Tell a story: Teaching science should have a narrative component, Goodenough says

BY TONY FITZPATRICK

There is a good story behind science, but one not often telling it in American classrooms. According to Urmila Goodenough, Ph.D., professor of biology in Arts & Sciences, science continues to be taught from K-12 to the college and university levels, in fragmental, incoherent bits and pieces rather than a coherent narrative, a history of nature. What's totally lacking in the teaching of science is what I call a history of nature, what happened from the Big Bang on," Goodenough said. "In the past few decades, the history of nature has really come together as an integrative story, with theories of the Big Bang, plate tectonics and advances in understanding biological evolution all tying the story together.

"Studies have shown that humans learn best when information is packaged in the form of a story. But the historical sciences — cosmology, evolutionary biology and earth science — exist independently in their own domains. There is no linkage."

Over the past year, Goodenough joined five other distinguished scientists in a review of the 50 state science standards for a project funded by the Fordham Foundation. She said roughly half of the states failed, and another 20 percent graded out as "C.”

"What we found was troubling, both as parents and as scientists," she said. "Only 19 states have produced standards that we would consider meritocratic — as parents, we would be satisfied to have our children educated in such contexts — while 16 were highly flawed, and 15 were flat-out unacceptable."

Tell a story: Teaching science should have a narrative component, Goodenough says

Katrina victims get a helping hand from WUSTL students

BY NEIL SCHOENHERR

H urricane Katrina slammed the Gulf Coast in August, killing at least 1,422 people and causing more than $73 billion in damage.

Many Southerners who escaped Katrina's wrath have been returning to assess what is left of their homes and businesses. Though nothing can bring back what has been lost, thousands of volunteers have been doing what they can to ease residents' pain.

More than 200 WUSTL students did just that over spring break. They traveled to Louisiana, Mississippi and Alabama to clear trash, repair homes, prepare food and provide some measure of support to those hardest hit.

"The experience was incredible," said junior Rachel Voss, who worked with Lutheran Campus Ministry in Bayou La Batre, Ala. "We were definitely challenged by the construction, which included measuring, cutting and hanging plywood walls, attaching trim and installing doors. But I learned a lot about construction, and the family (being helped) was very appreciative of us being there."

"By the end of the week, we didn't want to leave," everyone cried when we departed, including the owner of the house. It was, by far, the most meaningful and inspirational spring break I have had.

Students traveled in seven groups, loosely coordinated by the University's Community Service Program. The groups were the Catholic Student Center; Overflow, the ministry of Campus Crusade for Christ; Diocese of the Upper Midwest — Catholic Campus Ministry; the interfaith ministry of Central Union Missionary Baptist Church; and WUSTL's College of Social Work.

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Templeton awarded Fulbright-Israel Distinguished Chair

BY TONY FITZPATRICK

A lan R. Templeton, Ph.D., the Charles Rebechick Professor of Philosophy and the Center for the Study of Religion and Societies in the College of Arts & Sciences, has been awarded the Fulbright-Israel Distinguished Chair and will begin his six-month assignment Feb. 1.

The Fulbright-Israel Distinguished Chair Program offers distinguished American scholars the opportunity to spend a short time in Israel to develop, present and teach courses at a university. Templeton will be the only such chair in all of the natural sciences, social sciences and humanities in Israel. Candidates need to have significant publications and teaching records.

Templeton said he will spend the six months primarily in Hifa, where he will split time between the Rappaport Research Institute — a medical center that is part of the prestigious School of Medicine of the Technion, housing Israel's two Nobel laureates — and the University of Haifa. He will also travel around Israel, presenting seminars at various universities.

"I feel greatly honored to have won this chair," Templeton said. "In Hifa, I will teach a course in population genetics that emphasizes its application to human genetics. I will also attend by both graduate students and undergraduates." Templeton is a member of the Institute of Evolution at the University of Haifa and the Rappaport Institute, which is located at Weizmann Institute of Hifa and two Israeli collaborations.

The Fulbright program provides a broad population and evolutionary biologist who is also the director of the Rappaport Research Institute. He has shown that the human migration out of Africa instead of Asia, and will begin his six-month assignment Feb. 1. and will begin his six-month assignment Feb. 1. and is the prestigious School of Medicine of the Technion, housing Israel's two Nobel laureates — and the University of Haifa. He will also travel around Israel, presenting seminars at various universities.

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Graduate students are presented to research at symposium

BY NEIL SCHMEMANN

No one in its 11th year, the Graduate Student Research Symposium at Washington University in St. Louis will be held March 1-2 in the Science Center, at the corner of Euclid and Kingshighway. The symposium is open to students and faculty at all of the Arts and Sciences colleges and schools within the University, encouraging graduate students to present their research in five different areas: History and Social Sciences, Biological and Physical Sciences, Behavioral and Social Sciences, Arts and Letters, and International and Area Studies.

The symposium provides opportunities for students to share their research with fellow students and with the general public. It is also open to the public, including faculty, staff, and visitors.

Templeton has chaired or co-chaired more than 200 such seminars, and is a member of the Rappaport Research Institute — a medical center that is part of the prestigious School of Medicine of the Technion, housing Israel's two Nobel laureates — and the University of Haifa. He will also travel around Israel, presenting seminars at various universities.

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Investigational approach to AIDS treatment may allow patients to clear all HIV

BY MICHAEL C. PURDY

Clinicians who care for patients infected with HIV are facing a new set of experimental treatments that may eliminate the hidden copies of the virus that previously have made a cure or sustained virologic control challenging. AIDS treatment centers, including the AIDS Clinical Trials Unit (ACTU) at the School of Medicine, are participating in the trials, which are recruiting those infected with HIV who have not yet begun taking anti-HIV treatments.

Treatments based on combinations of several different AIDS drugs have already transformed the lives of many people with inflammatory lung diseases and should accelerate efforts to clear HIV from the body, according to a study published in the Journal of the American Medical Association.

"Endotoxin is a purified bacterial substance that triggers inflammation," said Schuster. "The technique we used keeps that inflammation from becoming systemic."
Lectures

Friday, Monday 24


Saturday, March 25

4-6 p.m. African Film Festival. African Perspectives: Parts I and II. Busch Hall. 935-6419.

Sunday, March 26

7 p.m. African Film Festival. A Haitian Woman's Journey: Parts I and II. Busch Hall. 935-6596.

Monday, March 27

8 a.m. Dalian Film Festival. Before Midnight. Sr. sc. advising, Busch Hall. 935-6419.

Tuesday, April 4

8 a.m. Chinese Film Series. "Legitimacy, Efficacy and Universality in the Age of New Media." (Continues through April 6.) Eliot Hall, 935-6543.

Wednesday, April 5

5 p.m. Academic Women's Network Seminar. "The Bizarro World of Angiology". Susan S. Chang, prof. of medicine. Busch Hall, Rm. 201, Hurst Lounge. 935-5175.

Wednesday, April 5

5 p.m. Immunology Research Seminar Series. "Rationale of LDL is the major source of the remaining LDL receptor-independent uptake of ApoB-100 from HDL: A new paradigm for atherogenesis." R. P. Kiessling, asst. prof. of medicine, U. of Chicago. Busch Hall, Rm. 201, Hurst Lounge. 935-5175.

Unboudnded, an ensemble piece choreographed by junior Jennifer Jothers, will be performed March 31-April 1 as part of the Performing Arts Department in Arts & Sciences' biennial Young Choreographers Showcase. Pictures (above left) are sophomores Meredith Wilkins, Heather Wigmore and Alyssa Moran. Selected by a jury comprising the full-time Dance faculty, and guest artists Massa, Mary Jean Costello, and Melissa O'Connell, the P.A.D.'s music director for dance. "Students undergo three rounds of auditions," Marchant said. "We think that the performance is followed by a selection of the best choreography that WUSTL at the recent American"
Washington University Opera to present Carlisle Floyd's Susannah March 24-25

By Lila Ottens

The Washington University Opera will present Carlisle Floyd's Susannah, which updates the biblical story of Susannah and the elders of Judah, in 4 p.m. March 24 and 25.

The performances are presented by the Department of Music in Arts & Sciences and will take place in Edison Theater.

Set in New Hope Valley, Tenn., the story centers on Susannah of New Hope, a beautiful young woman who finds herself accused of adultery by two elderly men. The performance features growing up in rural South Carolina as the son of a subsistence farmer and many of the themes of hypocrisy, mistrust and misunderstanding — remain all too relevant today.

"We wanted to do so much that is still happening in the world around us," Stewart said. "When we find ourselves unable to understand the strange, the all too relevant today."

Those who started with high-er cholesterol levels, especially LDL cholesterol, benefit. But she said the sterols are not as effective when used alone without dietary changes. The sterol pills used in the study were given as an additional therapy, not as the only cholesterol-lowering treatment.

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Additional symposium ses- sions will be held March 31 and April 1 in Simon Hall Room 122.

"After the Digital Divide" will focus on presentations and discussions by more than 20 artists, art historians, museum professionals and new-media experts from across the United States and Europe. Topics will highlight the aesthetic implications of digital media as well as related technical and logisti- cal issues, such as how digitiza- tion changes the distribution and storage of art works.

"The place of art and of the aesthetic, has undergone dra- matic changes," said Lutz Koepnick, Ph.D., professor of Germanic languages and literatures in Arts & Sciences, who organ- ized the symposium with Erin Coughlin, Ph.D., assistant professor of Germanic languages and literatures.

"While contemporary artists avow their engagement with so- phisticated electronic media, their written explicitly discuss what earlier generations considered the tools and bound- aries of artistic expression," Koepnick said. "The recent surge of Web and SMS arts, digital and virtual art, theory- worked writing, and — electro- nics and multimedia instal- lation projects and musical composition practices — not only reflect the impact of new sources of creativity, but also challenge the very nature of art and how we should think about it."

Yet Koepnick added that the symposium also aims to point out the "triumphalism" that often sur- rounds new kinds of art.

"Rather than to play out the new against the old, the speakers of this conference are challenged to think about the past, present and future of the aesthetic as structured by criti- cisms, different complex, technical transformation, and meaningful alternatives."

Eliasson was born in Copenhagen in 1967, Eliasson studied at the Royal Danish Academy of Art and in London. In 1996 he founded the Studio Wilhem, known for his Weather Project, which drew 2.3 million visi- tors. In the late 1990s, he began a project to expose the sun. "We have also created installations for the Alfo Musuem in Arhus, Den- mark (2004), the Kunstmuseum in Iowa City (2004), and the 2003 Venice Biennale, among many others," Eliasson said. "We use materials and light to create installations for the new Copenhagen University building and in a dramatic 9.3-meter-tall spiral off the Tate Modern in London. The aim of the symposium is to keep these discussions going on around the world."
Faculty Fellow Sandweiss to lead grad-student workshop today

Martina Sandweiss, Ph.D., professor of History and Ameri-
can studies at Amherst College and co-founder of the Arts & Sciences Reading From Personal Collectors" at 10 a.m. today in the Art and Artifacts Lab, in the Arts & Sciences Library Building, Room 201. She is the author of "Laura Gilpin: An Enduring Grace (1984), Laura Gilpin: The World in War; Prints and Daguerreotypes of the Westhetic Era (1989), editor of Photography in Nineteenth-Century America (1991), co-editor of The Shadow of Evolution: Life, Earth and the Cosmos (2006)," which presents a scien-
tific view to a world-dis-
fected students who take it as a re-
quired class. She said her col-
lleagues have taught it for five years.

"The students report that their interest in, and mastery of, sci-
tific concepts is greatly enhanced when such larger contexts are provided," she said.

The students who report that their interest in, and mastery of, scientific concepts is greatly enhanced when such larger contexts are provided. She said, "Our goal is to help students understand how the history of science contributes to our understanding of the world and how it impacts our daily lives.

In some cases, a lackluster presentation of scientific concepts can greatly enhance students' understanding of the material. As practiced in American schools, science education often fails to convey to students the potential of science leading a graduate-student workshop on "The Epic of Evolution: Life, Earth, and the Cosmos," presented to students the potential of science, and its impact on our daily lives.

The current version of the No Child Left Behind Act requires that states meet test standards in science and math, and that they develop "standards for the teaching of evolution, life, and the cosmos." This is to ensure that students understand the scientific basis for these topics and can apply it to their own lives.

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Neureuther Student Book Collection Essay Competition seeks entrants

University students who have a passion for collecting books, see details about how to enter are available online at library.wustl.edu/collections/neureuther.html.

Students should deliver their materials to the Department of Special Collections on the main level of Olin Library, weekdays from 8:30 a.m.-5 p.m. through April 3. Judges will consider the collection's scope, thematic unity, personal value to the collector and other factors. Winners will be announced and awards presented in late April.

The Neureuther Competition is made possible by the financial contributions of Carl Neureuther, a 1940 WUSTL graduate. This year, two first-place winners of the Neureuther Competition will be eligible to enter the Fine Books & Collections 2006 Collegiate Book-Collecting Championship.

The Neureuther Competition is designed to encourage students in all disciplines to develop personal libraries and to develop personal libraries during the school year, except school years of academic calendar. The competition is open to all students, including those who are enrolled in on-campus degree programs, part-time students, or those who are enrolled in on-campus degree programs, part-time students, or those who are not currently enrolled in on-campus degree programs.

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Miller, professor emeritus in law school; 84

Charles H. Newman, professor of English in Arts, Sciences, died Monday, March 13, 2006, at Barnes-Jewish Hospital after a lengthy illness. He was 67.

In mid-career, based on a pedagogical interest and seemingly limitless potential, Charles Newman was widely seen as one of the most exciting and unusual fiction writers in America," said David A. Lawton, Ph.D., professor and chair of English.

"In recent years, he has contended with courage against much serious illness. He nevertheless leaves a great legacy of completed work, including his Commentaries that should guarantee his reputation a second major flowering. He is likely to be remembered, and read, as a major figure." Newman earned a bachelor's degree in American studies, summa cum laude, from Yale University in 1964. He taught at Northwestern University from 1964-1979, where he was professor and chair of The Writing Seminars at Johns Hopkins University from 1979-1979. From 1978-79, took a break from academia and was owner/ manager of a horse- dog-breeding farm in Volney, N.Y., while he was working on his fourth novel, White Jazz, published in 1980.

Newman first came to WUSTL as the Visiting Hurst Professor of Creative Writing in January 1984, in 1985, he was visiting professor of English, and in July 1986, he became a full professor.

Newman is survived by his wife, Patricia E. Miller of Austin, Texas; and a daughter, L. Miller of St. Paul, Minn., and two grandsons.

Miller is survived by his wife, Lucille; two daughters, Deborah F. Miller of St. Paul, Minn., and Barry Miller of St. Louis, Mo.

The burial was March 15 at Jefferson Barracks National Cemetery.

The school law will host a memorial service at 5 p.m. April 20 in the Bryan-Covey Courtroom in Anheuser-Busch Hall. A reception will follow.

A Agrawal, retired professor of neurology

Harsh C. Agrawal, Ph.D., professor of neurology and of pediatrics, died in Miami Feb. 3, 2006, after a long illness. He was 66.

Agrawal was born in India in 1947 and earned a doctorate in biochemistry from Allahabad University in 1969.

Prior to arriving at Washington University in 1970, he was a lecturer at Charing Cross Hospital and St. Thomas's Department of Biochemistry in London.

He was the recipient of the Research Career Development Award from the National Institutes of Health (NIH) from 1974-1979, and was a member of the Neurology Study Section of NIH.

In his research career, he was known for his work in science education. He was 95.

Agrawal is survived by his wife, Patricia E. Miller; and sons, Daniel J. Miller of Southaven, Miss., and Robert J. Miller of Austin, Texas; and a daughter, L. Miller of St. Paul, Minn., and two grandsons.

—Andy Clandemom

Obituaries

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The singing neuropathology professor

BY BETH MILLER

Arie Perry puts a new twist on old songs to help students learn about brain disorders

It’s not likely many medical students can say they learned music appreciation in a neuropathology class — except for those in Arie Perry’s class.

Perry, M.D., associate professor of pathology and immunology in the School of Medicine, takes songs such as "Gimme Some Lovin’," "Desperado" and "Danny’s Song" and adds new lyrics to explain complicated neurological disorders such as oligodendroglioma, ependymoma and pituitary adenoma.

Students seem to anticipate the end of the lectures, when Perry pulls out his guitar and sings one of his songs on a lecture topic. He provides the lyrics and mp3 files to students so they can follow along.

"It’s fun for the students and fun for the professor as well," Perry says. "I enjoy seeing people perk up, doing something other than hours of lectures."

The soft-spoken Perry began writing songs about neuropathology as a resident at the University of Texas-Southwestern Medical School, when an attending physician at a conference jokingly challenged the residents to be more entertaining. Perry took it to heart and wrote his first song. "Schwannoma," about a peripheral nerve tumor. By the end of his song, Perry had added two or three times more people into the room from those passing by who wanted to listen.

"Later on, when I began teaching medical students, I found the songs to be a useful tool for people with better musical memories than nonte memories," Perry says.

"There’s a lot of good musicians in medicine."

When writing songs on neuropathology, Perry works to find several pieces that might fit the rhythm of the topic. "It’s a challenge to get the longer medical terms into a preexisting format," he says.

That rings true in the "Pituitary Adenoma" song, sung to the tune of "Danny’s Song," recorded by The Beach Boys.

"Pituitary adenoma, with your disrupted craniocerebral stream" you’re lost in the mucin pattern of the normal gland four cells appear so monomorphous, with little or round and perfect And sans and pepper nuclear chromatin... Perry, who has won several teaching awards — including the distinguished service teaching award from three classes and the professor of the year award from the Class of 2001 — says many of the songs he uses were popular before most of his students were born, which presents more of a challenge every year as students get younger. "But I hope that they enjoy it enough to look up the original," he says.

Robert E. Schmidt, M.D., Ph.D., professor of pathology and immunology and director of the division of neuropathology at the School of Medicine, said he was surprised at first that Perry’s students had taken to the end of lecture songs.

However, he was soon convinced by the warm reception of Perry’s songs by normally intense-focused medical students.

One year, students even held up lighters, a typical rock concert gesture calling for an encore, during one of Perry’s songs, Schmidt said.

Perry’s musical background comes from taking folk guitar lessons while growing up. He also was the lead singer in a rock band in high school, in which he sang songs by The Who, Journey, Rush, The Beatles and ZZ Top.

He also sang in the school choir and started taking voice lessons at that time, subsequently spending more of his efforts on classical music.

Perry and his wife, Zenobia, also a musician, sang their vows to each other at their 1990 wedding, which featured mostly original music.

Those days, Perry also sings professionally as associate principal tenor for the American Kantorei and its Bach at the Sem series at Concordia Seminary in Clayton. He also sings solos with other St. Louis choirs or at weddings occasionally.

"I get more nervous at other people’s weddings than I did as my own," Perry says.

Zenobia Perry is the pianist at a local church and has recorded a CD of original music.

The musical talent continues in their daughter, Jaclyn, 10, who plays piano and participates in competitions. The Perrys also have a 13-year-old son, Ryan, who plays piano and has a good memory for lyrics, Perry says.

Perry is involved with the National Alliance for Autism Research, based in Princeton, N.J. Perry is on an executive committee for the Autism Tissue Program, which provides banked brain tissue from individuals with autism to researchers worldwide.

Zenobia even wrote a theme song for one of the organization’s fund-raising walks.

The Jerusalem-born Perry and his wife, American Maye Perry, have arrived at Albert Einstein College of Medicine at Yeshiva University in New York. The family moved to Texas when Perry was 10.

Perry completed his undergraduate work at the University of Texas in 1986 and medical school at the University of Texas Southwestern in 1990. He also did his residency at UT-Southwestern.

He did fellowships in surgical pathology and neuropathology and conducted research at Mayo Clinic in Rochester, Minn., one of the premier tumor pathology programs nationwide, before arriving at Washington University in 1998.

Perry’s research focuses on tumors of the brain and central nervous system, which can be difficult to treat. He is involved in translational research aimed at finding new diagnostic, prognostic and predictive biomarkers to be used in managing brain tumor patients.

"It’s a complicated type of problem, and there are so many different types," he says.

Some of his work during his fellowship at the Mayo Clinic resulted in new grading criteria for meningiomas, although commonly perceived to be benign overall, subtypes are aggressive and clinically challenging tumors.

Those criteria have been adopted by the World Health Organization’s Tumors of the Nervous System publication, and are used as a reference for brain tumor diagnostic pathology around the world.

Perry also is medical director of the Anatomic Pathology Fluorescence in situ hybridization (FISH) lab, which is used to identify clinically useful chromosomal abnormalities in a wide variety of tumors and a good memory for lyrics, Perry says.

"It’s fun for the students and fun for the professor as well," Perry says. "I enjoy seeing people perk up, doing something other than hours of lectures."

The soft-spoken Perry began writing songs about neuropathology as a resident at the University of Texas-Southwestern Medical School, when an attending physician at a conference jokingly challenged the residents to be more entertaining. Perry took it to heart.