

New corporation created to take potentially lifesaving invention into marketplace

By Tobin J. Klinger

An invention by a group of University of Toledo researchers is now the centerpiece of a new corporation, which aims to take the product out of the laboratory and into the marketplace.

On Thursday, Jan. 31, Michael Glembourtt, the president of the recently formed ADS Biotechnology Corp. who has a track record of developing pharmaceutical products, joined leaders from The University of Toledo to discuss their product and hopes for its future use at a news conference on Main Campus.

"We are tremendously excited by the potential for this invention," said Dr. Lloyd Jacobs, president of The University of Toledo. "It's efforts like this that can help to transform the economic climate in Toledo,



Photo by Daniel Miller

As Drs. J. David Dignam, professor of biochemistry and cancer biology, left, and Joseph Shapiro, professor and chairman of medicine, look on, UT President Lloyd Jacobs and Michael Glemblourtt, president and CEO of ADS Biotechnology Corp., sign a licensing agreement between the University and the corporation.

while improving the human condition through medical innovation."

The invention, a new liquid compound that is polyethylene glycol (PEG)-modified albumin, has use during various medical scenarios where a patient's blood vessels begin to leak, flooding surrounding tissue, with all-too-often critical results.

In simple terms, the PEG works with the albumin, a protein found in blood, to

expand blood's volume so it will not escape through holes in the blood vessels.

"This discovery shows tremendous potential in the marketplace," said Glembourtt, president and CEO of ADS Biotechnology. "It is not only innovative, but it is sorely needed as physicians around the world attempt to stave off serious leakage issues and save lives."

Three UT faculty members are credited with the product's creation: Dr. Joseph Shapiro, professor and chair of the Department of Medicine and associate dean for business development; Dr. Ragheb Assaly, director of the UTMC Medical Intensive Care Unit; and Dr. J. David Dignam, professor of biochemistry and cancer biology.

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Scientist lands NSF funding to research cash crop

By Matt Lockwood

How many people do you know who farm and provide food for others? Anyone?

At the beginning of the 20th century, one person provided food for about three others. Today, one person out of 100 pro-

vides food for the other 99.

That's possible because of advances in machinery, fertilizers and plant science during the last century, known as the Green Revolution.

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Photo by Daniel Miller

KERNELS OF WISDOM: Dr. John Gray showed off his display of several types of corn. The associate professor of biological sciences is one of the recipients of a \$2.6 million grant from the National Science Foundation Plant Genome Research Project to investigate the genes that regulate corn growth and development.



Photo by Daniel Miller

President Lloyd Jacobs discussed some exciting initiatives under way at UT with Newstalk 760 WJR radio personality Paul W. Smith, who broadcast his Detroit-based morning talk show Friday, Feb. 1, from the UT Student Union.

Town Hall Meeting

with President Lloyd Jacobs
Thursday, Feb. 7, 4-5 p.m.

Health Education Building Room 100 on Health Science Campus

Questions can be sent to TownHallQuestions@utoledo.edu.
Watch the event online in real-time at <http://video.utoledo.edu>.

Committee seeks nominations for Distinguished University Professorships

By Jim Winkler

A University of Toledo academic committee is seeking nominations of tenured faculty members from Main and Health Science campuses for Distinguished University Professorships.

The Academic Honors Committee, co-chaired by Drs. Carol Bresnahan, Main Campus vice provost for academic programs, and Patricia Metting, Health Science Campus vice provost and College of Medicine associate dean for student affairs, expects to recommend to President Lloyd A. Jacobs names to fill up to seven vacant professorships before the end of the academic year, bringing the number to 14.

That number represents an increase agreed to by the provosts following the merger between UT and the former Medical University of Ohio. The number of Distinguished University Professorships, which are renewable, is planned eventually to grow to 18.

The committee selects professors based on outstanding teaching, research, scholarship and professional service. Each receives an annual grant of \$5,000 for five years.

Competitive candidates are likely, though not required, to be full professors, and must be tenured, according to Bresnahan.

"Although there is no limit on the number or percentage of candidates who may be nominated from any department or college, nominators should be mindful of the competitive nature of the professorships and should forward only those candidates

with outstanding credentials," she said.

Candidates must be nominated by a tenured faculty member; self-nominations will not be accepted.

Nominations should include:

- A cover letter of no more than 500 words from the nominator summarizing how the candidate meets the criteria for appointment as a Distinguished University Professor;
- The candidate's curriculum vita;
- Evidence of the candidate's national and/or international scholarly or professional standing. Documentation may include letters from disinterested outside experts solicited and forwarded by the nominator, citations, reviews and other scholarly activities;
- Evidence of excellent teaching, such as summaries of teaching evaluations, peer or student teaching reviews, teaching awards and examples of innovative teaching methods; and
- Documentation of meaningful professional outreach and engagement.

March 14 is the deadline for nominations, which should be sent to Donna Belkofer, Office of the Main Campus Provost, Mail Stop 939.

Candidates nominated in the 2006-07 round and whose dossiers remain on file in the Office of the Provost on the Main Campus must submit an updated curriculum vita and also may submit updates of other materials.

New corporation

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"The creation of this corporation represents a great deal of work, collaboration and passion in an effort to help prevent the millions of deaths that occur around the globe as a result of these types of leaks," Shapiro said. "While the solution may seem simple, it will take significant time and resources to maneuver through the process of earning approval by the U.S. Food and Drug Administration. ADS Biotechnology will help us make that a reality."

"We are at a critical stage in the

process," said Dr. Jeffrey Gold, provost, executive vice president for health affairs and dean of the College of Medicine. "We have the drive and the momentum to get a product into the hands of clinicians around the world and have a significant impact on patient survival. This effort exemplifies what The University of Toledo stands for — our dedication to improve globally the human condition and to support the economy of northwest Ohio."

Construction detours pedestrians

By Matt Lockwood

If you typically enter campus from Bancroft Street, you're probably aware that construction has started on the 54,000-square-foot, \$15.4 million Savage & Associates Complex for Business Learning and Engagement that will extend north from Stranahan Hall up the hill between Gillham Hall and the Ritter Planetarium.

Because the building is being built into a hill, dirt is being dug up and moved out by heavy trucks.

The construction means that many pedestrians will have to find alternative routes onto campus. Fences have been put up surrounding the work area to protect everyone from the cranes, heavy trucks and drilling rigs that will be used in the initial construction.

"The long-term gain in creating this high-tech facility to educate our next generation of business leaders certainly outweighs the short-term inconvenience of having to walk around the construction site," said Chuck Lehnert, associate vice president for facilities and construction. "Safety is our primary objective and that's why the fences are necessary."

A new concrete sidewalk has been



Photo by Daniel Miller

Fences surround Stranahan construction site.

poured between Gillham and University halls leading to Bancroft Street to make that detour a little shorter and cleaner.

The project is expected to be completed and the fences taken down in fall 2009.

Corn research

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Thankfully, for those of us who rely on Kroger more than Caterpillar, the next big advances in agriculture are upon us, and The University of Toledo is playing a role.

At this month's 50th anniversary of the Maize Genetics Conference in Washington, D.C., a first draft of the corn genome will be revealed.

"That's significant because corn is the largest cash crop in Ohio and the United States," said Dr. John Gray, associate professor of biological sciences.

It's also big news for Gray because he is one of the recipients of a \$2.6 million grant from the National Science Foundation (NSF) Plant Genome Research Project, aimed at using genomic tools to investigate the genes that regulate corn growth and development. Gray will collaborate with professors at Ohio State University.

"Having the genome in front of you is like having a very big book of instructions," Gray said. "The genome for corn is as big as the human genome. Now we have to read it, and in order to improve nature, we must understand it."

The NSF is supporting the research to gain a better understanding of economically important crops like corn, rice, sorghum and sugar cane, which are similar genetically.

Gray's project aims to make a collection of regulatory genes from corn, to identify the genes that are turned on or off by the regulatory genes, to figure out what those regulatory genes do, and to develop a Web site, www.grassius.org, that will serve as a research database.

The NSF also wants education to be a component of the corn research, and Gray has already integrated this project with the 50 undergraduate students taking his molecular genetics laboratory course.

"I want to give undergraduates an opportunity to do experiments in which they don't know the outcome," Gray said. "We have students studying genes that have never been studied before, so when they write up their lab reports they're writing up original findings."

Of those 50 undergrads, eight are performing honors projects related to the corn genome. They are utilizing advanced research techniques such as bioinformatics, DNA cloning and database mining.

All of the students will gain research skills and a new appreciation for modern agriculture.

"We forget how important it is to grow food; this gives us an opportunity to keep students aware," said Gray.

Check out UToday

Don't forget to bookmark UToday at <http://myut.utoledo.edu>.

UT marks Black History Month with 'Traditions, Transitions and Transformations'

The University will celebrate the past, present and future of African-American culture during more than 40 special events to commemorate Black History Month in February.

"This year's theme is 'Traditions, Transitions and Transformations,'" said Nina Grant, senior director, Office of Multicultural Student Services. "It was chosen to reflect not only these aspects of the African-American community, but also as a theme in line with the direction of the University."

The month's official kick-off features Quincy Troupe, poet and best-selling author of *The Pursuit of Happiness*. Troupe's autobiography about the life of Chris Gardner stayed on best-seller lists for 36 weeks and was made into a feature film.

The event is Monday, Feb. 4, from 5:30-7:30 p.m. in the Student Union. There is no charge, but call 419.530.2261 for a reservation.

"The Pursuit of Happiness" film will be screened at 10 p.m. on Thursday, Feb. 28, at the Student Recreation Center.

Another special event, "An Evening With Dr. Mae Jemison," features discussion with the first African-American woman in space. Jemison made the journey with the space shuttle Endeavour in 1992, then retired from NASA a year later.

"An Evening With Dr. Mae Jemison" is free and takes place at 6 p.m. on Wednesday, Feb. 13, in the Student Union Auditorium. Students may chat with Jemison from 4:15-5:30 p.m. the same day in Student Union 2584.

Other activities include:

Jan. 14-Feb. 8

Dr. Martin Luther King, Jr. Essay Contest: "How Do Dr. King's Contributions Affect My Life Today?" Deadline: 5 p.m., Friday, Feb. 8, to sandra.rivers@utoledo.edu or to the Office of Institutional Diversity, Mulford Library Room 327 on the Health Science Campus, and Room 3770 in University Hall on the Main Campus.

Feb. 4-29

Daily Trivia Contest: "Do You Know YOUR History?" 8:15 a.m.-5 p.m., Mon.-Fri., Office of Multicultural Student Services, Student Union 2500 and African-American Student Enrichment Initiative Office, Student Union 121.

"The Skywatchers of Africa," 7:30 p.m., Mon.-Sat., Ritter Planetarium and Brooks Observatory. Cost: \$5 for adults, \$4 for seniors and children 12 and younger, free for children 3 and younger.

Feb. 2-23

"Follow the Drinking Gourd," 1 p.m., Ritter Planetarium and Brooks Observatory. Cost: \$5 for adults, \$4 for seniors and children 12 and younger, free for children 3 and younger.

Monday, Feb. 4

Poetry Reading with Quincy Troupe, noon-1 p.m., Office of Multicultural Student Services, Student Union 2500.

Tuesday, Feb. 5

"Gallery Talk," 3-4 p.m., Office of Multicultural Student Services, Student Union 2500.

Tuesdays: Feb. 5, 12, 19, 26

Brown Bag Lunch Series, noon-1 p.m., Student Union 3016. Topics: Feb. 5 "A Conversation With Dr. Jenkins;" Feb. 12 "Fairest of Them All: Women of Color in the Miss America Pageant;" Feb. 19 "From Alabama to Graduating From Michigan's First Class: One Woman's Story Following the Implementation of Affirmative Action to Academia;" Feb. 26 "History Informs the Future: From African-American Social Movements to Mass Multiethnic Movement."

Wednesdays: Feb. 6, 13, 20, 27

R.A.A.P. Sessions, 12:30-2:30 p.m., Student Union 2582.

Wednesday, Feb. 6

Black Student Union Presents "Hip Hop v. America," 7 p.m., Student Union 2592.

Thursday, Feb. 7

Commuter Break: soul food, noon-1 p.m., Student Union South Lounge.

"Misery Loves Company: Exercise, Women and the Buddy System," 12:30-1:30 p.m., Catharine S. Eberly Center for Women Conference Room, Tucker Hall 0180.

Fridays: Feb. 8 & Feb. 22

"Coffee House Noontime Concert Series," noon-1:30 p.m., Student Union, South Lounge.

Friday, Feb. 8

Black Student Union Presents: 37th Annual Fashion Show and After Party, 6 p.m.-2 a.m., Student Union Auditorium. Fees: \$10 for Fashion Show and After Party, \$7 for Fashion Show only, \$5 for After Party only.

Saturday, Feb. 9

"Saturday Nite Alive," 9 p.m., Rocky's Attic in the Student Union.

Monday, Feb. 11

"Black Pride," sponsored by UT's chapter of the NAACP, 7:30-10 p.m., Student Union 2584.

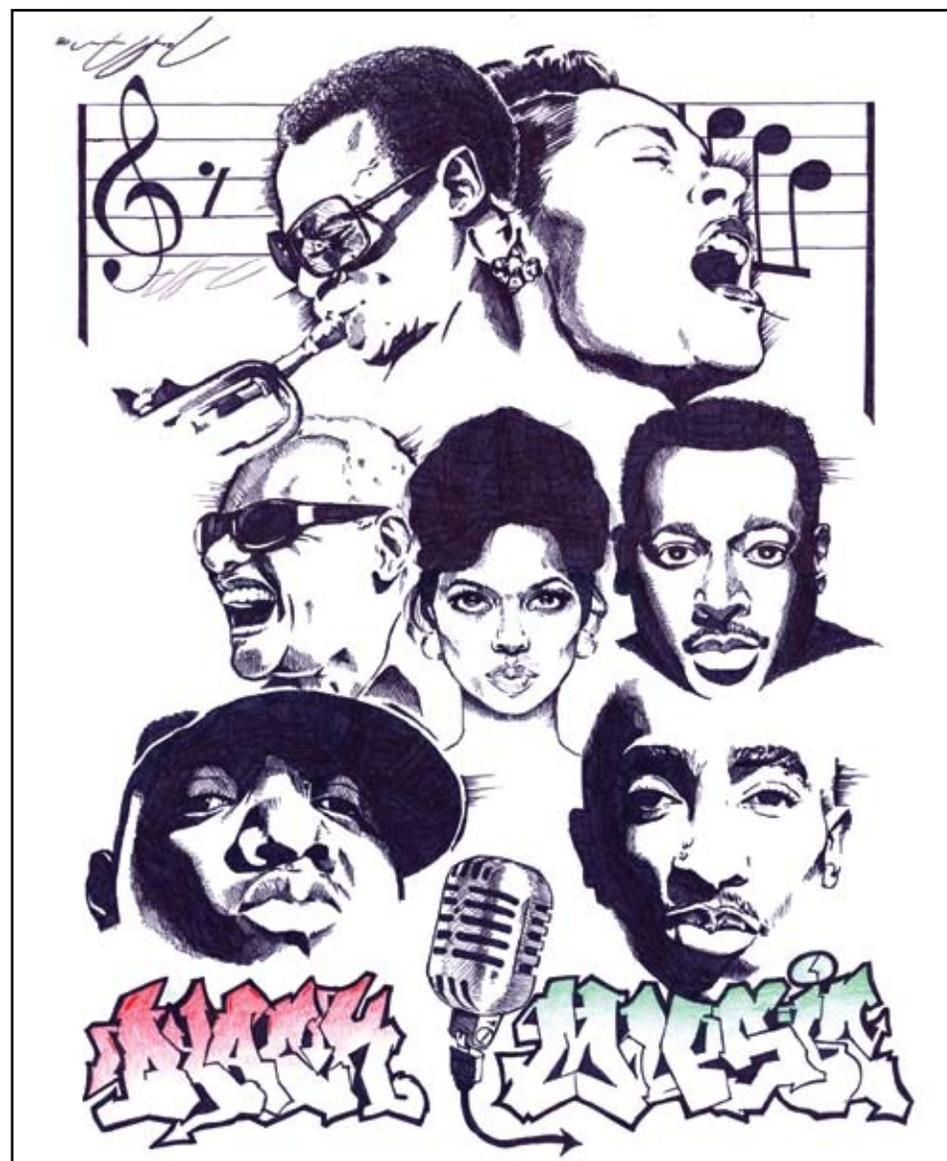
Tuesday, Feb. 12

"Rocky's Night," 8 p.m., Rocky's Attic in the Student Union.

Black Student Union Presents: 3-on-3 Basketball Tournament, 11 p.m.-2 a.m., Student Recreation Center. Pick up a form in Student Union 2500.

Friday, Feb. 15

"African Maroon Societies in the Americas: A Living Legacy," noon-1:30 p.m., Tucker Hall 1122.



Sunday, Feb. 17

Gospel Extravaganza, 7 p.m., Doermann Theater.

Monday, Feb. 18

"Citizenship, Sportsmanship and Scholarship" luncheon with Mississippi Supreme Court Justice James E. Graves, Jr., noon-

1:30 p.m., Libbey Hall. Limited seating; call 419.530.2261 for reservations.

Dr. Martin Luther King, Jr. Scholarship Benefit Dinner, 7 p.m., Student Union Auditorium. Speaker: James E. Graves, Jr., a justice with the Mississippi Supreme Court. Call

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UTNEWS

UT News is published for faculty, staff and students by the University Communications Office weekly during the academic year and periodically during the summer. Copies are mailed to employees and placed in newsstands on the Main, Health Science, Scott Park and Toledo Museum of Art campuses. UT News strives to present accurate, fair and timely communication of interest to employees. Story ideas and comments from the UT community are welcome. Send information by campus mail to #949, University Communications Office, Vicki Kroll. E-mail: vicki.kroll@utoledo.edu. Fax: 419.530.4618. Phone: 419.530.2248. Mailing address: University Communications Office, The University of Toledo, Toledo, OH 43606-3390.

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UT professor's research published in Nature

By Jon Strunk

At a time in life when many young adults are trying to balance student debt payments and begin a career search, Dr. Stacy Philpott was on a coffee plantation in southern Mexico studying the balance of ecosystems and species and how they organize and space themselves throughout a given environment.

Now an assistant professor in the Department of Environmental Sciences at The University of Toledo, Philpott has had her work, which began in 1999 when she was a graduate student at the University of Michigan, make its way into the Jan. 24 issue of *Nature*.

Philpott studies ants. Vast and complex, the societies of the aggressive *Azteca instabilis* ant nest in the shade trees that grow over the coffee crop. *Azteca* are natural predators of important coffee pests, including a beetle that feeds on coffee beans.

Considering the aggressiveness of the ants, one might assume the ants would overwhelm the entire plantation and establish colonies in every tree. Instead, the *Azteca* ants appear in clusters throughout the plantation, shifting their locations over time.

Normally, studying the basis for clumped patterns in ecosystems is difficult because of underlying differences in environment. But the uniformity of a coffee plantation — the same species of

trees evenly spaced over large areas — gave Philpott and her colleagues from the University of Michigan an opportunity to explore another explanation.

While ferocious toward coffee-destroying beetles, other insects and even humans, the ants do have a natural enemy in the area — an insect cheerfully named the decapitating fly. The fly lays an egg in the body of a live ant, and the larva consumes the ant's head from the inside out before emerging from the dead ant's neck. Even more dramatic, however, are the abilities of the flies to completely change the behavior of these aggressive ants, limiting their movement outside of the nests by more than half.

Using a modeling approach only including the natural spread of *Azteca* colonies and the behavioral effects of the flies, Philpott and her colleagues reproduced the clumped pattern of ant colonies observed in the field. The result demonstrates that the spatial organization of these ants likely results from attacks by the ant parasite.

"No one group, the flies or the ants, grows too large relative to the others as both depend on the others to survive," Philpott said. "The nature of the plantation allows us to rule out some other environmental factors and focus on how the interactions between organisms dictate where these ants establish their homes."

Black History Month

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419.383.3438 or 419.530.2508 for tickets.

Tuesday, Feb. 19

"Daughters of the Dust" film screening, 6-8 p.m., Student Union 2584.

Wednesday, Feb. 20

Book Signing with Darla Turner, author of *Delayed But Not Denied*, 6-8 p.m., Office of Multicultural Student Services, Student Union 2500.

Black Student Union and Muslim Student Association Present "Justice and Unity for Students," 7 p.m., Student Union 2592.

Thursday, Feb. 21

Alumni Leadership Series, 6 p.m., Student Union 2592. Speaker: Toledo Public Schools System leader and UT alumnus Richard Jackson.

"Tongues Untied" film screening and discussion, 8-10 p.m., Student Union 3018.

Theater Thursday: "American Gangster," 10 p.m., Student Recreation Center.

Monday, Feb. 25

"Honoring Augustine of Hippo," 9:30-10:30 p.m., Corpus Christi University Parish.

Tuesday, Feb. 26

"Beyond Beats and Rhymes," a film by Byron Hurt, 6-9 p.m., Student Union 2584.

Wednesday, Feb. 27

"Night of Appreciation: African-American Art and Music," 7 p.m., Student Union South Lounge.

Thursday, Feb. 28

"Women and the Civil Rights Movement," 12:30-1:30 p.m., Eberly Center For Women Conference Room, Tucker Hall 0180.

African Tea, 3-4 p.m., Office of Multicultural Student Services, Student Union 2500.

Dr. Lancelot Thompson Achievement Program, 6:30-9 p.m., Student Union Auditorium.

Friday, Feb. 29

Black Student Union Presents "Soul Food Luncheon," noon-2 p.m., Student Union South Lounge.

Contact the Office of Multicultural Student Services at 419.530.2261 for more information. A complete list of events is available at <http://myut.utoledo.edu>.



Photo by Jack Meade

HITTING THE HIGH NOTES: Tenor Tim Shew entertained a UT audience with stories and musical hits from Broadway shows such as "Les Miserables" at a Jan. 25 performance at the Department of Music's Vocal Arts Series. Shew, a versatile, talented performer, is an American Music Theatre master who has performed on Broadway in productions such as the Bernstein/Comden and Green Broadway production of "Wonderful Town," and he starred as Jean Valjean in the Tony Award-winning "Les Miserables." The former Toledo actor has returned to the University several times to present the Shew Music Education Scholarship. His mother, Susie, is an alumna of the University, receiving a master's degree in counseling in 1980. A counseling scholarship at UT is named in her honor.



Dr. Gbenga Ajilore, UT assistant professor of economics, appeared on the PBS "NewsHour with Jim Lehrer" Jan. 24 to offer his views of the proposed federal economic stimulus package and its effects. Ajilore predicted the stimulus would have a limited impact in Midwest states and said new industries, such as alternative energy and photovoltaics, are needed to jumpstart Midwest economies.

In memoriam

Dr. Steven M. Dosick, Evanston, Ill., died Jan. 24 at age 65. After the 1975 completion of his residency and fellowship in peripheral vascular surgery at the former MCO /MUO, he joined the volunteer faculty, teaching as clinical assistant professor of surgery until 2006.

Grace M. Jolley, Tucson, Ariz., a volunteer at the former Medical College of Ohio, died Jan. 24 at age 63. She belonged to the Satellites until her retirement in 2005.