

USING INDIRECT COSTS *Effectively*

BY SUSAN ATHEY, NIGMS

Need a piece of equipment to boost your university's research capabilities? Or maybe an administrative assistant to help keep your program and others' running smoothly? Are such costs allowable, and if so, how should they be charged to your grant?

These expenses typically fall under the category of facilities and administration (F&A) costs and are often referred to as "indirect" costs. And yes, F&A funds can assist your university in purchasing equipment or hiring program support staff. But often, F&A costs are not spent correctly—or completely—and unused money ends up being returned to the funding agency at the end of the grant period. So it serves you and your institution well to understand these costs and make the most of them during the lifetime of your grant.

F&A Costs "Unmasked"

Office of Management and Budget Circular A-21, "Cost Principles for Educational Institutions," spells out what is allowable in terms of costs applicable to Federal grants, contracts, and other sponsored agreements with educational institutions. The circular delineates what can be charged as direct costs and what should be charged as indirect costs.

"Direct" costs are those that are directly tied to your specific project and can be clearly identified as such. These costs include expenses like faculty salaries, student stipends, and travel funds for scientific meetings.

F&A costs are incurred for common objectives of your university and therefore cannot be easily identified with your particular research project, instructional activity, or other institutional activity. Examples of F&A costs include student services, building operations and maintenance, building and equipment depreciation, library expenses, departmental secretarial assistance, office supplies, and administration.

Knowing what expenses to charge as direct costs and those to charge as F&A costs can be tricky. When you receive your grant award, you receive a set amount of money to get your program up and running (aka your direct costs). The award may also include an allowable percentage of your direct costs that are funded as F&A costs. For example, the Minority Access to Research Careers (MARC) Undergraduate Student Training in Academic Research program allows F&A costs at the rate of 8 percent of total allowable direct costs (less equipment and tuition). F&A costs on Support of Continuous Research Excellence (SCORE) grants are generally much

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Roman J. Garcia (left), a Minority Biomedical Research Support program participant at Florida International University in Miami, performs research with his mentor Lidia Kos, Ph.D. Garcia recently received the 2004 PanAmerican Society for Pigment Cell Research Young Investigator Award. For more on student awards and activities, see the expanded online version of the *Minority Programs Update* at <http://www.nigms.nih.gov/news/mpufall04>.

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Hagan Named NIGMS Associate Director for Extramural Activities

BY SUSAN ATHEY, NIGMS

Ann A. Hagan, Ph.D., was recently named NIGMS associate director for extramural activities. In this position, she oversees the fiscal management of the Institute's \$1.9 billion research and research training grant program in the basic biomedical sciences. She also advises the NIGMS director on the planning, development, and administration of Institute grant activities.

"Dr. Hagan is an exceptional scientist-manager whose skills, experience, and personality make her a perfect fit for this pivotal position. Her talent in managing people and programs will lead NIGMS forward as it continues to support cutting-edge science in new and existing areas," said Jeremy M. Berg, Ph.D., NIGMS director.

Hagan began her career as an assistant professor of biology at George Williams College in Downers Grove, IL. She first came to NIH in 1979

as a staff fellow at the National Institute of Mental Health. In 1981, she returned to academia as an assistant professor of biology at American University in Washington, DC. She rejoined NIH in 1987 as a health scientist administrator in the Grants Review Branch of the National Cancer Institute. In 1989, Hagan moved to the National Institute of Diabetes and Digestive and Kidney Diseases, where she rose through the ranks to become chief of the Review Branch. In 2000, Hagan became deputy associate director for extramural activities at NIGMS and served as acting associate director between November 2003 and May 2004.

Hagan received B.S. and M.S. degrees in biology education and a Ph.D. degree in physiology, all from the University of Illinois at Urbana-Champaign. ●

MORE Director Celebrates Opening of American Indian Museum

BY SUSAN ATHEY, NIGMS

Clifton Poodry, Ph.D., director of the NIGMS Division of Minority Opportunities in Research (MORE), was among a number of NIH employees who participated in the opening ceremonies of the National Museum of the American Indian in Washington, DC, in September. Poodry, a member of the Tonawanda Seneca Indian tribe, walked in the procession on the National Mall with fellow members of the American Indian Science and Engineering Society. Over 25,000 people participated in the procession, representing more than 400 Indian tribes.

"It was a spectacular day that brought together people from many nations in celebration of a long-anticipated event," Poodry said.

"There was a pervasive feeling of good will and hope, and of course a deep feeling of pride. The size and diversity of the procession was awesome." ●



Clifton Poodry participates in the museum's opening procession alongside Debbie Sweitzer (center), a health program assistant with the National Heart, Lung, and Blood Institute; and Becky Tudisco (right), the equal employment opportunity manager for the National Institute of Diabetes and Digestive and Kidney Diseases.

FROM THE MORE DIRECTOR

Reaching Out to the MORE Community

BY CLIFTON POODRY, PH.D., NIGMS

One of the most rewarding aspects of my job as MORE director is the opportunity to interact with grantees—to meet with you and learn about your programs and to hear your opinions and ideas. I especially appreciate the heartfelt expressions of support for the overall mission of MORE and the determination to make a significant difference.

During this past summer and early part of the fall, the staff from MORE held a series of six outreach visits with directors of MARC and MBRS programs around the country. We brainstormed ways to achieve our goals. We listened to your concerns and we thought about ways to better our programs.

One specific goal of this year's outreach visits was to hear a broad community response to proposed changes to the MBRS SCORE program. For the first time, MORE staff solicited input from the subproject principal investigators, and they were not shy with their comments. As is to be expected, we got a range of input, some positive and some negative. Some participants offered suggestions for alternative approaches. We had expected many of the comments but some we did not anticipate, which means the outreach served its purpose.

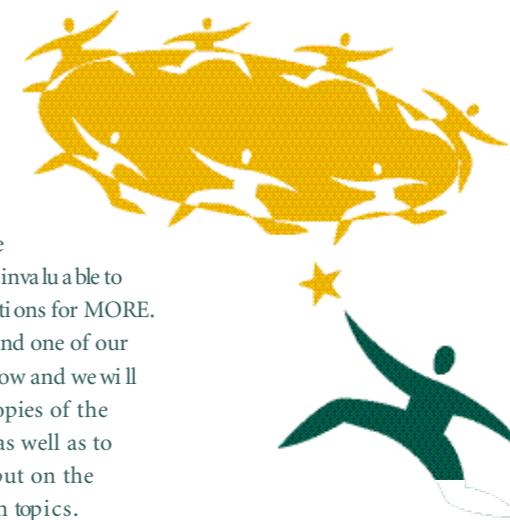
A second objective of the outreach visits was to discuss the design of student development programs so they focus on their mission while being sensitive to the laws regarding non-discrimination. In particular, we emphasized that MORE

programs are not designed to exclude any particular ethnic group from participating—they are designed to include individuals who have been historically excluded from careers in biomedical research.

I want to thank all of the program directors who participated in these meetings. Your insight is invaluable to us as we plan future directions for MORE. If you were unable to attend one of our meetings, please let us know and we will be happy to send you copies of the meeting presentations, as well as to receive your specific input on the outreach visit discussion topics.

As always, I welcome your feedback and comments. ●

Clifton Poodry, Ph.D., poodryc@nigms.nih.gov, Director, MORE Division, NIGMS, Room 2AS.37, 45 Center Drive MSC 6200, Bethesda, MD 20892-6200, 301-594-3900



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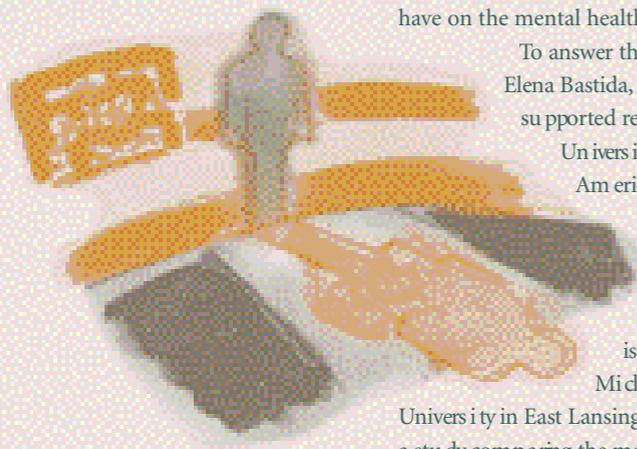
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RESEARCH HIGHLIGHT

Health Disparities Research Along U.S.-Mexico Border Reveals Surprises

BY BERNICE WUETHRICH



Thorny shrubs and mesquite lend the landscape a rough cover along the Lower Rio Grande in Southern Texas, where life can be as tough as the bristling brush—particularly for Mexican immigrants striving to settle in a new country. But what impact does this life—and the stress of migration itself—have on the mental health of immigrants?

To answer this question, Elena Bastida, Ph.D., an MBRSS-supported researcher at the University of Texas-Pan American in Edinburg, and co-investigator Israel Cuellar, Ph.D., who is now at Michigan State University in East Lansing, conducted a study comparing the mental health of Mexican immigrants and native-born Mexican Americans living in the region.

Their study addressed past research indicating that recent Mexican immigrants tend to have better mental health and be higher achievers than native-born Mexican Americans. In fact, the literature suggests that the longer Mexicans reside in the United States, the more likely they are to report detrimental mental health conditions, something that has become known as the “mental health paradox.”

But Bastida and Cuellar’s recent results challenge the paradox. They found that length of residency and immigrant status have no bearing on depression, health status, life satisfaction, or

self-esteem in study participants. On the other hand, factors such as income, age, gender, and acculturation significantly predict well-being. Indeed, the scientists’ results suggest that the longer an individual resides in the United States, the less likely he or she is to be depressed.

Bastida’s results are based on data from the Border Epidemiologic Study of Aging (BESA), of which she is the principal investigator. Beginning in 1995, Bastida and her colleagues interviewed a random sample of 1,370 Mexican-American households, some urban, some rural, all in the border region of Hidalgo and Starr counties in Texas. She grouped the respondents by age and has conducted follow-up interviews at 24-month intervals, collecting three waves of data, with a fourth under way. For the mental health and residency study, Bastida compared native-born Mexican Americans to Mexican immigrants who had lived in the United States for 15 years or less, 16–30 years, 31–45 years, and 46 years or more.

Bastida suggests that methodological differences—in population samples, mental health measures, and environmental factors—could partly explain the strikingly different results obtained by the BESA study. Specifically, she suggests that three factors may explain why length of stay or immigrant status had no effect on depression scores or well-being in her study.

First, previous studies were based on interviews with Hispanics who had been in the United States an average of 15 years or less, whereas BESA encompasses those who have been here three times as long.

Most previous work did not study Mexican immigrants who had lived the majority of their lives in the United States, as did Bastida’s study.

“Maybe earlier studies were catching people in the most difficult time of their adjustment,” she speculated.

Secondly, Bastida’s study population was significantly older than those in other studies. The youngest person in the BESA study was 45 years old and the mean age was 62.

Finally, the BESA study participants all lived along the U.S.-Mexico border, where Spanish is commonly spoken and 85 to 95 percent of the general population is of Mexican origin. Bastida suggests that these environmental conditions may greatly influence adjustment to living in the United States.

“In our border area, ties with Mexico are very strong,” Bastida noted. The mental and physical proximity to Mexico may have a protective effect on immigrants’ mental health, she believes. ●

To read more about Bastida’s research findings, see the expanded online version of the *Minority Programs Update* at <http://www.nigms.nih.gov/news/mpufall04>.

Reference: Cuellar I, Bastida E, Braccio SM. Residency in the United States, subjective well-being, and depression in an older Mexican-origin sample. *J Aging Health* 2004;16:447-66.

continued from page 1

higher, sometimes as much as 40 to 60 percent depending on the negotiated rate. For example, if your SCORE research program receives \$300,000 in direct costs and the negotiated F&A rate is 40 percent (with no exclusions), the F&A portion of the award would be \$120,000.

F&A costs are there to help strengthen your institution’s research environment and infrastructure. Some investigators report that their institutions pass along some (or all) of the indirect costs to the departments or individuals that generate them. This is not an appropriate use of the funds, which are intended to cover such hidden costs of doing research as campus contracts and grants offices, health safety officers, hazardous waste management, and institutional review boards. Proper use of F&A funds is an important contribution to the well-being of your institution, and by extension, to all who work and learn there. ●

For a copy of Circular A-21, see <http://www.whitehouse.gov/omb/circulars/a021/print/a021.html>. For specifics on F&A costs as they apply to your grant, contact Toni Holland, NIGMS Grants Management Officer, at 301-594-5132.

DID YOU KNOW?

Former MARC trainee Jeanette L. DucutSicala was part of a research team that discovered a molecule found in nearly all cells that plays a vital role in kick-starting the production of key biological molecules involved in inflammation. The finding may lead to new strategies for blocking the devastating inflammation that lies at the heart of autoimmune disorders such as multiple sclerosis, arthritis, and lupus, as well as some cancers.

For more on NIGMS-funded research, see http://www.nigms.nih.gov/news/releases/funded_research.html

Profile

TANYA PORRAS-YAKUSHI



This section profiles former MORE participants who have excelled in their fields. We hope that the profiles will give students an idea of the types of careers available with science degrees and the paths others have taken to achieve those careers.

NIGMS Training Develops a Future Scientist

BY SUSAN ATHEY, NIGMS

In a quiet lab on the campus of the University of California, Los Angeles (UCLA), Tanya Porras-Yakushi studies how proteins are synthesized by the cell's protein-making machinery, the ribosome. Since proteins are an intrinsic part of all life processes, these studies are of fundamental importance to understanding health and disease.

Porras-Yakushi has been supported by NIGMS at various points during her education, first as an undergraduate student participant in two NIGMS minority programs and now as a predoctoral trainee.

Porras-Yakushi has come a far way since high school, where she says her interest in science was first sparked. She found she excelled in classes like chemistry and physics and because of this, she enrolled in a special summer program at California State University, Los Angeles, after graduating from high school. The program was geared toward students interested in pursuing science careers.

"One of the instructors also happened to be a senior or participant in the university's Minority Biomedical Research Support [MBRS] program," Porras-Yakushi explained, crediting the instructor with introducing her to the MBRS program and the opportunities it provided. Intrigued, Porras-Yakushi applied and was admitted to the program. Later in her undergraduate years, she became a MARC program trainee. The programs helped Porras-Yakushi with tuition, provided her with a stipend, and gave her the opportunity to conduct research under the supervision of a mentor.

Porras-Yakushi went on to earn a bachelor's degree in biochemistry in 2001 and is now pursuing a Ph.D. in biochemistry and molecular biology at UCLA. As part of her training, Porras-Yakushi is doing thesis research in the lab of Steven Clarke, Ph.D. The cellular and molecular biology predoctoral training grant that supports her is one of over 250 training grants that NIGMS awards, supporting thousands of trainees across the country.

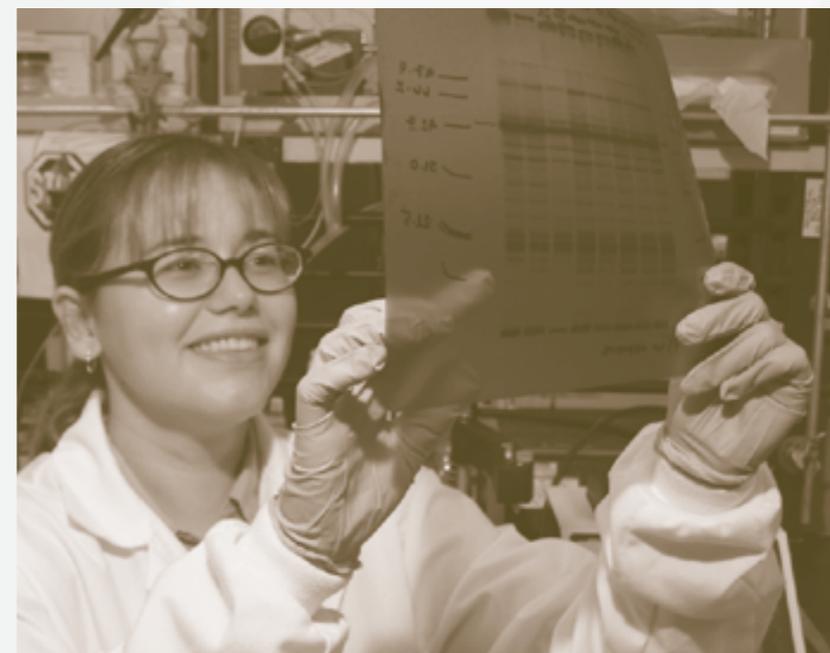
"The training grant enables me to work in a lab, travel to scientific meetings, attend special seminars that promote interdisciplinary research, and take other courses such as a required one on ethics in research," Porras-Yakushi said, adding that as a third-year predoctoral student,

she'll present her research to her fellow trainees and some faculty members later this year.

Upon receiving her Ph.D., Porras-Yakushi hopes to return to California State University, Los Angeles, to teach undergraduate biochemistry and run her own research group.

"My ideal job would also involve doing research with undergraduates," she added. ●

If you know an outstanding former MARC, MBRS, or Bridges participant who has excelled academically or professionally and you would like to nominate that person as a future Update profile subject, please let us know. Your suggestions are always welcome.



NIGMS' training programs help to provide the most critical element of good research: well-prepared scientists. In recognition of the rapidly changing, interdisciplinary nature of biomedical research today, the Institute's training programs are flexible and stress approaches to biological problems that cut across disciplinary and departmental lines. NIGMS places special emphasis on the recruitment and retention of underrepresented minorities in its training programs.

The Institute supports promising predoctoral and postdoctoral students seeking research training in the basic biomedical sciences and related behavioral and clinical fields through institutional training grants and individual fellowships.

For more information about NIGMS-supported training activities, visit <http://www.nigms.nih.gov/funding/trngmech.html> or contact:

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NEWS and Notes

- **Irene Eckstrand, Ph.D.**, the Bridges to the Future program director at NIGMS since 1999, left the program this past spring to manage a new Institute initiative aimed at harnessing the nation's computing skills to enhance our ability to respond to disease epidemics and bioterrorism. The initiative, called MIDAS (an acronym for Models of Infectious Disease Agent Study), will develop powerful computer modeling techniques to analyze and respond to infectious disease outbreaks, whether they occur naturally, such as SARS, or are released intentionally in a bioterrorist attack. **Adolphus Toliver, Ph.D.**, has taken over as interim director of the Bridges program at NIGMS.

- MORE grantees **Chellu S. Chetty, Ph.D.**, and **Margaret Werner-Washburne, Ph.D.**, were among the recipients of this year's Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring. The annual awards recognize influential individuals and institutions who have been leaders in encouraging minorities, women, and disabled persons to pursue careers in science and engineering.



Chellu S. Chetty

Chetty is a professor of biology at Savannah State University in Georgia, where he also serves as director of the school's MBRS program. He is acknowledged for mentoring undergraduate and graduate students and for his efforts to increase the number of individuals in science, mathematics, and engineering disciplines.

Werner-Washburne is a professor of biology at the University of New Mexico in Albuquerque, where she is also a subproject investigator on the university's Initiative for Minority Student Development grant. She is credited with using a

hands-on approach for mentoring students in the areas of biology, mathematics, computer science, and mechanical and chemical engineering.

Also honored was the **American Physiological Society**, which operates NIGMS-funded education and minority programs. The society was recognized for its programs for minority students and teachers and its efforts to increase diversity in the field of physiology.

A total of nine individuals and eight institutions received Presidential awards at a recent ceremony in Washington, DC. The awards were established by the White House Office of Science and Technology Policy in 1996 and administered through the National Science Foundation. Award recipients receive a \$10,000 grant and a commemorative Presidential certificate.

- **Juliette B. Bell, Ph.D.**, director of the MBRS program at Fayetteville State University in North Carolina, has been appointed dean of the newly formed College of Basic and Applied Sciences at the university. Bell, a chemistry professor, also serves as the university's director of biomedical research. During her 12-year tenure with the university, Bell has received numerous awards, including the Presidential Millennium Award for Excellence in Teaching in Mathematics, Science, Engineering, and Technology in 2000.

- MORE Director **Clifton Poodry, Ph.D.**, and several MORE program directors were among the recipients of 2004 Distinguished Awards from the Society for Advancement of Chicanos and Native Americans in Science (SACNAS). The annual awards recognize individuals who have dedicated themselves to science, education, and mentoring.



Margaret Werner-Washburne

Poodry was honored with the society's Professional Mentor Award. Other honorees included **Laura J. Robles, Ph.D.**, a professor of biology and acting dean of graduate studies and research at California State University, Dominguez Hills, who received the Distinguished Undergraduate Institution Mentor Award; **Elma Gonzalez, Ph.D.**, a professor of biology at the University of California, Los Angeles, who received the Distinguished Scientist Award; and **J. Dennis O'Malley, Ph.D.**, a chemistry instructor at Haskell Indian Nations University in Lawrence, KS, who received the Community/Tribal College Mentor Award.

The honorees received their awards at the 2004 SACNAS conference in Austin, Texas, in October.

- **Janice Blum, Ph.D.**, a Bridges to the Doctorate faculty mentor and a professor of microbiology and immunology at the Indiana University-Purdue University School of Medicine in Indianapolis, received the 2004 Alvin S. Bynum Award for Excellence in Academic Mentoring. The award recognizes an outstanding faculty member who has demonstrated longstanding commitment to fostering an atmosphere of learning at the university.
- In recent months, we have received word about the following student participants in NIGMS minority programs. • **Jeanette L. Ducut Sigala**, a former MARC under graduate student at California State University, Northridge, received her Ph.D. in the

biological sciences from the University of California, San Diego, and is now a postdoctoral fellow at the Salk Institute for Biological Studies in La Jolla, CA. • **Annette Gabaldón**, a former MBRS program participant at New Mexico State University in Las Cruces, completed her Ph.D. at the University of California, Davis, and is now an assistant professor of biology at Colorado State University, Pueblo. • **Pa Linda Parikh**, a former MBRS program participant at Barry University in Miami Shores, FL, received an M.D. from Ross University School of Medicine in Edison, NJ, and is now an assistant professor of psychiatry at Weill Medical College of Cornell University in New York City. •

We are always interested in hearing about NIGMS minority program faculty, alumni, and students.

Photographs of your students, research labs, and activities are also welcomed and encouraged.

Please send information to:

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DID YOU KNOW?

NIGMS has science education materials available for use in your classroom. In addition to a set of publications on chemistry, genetics, structural biology, and pharmacology, the Institute produces the feature publication *Findings*, which highlights the research of selected NIGMS-funded scientists. In this publication, students can also read about recent, clinically relevant NIGMS-funded research studies and solve a crossword puzzle containing words used in the stories.

For more on NIGMS science education resources, see http://www.nigms.nih.gov/news/science_ed

Attention All Readers

Be sure to check out the expanded online version of the *Minority Programs Update*. There you will find additional news about MORE activities and participants including student presentations, recent graduates, and upcoming meetings.

<http://www.nigms.nih.gov/news/mpufall04>

SELECTED PUBLICATIONS

by MORE Faculty and Students (listed by institution)

BARRY UNIVERSITY

Bingham SM, Mudd LM, Lopez TF, Montague JR. Effects of ethanol on cultured embryonic neurons from the cerebral cortex of the rat. **Alcohol** 2004;32:129-35.

Lin YP, Petrino TR, Wallace RA. *Fundulus heteroclitus* gonadotropins.5: Small scale chromatographic fractionation of pituitary extracts into components with different steroidogenic activities using homologous bioassays. **Reprod Biol Endocrinol** 2004;2:14.

CITY UNIVERSITY OF NEW YORK, YORK COLLEGE

Dubrovsky EB, Dubrovskaya VA, Leviner L, Schiffer S, Marchfelder A. *Drosophila* RNase Z processes mitochondrial and nuclear pre-tRNA^{Leu(UUR)} 3' ends *in vivo*. **Nucleic Acids Res** 2004;32:255-62.

Leviner L, Oestreicher I, Florentz C, Morl M. A pathogenesis-associated mutation in human mitochondrial tRNA^{Leu(UUR)} leads to reduced 3'-end processing and CCA addition. **J Mol Biol** 2004;337:535-44.

Toompuu M, Levinger LL, Nadal A, Gomez J, Jacobs HT. The 7472insC mtDNA mutation impairs 5' and 3' processing of tRNA^{Ser(UCN)}. **Biochem Biophys Res Commun** 2004;322:803-13.

CUYAHOGA COMMUNITY COLLEGE

Kwan ML, Battiste MA, Macala MK, Aybar SC, James NC, Haoui JJ. Diethylaluminum chloride mediated vinylsilane synthesis: comparison of different solvent systems. **Synthetic Comm** 2004;34:1943-50.

FLORIDA INTERNATIONAL UNIVERSITY

Martinez L, Almagro JC, Coll JL, Herrera RJ. Sequence variability in the fibroin-H intron of domesticated and wild silk moths. **Insect Biochem Mol Biol** 2004;34:343-52.

Pereira-Simon S, Sierra-Montes JM, Ayesh K, Martinez L, Socorro A, Herrera RJ. Variants of U1 small nuclear RNA assemble into spliceosomal complexes. **Insect Mol Biol** 2004;13:189-94.

JOHNS HOPKINS UNIVERSITY

Nguyen DM, Reynald RL, Gittis AG, Lattman EE. X-ray and thermodynamic studies of staphylococcal nuclease variants I92E and I92K: insights into polarity of the protein interior. **J Mol Biol** 2004;341:565-74.

MEHARRY MEDICAL COLLEGE

Hu L, Xu X, Valenzuela MS. Initiation sites for human DNA replication at a putative ribulose-5-phosphate 3-epimerase gene. **Biochem Biophys Res Commun** 2004;320:648-55.

Shi M, Yang H, Motley ED, Guo Z. Overexpression of Cu/Zn-superoxide dismutase and/or catalase in mice inhibits aorta smooth muscle cell proliferation. **Am J Hypertens** 2004;17:450-6.

Wormley DD, Ramesh A, Hood DB. Environmental contaminant-mixture effects on CNS development, plasticity, and behavior. **Toxicol Appl Pharmacol** 2004;197:49-65.

MOREHOUSE SCHOOL OF MEDICINE

Bayorh MA, Ganafa AA, Socci RR, Silvestrov N, Abukhalaf IK. The role of oxidative stress in salt-induced hypertension. **Am J Hypertens** 2004;17:31-6.

Gharavi AE, Vega-Ostertag M, Espinola RG, Liu X, Cole L, Cox NT, Romagnoli P, Labat K, Pierangeli SS. Intrauterine fetal death in mice caused by cytomegalovirus-derived peptide induced by aPL antibodies. **Lupus** 2004;13:17-23.

STANFORD UNIVERSITY

Lacayo CI, Theriot JA. *Listeria monocytogenes* actin-based motility varies

depending on subcellular location: a kinetic probe for cytoarchitecture. **Mol Biol Cell** 2004;15:2164-75.

STILLMAN COLLEGE

Neggers YH, Singh J. Effect of dietary protein, zinc, and carbon monoxide on fetal zinc concentration in mice. **Biol Trace Elem Res** 2004;98:171-9.

TEXAS A&M UNIVERSITY, KINGSVILLE

Bhattacharya A, Purohit VC, Beller NR. Benzoin condensation: monitoring a chemical reaction by high-pressure liquid chromatography. **J Chem Ed** 2004;81:1020-22.

UNIVERSITY OF THE DISTRICT OF COLUMBIA

Nath N, Pokharia S, Eng G, Song X, Kumar A, Gielen M, Williams R, Besemans M. New trimethyl tin (IV) derivatives of dipeptides: synthesis, characteristic spectral studies and biological activity. **Appl Organometal Chem** 2004;18:460-70.

Song X, Duong Q, Mitrogorji E, Zapata A, Nguyen N, Strickman D, Glass J, Eng G. Synthesis, structure characterization and larvicidal activity of some tris-(para-substituted phenyl)tin. **Appl Organometal Chem** 2004;18:363-8.

WAKE FOREST UNIVERSITY SCHOOL OF MEDICINE

Aileru AA, Logan E, Callahan M, Ferrario CM, Ganten D, Diz DI. Alterations in sympathetic ganglionic transmission in response to angiotensin II in (mRen2)27 transgenic rats. **Hypertension** 2004;43:270.

Send in your references for inclusion in Selected Publications. We would appreciate your contribution to this section in order to represent as many NIGMS minority programs as possible. Complete bibliographical citations can be phoned, faxed, mailed, or e-mailed to the Editor (see page 2).

RECENT

Awards and Fellowships

PREDOCTORAL FELLOWSHIPS FOR MINORITY STUDENTS (listed by fellow and graduate institution)

Kimberly Barnett
University of Maryland,
Baltimore County

Katherine M. Butler
University of Wisconsin,
Madison

Darian Cash
University of California,
Los Angeles

Shawn M. Castro
University of Texas Medical
Branch at Galveston

Adrienne M. Cottrell
University of Georgia,
Athens

Celso A. Espinoza
University of Colorado
at Boulder

Gerardo E. Fernandez
University of California,
Los Angeles

Cerrone R. Foster
East Tennessee State
University, Johnson City

Nestor E. Franco
University of California,
Los Angeles

Melva T. James
Massachusetts Institute of
Technology, Cambridge

Andres A. Larrea
University of Miami School
of Medicine, FL

Kimberly R. Marshall-Batty
Georgetown University,
Washington, DC

Zulimar Nevarez
University of California,
Irvine

Lake N. Paul
Purdue University,
West Lafayette, IN

Javier G. Read De Alaniz
Colorado State University,
Fort Collins

Alicia M. Richarte
University of Texas
Southwestern Medical
Center at Dallas

Jacqueline F. Rivera
University of Southern
California, Los Angeles

Brenda Salerno
Johns Hopkins University,
Baltimore, MD

Odeniel Sertil
Albany Medical College, NY

Lavinia Sheets
Oregon Health & Science
University, Portland

Leonard S. Smith
Rockefeller University,
New York, NY

BRIDGES TO THE FUTURE AWARDS (listed by institution and principal investigator)

Bridges to the Baccalaureate

Daytona Beach Community
College, FL
Ram Nayar

Fort Valley State
University, GA
Clinton Dixon

Harry S Truman College,
Chicago, IL
Joseph L. Kyle

Monroe Community
College, Rochester, NY
Paul Wakem

San Juan College,
Farmington, NM
Eric T. Miller

University of Connecticut
Health Center, Farmington
Marja M. Hurley

Bridges to the Doctorate

University of Illinois
at Chicago
Nurtan A. Esmen

University of Texas
at Arlington
Mary L. Bond

University of Texas Medical
Branch, Galveston
Cary W. Cooper

MBRS RISE AWARDS (listed by institution and principal investigator)

Grambling State
University, LA
Felix I. Ifeanyi

Morehouse College,
Atlanta, GA
Jann H. Adams

University of Texas at
Brownsville and Texas
Southmost College
Eldon L. Nelson

Universidad del Este,
Carolina, Puerto Rico
Lilliam Lizardi

University of Maryland,
Eastern Shore,
Princess Anne
Joseph M. Okoh

University of Texas
at El Paso
Renato J. Aguilera

MBRS SCORE AWARD
(listed by institution and
principal investigator)

Alabama A&M University,
Huntsville
Purushottam G. Kale

MBRS IMSD AWARDS (listed by institution and principal investigator)

Louisiana State University
and A&M College,
Baton Rouge
Robert M. Strongin

Oklahoma State University,
Stillwater
Robert V. Miller

University of North Texas
Health Science Center at
Fort Worth
Thomas Yorio

MARC U*STAR AWARDS (listed by institution and principal investigator)

California State University,
Bakersfield
Carl R. Kemnitz

Queens College, City
University of New York,
Flushing
Zahra Zakeri

St. Augustine's College,
Raleigh, NC
Mark A. Melton

MARC ANCILLARY TRAINING ACTIVITIES AWARDS (listed by institution and principal investigator)

Brown University,
Providence, RI
Valerie P. Wilson

National Coalition of Ethnic
Minority Nurse Associations,
Culver City, CA
Betty L. Williams

INSTITUTIONAL RESEARCH AND ACADEMIC CAREER DEVELOPMENT AWARDS (listed by institution and principal investigator)

University of Pittsburgh, PA
Vanathi Gopalakrishnan

University of Texas
Southwestern Medical
Center at Dallas
Marc Turcotte

Washington University,
St. Louis, MO
Robert Culverhouse

Yale University,
New Haven, CT
Rachel E. Mahaffy

ACRONYMS USED IN THIS ISSUE

BESA	Border Epidemiologic Study of Aging
F&A	Facilities and Administration
MARC	Minority Access to Research Careers
MBRS	Minority Biomedical Research Support
MIDAS	Models of Infectious Disease Agent Study
MORE	Minority Opportunities in Research
NIGMS	National Institute of General Medical Sciences
NIH	National Institutes of Health
SACNAS	Society for Advancement of Chicanos and Native Americans in Science
SCORE	Support of Continuous Research Excellence
UCLA	University of California, Los Angeles



The Division of Minority Opportunities in Research administers research and research training programs aimed at increasing the number of minority biomedical scientists.

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For more information, see the MORE Division Web site at <http://www.nigms.nih.gov/minority>.

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