Researcher achieves first view of cell nuclear process

When Dr. Weidong Yang, biological sciences, showed a movie at a recent conference of a single molecule passing through the nuclear pore complex of a cell, the audience of biologists, chemists and photochemical scientists gasped and exclaimed in surprise and recognition of the importance of what they had just witnessed. "This is something they had never seen before," Yang said, smiling.

What he and his research team at BGSU have accomplished is indeed groundbreaking. Before they captured a moving, three-dimensional image of this critical transit through the cell's gateway into the nucleus, it was unknown both how the nuclear transport system worked and what path materials and information took as they passed through the five-nanometer-wide opening.

Using single molecules of proteins they have rendered fluorescent with lasers and organic dyes, the team tracks the protein's progress with a powerful microscope and high-speed, super-resolution camera.

"These innovative techniques need strong support," said Yang, who has a joint appointment in photochemical sciences. His research is funded by a National Institutes of Health grant of $400,000 over three years. The funding has paid for major upgrades to his cell-biology and microscopy-imaging laboratories and the purchase of specialized equipment. The Ohio Board of Regents has also contributed to the study.

Graduate and undergraduate students in the lab are benefiting from the opportunity to work in this promising field. "Some of them have had offers to go to other schools when they graduate, but they don't want to leave. They want to learn these new techniques. It makes them more competitive in finding jobs compared with those in pure physics or biology," Yang said.

Yang's work is gaining international attention. It will appear in five scientific journals this year, and the prestigious journal Proceedings of the National Academy of Sciences featured Yang and his post doctoral student Jiong Ma's article on their work as its lead story in the April edition. Yang has been an invited speaker at several high-level conferences on single-molecule research, a leading new discipline that blends biology, chemistry and physics. "We can provide evidence to show we can do something other people can't do. It's new, it's exciting, and we can do it," he said enthusiastically.

The outside attention is coming because the discoveries are vitally important to research into the causes and treatment of disease. If the nuclear pore is not functioning properly, it can permit potentially dangerous materials into the nucleus. Dysfunctions of the nuclear transport system are linked to numerous human diseases including leukemias, cancers and liver cirrhosis.

"It's a trafficking problem," Yang said. "We want to control what the pore is letting in. These are problems that traditional biomedical measures cannot conquer. Now that we can capture the molecule in a pore, we can compare a normal cell to a cancer cell to see what changed, what's different. Advances expected from this work will directly impact our understanding and development of therapies."
Meet Eileen O’Neill, alumna and TLC exec

Eileen O’Neill is living proof that an internship can lead to your future career. While earning a master’s degree in popular culture at BGSU, O’Neill interned at Discovery Communications. Twenty years later she is the president and general manager of The Learning Channel (TLC), a division of Discovery. Under her direction, TLC has added a number of popular reality series including “Cake Boss” and “19 Kids and Counting.”

O’Neill will be back on campus tomorrow (Sept. 21) to talk about her life “From Freddie and Frieda to the Cake Boss.” The public lecture, sponsored by the College of Arts and Sciences, Graduate College and the Department of Popular Culture, runs from 3:30-5 p.m. in the Bowen-Thompson Student Union Theater. O’Neill will discuss the launch of the Planet Green channel, which she is credited with accomplishing in less than a year, as well as how the University prepared her and what leadership skills she relies on.

A reception open to the public will follow.

The event is part of several lecture series: The College of Arts and Sciences Centennial Lecture and Dean’s Distinguished Alumni Lecture, and the Department of Popular Culture Colloquium Series.

Last April, O’Neill was honored as one of BGSU’s “100 Most Prominent Alumni.”

Her presentation may not be recorded.

Artist to share philosophy vis-à-vis work

BGSU alumnus Walter Behrnes is on campus to discuss his artwork as well as his philosophy. A prolific artist, Behrnes is a special effects supervisor currently working at ReelFx in Texas.

While making art, he poses provocative questions revolving around the subject of consciousness and the self. Questions such as “Who am I?” and “How do I view the world?” help to define new dimensions in his work.

He will give a free talk at 6 p.m. tonight (Sept. 20) in the Bowen-Thompson Student Union Theater in which he will illustrate how his philosophical investigation directly affects the art he creates.

Behrnes has also worked for Post Asylum, Tippett Studio and DNA Productions doing 3D modeling, procedural environmental modeling, technical direction, and special effects. His work has been included in commercials and major motion pictures including “Open Season 2 and 3,” “The Spy Next Door,” “The Spiderwick Chronicles,” “The Ant Bully” and more.

IN BRIEF

Faculty Senate hosts forum on union question

The Faculty Senate, in its position of neutrality on the question of collective bargaining, will convene a forum from 2:30-4 p.m. Tuesday (Sept. 21) in 228 Bowen-Thompson Student Union (the Multi-Purpose Room).

Representatives of the administration, the BGSU-Faculty Association, and the AAI (Advocates for Academic Independence) have agreed to participate in a moderated discussion
about a series of topics related to unionization. Moderators for the forum are Thomas Walton of The (Toledo) Blade and David Miller of the Bowling Green Sentinel-Tribune.

Each set of representatives will provide brief opening and closing statements and respond to a set of questions shared in advance among the three groups. In addition, audience members will be able to submit written questions to the moderators, to which each group will be able to respond in a timed format.

The event will be streamed live and archived for later access. BGSU authenticated users may access the stream on their computer desktops at https://dvss.bgsu.edu/player.php?movie_id=14717.

This stream becomes active around 10 a.m. this morning (Sept. 20) with the looping ID running and will switch to the live event feed at 2:15 p.m. Tuesday. Firelands faculty members are invited to view the video in 1004 Cedar Point Center.

All invited to Graduate College Fair tomorrow

The Graduate College Fair will be held from 3-7 p.m. tomorrow (Sept. 21) in the Lenhart Grand Ballroom of the Bowen-Thompson Student Union.

Hosted by the Graduate College and Continuing and Extended Education, the fair will be a time for prospective students to learn more about graduate and research opportunities, BGSU's nationally ranked programs, Graduate College faculty and resources and scholarships.

Breakout sessions will include panel discussions by current BGSU graduate students and presentations on scholarships and grants.

For more information, contact Sara Smith at 2-7870 or millsar@bgsu.edu. For more on the Graduate College, visit http://www.bgsu.edu/colleges/gradcol/.

Opera students to present Mozart and Handel works

From stage lights to sunlight, audiences at BGSU’s next Opera Theater production will enjoy a double bill of Mozart and Handel. Mozart’s “The Impresario” and Handel’s “Acis and Galatea” will be performed at 8 p.m. Friday (Sept. 24) and at 3 p.m. Sunday (Sept. 26) in Kobacker Hall of the Moore Musical Arts Center.

“The Impresario,” one of Mozart’s early works, is a delightful glimpse into the backstage world of opera, complete with rich bankers, poor impresarios and dueling divas. In the comic opera with spoken dialogue, Gottlieb Stephanie’s libretto is combined with Mozart’s score, which he created as an entry for a musical competition.

Originally written in Italian, “Acis and Galatea” is a pastoral tale of love between a demigod and a simple shepherd who is threatened by a crude cyclops. The secondary characters provide humor without diminishing the audience’s capacity to sympathize with the main characters.

The production’s co-directors are Darin Kerr, a fourth-year Ph.D. candidate in the Department of Theater and Film, and Dr. Ronald Shields, department chair. Dr. Emily Freeman Brown, director of BGSU orchestral activities, is the musical director. The performance will be sung in English with English supertitles.

Advance tickets are $12 for adults and $9 for senior citizens. On the day of the performance, tickets will be $15 for adults and $12 for students and senior citizens. Tickets can be purchased at the Moore Musical Arts Center box office weekdays from noon to 6 p.m. or by calling 2-8171.
Sustainability conference to focus on collaboration

BGSU will host a regional conference Oct. 20 to explore "Perspectives on Sustainability: Collaboration in Higher Education in Northwest Ohio."

Faculty, staff and students are invited to attend and present papers. The conference will be held from 9 a.m. to 5 p.m. that Wednesday in the Multipurpose Room of the Bowen-Thompson Student Union.

Organized by BGSU, the University of Toledo and other area institutions of higher education, the day will focus on three themes:

- University and student initiatives
- Sustainability pedagogy: sustainability in the classroom
- Sustainability research

Participants will be able to share approaches, successes and lessons learned and make connections for new collaborations in sustainability. The conference costs $19, which includes lunch and snacks. It is free for students, but they must register in advance.

To register or submit a presentation, visit http://www.bgsu.edu/departments/envp/pages/2010_conference.html

Certification of professional development hours will be available.

CALENDAR

Monday, Sept. 20

Center for Teaching and Learning Workshop, "Integrating Your Courses with BGSU Learning Outcomes and Core Values," 9-10 a.m., 201 University Hall. Register online at http://www.bgsu.edu/ctl/page74987.html.

Center for Teaching and Learning Workshop, "Manage Yourself and Your Info!,” 10-11:30 a.m., 210B Jerome Library. Register online at http://www.bgsu.edu/ctl/page11755.html.

CFDR Speaker Series, “Demographic Perspectives on Same-Sex Couples,” presented by Dr. Gary Gates, The Williams Institute, UCLA School of Law, noon-1 p.m., 314 Bowen-Thompson Student Union. Hosted by the Center for Family and Demographic Research.

Conversation About Unionization, informal discussion with Dr. Ken Borland, senior vice president for academic affairs and provost, 2-3 p.m., 201 Union.

ARTalks 100@100 Alumni Lecture, “Inward: Recent Work and a Journey,” by digital artist Walter Behrnes, 6 p.m., 206 Bowen-Thompson Student Union.

Artist Lecture, “Inward: Recent Work and a Journey,” presented by digital artist Walter Behrnes, 6 p.m., Union Theater.

Tuesday, Sept. 21

Center for Teaching and Learning Workshop, “Effective Public Speaking in Academic Settings,” 10:30 a.m.-noon, 201 University Hall. Register online at http://www.bgsu.edu/ctl/page11755.html.

Faculty Senate Forum on Unionization, 2:30 p.m., McFall Center Assembly Room. The event will be streamed live for BGSU authenticated users on their computer desktops at https://dvss.bgsu.edu/player.php?movie_id=14717.

Center for Teaching and Learning Workshop, "Evaluating Student Learning Using Assessment Rubrics," 3-4 p.m., 201 University Hall. Register online at http://www.bgsu.edu/ctl/page11755.html.

Graduate College Fair, 3-7 p.m., Lenhart Grand Ballroom, Union.

Arts and Sciences Centennial Lecture, “From Freddie and Frieda to the Cake Boss,” by alumna Eileen O'Neill, president and general manager of The Learning Channel, 3:30 p.m., Union Theater. Reception to follow. The talk is also the A&S Dean's Distinguished Alumni Lecture, and part of the Department of Popular Culture Colloquium Series.

Tuesdays at the Gish Film Series, "Two Thousand Maniacs!" (U.S. 1964), 7:30 p.m., Gish Film Theater, Hanna Hall.
Student Composers' Forum, 8 p.m., Bryan Recital Hall, Moore Musical Arts Center.

Wednesday, Sept. 22

Center for Teaching and Learning Workshop, "Give Students a Reason to Come to Class: Back to Basics," 9-10 a.m., 201 University Hall. Register online at http://www.bgsu.edu/ctl/page77880.html.

Center for Teaching and Learning Workshop, "NAMI: Service through Support, Education and Advocacy," 9:30-10:30 a.m., 201 University Hall. Register online at http://www.bgsu.edu/ctl/page11755.html.

Brown Bag Series, "Home-Seeking and the Black Women's West," presented by Dr. Emily Lutenski, ethnic studies, noon–1 p.m., Women's Center, 107 Hanna Hall.

Chinese Ensemble, "Beauty and Melody," noon–1 p.m., BGSU Firelands, The Pit.

Biology Seminar, "Chinook Salmon in Lake Huron: A Model System for Studying the Colonization Dynamics and Adaptive Potential of Salmon," presented by Dr. Yolanda Morbey, University of Western Ontario, biology, 3:30–4:30 p.m., 112 Life Sciences.

Men's Soccer vs. Wright State, 4 p.m., Cochrane Field.

ARTalks Lecture, "Italian Renaissance Art," featuring Chriscinda Henry, art historian, Yale University, 6 p.m., Fine Arts Center.

Faculty Artist Series, featuring Megan Ferguson, viola, 8 p.m., Bryan Recital Hall, Moore Musical Arts Center.

Thursday, Sept. 23

Center for Teaching and Learning Workshop, "Deep Learning: Can You Make It Happen?" 2-3 p.m., 201 University Hall. Register online at http://www.bgsu.edu/ctl/page75113.html.


Alumni Reading, featuring John Bradley, Maurice Kilwein Guevara, Gary McDowell and F. Daniel Rziczek, poetry from The Rose Metal Press Field Guide to Prose Poetry: Contemporary Poets in Discussion and Practice, 7:30 p.m., Prout Chapel.

International Film Series, "Okuribito (Departures)," Japan (2006), 7:30 p.m., Gish Film Theater, Hanna Hall.

Concert, featuring Student Jazz Combos, 8 p.m., Bryan Recital Hall, Moore Musical Arts Center.

Friday, Sept. 24

State of the University Address, by President Carol Cartwright, 10 a.m., Lenhart Grand Ballroom, Union. Doors open at 9:30 a.m. for coffee and fellowship.


Workshop, "Service-Learning as a High-Impact Pedagogy," presented by Jeff Howard, DePaul University Steans Center for Community-based Service-Learning, 1-4 p.m., 207 Union.

Women's Research Network, "Racial Analysis on WebMD," presented by Aisha McGriff, doctoral candidate, American culture studies, 1:30–3 p.m., Women's Center, 107 Hanna Hall.

Men's Soccer vs. Buffalo, 4 p.m., Cochrane Field.

ARTalks Lecture and Reception, presented by Debra Priestly, mixed-media artist, 7 p.m., 204 Fine Arts Center.

Opera Forum, 7:15 p.m., Bryan Recital Hall, Moore Musical Arts Center. Free.

Opera Theater, "Acis and Galatea," by G.F. Handel, and "The Impresario," by W.A. Mozart, 8 p.m., Kobacker Hall, Moore Musical Arts Center. Tickets are $12 for adults, $9 for students and seniors; $3 surcharge the day of the event. Call 2-8171 to reserve.

Sunday, Sept. 26

Men's Soccer vs. Lipscomb, 11 a.m., Cochrane Field.

Women's Soccer vs. Kent State, 2 p.m., Cochrane Field.

Opera Forum, 2:15 p.m., Bryan Recital Hall, Moore Musical Arts Center. Free.

Opera Theater, "Acis and Galatea," by G.F. Handel, and "The Impresario," by W.A. Mozart, 3 p.m., Kobacker Hall, Moore Musical Arts Center. Advance tickets are $12 for adults, $9 for students and seniors; $3 surcharge the day of the event. Call 2-8171 to reserve.

Monday, Sept. 27

Men's Golf vs. John Piper Intercollegiate, Forest Creason Golf Course.
**Center for Teaching and Learning Workshop,** "The Joy of Teaching Large Lecture Hall Classes," 1-2 p.m., 201 University Hall. Register online at http://www.bgsu.edu/ctl/page11755.html.

**Center for Teaching and Learning Workshop,** "Principles for Good Practice," 2-3 p.m., 201 University Hall. Register online at http://www.bgsu.edu/ctl/page68950.html.

**ARTalks 100@100 Alumni Lecture,** "Taking Flight: The Journey Continues," presented by Marilyn Da Silva, metalsmith, 6 p.m. 204 Fine Arts Center.

**Continuing Events**

**Through Sept. 21**

**Art Exhibit,** paintings by Robert McCann, Little Gallery, BGSU Firelands. Gallery hours are 9 a.m.-5 p.m. Monday-Friday.

**September 24-26**

**Art Exhibit,** featuring visiting artist Jason Chakravarty, glass and neon, 10 a.m.-6 p.m., Glass Studio, Fine Arts Center.

**Through Sept. 26**

**Art Exhibit,** "Re-imagining the Distaff Toolkit," Willard Wankelman Gallery, Fine Arts Center. Gallery hours are 11 a.m.-4 p.m. Tuesday-Saturday, 6-9 p.m. Thursdays, and 1-4 p.m. Sundays.

**Through Oct. 2**


**JOB POSTINGS**

**FACULTY**

**Communication.** Assistant Professor. Call Sandra Faulkner, 2-8349. Deadline: Nov. 1.

**History.** Assistant Professor. Call the department, 2-2030. Deadline: Nov. 30.

**Communication Disorders.** Assistant Professor. Call Rodney Gabel, 2-7168. Deadline: Dec. 1.

**Labor Postings**

http://international.bgsu.edu/index.php?x=facinfohires

Employees wishing to apply for these positions must sign a "Request for Transfer" form and attach an updated resume or data sheet. This information must be turned in to Human Resources by the job deadline.

**CLASSIFIED**

**On-campus classified:** http://www.bgsu.edu/offices/ohr/employment/BGSU_only/page11151.html

**Off-campus classified:** http://www.bgsu.edu/offices/ohr/employment/cl_staff/page11145.html

**ADMINISTRATIVE**

http://www.bgsu.edu/offices/ohr/employment/adm_staff/page11137.html

**OBITUARY**

Elaine Brents, 74, died Sept. 15 in Weston. She was a secretary at the University from 1971-2003, in the Applied Human Ecology and Springboard offices.