical lessons and appealing to everyone's conscience and devotion. Just knowing that others cared was one of the conference's highest achievements. Those of us in mid-career paths who do not know which direction to take came out inspired.

What was especially important to me was the fact that I made contacts

that I am sure will last my lifetime — both with people senior to me and with my immediate juniors, whom I can help with practical issues like choosing graduate programs. I have been in contact with both groups ever since. My burning desire to share in such academic altruism has been met. It was a transforming experience and I owe gratitude to Dr. Joan Reede and her team for the opportunity.

#### Student Letters

All in all, this conference was the single most interesting and informative event of my budding career. I am eager to keep in touch with the contacts I made, and come to Harvard this summer to do research. Such amazing things happen in neuroscience each day I feel privileged to be alive at this time... As a black woman in America whose goal it is to be a neurosurgeon, I know I've got my work cut out for me, but with support like the Biomedical Science Careers Conference, I know I'm up to the task.

#### Nile Fair Smith College Northampton, MA

The Biomedical Science Careers
Conference was a success. It presented great opportunities for me, and I plan to take full advantage of as many of those opportunities as possible...The exchange of experiences, information, and knowledge along with advice from a diverse group of professionals was just what I needed. Nowhere else have I had the pleasure of meeting and talking with so many science-related professionals.

Amina R. Watson Jamaica Plain, MA. ♦

#### **BSCP Awards**

The BSCP's 1996 Focus Award was presented to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. for providing legal guidance that has brought the BSCP forward from an assembly of dedicated volunteer organizations to a fully developed non-profit entity; and for providing communication vehicles that have enabled BSCP to reach out to the medical and corporate communities, as well as to minority youth. Jeffrey M. Wiesen, President and Managing Partner, accepted the award.

The BSCP's 1996 Entrepreneurial Award was presented to Gary Saunders, Tedd Saunders and the Park Plaza Hotel for their continued spirit of entrepreneurship, and for their personal and organizational dedication to the BSCP and to minority students in the New England region. Through the commitment of their resources, they have contributed to the vision of a business community actively involved in the personal and professional development of its minority youth. Gary Saunders accepted the award.

The BSCP's 1996 Achievement Award was presented to the New England Board of Higher Education for significantly improving minority students' access to and success in higher education in New England; and for creating a prototype of an academic support network for minority students (high school through graduate school) that can be confidently used and adapted by other organizations. John Hoy, President, accepted the award.



Joan Reede presents the 1996 Focus Award to Jeffrey M. Wiesen, President and Managing Partner of Mintz Levin.



Joan Reede presents the 1996 Entrepreneurial Award to Gary Saunders of the Park Plaza Hotel.



John Hoy accepted the 1996 Achievement Award on behalf of the New England Board of Higher Education.

## **Guest Column**

#### **Why Biomedical Science** is Important

#### BY BRENDA HOFFMAN, DIRECTOR OF ACADEMIC DEVELOPMENT, HARVARD MEDICAL SCHOOL

The task of biomedical science has always been to develop the health care professionals who practice hands-on-medicine - physicians, surgeons, nurses, dentists - and to develop scientists who explore the function of the human body and the nature of disease, and create new drugs and medical treatments. In continuing these functions, biomedical science will remain important. New factors, however, will make biomedical science even more important and challenging in the future.

Some of these factors include: (1) Technology—with the aid of new tools (lasers, computers, digitalization, robotics, newly discovered materials), the role of technology will expand and become even more sophisticated in creating new medical and surgical devices; (2) Diseases the emergence of new diseases (AIDS, Ebola virus) and the reappearance of old diseases (tuberculosis, polio) means that new methods for identification of diseases and new drugs to control them will be needed; (3) Poverty—the interaction between poverty and illness, on the national and international levels, demands closer inspection; and (4) Financial Cost-Benefit Analysis - the insis-

found to measure the outcomes and increase the effi-

Many of the fields within biomedical science are changing, and that change is indicative of the future. Na-

tionally, major reports recommend that some medical schools be closed, reducing the number of physicians matriculating. Both nurses and doctors have lost their jobs at hospitals where downsizing of staff has occurred. And funding for biomedical scientists has decreased.

However, those interested in careers in the medical professions should not be discouraged. According to Dr. Woodrow A. Meyers, Jr., Director of Health Care Management at Ford Motor Company, "Health is always going to be important. Personal health is near the top of the list of concerns of all people in the

> industrialized and nonindustrialized world."

From a national perspective, the kinds of physicians and health care providers needed is changing. The demands for physician specialists (cardiologists, radiologists, anesthesiologists) has lessened, while the need for primary care providers (internists, pediatricians, family practitioners) has increased.

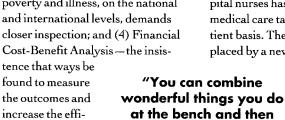
The need for traditional bedside hospital nurses has decreased as more medical care takes place on an outpatient basis. These nurses are being replaced by a new kind of health care

> provider capable of attending to out-ofhospital patients nurse practitioners, physicians' assistants and community nurses.

For biomedical research, bench laboratory work will remain critical. Dr. Dennis A. Ausiello, Professor of Medi-

cine and Director of the MD-PhD Program at Harvard Medical School, believes that the most exciting challenges intellectually and practically exist in biomedical careers. "You can combine wonderful things you do at the bench and then take them to the bedside for application," he says. Even with the recent threat to funding cuts, he notes, "The climate may appear more antagonistic, but there are individual efforts for serious commitment by biotechnology, biomedicine and big business, which was not even involved professionally 15 to 20 vears ago."

In this changing environment, new fields of study are being created and existing fields expanded. In the field of public policy, experts are now being trained to examine the relationship between diseases and the environment, between diseases and social and cultural factors, and between medical treatment and medical outcomes. Medical informatics, the development of non-invasive surgical procedures, genetic benchmarking, and advancements in forensic pathology are only some of the fields that are now coming into their own.



take them to the bedside

for application."

Dr. Dennis A. Ausiello

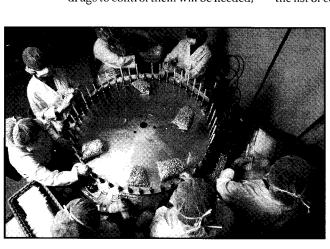
**Professor of Medicine** 

and Director,

MD - PhD Program,

**Harvard Medical School** 

ciency of medical treatments will continue.

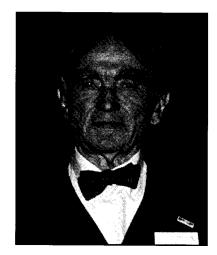


The work of biomedical scientists has never been more important. It demands well-trained people who can apply creative and innovative thinking along a wide spectrum of fields. The opportunities are there for those interested in becoming involved in an exciting, meaningful and vital endeavor.

#### Tribute A. Clifford Barger, MD (1917-1996)

A. Clifford Barger, Robert Henry Pfeiffer Professor of Physiology Emeritus at Harvard Medical School, died of cancer on March 13, 1996 at his home in Brookline, MA. He was 79. Dr. Barger graduated from Harvard College in 1939 and received his M.D. from Harvard Medical School in 1943. He was an expert in the patho-physiology of congestive heart failure. He was a former president of both the American Physiological Society and the Massachusetts Society for Medical Research. Daniel Federman, Dean for Medical Information in the Faculty of Medicine at Harvard, said of Dr. Barger that he "was a physiologist's physiologist who introduced generations to his field. He welcomed students into his laboratory to do research, and it was often the beginning of a career and always the start of a lifelong friendship."

Dr. Barger was a pioneer in identifying the need to increase minority representation in the biomedical sciences. He began developing programs toward that end as far back as the 1960s. He was also a visionary in the founding of the Biomedical Science Careers Project (BSCP). A staunch supporter of BSCP from the very beginning, he helped shape the mission of this organization and ac-



A. Clifford Barger, MD

tively participated in our first two student conferences. All of us affiliated with the BSCP will sorely miss his presence, guidance and inspiration.

#### René continued from page 1

mal application forms to fill out and no deadlines. Students are required to provide their social security number, a signed statement of their career goals, and a copy of an official academic transcript. The investigator may want to see the student's record before deciding whether or not to take him/her on. "Generally, when deciding whether to award an internship, we look at the overall quality of a student," René says. "If a GPA is not that great but other factors are impressive, we might take a chance anyway, and offer maybe a one-summer grant rather than two or more."

Stipends for the internships vary, but the standard for a high school student is approximately \$2,000 for a summer internship, or \$5 an hour if the work continues through the school year. College students are paid \$6 an hour, full time, during the summer and up to half-time during the academic year. If a student finds an internship in another state, he or she is responsible for finding, and paying for, living arrangements.

Graduate students are paid whatever the institution pays graduate research assistants, which can include tuition in a "compensation package" that may not exceed the beginning level of a postdoctoral fellow (up to \$23,000). The salary level for a postdoctoral fellow is consistent with the salary level for other postdoctoral fellows at the institution. Investigators (faculty) are paid up to \$40,000 per year for salary and fringe benefits.

Of all the programs sponsored by the NIH, René says, "This is the one I like best because it provides opportunities for minority students wherever they are and puts them in a researchintensive environment wherever they want to go."

Some areas in which students have become involved in research programs include: alcohol abuse and alcoholism, infectious disease, cancer, child health and human development, environmental health sciences, and human genome research.

If you are interested in applying for an NIH Research Supplement, you can contact Dr. René at:
NIH/NIGMS 45 Center Drive MSC 6200, Bethesda, MD 20892-6200, (301) 594-3833 or (301) 402-0156 (fax); or e-mail him at ReneA@gm1.nigms.nih.gov.◆

#### **Upcoming Test Dates**

#### American College Testing Program (ACT)

Registration: May 10, 1996 Test: June 8, 1996 For information, call: (319) 337-1000

## Scholastic Assessment Tests (SAT I & II)

Registration: April 26, 1996 Test: June 1, 1996 For information, call: (609) 771-7600

#### Dental Admission Test (DAT)

Registration: September 3, 1996 Test: October 12, 1996 For information, call: (312) 440-2689

## Medical College Admission Test (MCAT)

Registration: July 19, 1996 Test: August 17, 1996 For information, call: (319) 337-1357

#### Optometry Admission Test (OAT)

Registration: September 16, 1996 Test: October 26, 1996 For information, call: (312) 440-2693

#### **Upcoming Event**

The New England Board of Higher Education, the Massachusetts Institute of Technology (M.I.T.) and the Black Alumni of M.I.T. will hold the annual Science and Engineering Academic Support Network Conference on Saturday, October 12, 1996 at the M.I.T. Stratton Student Center on Massachusetts Avenue in Cambridge. The conference is from 8:00 am – 5:00 pm. For more information, or to register, call Emorcia Hill at (617) 357-9620. It's not too early to register!

#### Resources

The Internet's World Wide Web is one of the most promising locations for finding educational and career opportunities, as well as sources for financial aid. Following are sites singled out in this category by *PC Magazine* this year in its annual "100 Top Web Sites" issue.

Internet College Exchange, a collection of information that will help high school students applying to colleges develop a list of potential colleges, select the ideal school from that list, fill out applications, look into financial aid, and respond to acceptance letters. There are also special links for parents and counselors, a bookstore, a newsletter and a list of all major U.S. colleges that have Internet sites. http://www.usmall.com/college

Financial Aid Information, a collection of books, phone numbers, Usenet newsgroups, services, bibliographies, and mailing lists that offers a roadway to all the latest grants, loans, scholarships and fellowships. It also includes FastWeb, a searchable database of even more financial information.

http://www.cs.cmu.edu/afs/cs.cmu.edu/user/mkant/Public/FinAid/finaid.html

The Internet's Online Career Center, including jobs databases broken down by industry, state, city or keyword. This site also lets you read up on nationwide career fairs, seek out advice and post resumes in HTML format. http://www.occ.com

The Monster Board, containing roughly 45,000 job opportunities from more than 700 corporations, which can be browsed manually or searched with a keyword engine. It includes a resume database, employer profiles and career fair updates. http://www.monster.com/home.htm.

#### **Books in Print**

Getting into Medical School: A Planning Guide for Minority Students is a must for African-American, Latino and Native American students applying to medical schools. Written "by doctors for prospective doctors," the book includes chapters on: Summer Opportunities, Beating the MCAT, The Application, The Interview, and Financing a Medical School Education. The book was published in 1996 by Williams & Wilkins. Proceeds from sale of the book go to AFRINATO, a non-profit corporation that supports the educational endeavors of African-American, Latino and Native American students who aspire to become physicians.