Proud to be here: Postdoctoral fellow Marlene Winkelbauer says career-development opportunities and training and mentoring are areas that often determine those post-educational prospects. She says UAB is strong in those crucial areas, and The Scientist's newest rankings agree with her.

While TB threat is real, local officials say country is prepared

A man boarded an airplane in Atlanta in 2007 with a highly contagious, potentially fatal disease that easily can be spread from one person to another.

The disease — tuberculosis or TB — is spread via air droplets released during coughing, spitting, sneezing or talking. The man knowingly boarded the plane with an active strain of TB despite health officials telling him he shouldn't travel. And his trip wasn't a short one; he flew from Atlanta to Paris and returned to North America 11 days later on a flight from Prague to Montreal. He then re-entered the United States by car.

Think this couldn't happen a second time? Think again.

This past January a passenger with TB was detained in San Francisco after flying from Philadelphia despite being on a "do-not-board" list. This is the doomsday scenario government health officials fear when it comes to TB — a disease largely treatable and under control in the United States, but spiraling out of control in other parts of the world.

In fact, the World Health Organization (WHO) 2009 TB report estimates 9.27 million people were diagnosed with the disease worldwide in 2007 with an estimated 1.7 million deaths — numbers that local experts say are conservative estimates.

At the heart of the TB issue is way the virus has replicated to create several different types of TB. There is standard TB, multi-drug resistant TB (MDR TB), extremely drug resistant TB (XDR TB) and another extreme form of TB, known unofficially as XXDR TB, or totally drug resistant TB. The concern of U.S. health officials, says Elizabeth Turnipseed, M.D., voluntary assistant clinical professor and director, disease control for the Jefferson County Department of Health, is that if this extreme form of the disease doesn't come under control soon in places like Africa and Asia, it could spread to the United States and cause a nightmare health-care scenario.

"People think of TB as an historical disease or somebody else's problem," she says. "They think it's half a world away. In reality, it's a cough or sneeze away."
Ethics filing deadline is April 30 this year
UAB employees who meet a certain salary threshold, or whose job includes management of state funds in certain capacities, are required to file their annual Statement of Economic Interests form with the Alabama Ethics Commission by April 30.

The commission offers an online filing option at www.ethics.alabama.gov, or you may choose to print the form, complete and return it directly to the State of Alabama Ethics Commission. Employees who meet the filing criteria receive a formal notice of this requirement at their UAB e-mail address.

UAB Eye Care to hold annual trunk show
The third annual Trunk Show will be held from 9 a.m. to 5 p.m. Friday, March 26 at UAB Eye Care.

All of the latest eyewear fashions will be available, and payroll deduction is available for UAB employees. Call the perfect frame.

Visit www.uab.edu/uabeye Care to hold annual trunk show uAb eye care to hold

Learn latest on service-learning at March 24 meeting
Hear the highlights of 2010 Gulf South Summit on Service-Learning and Civic Engagement from 11:45 a.m. to 5 p.m. Friday, March 26 at UAB Eye Care.

Students and staff worked on various projects in the Birmingham metro area — from house painting to the Humane Society — Saturday, March 6 as part of UAB’s Into the Streets campuswide volunteer day. Several students visited the Birmingham Humane Society to help bathe, feed and care for the animals. If you want to be involved in future Into the Streets projects, contact the office of Student Involvement at 934-8020.

Pediatric Cardiology moves to new facility
The Division of Pediatric Cardiology has moved to a new, much larger home on the ninth floor of the new UAB Women & Infants Center at the corner of Sixth Avenue and 18th Street South.

The division’s new suite also is home to the noninvasive diagnostic unit for the noted Alabama Congenital Heart Disease Diagnosis and Treatment Center. The UAB Division of Cardiovascular and Thoracic Surgery also will see patients with congenital heart disease in the same suite.

“This suite was designed to be patient-centric,” said Associate Division Director Yung Lau, M.D. “We have been able to expand our commitment to perform all the common noninvasive cardiology tests in one place and to make a patient’s visit as comprehensive and efficient as possible.”

This consolidation is expected to facilitate real-time collaboration by surgeons and cardiologists in the management of patients with complex congenital heart disease.

Laboratory Safety Workshop to be offered May 12
Occupational Health & Safety will offer a one-day course on laboratory safety from 8 a.m. to 5 p.m. Wednesday, May 12 in the Community Health Services Building; a catered lunch will be provided. In depth discussions and demonstrations are offered on biohazard, chemical safety, hazardous materials, waste and general safety.

This is an excellent course for anyone who works in or supervises a laboratory. There is a $25 fee for UAB employees ($75 for non-employees). Class size is limited. Call 4-2487 to register. Information is online at www.healthsafe.uab.edu

Researchers invited to add questions to statewide survey
Faculty are invited to participate in the 2010 UAB Researchers’ Omnibus Survey of Alabama (ROSA) that can that can provide preliminary data for grant proposals and information on current issues. Researchers can sub- "uAb reporter

Registration open for summer camps
UAB offers a variety of summer camps that provide academic enrichment for children and teenagers. Camps range from the arts, business, computers, forensics, advanced sciences to sports, cheerleading. Learn more at www.uab.edu/summercamps.

For more information contact Juanita Sizemore at jsizemore@uab.edu. This event is free and open to the public. A complete listing of UAB Discussion Book activities can be found at www.uab.edu/discussionbook.

Apply now for faculty development grants
The RFP and application guidelines for the 2010-2011 UAB Faculty Development Grant Program are available online at www.uab.edu/facultydevelopment and www.uab.edu/senate/home.html. The funding for these grants is provided by the provost’s office and with matching funds from the applicant’s department.

The Faculty Senate Curriculum & Research Committee reviews proposals and recommends funding for proposed projects. Faculty are encouraged to apply individually or as a member of a multidisciplinary team.

LaGory to lead Discussion Book Dialogue March 25
Mark LaGory, Ph.D., chair of the Department of Sociology, will discuss “Homelessness as a Health Problem: How Can We Help?” during the UAB Discussion Book Dialogue at 11:30 a.m. Thursday, March 25 in the Lister Hill Library Ireland Room.

For more information contact Juanita Sizemore at jsizemore@uab.edu. This event is free and open to the public. A complete listing of UAB Discussion Book activities can be found at www.uab.edu/discussionbook.

Visit www.uab.edu/facultydevelopment and click on “Workshop Registration” to register for the workshop.

ConTRibUToRs
M. D. "We have been able to expand our commitment to perform all the common noninvasive cardiology tests in one place and to make a patient’s visit as comprehensive and efficient as possible.

This consolidation is expected to facilitate real-time collaboration by surgeons and cardiologists in the management of patients with complex congenital heart disease.

LABORATORY SAFETY WORKSHOP TO BE OFFERED MAY 12
OCCUPATIONAL HEALTH & SAFETY WILL OFFER A ONE-DAY COURSE ON LABORATORY SAFETY FROM 8 A.M. TO 5 P.M. WEDNESDAY, MAY 12 IN THE COMMUNITY HEALTH SERVICES BUILDING; A CATERED LUNCH WILL BE PROVIDED. IN DEPTH DISCUSSIONS AND DEMONSTRATIONS ARE OFFERED ON BIOHAZARD, CHEMICAL SAFETY, HAZARDOUS MATERIALS, WASTE AND GENERAL SAFETY.

THIS IS AN EXCELLENT COURSE FOR ANYONE WHO WORKS IN OR SUPERVISES A LABORATORY. THERE IS A $25 FEED FOR UAB EMPLOYEES ($75 FOR NON-EMPLOYEES). CLASS SIZE IS LIMITED. CALL 4-2487 TO REGISTER. INFORMATION IS ONLINE AT WWW.HEALTHSAFE.UAB.EDU

RESEARCHERS INVITED TO ADD QUESTIONS TO STATEWIDE SURVEY
FACULTY ARE INVITED TO PARTICIPATE IN THE 2010 UAB RESEARCHERS’ OMNIBUS SURVEY OF ALABAMA (ROSA) THAT CAN PROVIDE PRELIMINARY DATA FOR GRANT PROPOSALS AND INFORMATION ON CURRENT ISSUES. RESEARCHERS CAN SUB- "UAB REPORTER"
Four years ago Philosophy Professor Greg Pence, Ph.D., took a small group of students to the National Intercollegiate Ethics Bowl championship in Jacksonville, Fla., to observe the competition. Pence was interested in starting and coaching an ethics bowl team at UAB, but he left that day convinced it might be a while before they were ready for the national stage.

He was wrong.

UAB’s Ethics Bowl Team competed in this year’s national championship in Cincinnati, and in its second year of competition the Blazers walked away as the national champion.

“With two freshmen and only our second appearance, we were the Cinderella team of the 32-team tournament,” Pence says. “I was so proud of how our students blended their science majors with ethical reasoning that the last victories brought tears to my eyes.

“We had thought that getting to the final eight would be enough this year, but we were thrilled to be lucky enough to win it all with such a young team.”

Pence’s squad competed against 31 colleges and universities, and they debated some of today’s most difficult ethical issues.

The topics included various controversial ethics cases taken from current events, including health care for illegal immigrants, the Octomom, legalizing casinos, and allowing teachers to carry guns in schools to protect themselves.

UAB had to present one case and counter another in the finals against Weber State. The Blazers presented a case on the ethics of greenbelts, a policy and land-use designation used in planning to retain areas of largely undeveloped, wild or agricultural land surrounding or neighboring urban areas. In the case they refruted, the team argued that a doctor is ethically bound to treat an undocumented Mexican worker who was dying of cervical cancer.

Rachael Rosales, a freshman team member and Mexican-American, countered the final case.

“That last case worked to our advantage,” Pence says. “We argued that undocumented workers pay taxes, and ethically a doctor has to try and save the patient. It played to our strength, and we countered it very well. Emotionally, that’s what won the judges and the audience over to us.”

Members of the UAB Ethics Bowl Team are freshmen Rosales, an Athens native, and Malick Hossain of Rainbow City, sophomores Chris Grieves of Southside and seniors Michael Lester and Ayush Sharma, both of Huntsville.

Lester and Graves were members of the 2009 team, which finished 12th in the national championships.

Lester says the nerves of all of the team members were definitely spiking before the final match against Weber State. The team goal going into the championship was to improve on this past year’s finish and make it to the top eight. Instead, the Blazers defeated 2009 national champion Indiana University, 2008 semifinalist Westminster College twice and teams from the University of California-Santa Cruz and Carleton College. And at the end of the competition, they found themselves sitting at the big table facing Weber State for the championship.

“It was exciting, and it was a lot of fun,” Lester says. “Weber State was a talented team. We were still a little nervous when it was over and waiting on the results, but I think we were more enjoying the opportunity we had and enjoying the moment.”

Nerves also rattled the young team during the regional competition this past fall, and the stress rose after winning their first three matches.

“I tried to break the tension and have everyone relax a little bit,” says Lester. “So I just told the whole team, ‘Guys, come on. We’re not going to win the national championship. Don’t stress out. I have to eat my words, I guess’.

True purpose

Pence says he wanted to start an Ethics Bowl team because he thought the competition was a practical way to engage students in the study of ethics.

“It’s an excellent way of teaching ethics — to force people to make an analysis of a real case,” Pence says. “All of the cases are taken from the news. It’s also a group project that forces people to work together. It’s an exciting intellectual competition. It seems to me that it’s the true purpose of the university and what we’re doing here.”

Team members say the experience has changed their academic life and future in many respects, and they credit Pence for his desire to work with them and see them excel.

“College is a rough adjustment,” Rosales says. “It’s nice to know you have an advocate and someone who believes in you. Even at times when you’re feeling down, you know Dr. Pence believes in you and your abilities because he lets you know I’m grateful I’ve had the opportunity to be one of his students.”

All of the students on the team are in the Early Medical School Acceptance Program (EMSAP), which Pence directs, with the exception of Sharma, a philosophy and psychology major. She says Pence treated her like one of his EMSAP students, pushing her to excel.

“He motivated me to do things outside of Ethics Bowl, including studying abroad and applying for scholarships to continue my education,” Sharma says. “He’s actually the person who motivated me to try out for the team, because I wasn’t going to do it.”

“I don’t think any of us really can express how much we feel we owe Dr. Pence,” Lester adds. “He’s changed the course of my life in many ways by guiding me through my undergraduate decisions. He’s helped me move on to the next phase of my life and feel confident and prepared.”

UAB’s team showed that confidence throughout the national championship competition, and won many fans along the way.

In fact, as the competition drew closer to its conclusion, members of the audience began cheering for the Cinderella Blazers.

“I’ve been to four ethics bowls, and I’ve never seen the way the audience reacted to us,” Pence says. “They were very enthusiastic that we won.”

Now the upstart team finds itself as the hunted instead of the hunter for next year, a point not lost on the UAB coach.

“This puts us on the map, and it’s a hard opportunity to get lost on the UAB coach.”

“College is a rough adjustment,” Rosales says. “It’s nice to know you have an advocate and someone who believes in you. Even at times when you’re feeling down, you know Dr. Pence believes in you and your abilities because he lets you know I’m grateful I’ve had the opportunity to be one of his students.”
Liber invited to observe fair and free election in Ukraine

Ukraine's 2004 presidential election spurred accusations of vote-rigging, and a poll conducted this past fall showed that 82 percent of Ukrainians expected more of the same in 2010 — especially with the two primary candidates accusing each other of plotting to rig votes.

Some international and domestic election observers shared these fears, and a team of more than 600 election watchers was organized by the Organization for Security and Co-operation in Europe (OSCE) to observe the election.

George Liber, an expert in Ukrainian history and politics, was part of a team of more than 600 election watchers organized by the Organization for Security and Co-operation in Europe (OSCE) to observe Ukraine's 2010 presidential election. The group was invited to assess the fairness of the election.

"Our job was to evaluate the voting conditions in the polling stations, and every few hours we had to fax observation-report forms to OSCE headquarters in Kyiv," Liber says. "The OSCE leadership team in Kyiv issued its first public assessment of the fairness of the vote within 24 hours after the polls closed. The OSCE based its overall reports on our observations at the local level.

Electoral observers with the OSCE observed close to 3,500 election precincts, or approximately 10 percent of all election precincts in Ukraine. Twenty-five million men and women — or 69 percent — of all eligible voters participated despite temperatures between minus-10 and minus-15 degrees Celsius. The Ukrainian election was split into two parties — the primary, which was held Jan. 17, when 18 percent voted to be president, and the runoff, held Feb. 7. Prime Minister Yulia Tymoshenko and opposition leader Viktor Yanukovych emerged from the primary as the two major candidates for president. Yanukovych won 49 percent of the vote to Tymoshenko's 45.5 percent with 4.5 percent voting "None of the Above." The OSCE elections-monitoring mission approved these results.

The OSCE placed team leaders on the ground four months prior to the election so they could watch television news, read newspapers and assess the amount of airtime each candidate received. This helped provide a long-term perspective on election fairness. The OSCE then sent short-term election observers into the country. The short-term observers were split into teams A and B. Team A consisted of election watchers who observed the precinct election commission's final preparations before the polls opened at 8 a.m. They then visited 10 other election precincts during the next 12 hours, writing reports on each one. The B team observed the end of the election period at 8 p.m. A precinct election station, watched the local election commission count the paper ballots, saw the final paperwork completed and accompanied a delegation from the local precinct to the district election headquarters as they registered their election results. At the district election headquarters, Team B members observed the acceptance of up to 125 precinct election results per district. The district election commission often completed this process in the afternoon of the next day.

Liber was a member of the B team in the primary and the A team for the runoff.

Liber says he never observed or heard of any problems at the polling places he observed in the Odessa Oblast in February.

"I had a very pleasant experience," Liber says. "Everyone I encountered acted quite civilly and very nicely. I heard of some incidents in East Ukraine in which police officers harassed OSCE election observers by constantly demanding to examine their official election-identification cards and their passports. And there were other rumors, of course — rumors that people were paid $30 to vote for a particular candidate. But these are things which can't be proven, and I think the scale of such bribery is difficult to gauge."

One of the 20 election watchers on Liber's team in Kiev reported an incident of disappearing ink on some ballots at his location. The watcher said the official pens that were to be used to mark ballots were filled with pens that appeared to mark ballots, only to have the ink disappear a few minutes later.

Liber said the precinct election commission handled the situation appropriately.

"When they started to count up all the ballots they put aside the ones that were blank, and after they counted up all of the election ballots with real pen marks on them, they examined the ballots with no visible markings," Liber says. "They looked carefully and lifted them up to the light, and they noticed the indent on the ballots where the votes were originally cast. They then took a vote and decided that the ones they could recognize the indent they would count the ballots.

"They accepted each ballot they could read, and I think that's to the credit of that precinct election commission.

"The voting process and the counting of the votes in Ukraine is completed by hand. Ballots are placed in clear boxes so there can be no false bottoms where ballots fall through and disappear. The secretary of the precinct election commission then counted the ballots when the polls closed. Liber says the vote count was fascinating to watch.

"I watched them toss all of the ballots out of the boxes onto a table and the precinct secretary would count them one by one," Liber says. "Luckily, in my experience, the secretary who counted was superb. She was fast. She counted 1,200 ballots and then she divided them into piles for each candidate, and then she counted each pile. Once this was done a form was filled out saying the total number of ballots that were received, and the total number of disqualified ballots. The process where we went smooth and quickly. I heard that in one polling station in another district there were only 350 ballots, and it took five hours to count them."

In 2004, Viktor Yushchenko accused authorities of rigging the run-off election in favor of Yanukovych, which led to massive protests nationwide. The results of the runoff were eventually annulled and a re-vote was ordered by the Ukrainian Supreme Court. The OSCE and other international election observers declared that the second runoff was fair and free. The final vote showed an eight-point victory for Yushchenko. He went on to make promises to fight corruption during his time as president, but Liber says the corruption actually increased during the past six years, which made the need for election observers for the 2010 election all the more necessary.

"Ukraine is still very much a struggling democracy," Liber says. "There has been no real implementation of the rule of law or the introduction of efforts to fight corruption over the past six years. So while Ukraine is formally a democracy, it is still very much a flawed one."

The election officials he observed, Liber says, sought to make the election as fair as possible.

UAB School of Nursing seeks visionary leader nominees

A part of its celebrating 60th anniversary celebration, the UAB School of Nursing is seeking nominees for the 60th anniversary nursing leader it will honor at its anniversary celebration finale later this year.

"Alumni from the UAB School of Nursing have been integral in distinguishing the school in state, national and international circles and in shaping the nursing profession," says the school's dean, Doreen Harp, Ph.D. "These awards were established to celebrate the school's renowned graduates and their mark on nursing.

Nominees must be graduates of the UAB School of Nursing or have accomplished the Bachelor of Science in Nursing at the University of Alabama School of Nursing in Birmingham or diploma-nursing program rooted in UAB's history — Hillman, Jefferson-Hillman and University Hospital. Alumni who have received the Distinguished Alumna Award, Jo Ann Barnett Compassionate Caring Award and/or any other UAB School of Nursing or UAB honor/award are eligible to receive a Visionary Leader Award. Nominations are open for living or deceased alumni.

Each nominee should be known for distinct service in the field of nursing and/or health care on the local, state, national and/ or international level in practice, education and/or research; be recognized by colleagues and peers for outstanding achievement and/ or the introduction of efforts to fight corruption over the past six years. So while Ukraine is formally a democracy, it is still very much a flawed one."

The election officials he observed, Liber says, sought to make the election as fair as possible.
New answers in the riddle of TB persistence uncovered

Andries Steyn, Ph.D., grew up close to Cape Town, South Africa — a part of the world where tuberculosis (TB) is raging due primarily to the high number of people with HIV.

In fact, World Health Organization statistics estimate that close to one of every 100 people have TB in one area near Cape Town — South Africa’s capital city.

Steyn learned about the disease during his postdoctoral work at the Albert Einstein College of Medicine in New York when he met Barry Bloom, a leading scientist in the areas of infectious diseases, vaccines and global health.

“When I told him I was from South Africa, he asked me all about the TB problems in the country, and I didn’t really know anything about TB at that point,” Steyn says. “I didn’t even know South Africa had the highest TB incidence in the world. I was from the country and didn’t even know that.”

Steyn was intrigued. He was finishing his work in the lab of Julius Marizau, a biochemist and geneticist who discovered that de-natured DNA was reversible, and joined Bloom’s lab afterward. Bloom is considered a world-renowned TB investigator, and when he left Albert Einstein to become dean at Harvard, Steyn followed and spent the next five years learning the intricacies of this complicated disease.

“We’re dealing with a real hard-core bug,” says Steyn, an associate professor of microbiology whose lab is deep into groundbreaking research of TB. “One-third of the world is latently infected with TB. That’s more than 2 billion people latently affected — and there are no drugs to kill dormant TB, and there’s no good vaccine against it.”

A new drug to combat TB has not been discovered since the 1950s, and Steyn says that drug — isoniazid — was discovered by accident.

Today, TB researchers around the world are centered on trying to understand which genes enable TB to enter, maintain and emerge from its dormant state within the lungs. There are drugs available to treat the clinical strains of TB, but developing countries are experiencing higher incidences of more extreme-drug-resistant forms of the disease; current drugs don’t always offer successful treatment results.

Researchers believe new drugs can be developed to combat TB if they can find the keys to unlock the mystery of its dormant state.

Steyn’s lab has looked extensively into the role of oxygen and nitric oxide in TB dormancy.

TB settles into the lungs when it is inhaled, and the body’s immune system activates and attempts to wall off the disease. TB responds by forming a granuloma-type structure that houses it in a low-oxygen environment, which researchers believe sends the signal for TB to enter a dormant state.

Some evidence also shows TB reacts the same way to nitric oxide, a chemical produced naturally by the body that is supposed to kill TB.

Steyn’s lab has dissected the way TB senses oxygen and discovered two very specific TB sensing molecules that binds to the oxygen and nitric oxide molecules through hemoglobin and myoglobin.

“What nitric oxide and oxygen does to TB — even though they are two totally different molecules — they induce the exact same genetic response,” Steyn says. “That is pretty unique.”

Steyn’s lab also has discovered a third dormancy signal, carbon monoxide. Carbon monoxide, like nitric oxide, is produced in the lungs, and small quantities of those gases are released in the body.

Steyn says these discoveries have changed scientific thinking.

“The germ itself may not be dead, but it is contained,” Dunlap says, “and 90 percent of people who have TB bacteria won’t get sick. It’s the other 10 percent who have a tough time with the disease.”

That’s the reason the disease is prevalent in parts of Asia and Africa, where HIV rates are linked to increased diagnoses of XDR.

“TB is the leading killer worldwide of people with HIV, and it’s the leading infectious killer of healthy young adults. The burden of disease is just tremendous,” says Turnipseed.

Many people in these developing countries dying with TB have XDR, which is resistant to all first- and second-line drugs. MDR and XDR can develop if medications to treat basic TB aren’t available — the case in most developing countries — or aren’t taken properly by the patient.

According to Andries Steyn, one-third of the world is latently infected with TB — more than 2 billion people.

At this time there are no drugs to kill dormant TB, and there’s no good vaccine against it. Steyn’s lab now is looking into the role of oxygen and nitric oxide in TB dormancy.

**TB THREAT**

**CONTINUED from page 1**

**What is TB?**

Nancy Dunlap, M.D., professor of medicine in Pulmonary, Allergy & Critical Care, has treated MDR. TB patients at UAB in the past, and for 10 years she was a consultant through the Alabama Department of Public Health to patients confined to the maximum-security Kilby Correctional Facility in Montgomery who refused to take their medication properly.

Dunlap says the TB organism is very difficult to treat. Patients must maintain a strict medical regimen of multiple antibiotics for long periods or the disease will progress. The reason: TB differs from common bacteria. It has a very thick, waxy coat, is slow growing and it does not respond to usual antibiotics. If antibiotics are taken improperly, the TB organism may become resistant to them.

With most bacteria, like pneumonia for example, you get infected and the bacteria divides every 20 minutes, and you’re sick eight hours later,” Dunlap says. “TB divides every day or two. It’s a very slowly progressing, indolent kind of infection.”

Most people with a normal immune system can develop an effective immunity to the TB organism in six to eight weeks. The body effectively walls off the disease and encapsulates it.

“TB is the leading killer worldwide of people with HIV, and it’s the leading infectious killer of healthy young adults. The burden of disease is just tremendous,” says Turnipseed.

Many people in these developing countries dying with TB have XDR, which is resistant to all first- and many second-line drugs. MDR and XDR can develop if medications to treat basic TB aren’t available — the case in most developing countries — or aren’t taken properly by the patient.

**History of TB**

A 19-year-old Peruvian visiting the United States to study English instead found himself in A.G. Holley State Hospital just south of West Palm Beach in Florida in late 2007. The hospital is the nation’s last standing TB sanatorium and is a quarantine hospital. The student, Oswaldo Juarez, was diagnosed with XDR TB — a strain that previously had never been seen in the United States and is rare because only a small number of people in the world are thought to have had it.

Juarez’s diagnosis and treatment — reported for the first time by the Associated Press this past December — caught the attention of Dunlap and Turnipseed.

Dunlap says the fact that the disease in this XDR form was in the United States is “scary.”

“We have porous borders, and people come and go into our country all of the time,” Turnipseed says, “and we don’t always know who’s coming, who’s going, where they come from or what their issues are. As long as that’s the case, whatever is happening in the world is a potential problem for us.”

**Treating TB in the United States**

Despite the threat of TB, the good news is that the nearly 20,000 cases of active TB that occur in the United States every year are treatable. The standard of care in a Directly Observed Treatment Shortcourse (DOTS) that involves at least a six-month antibiotic regimen.

“There is a good side to this, and that is if we do the right things, TB is an imminently treatable disease,” Turnipseed says. “If we can continue to figure out how to develop better diagnostics, make meds available and coordinate resources all over the world so there can be directly observed therapy, that would be even better. There would be huge steps toward preventing this from becoming a catastrophic problem here at home.”
Gary Warner voted “Most Popular Security Blogger”

Gary Warner, the director of UAB’s research in computer forensics, has been named the country’s “Most Popular Security Blogger” after a vote of information-security peers and blog readers.

The popular blogger vote was hosted by Secure Computing Magazine. Warner’s win was announced during a magazine sponsored awards dinner in San Francisco. The dinner was held in conjunction with the annual RSA Conference, a five-day event for the information security industry that is considered to be the country’s most influential.

Warner’s blog, CyberCrime & Doing Time, is read by thousands each month. Site visitors range from information-security insiders to media members who report on the technology beat to novice computer users concerned about cyber crime threats. Read the blog at http://garwarner.blogspot.com.

“This is a big honor for me, and it is wonderful to be recognized for something that I am passionate about producing,” Warner says. “I see the blog as extension of the teaching I do inside my classroom at UAB, and I want my readers to understand the cyber threats that exist and the ways they can protect themselves.

Dating back to 2006, CyberCrime & Doing Time is oftentimes the first web site to announce new cyber attacks and threats to the public.

Warner has linked cyber-attack campaigns to pop star Michael Jackson’s death and uncovered Twitter users’ unwitting role in computer attacks against Iranian government Web sites during that country’s contested 2009 presidential elections. He hopes readers find the blog to be a powerful tool in the securing their personal information.

“There are very few people out there anymore who are not using some form of technology that could potentially put their personal information at risk,” Warner says. “So knowledge of the threats is power; the more informed we are the less likely cyber criminals are to take advantage of us.”

Gary Warner’s blog, CyberCrime & Doing Time, is read by thousands each month. Check it out at http://garwarner.blogspot.com.
Men should take lead in deciding to test for prostate cancer

Men who undergo prostate-cancer screening should discuss with a doctor the uncertainties, risks and benefits of the test before it is performed, says Edward Partridge, M.D., president-elect of the American Cancer Society National Board of Directors and director of the UAB Comprehensive Cancer Center.

The published guidelines suggest doctors more actively involve patients in the decision and offer clearer guidance on those things that should be discussed, says Partridge, a co-investigator on the national Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial (PLCO trial) that helped inform the updated guidelines.

Stroke-prevention procedures should be influenced by age

Two stroke-prevention procedures are safe and equally beneficial for men and women at risk for stroke, but the effectiveness does vary by age, say UAB researchers collaborating with other North American stroke investigators.

The overall safety and efficacy of surgery and stenting procedures essentially is the same with equal benefits for men and women, for patients who previously have had a stroke and for those who had not, researchers say.

The most notable finding was the role of patient age in accounting for differences in comparing the two prevention procedures, says George Howard, Dr.PH., chair of biostatistics in UAB’s School of Public Health.

HIV drug given to protect fetus should be avoided one year after childbirth

Women given the HIV-prevention drug nevirapine to protect their fetus should not use an HIV-drug regimen for at least one year after childbirth, UAB researchers say in findings published in the New England Journal of Medicine.

A new UAB study found that while nevirapine works well to prevent mother-to-child HIV transmission, a cocktail known as combination antiretroviral treatment (ART) that contains the drug for at least one year after childbirth will use in an academic setting or wherever they go. And, pointedly, those are skills that you have to have to be able to walk into a lab, start it up and be successful. I think that's been well received.”

The grant-writing course in particular paid dividends for Winkelbauer. She participated in the course in fall 2008. Participants were required to submit a grant to be reviewed in a mock review session at the end of the course — something she says was invaluable to her. “I think this process was pivotal to getting my American Heart Association Postdoctoral Fellowship funded,” she says.

The OPE also has a growing number of funding mechanisms that provide career-development courses off site plus grant incentives. In addition, the office has started an internship program that enables postdocs to work outside of their regular labs in industry, a biotech lab or in an administrative setting. The new Mentored Experiences in Research, Instruction and Teaching (MERIT) Program, funded by the NIH, also made an impact.

Benefits for postdocs were also improved in January of this year, giving them access to health, life and accidental death and dismemberment insurance and long-term disability. Previously, postdocs funded by institutional or individual training grants only had access to health insurance while postdocs who were funded directly by a mentor were granted access to all of the insurance options. Schwiebert says UAB President Carol Garrison was instrumental in equating those policies, and a co-investigator on the national Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial (PLCO trial) that helped inform the updated guidelines.

HIV drug given to protect fetus should not use ART

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HPV vaccine also protects female after cancer surgery

A vaccine designed to prevent high-risk papillomavirus (HPV)-related disease recurring, said Warner Huh, M.D., an associate professor in the UAB Division of Gynecologic Oncology.

The vaccine was designed for women who are at high risk of HPV-related disease recurrence, according to a recent study published in the New England Journal of Medicine. The study showed that women who had a hysterectomy and received the vaccine had a lower risk of disease recurrence compared to those who received placebo.

The vaccine is approved by the U.S. Food and Drug Administration (FDA) for the prevention of cervical cancer in women 16 to 26 years old. It is also approved for the prevention of certain types of genital warts and certain types of anal cancer.

UAB-led study shows simple steps could reduce stillbirths by as many as 1 million

New findings in a study led by the director of the UAB Division of Neonatology show that that training birth attendants in essential newborn-care techniques reduced stillbirths by more than 30 percent — and potentially could save as many as 1 million lives worldwide each year.

This project, spearheaded by UAB’s Waldemar A. Carlo, M.D., was designed to train birth attendants, including doctors, midwives, nurses and traditional birth attendants, in communities worldwide. The findings were published in the New England Journal of Medicine.

HudsonAlpha spring symposium will be March 30; register now

The HudsonAlpha Symposium, open to graduate students, postdoctoral fellows, university faculty and research staff, will be held from 8 a.m. to 6 p.m. Tuesday, March 30 in the Jackson Center, located adjacent to the HudsonAlpha Institute in Huntsville. Participating institutions include UAB, the University of Alabama and Auburn, Emory and Vanderbilt universities. Register online at www.hudsonalpha.org/symposium.

Learn more about these topics and other UAB research at www.uab.edu/news.

POSTDOCS

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lished in The Scientist is that of the top 40 institutions listed, 28 are institutes or research organizations that are independent of academic institutions.

“Of the academic institutions listed, only four among the top 24 were ranked higher than UAB, and only two of those are public universities. To me that speaks volumes in terms of our relative competitiveness among peer institutions,” Now says.

Surveys were sent to postdoctoral fellows throughout the country to gather data for the rankings from September to November 2009. Respondents were asked to assess their environment according to criteria in several different areas by reading positive statements with which the respondent was asked to agree or disagree. Scores for each statement were averaged by organization, and an average importance score was calculated for each factor.

Schwiebert says the OPE together with the UAB Postdoctoral Association spent the past year improving its workshop series as well as on- and off-the-bench opportunities in academics and other endeavors.

“We have started courses to help postdocs learn to write grants, and we have a popular lab-management course that we started this past fall,” Schwiebert says. “It explains of the ins and outs of starting a lab. How do you hire people? How do you mentor? How do you put together a budget? All of these are skills that postdocs will use in an academic setting or wherever they go. And, pointedly, those are skills that you have to have to be able to walk into a lab, start it up and be successful. I think that’s been well received.”

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The VIVA HEALTH STARLIGHT GALA is one of the Southeast's most elegant celebrations of the arts. Enjoy a pre-show reception followed by a performance from “The King of Motown,” the legendary R&B artist SMOKEY ROBINSON. With thirty-seven TOP 40 hits, Smokey is one of the most recognizable voices of the Motown Era.

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