Art major Gina Hunt’s journey into a new medium demonstrates how discovery and invention can be part of an artist’s education. The result is a vibrant, textural painting—and a heightened sense of self-confidence for the artist. Hunt’s work will be featured at the 11th annual Undergraduate Research Conference on April 27th and 28th. The URC is just one of several events—including the first annual Graduate Research Conference—that will showcase student and faculty research during the month of April.

*Photo by: Krista Heinitz*
Art major Gina Hunt’s journey into a new medium demonstrates how discovery and invention can be part of an artist’s education. The result is a vibrant, textural painting—and a heightened sense of self-confidence for the artist.

Undergraduates BreAnna Kruger and Amanda Trost are testing the theory that conditioning classes improve students’ fitness levels. For their efforts, they’ve been rewarded with an Undergraduate Research Conference grant—and acceptance into highly competitive doctoral programs in physical therapy.

As sophomores in the pre-med track, Brittany Frank and Sarah Karalus were looking for ways to improve their chances of getting accepted into medical school. When they approached Dr. Michael Bentley about possible research projects, they embarked on a two-year journey that has earned them national recognition for their work.

The 2009 Distinguished Faculty Scholar Award winners have earned knighthood, awards from the National Endowment for the Arts, and Fulbright fellowships. But it is their dogged pursuit of excellence in research and creative activity that makes them truly extraordinary.

The mission of FRONTIERS is to celebrate the scholarly and creative accomplishments of Minnesota State Mankato faculty and students and inform the campus community of research-related opportunities. FRONTIERS is published three times per year by the College of Graduate Studies and Research and distributed to Minnesota State Mankato faculty, staff, and graduate students. The College of Graduate Studies and Research welcomes ideas for feature stories and other content consistent with the mission of the newsletter. Please e-mail story ideas to cesr@mnsu.edu.

Minnesota State University
Spring 2009 Volume 3, Issue 2

GOT PHOTOS?
Faculty who have high-quality digital photographs of recent research or creative projects are encouraged to submit them to the College of Graduate Studies and Research for inclusion in upcoming issues of FRONTIERS or TOMORROW. Photographs should be at least 200 dpi and should be accompanied by a brief caption describing the project and the photo. E-mail photographs (in jpg or of format) to anne.blackhurst@mnsu.edu.

Working in the area of heating, ventilation, and air-conditioning (HVAC), mechanical engineering professor Patrick Tebbe studies how energy can be used more efficiently in buildings. He is pictured here conducting thermal systems research with a psychrometer test unit in his lab.
One art student’s journey into a new medium demonstrates how discovery and invention can be part of an artist’s education.

“Sometimes the impression about art masters is that they know exactly what they are doing at all times, but they don’t,” said Brian Frink, art professor at Minnesota State University, Mankato. “It is that process of discovery that makes art making so exciting.”

Frink refrains from dictating the art making process for his students. He said, “I try to help students focus their work but I never tell them what to do. They have to come up with the answers on their own.”

To encourage exploration, students are exposed to a variety of techniques and methods, including demonstrations from...
Art student Gina Hunt was inspired by the effect of wax when used in a visiting artist’s printmaking demonstration. “The wax gave the print a warm, organic quality that I really liked. I wanted to use wax in my own work,” said Hunt.

Previously, Hunt worked in two separate mediums, printmaking and painting. They felt disconnected and she was looking for a way to fuse the two.

She started researching encaustic painting—using beeswax blended with paint. Frink painted with encaustic for more than 10 years when he first came to Minnesota State Mankato. “He was a great resource for me,” said Hunt.

Frink suggested to Hunt that her exploration with encaustic might be an interesting project for the Undergraduate Research Conference. Her research proposal earned her a Minnesota State Mankato Foundation grant and was accepted for presentation at the national conference in La Crosse, Wisconsin. This is Hunt’s second year presenting at the URC. “Participating in the URC gives students the professional experience of presenting their work and challenges them to organize their thoughts about it,” said Frink.

After receiving the grant, Hunt began exploring, experimenting, and documenting her discovery process. She likes to get physical with her art and described it as handmade, without the mediation of technology. Hunt said, “Printmaking and encaustic painting are very old art forms. In fact, printmaking has been in use since the 16th century and the Egyptians actually used encaustic to paint sarcophagi portraits. And what I like about working with wax is that I get to use my hands, rather than just brushes,” she said.

At her work station in the third floor art studio of Nelson Hall, in addition to the painting easel, you will see some unusual things—hot plate, electric fry pan, wood clamp, colorful wax-encrusted brushes, and tin cans of what look like liquid crayons. After everything is turned on, Hunt said, “It takes about 20 minutes for things to warm up before I can begin working.”

Although Brittany Frank and Sarah Karalus are still undergraduate students at Minnesota State University, Mankato, this call may be in their not-too-distant future: “Paging Dr. Frank and Dr. Karalus, please report to surgery.”

For more than two years, Frank and Karalus have been researching vasculature regeneration of the rat liver. They are scheduled to present their findings in April at the National Undergraduate Research Conference in La Crosse, Wisconsin, as well as at the Undergraduate Research Conference at Minnesota State Mankato.

As sophomores in the pre-med track, Frank and Karalus were looking for ways to improve their chances of getting accepted into medical school. They approached Dr. Michael Bentley about possible research projects. Bentley said, “Liver regeneration happened to be on my mind at the time.”

It is well known within the medical community that when a portion of liver tissue is removed, the remaining tissue will undergo regeneration. Even at the time of Greek mythology when Zeus sentenced Prometheus to have his liver eaten daily by an eagle, humans had knowledge of liver regeneration. In fact, the liver regenerates its mass in about one week’s time. Frank and Karalus are more specifically interested in how blood vessels change in regard to liver regeneration.

Frank and Karalus began their project in the library, researching related studies. Karalus said, “We spent our first semester mostly researching old scientific articles, books, and whatever Dr. Bentley could throw our way.” Bentley added, “There are only a handful of studies related to this; not much research has been done in the field.”

Frank and Karalus spent the following semester learning surgical techniques from Dr. Penny Knoblich. After Knoblich was comfortable with their surgical skills, the hands-on study began. To further analyze the regrowth of the liver blood vessels, they removed a section of the rat’s liver. Ten adult rats were used for this study. Five rats were used for sham surgeries—meaning they were operated on but no portion of the liver was removed—and five were used for the partial hepatectomy.

Frank said, “Surgery was the best part. We got to scrub in, anesthetize the rats, cut out a portion of the liver, sew up the liver, sew up the muscle, and sew up the skin. The opportunity to learn about sterile techniques, anesthetization, organ removal, muscle repair, and sutures was a great experience.”

Two weeks after surgery, the rats were euthanized; the livers were removed, preserved, and prepared for analysis. Frank and Karalus found that regeneration and vascular regrowth occurred in parts of the liver untouched by surgery. The results indicate that vascular regrowth is an integral part of liver regeneration. This semester Frank and Karalus are comparing the liver samples using a scanning electron microscope.

“For a student project, this is extremely ambitious,” said Bentley. But Frank and Karalus have an additional challenge. A double major in biology and Spanish, Karalus is spending the semester in Costa Rica, leaving Frank to prepare many of the samples independently. Frank is happy for her partner, but voiced a bit of concern about getting all the research analyzed in time for the conferences.

Fortunately, technology is on their side. Karalus helps review the liver images sent to her via email.

While working two and a half years on a research project has been challenging, Frank and Karalus said the rewards outweigh the stress. “Overall, getting involved with research at MSU has been such a great opportunity. You are able to network and meet so many interesting people and learn about other prestigious projects that are going on at MSU. It is such great practical experience,” said Karalus.
Entered as simple Google searches, the terms weight loss, fitness, health, and aerobic conditioning each produce millions of results. There are nearly as many books and magazine articles available on the subjects. Americans talk the health and fitness talk from every conceivable angle. We are inundated with information and invitations to get fit. And we say we are getting the message.

University students are no exception. Research indicates that college years are highly influential in shaping lifetime diet and fitness habits. Since general education at Minnesota State Mankato requires two to three credits in performance or participation courses, many students choose to apply those to a class they assume will improve their aerobic conditioning. But will it?

That is what exercise science seniors BreAnna Kruger and Amanda Trost hope to find out. They are one of five teams of researchers to receive a grant from the Undergraduate Research Conference. Through their research, Kruger and Trost measured the volume of oxygen used by aerobic conditioning class volunteers at the beginning of the spring semester and will measure it again after six weeks of regular exercise. Volunteers agreed to wear an oxygen mask and proceed through a series of progressive stages on the treadmill. After all the data are collected, Kruger and Trost will analyze variations in the volume of oxygen used. As fitness levels increase, the volume of oxygen consumed during exercise increases. If the aerobic conditioning class activities are effective at improving fitness, the second evaluations will show that student volunteers used more oxygen. For their time, volunteers receive a fitness assessment worth $100 and a t-shirt.

Their mentor, Dr. Mary Visser, encouraged Kruger and Trost to become involved in undergraduate research. “Dr. Visser talked about the importance of undergraduate research in about every class,” said Kruger. Visser added, “Participation in the URC is like gold on their résumé and demonstrates all the characteristics that post-baccalaureate programs are looking for in their applicants.”

The opportunity to gain expertise with assessment equipment and provide input aimed at improving human performance classes at Minnesota State Mankato is exciting for Kruger and Trost. However, they each say the most valuable benefit is the experience they’ve gained with proposal writing, research, and presentation.

Kruger and Trost both plan to pursue careers in physical therapy, a competitive field. “We both have good grades and work as physical therapy aides. But this research project definitely made our graduate school applications stand out,” said Trost. Kruger added, “And during our interviews for graduate school, we were probably more confident because we had something that set us apart from the pack.” Apparently the interview committees agreed. Both have been accepted into physical therapy doctoral programs.

Dr. Mary Visser (far left) fits a mask on a research participant as Amanda Trost and BreAnna Kruger (far right) prepare to collect data about the participant’s oxygen use during exercise.

THE SCIENCE OF FITNESS

MINNESOTA STATE UNIVERSITY, MANKATO faculty and scholars are quietly establishing national and international acclaim for their work, continually developing a habit of excellence. The dedication and passion shown to their students is admirable in and of itself but, paired with the dogged pursuit of excellence in research and creative scholarship, the accomplishments of Minnesota State Mankato faculty are extraordinary. Each April, the Center for Excellence in Scholarship and Research recognizes these extraordinary contributions.

In 2009, the Distinguished Faculty Scholars are John Janc, Richard Robbins, and Richard Terrill. They make a collection of scholars who enjoy knighthood, awards from the National Endowment for the Arts, and Fulbright fellowships.

Before consulting the original manuscript of Victor Hugo’s 1829 play “Marion de Lorme,” housed at the Bibliothèque Nationale de France in Paris, professor of modern languages John Janc works with a microfilm of the work.

Professor of English Richard Robbins, director of the creative writing program since its inception, has developed the Good Thunder Visiting Writers Series into one of the nation’s premier visiting writers programs.

Before consulting the original manuscript of Victor Hugo’s 1829 play “Marion de Lorme,” housed at the Bibliothèque Nationale de France in Paris, professor of modern languages John Janc works with a microfilm of the work.

“A habit of excellence,” said Aristotle, “is not an act but a habit.”

continued on page 10
To say that Dr. John Janc teaches French and French literature is a bit of an understatement. Indeed, he is a leader in the field. One letter of support states, “[Janc] pursued foreign language pedagogy in his studies when the field was still in its infancy.” But he is not only a teacher of teachers.

Among his many accomplishments while at Minnesota State Mankato, Janc established the University’s Summer Study in France program in 1979 and continues to serve as its director; received academic knighthood by the French Government in 1986; and was named the 2008 Minnesota French Teacher of the Year.

However, Janc’s real passion may be the writings of Victor Hugo. Over the past 32 years, Janc has patiently pursued a type of specialized academic research in original French language documents called “édition critique.” He spends time every December in the Bibliothèque Nationale de France reviewing Hugo’s original manuscripts.

In the past 50 years, Janc is the only scholar who has published critical editions of Victor Hugo’s plays, making him an internationally recognized scholar of 19th century French literature. Janc is currently preparing a fourth volume, Marion De Lorme. Edition critique. While it was difficult for him to identify one motivating factor in his ongoing research Janc said, “Knowing that I am able to share my love for Victor Hugo with my students through my research and help them appreciate and value one of France’s greatest writers comes at the top of the list.”

In the Department of English, Richard Robbins has been described as “the heart and soul of the Creative Writing Program,” serving as director since its establishment in 1988 and developing the Good Thunder Visiting Writers Series into one of the premier visiting writers series in the country.

As a creative writing professor, he feels a special obligation to “walk the walk,” claiming the bedrock of his credibility is his continued writing, publishing, and performing. Robbins wrote, “My work over the years has focused on creating poetry and prose that will seem to editors to be original and important.” Robbins’ success in his attempts is apparent.

 Granted fellowships by both Scotland’s Hawthornden International Retreat for Writers and the National Endowment for the Arts, he enjoys international and national acclaim for his writing. Ted Kooser, Pulitzer Prize winner and former Poet for the Arts, he enjoys international and national acclaim for his writing. Ted Kooser, Pulitzer Prize winner and former Poet Laureate, offered praise for Robbins’ book Famous Persons We Have Known, “There is something fresh in almost every line, and when I came to the end of the last poem, I felt I’d been given a world.”

As much as Robbins values writing and teaching and the Good Thunder series, making time for everything can be a challenge. Robbins said, “The award seems to say the balancing act is working, and for that I’m grateful, especially since I know we have outstanding colleagues at Minnesota State Mankato doing important work in a broad variety of fields.”

Creative writing professor Richard Terrill has made a profound impact on students and the literary community. MFA graduate Bronsson Lemer said, “Because of him, I am a better writer and a better teacher.” There is, perhaps, no greater praise for a teaching professor.

Terrill is one of the reasons Minnesota State Mankato receives high praise for its production of writers and its writing community. More than 19 years ago, he established the monthly Writers Bloc, an open reading series, which gives students the opportunity to read their work in public.

In addition to being a great teacher, Terrill is a renowned writer. Motivating students while continuing to publish in two genres—creative nonfiction and poetry—is something he has done for years. Some of Terrill’s notable awards include a Literature Fellowship from the National Endowment for the Arts, three Senior Fulbright Fellowships, and a Minnesota Book Award.

Sometimes surprised by what his writing reveals, Terrill enjoys the process. “I’m motivated by the excitement that the process of writing affords, a discovery of what I didn’t know I believed,” he said.

Terrill often writes about music; however, his subjects also cover China, contemporary writing, spirituality, and nature. His work has been described as “extraordinarily wide-ranging” by his colleagues and has appeared in Ireland, China, and South Korea.

This year’s distinguished faculty scholars, Janc, Robbins, and Terrill, have earned national and international acclaim for their collection of work. The CESR director, Steve Bohnenblust, expects the University’s reputation for excellence in scholarship and research to continue to grow because at Minnesota State Mankato, excellence is a habit.

When the Minnesota Department of Transportation needed practical solutions to ensure road bases were compacted adequately, they contacted Minnesota State University, Mankato’s Center for Transportation Research and Implementation. Jim Wilde and Aaron Budge, civil engineering professors, were awarded a $250,000 grant and are collaborating to help Mn/DOT improve the longevity of our roadways.

Currently, Mn/DOT uses a 20-ton test roller to ensure road bases are compacted enough before applying the pavement materials. Budge said, “There are only a few machines in the state and it is inconvenient and costly to transport them around to

WHERE RESEARCH MEETS THE ROAD

Wilde (standing) and Budge (seated) work on practical, applied research projects, often getting directly involved in construction projects with state, county, and city agencies. The Mn/DOT project is part of the Crosstown Expansion along I-35W and Highway 62 in south Minneapolis.
The implementation procedures depending on soil conditions, weather, and traffic load. Budge is a geotechnical engineer.

His focus is a little deeper, meaning he studies ground and soil conditions as they relate to foundation engineering.

The Center for Transportation Research and Implementation is collaborating with an equipment manufacturer to develop a test roller mechanism that fits on the axle of a dump truck—something every road construction company owns. Wilde said, “The mechanism will measure the level of compaction. Then we will develop the standards and road construction company owns. Wilde said, “The mechanism will measure the level of compaction. Then we will develop the standards and implementation procedures depending on soil conditions, road use, and surface materials.” Civil engineering students will work with the Center to collect lab and field test data on the mechanism.

In addition to this grant, Budge and Wilde have other research projects in progress and proposed. Together, they have been awarded more than $1.2 million in grants and contracts over the past five years.

The foundation division and bridge office of Mn/DOT invited Budge to help find a safe way to predict pile capacity for bridges. Piles are the long steel pipes that extend into the ground and hold up bridges. Budge said, “For years, Mn/DOT has used a formula to determine how deep to drive piles for individual bridges. Recently, the federal government asked Mn/DOT to prove the formula was effective.” Budge and a colleague at the University of Massachusetts are applying the formula and analyzing hundreds of bridge case histories to assess the safety of the current practice and, if necessary, to suggest formula adjustments.

Budge and his students are also at work in the field. Mn/DOT is testing Teflon-coated piles to reduce the negative effect of soil friction on load capacity. In some cases, friction between the soil and the piles increases the load and decreases the ability of the piles to support the bridge structures. Students placed data collection gauges on the piles, and the data gathered will allow Mn/DOT to determine if using the Teflon-coated piles is cost effective.

Another project Wilde is currently working on will help county engineers determine what percent of traffic in their area is heavy trucks. Mn/DOT currently estimates heavy truck traffic at around 2 percent in every county, and roads are built accordingly. Wilde and his students are finding that heavy truck traffic is closer to 3-6 percent. Wilde said, “That is three times the estimate and may be one reason road surfaces deteriorate faster than expected.” Wilde’s project includes a plan to provide a method for each county to estimate its own percentages.

Wilde was instrumental in setting up the Center for Transportation Research and Implementation, which was created at Minnesota State Mankato in 2008. “The implementation sets us apart from other transportation research institutes,” said Wilde. “We apply the research so contractors working in the field can use it on a daily basis.”

Jackson County Engineer Tim Stahl appreciates the way the Center focuses on applying the research. “Professor Wilde talks to the people doing the work. The research isn’t just theoretical. It provides practical information we can use, not in 10 or 15 years, but now,” said Stahl.

Civil engineering professors Jim Wilde (left) and Aaron Budge, pictured here in their lab, were awarded a $250,000 grant to help the Minnesota Department of Transportation improve the longevity of Minnesota roadways. Their complementary experience and expertise allow joint research efforts related to the interaction of soil and pavement on properties in pavement design. This machine is used to test soil, pavement, and other materials used in construction applications.

On April 13, 2009 the Office of Research and Sponsored Programs (RASP) will hold its third annual recognition event in honor of grant and contract applicants and recipients during the preceding year. In addition to honoring all faculty and staff who applied for grant or contract support, RASP will recognize the following outstanding achievements.

### EXCELLENCE IN GRANTS AWARD

**Nancy Sprengeler**  
$314,000

Each year, Educational Talent Search helps 800 low-income and first-generation potential college students from south central Minnesota get the information and support they need to attend college. Sprengeler (pictured, right, with students as they prepared to attend a weekend TRIO Conference in Minneapolis) was awarded a $314,000 U.S. Department of Education grant this year. “It is amazing what this program can offer families in terms of postsecondary planning assistance, all free of charge,” said Sprengeler. Grant activities include college visits, ACT prep workshops, parent workshops, and individual student advising.

### NEW FACULTY INITIATIVE AWARD

**Lillian Duran**  
$16,000

Lillian Duran, elementary and early childhood professor, was awarded a $16,000 grant from the Minnesota Department of Education to enhance the new Early Childhood Special Education (ECSE) graduate program at Minnesota State Mankato. Grant funding provided new early childhood assessments and two graduate-level workshops for ECSE students and professionals. Duran (pictured, left) is currently working on a grant to research ECSE services provided to English Language Learners and hopes to develop a website to share information and improve services.

### DISTINGUISHED PRINCIPAL INVESTIGATOR AWARD

**Patrick Tebbe**  
$45,000

Mechanical engineering professor Patrick Tebbe (pictured), along with Saed Moaveni, mechanical engineering, and Louis Schwartzkopf, physics, was awarded a $59,000 grant from the Minnesota Department of Commerce to determine the effectiveness of solar thermal wall systems installed in Minnesota in supplying heat and reducing fossil fuel use and greenhouse gas emissions. Tebbe’s research also includes designing solar chimneys for power generation as part of the EPA’s People, Prosperity, and Population program. He is being honored for his outstanding contribution to the campus research environment, demonstrated through his excellence in grantmanship, collaboration, and mentorship.

### EXCELLENCE IN GRANTS AND CONTRACTS AWARD

**John Frey, Bruce Jones, Chris Ruhland, Jim Rife, and Gregg Marg**  
$1,235,500

Former College of Science, Engineering and Technology Dean John Frey and faculty members Bruce Jones (pictured), Gregg Marg, Jim Rife, and Chris Ruhland were awarded more than $1.2 million from the U.S. Department of Energy and the Minnesota Department of Employment and Economic Development. Funds will be used to further research in renewable energy and emissions.

### EXCELLENCE IN CONTRACTS AWARD

**Aaron Budge and Jim Wilde**  
$278,000

SEE RELATED ARTICLE, page 11
A NEW TRADITION OF EXCELLENCE

Minnesota State Mankato has a long-standing tradition of excellence with the Undergraduate Research Conference and the idea for a Graduate Research Conference surfaced occasionally for years. “The idea finally got some traction about two years ago, when the Graduate Committee officially proposed the conference and asked the Faculty Association to appoint members to the inaugural steering committee,” said Annie Blackhurst, Dean of the College of Graduate Studies and Research.

Almost immediately, a dozen faculty members voiced support and a commitment to hold Minnesota State Mankato’s first Graduate Research Conference in April 2009. Using information gathered from other graduate research conferences and experience with the URC, the committee put together a plan. A date was set, subcommittees were formed, postcards and e-mails were sent out, and faculty presentations were conducted.

There was no need to completely reinvent the wheel. Committee chair, Vicki Luoma, said, “We have a wonderful model of a successful conference right here.”

While similar in format to the URC, the Graduate Research Conference expects a different level of research. In addition, graduate students have the opportunity to present their research at whatever stage it is in. If they are in their first year of study, they may present the research they have completed so far.

The goals of the conference are many. “First and foremost,” said Luoma, “it is a celebration of the scholarly and creative work produced by our graduate students and the University.” The conference provides an opportunity for students to share their work with family, friends, faculty, employees, and the community.

Research is often conducted in isolation. Blackhurst said, “We hope the conference increases visibility and strengthens the sense of community among graduate faculty and students across campus.”

In its first year, the Graduate Research Conference committee hopes to showcase 100 Minnesota State Mankato graduate researchers in the course of one day. According to graduate assistant Amin Abdul-Mohamed, the biggest challenge was not getting students to present, but getting other students to attend. “There was a lot of enthusiasm for participating in the conference. But there is great benefit from attending the conference. It allows students to understand and appreciate the work of students in other fields.” In the future, the committee hopes the GRC will last several days, be a source of research grants, and include guest researchers from other universities.

With more than 10 years of a successful undergraduate conference and the growing presence of graduate studies at the University, many believe the time for a graduate research conference is right. Vicki Luoma, committee chair, said, “We are excited and confident about the success of the GRC. It is a win, win, win, win situation.” If the enthusiasm of the planning committee is any indication of the potential success, the campus and community have a lot to look forward to.

Laura Bartolo, McNair Program director, wants to make sure the McNair scholars have the confidence needed to present research. After all, the goal of the achievement program is to support students to attain graduate-level degrees. Research presentations are an inevitable part of their future. And although there are many opportunities for scholars to practice their presentations within the comfort of the McNair offices, Bartolo felt they needed something more formal. “At times, we all benefit from some external motivation to help us achieve at a higher level,” she said.

When she decided to pursue the McNair Achievement Program Colloquium, she wasn’t interested in setting up another hoop to jump through. Instead, Bartolo aims to provide a formal, supportive opportunity for scholars to improve their presentation skills, share research, and increase their confidence.

The idea of presenting at Minnesota State Mankato’s Undergraduate Research Conference can be very intimidating for students, especially those whose first language is not English. The colloquium will be similar to the URC, but on a smaller, more intimate scale. “We expect that by providing our scholars with another opportunity to present, they will gain confidence. With that confidence, we will raise the caliber of McNair presentations at the URC,” said Bartolo.

In addition to presentation experience, the colloquium gives Bartolo and faculty mentors the opportunity to shine the light directly on McNair scholars. Like all undergraduate researchers, McNair scholars put in countless hours collecting and preparing research. Bartolo is excited about the work of the students. “The research conducted by our scholars is impressive. We want that to be effectively communicated at the Undergraduate Research Conference,” she said.

McNair scholar Abdullahi Nur has enjoyed the challenges of the research project. “I have learned for myself that when doing research, it is important to obtain reliable data, be patient, and stay positive. The opportunity to be involved in this research project has given me lifelong experience and learning,” said Nur. McNair scholars rely heavily on their faculty mentors. First time geography studies mentor Forrest Wilkerson said he also relied heavily on the McNair staff. “If I ever need anything, they are always there. And more importantly,” said Wilkerson, “the McNair Program is committed to helping students learn.” He recommends other faculty take the opportunity to become involved as mentors. Wilkerson added, “I enjoy watching the light bulbs go on. This is not work.”
The College of Graduate Studies and Research is proud to sponsor the following research-related events during the month of April. Together, the events showcase and celebrate the wide range of high-quality scholarship, research, and creative activity conducted by our faculty and students.