The aim of the Rock Research Expo (RRE) is to serve as a newsletter that keeps our campus informed of the scholarly endeavors and potential research opportunities for both faculty members and students.

Specifically, RRE:

- Shares new knowledge of different disciplines on campus
- Provokes students’ interests and curiosity in knowledge exploration
- Promotes long term academic communication and collaboration on campus, and most importantly
- Develops a success-driven environment of learning for faculty members and students

The Scope of RRE includes:

- Recent publications of faculty members and students (title, authors, and optional abstract)
- Recent research projects and grant acquisition (title, authors, brief description)
- Recent conference presentations, performances, and exhibitions of faculty members and students
- Announcement of research related activities

The Policies of RRE area:

- Anyone can submit their information via email. Student submissions need to have a supporting letter or email from a faculty member
- The basic submission standards for the newsletter will be that the submitted material be legible, pertinent, and appropriate to present to the campus community
- Authors are responsible for the accuracy of their submissions. Newsletter editors and SRU will NOT be responsible for the verification of the submitted information

Contact Information:

rockresearchexpo@sru.edu

http://www.sru.edu/academics/research/rock-research-expo
As a regional public university, SRU has a primary responsibility to educate the citizenry of the state. The faculty do such a good job in the classroom that SRU is known across the region for the quality of its teaching. That is wonderful, and it has helped the university reach new enrollment heights this year, but it tends to overshadow the quality research and creative activity in which faculty also engage.

Further, the disciplinary nature of the academy breeds insularity, reinforced by structural arrangements which hamper physical interaction. The result is that faculty members are not aware of the many good scholarly activities which are going on in other colleges and departments.

This is where the Rock Research Expo (RRE) is of value. RRE publicizes the impressive accomplishments of faculty and students in the areas of publications, presentations, performances and exhibitions to colleagues at SRU and to external audiences.

I encourage you to note the scholarly achievements of SRU faculty, and congratulate them when you next see them. Perhaps even start a conversation about mutual academic interests, and embark on some interdisciplinary scholarship.

Enjoy!

Philip Way

Provost and VP for Academic and Student Affairs

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http://www.sru.edu/academics/research/rock-research-expo
FEATURE STORY

A Path of Discovery and Partnership to External Funding for a Larger Research Project

by Elizabeth Kemeny, Deborah Hutchins, & Courtney Gramlich (2017)

In applied research, sound partnerships with community-based programs are necessary for effective research agendas. It is also important to leverage funds from smaller internal research grants to pave the way for external funding. A partnership between the recreational therapy program and Storm Harbor Equestrian Center, a Premier Accredited PATH International facility, provided an opportunity for three smaller research studies from 2015 to 2017. The preliminary research efforts led to recent funding of $88,000 from the Horses and Humans Research Foundation for a research project from February 2017 to August 2018.

With a prevalence of 1 in 68 children (CDC, 2014), autism spectrum disorders (ASD) rank as the most prevalent developmental disorder. The core symptom areas are deficits in social communication and interactions, sensory issues, and restricted or repetitive behavior (APA, 2013). Related to the core symptoms of communication difficulties, sensory and behavioral differences, social anxiety in adolescents with ASD often impedes independent function in adult life (McGowen, Johnstone, McKirdy, Owens, & Stanfield, 2013). For youth who are transitioning into adulthood, elevated stress levels and lack of coping mechanisms become barriers to health and quality of life (Hong, Bishop-Fitzpatrick, Smith, Greenberg, & Mailick, 2016).

Finding evidence of an effective way, without medication, to address stress in young adults with autism, will have broad implications for health of the individual as well as their family members.

In the path to external funding, the university’s internal faculty-student research grant program supported the process. First, the faculty and student researchers completed one study focusing on the outcomes of therapeutic riding on self-efficacy and social skills of youth with autism. This study compared individualized goal-directed recreational therapy to a group activity program for adolescents with ASD. When compared to a group activity program with no individualization or goal setting, Kemeny, Hutchins, Gramlich, Russell, Kerr, & Compton (2015) saw more improvement in social skills and self-efficacy in individualized goal-directed recreational therapy. It appeared that the more intentional targeting of goals had a greater impact on the adolescents’ self-efficacy or confidence for social recreational activity participation. By providing more structure and clarity about the goals of the recreational pursuit beforehand, the participant may have had less social anxiety and more confidence for social engagement than in a peer-mediated situation. Another finding from the descriptive analysis of observational data revealed that goal-directed social games were more effective in promoting responsiveness to mentor/peer and the goal-directed equine-assisted activities were more effective in supporting the individual to initiate conversation.

In the second study, after a PASSHE professional development grant provided funds for training, Dr. Kemeny studied a stress management technique, HeartMath, for youth on the autism spectrum. She conducted a retrospective case study of a series of HeartMath stress management sessions with a young adult with autism. Through this study, she was able to identify a number of strategies for adapting HeartMath for youth on the autism spectrum.

Finally, another internally funded faculty-student research study (Kemeny, Hutchins, Gramlich, Crandell,
Crane, Edwards, Ginsberg, Milstein, & Pykus, In Press) in the final analysis phase, compares two goal-directed therapeutic riding protocols: ground work (grooming and tacking) before therapeutic horseback riding and a structured social group before therapeutic horseback riding. This single subject research focuses on the most effective protocol for using therapeutic riding as an intervention for improving social skills in adolescents with autism. Each of the 13 participants received two different conditions (ground work or social games) in randomized order prior to therapeutic riding. Measures included the parent-report (Home Community-Based Social Scale), observation of behaviors, heart rate variability, and a self-report affect scale. Observational data was analyzed through charting, visual inspection, and interpretation of the data. Preliminary analysis suggests that social engagement games (interaction with peers) prior to therapeutic riding leads to better social outcomes and intensive ground work (interaction with horse) prior to therapeutic riding led to better emotional and cognitive-based outcomes (relaxation, instruction following, and time-on-task).

Using a repeated measures crossover design, the newest research study will compare two different therapeutic interventions (therapeutic riding and stress management training) for effectiveness in promoting stress reduction in young adults with autism spectrum disorders. The proposed study uses a crossover design to better understand which stress management technique is most effective. The participants (n=30) will be randomly assigned to the order that they receive therapeutic riding protocol, the HeartMath intervention or no treatment control. The measures of stress (cortisol in saliva, heart rate, social responsiveness, social anxiety/stress, and perceived stress) will be collected before and after the 10 week intervention periods. In addition, saliva and the heart rate will be collected before and after each session for the HeartMath and therapeutic riding conditions.

This research path did not take a straight line to external funding. However, the combination of several different smaller studies provided the backdrop for a larger more expansive study. The partnership with Storm Harbor Equestrian Center and the outcomes from the faculty-student research studies provided information about feasibility and evidence-based protocols that could be used in a more extensive study.

References


RECENT PUBLICATIONS


Chen, L. & Zhou, H. (Department of Computer Science)


Abstract:
We report on the occurrence of three species in western Pennsylvania counties that represent state range extensions and two that represent new county occurrences. The range extension per se or new county occurrences for four of the species are important because of their respective invasive tendencies. The species for which new distribution data is available include Cardamine impatiens L., Geranium dissectum L., Lamiastrum galeobdolon (L.) Ehrend. & Polatschek, Lathyrus latifolius L., and Rosa gallica L.

Covey, W. (Department of English)


http://www.sru.edu/academics/research/rock-research-expo

Hilton, J.T. (Department of Secondary Education/Foundations of Education)
• (2016) “Teaching future middle level educators to craft learning activities that enhance young adolescent creativity,” Current Issues in Middle Level Education, 21 (1), 1-5.


Background:
Clinically, when a difference of at least 10 mmHg in systolic blood pressure (SBP) between arms exists, it is identified as an interarm systolic blood pressure difference (ISBPD). At rest, ISBPD is linked with hypertension, peripheral vascular disease, and increased premature mortality. Exercise may reveal underlying cardiovascular pathologies otherwise absent at rest. However, there have been no investigations to examine the effect of exercise on ISBPD. Aim: The aim of this investigation was to determine whether exercise may alter ISBPD when detected at rest or reveal ISBPD when it was not observed in the resting condition. Methods: An experienced investigator sequentially measured SBP using standard auscultation in each arm (alternating order) in 85 normotensive individuals (22+/-6 years, 39 male, 46 female). ISBPD was quantified before exercise (PRE). Participants then completed a three-stage protocol on a cycle ergometer. A cadence of 50 rpm was maintained at a workload of 3 (EX-3; light) and 6 (EX-6; moderate) METS and during an active recovery (REC). At each stage, SBP was measured upon achieving steady-state heart rate. A logistic regression analysis was used to determine the change in odds ratio of ISBPD when exposed to exercise. Results: Thirteen percent (n=11) of patients presented with ISBPD during PRE and the degree of ISBPD was lower (3.81 mmHg; P<0.05) in REC than PRE. In individuals who did not present with ISBPD during PRE (n=74), progression from EX-3 to EX-6 significantly increased the odds of developing ISBPD (4.31; P<0.05). Conclusion: In individuals with ISBPD at PRE, active recovery from exercise attenuated the difference between interarm SBP. Moderate-intensity exercise resulted in ISBPD not otherwise present at rest.


Objective:
This investigation was performed to determine how students in a health sciences program utilize and explain techniques within blood pressure measurement using a novel assessment, and changes associated with greater curricular exposure. Methods: An exploratory, qualitative and quantitative study was conducted using a ‘Think Aloud’ design with protocol analysis. Following familiarization, participants performed the task of measuring blood pressure on a reference subject while stating their thought processes. A trained practitioner recorded each participant’s procedural proficiency using a standardized rubric. There were 112 participants in the study with varying levels of curricular exposure to blood pressure measurement. Results: Four trends are noted. Specifically, a trend was observed wherein a marked increase in procedural proficiency with a plateau occurred (e.g. released cuff pressure 2-4 mmHg, 10%, 60%, 83%, 82%). Secondly, a trend was observed with improvement across groups (e.g. cuff placed snugly/smoothly on upper arm, 20%, 60%, 81%, and 91%). Other trends included a marked improvement with subsequent decrease, and an improvement without achieving proficiency (e.g. palpation of the brachial pulse, 5%, 90%, 81%, 68%, appropriate size cuff, 17%, 40%, 33%, 41%, respectively). Qualitatively, transcript interpretation resulted in a need for clarification in the way blood pressure procedure is instructed in the curriculum. Conclusions: The current investigation provides a snapshot of proficiency in
blood pressure assessment across a curriculum and highlights considerations for best instructional practices, including the use of ‘Think Aloud. Consequently, medical educators should use qualitative and quantitative assessments concurrently to determine achievement of blood pressure skill proficiency.


**Abstract:**
The kettlebell swing (KBS), emphasizing cyclical, explosive hip extension in the horizontal plane, aligns with movement- and velocity-specificity of sprinting. The present study examined the effect of an eight-week KBS intervention on sprinting in recreationally-active females, in comparison to an eight-week intervention using the stiff-legged deadlift (SDL). Following a pre-testing session measuring 30-meter sprint and countermovement vertical jump performance, participants were divided evenly by sprint time into KBS (n=8) and SDL (n=10) cohorts. Following familiarization with the exercises, KBS met twice weekly to perform swings using the Tabata interval (20s work, 10s rest, 8 rounds), stressing a rapid, explosive tempo. In contrast, the SDL group performed their Tabata stiff-legged deadlifts at a conventional resistance training tempo (2 seconds concentric, 2 seconds eccentric). Following eight weeks and greater than 95% training adherence, the SDL group only had a slightly greater average training volume (~3%) than KBS. No significant differences in pre-test values, or changes were noted in sprint performance from pre- to post-intervention in either group. An improvement in vertical jump performance was noted across groups. Potential explanations for the lack of sprint improvement compared to previous studies include differences between recreationally-active and athletic females, and low exercise volume (~46% of a comparable study with improvements in vertical jump). Future studies should seek to determine the appropriate volume and intensity for KBS components of sprint programming.


**Abstract:**
A communal orientation focusing on others is consistent with stereotypes of women’s social roles and personality traits, whereas an agentic orientation focusing more exclusively on oneself is consistent with men’s roles and traits. Using survey methods, we drew from Sandra Bem’s ideas to investigate whether gender differences in endorsement of communal and agentic conflict-management strategies varied depending on the peer relationship context. When gender differences were found, we investigated whether they were accounted for by masculine and feminine personality traits. College students (N = 116; 49 men and 67 women, 18–24 years-old) from the U.S. mid-Atlantic region rated stereotyped masculine and feminine traits as well as communal and agentic strategies for resolving hypothetical contexts in three peer contexts: same-gender friend, other-gender friend, and other-gender romantic partner. When conflicts involved a same-gender friend, women rated communal strategies higher than did men, but men’s and women’s ratings of communal strategies were similar in the other peer contexts. When conflicts involved an other-gender friend or romantic partner, women rated agentic strategies higher than did men, but men’s and women’s ratings of agentic strategies were similar when the conflict involved a same-gender friend. Women’s greater endorsement of communal strategies for managing conflicts with a same-gender friend was partially explained by their being more likely than men to endorse stereotypical feminine personality traits. Results are discussed in light of Bem’s (1974) once revolutionary, but still relevant, ideas that situational demands influence behavioral expressions of gender and that gender is a multidimensional construct.


Krayesky, D.M. & Chmielewski, J.G. (Department of Biology)


**Abstract:**
Several new Sphagnum species occurrences are reported for each of Butler, Crawford, Mercer, and Venango Counties in northwestern Pennsylvania. Five new county records are reported from Butler County: S. centrale, S. cuspidatum, S. flexuosum, S. girgensohnii, and S. subtile. Sphagnum contortum and S. palustre are new to Crawford and Mercer Counties, respectively. Seven new county records are reported to Venango County, namely, S. cuspidatum, S. girgensohnii, S. magellanicum, S. majus, S. palustre, S. subsecundum, and S. warnstorfi. Additionally, we report the continued occurrences of S. girgensohnii from Allegheny County and S. capillifolium from Butler County that were previously known only from historical records of collections made 70 and 80 years ago, respectively.


**Abstract:**
Range extensions to Butler County (Albizia julibrissin, Maclura pomifera and Magnolia kobus), Mercer County (Bellis perennis), Venango County (Lespedeza cuneata), and both Allegheny and Lawrence Counties (Arundinaria gigantea) are reported. All species are non-native to Pennsylvania, and L. cuneata and A. julibrissin are considered invasive species in the commonwealth. The occurrence of M. kobus from a wet lowland forest in Butler County represents the first naturalized report of the species from the western half of the commonwealth. The reports of A. gigantea from Allegheny and Lawrence Counties are notable as they represent the second known occurrences of naturalized populations in Pennsylvania.


**Aims:**
Serum chemerin concentrations are elevated in obese individuals and may play a role in type 2 diabetes. Exercise improves insulin sensitivity, which may be related to changes in chemerin. This study explored how an acute bout of
aerobic exercise affected chemerin levels in non-diabetic obese adults. Methods: Blood samples from 11 obese adults were obtained during two separate conditions: sedentary (SED) and exercise (EX; 60–65% VO2peak). Samples were drawn at baseline, immediately following exercise and hourly for an additional 2 h. ANOVA was used to test for differences in chemerin between conditions. Results: Unadjusted analysis showed no difference in overall change (baseline to 2 h post) in chemerin between conditions. During the 2-h post-exercise period, chemerin decreased to 12% below baseline, compared to a 2.5% increase above baseline during that time period on the sedentary day (p = 0.06, difference in post-to-2 h change between conditions). Controlling for homeostatic model assessment of insulin resistance (HOMA-IR), a significant difference existed between EX and SED in the change in chemerin from baseline to 2-h post (p = 0.02). Stratified analyses showed a consistent exercise-induced decrease in chemerin among non-insulin resistant subjects, while chemerin increased during exercise among insulin resistant subjects, and then decreased post-exercise. Conclusion: An acute bout of exercise in obese individuals may elicit a drop in chemerin levels during the post-exercise period, and this response may vary based on insulin resistance.


Abstract:
Bonus depreciation was enacted by the United States Congress and signed into law in 2002 largely in response to the economic malaise that engulfed the U.S. economy after the September 11, 2011 terrorist attacks. We investigate whether bonus depreciation, a capital asset expensing allowance under the U.S. federal income tax code, impacted the level of business investment in property, plants, and equipment in the time periods that followed 9-11 in comparison to other earlier time periods. Based on the empirical evidence, the bonus depreciation policy has a positive effect on capital expenditures only in the period in which this policy was legislatively anticipated, specifically the period spanning the last quarter of 2001 and the first quarter of 2002. Otherwise, we find no significant increase in capital expenditures during the period that this special depreciation provision policy is initially in place from 2002 to 2005. Although bonus depreciation is re-enacted in response to the fiscal distress and recession that began in 2007, capital expenditures actually decline during the recovery era, a period following the post-2008 subprime mortgage crisis. Though Congress continues to temporarily re-enact bonus depreciation on an annual basis through December 31, 2014, there is no strong evidence that capital investment is positively impacted. Instead, the empirical results show that factors that positively affect the level of companies’ capital expenditures include capital intensity, cost of capital, amount of cash holdings, changes in sales and loans. Our empirical results invite the question of Congress’ intended goal in re-instating bonus depreciation for 2015 through 2019.

Melago, K.A. (Department of Music)
• (2016) “Managing Email in a Social Media World,” PMEA News, 80 (4), 52-54.


http://www.sru.edu/academics/research/rock-research-expo

Abstract:
Building Radiation Hybrid (RH) maps is a challenging process. Traditional RH mapping techniques are very time consuming, and do not work well on noisy datasets. In this presented research, we propose a new approach that uses resampling technique with consensus clustering technique to filter out unreliable markers, and build robust RH maps in a short time. The main aims of using the proposed approach is: first to reduce the mapping computational complexity, thus speeding up the mapping process. And second, to filter out unreliable markers, and map the remaining reliable markers to build robust maps. The proposed approach maps RH datasets in four steps, as follows: 1) uses Jackknife resampling technique to resample the RH dataset, and groups all resampled datasets into clusters. 2) Builds consensus clusters and filters out unreliable markers. 3) Maps the consensus clusters. 4) Connects the consensus clusters’ maps to form the final map. To demonstrate the performance of our proposed approach, we compare the accuracy of the constructed maps with the corresponding physical maps. Also, we compare the running time of our constructed maps with the Carthagene tool maps running time. The results show that the proposed approach can construct robust maps in a comparatively very short time.

Sparrow, T. (Department of Philosophy)


Winters, A.M. (Department of Philosophy)


RECENT PRESENTATIONS/
PERFORMANCES/EXHIBITIONS


Ambrosio, N. (Department of Dance)
- (2016) presented a solo dance entitled Roll Up Your Sleeves, presented at the Succop Theatre, Butler, PA, with music by Andy Hasenpflug.
- (2016) choreographed Handel’s Messiah, for the 200 member Music Club Chorus of New Castle, performed with 15 dancers at St. Vitus Church, New Castle, PA.


Abstract:
The goal of the study was to create a modern checklist of lichen species in Lawrence County, Pennsylvania. Lichens are composite organism combined of one or two types of fungi and photobiont. The photobiont of lichens are either a species of green algae or cyanobacteria. The most recent studies in this area were concluded about 60 years ago, hence the records are merely historic. Previous studies have identified 31 species in Lawrence County. In the study herein, a collection of nearly 50 lichens were acquired in 2016 from Lawrence County. There are 11 new records for Lawrence County. In addition, five are new records for western Pennsylvania. In conclusion, this study demonstrates, that lichen diversity in the Lawrence County is underestimated. Furthermore, these new reports may represent in some cases species requiring protection, as it is difficult at this time to determine if these aforementioned species are rare or merely overlooked.


Abstract:
The poster showcased how the Inter-Professional Education (IPE) team has initiated a project to incorporate IPE into the health professions majors at SRU. Outlined in the poster were the vision and strategic plan, current progress, and challenges that have been faced by the IPE team during the initial phase of the project.

Custer, T.M. (Department of Dance)
- (2016) Performed solo hip hop dance theater show, "My Good Side" at the University of Colorado at
• (2016) Performed solo hip hop dance theater show, "My Good Side" at Illinois State University. Taught master classes and choreographed a new work for students. October.

• (2016) Choreographed a new work for students at Meredith College in Raleigh, NC. November.


Dailey, M.A (Department of Nursing) (2017) “Personality type and the configuration of online learning groups,” poster presentation based on original research at The 28th Congress of Sigma Theta Tau International Honor Society of Nursing, Dublin, Ireland. July.


Hertel, H. (Department of Art) (2016)

**Project Description:**
The Sailcloth Art Project is a transdisciplinary project involving several faculty members: Heather Hertel (Department of Art), Ben Shaevitz (Department of Physics), David Krayesky (Department of Biology), Ursula Payne and Lindsay Fisher Viatori (Department of Dance).

The Sailcloth Art Project: A Material Investigation. SRU Student /Faculty Research Grant Recipient Student Participants:

Maggie Acker, Jared Robison (Department of Art, Bachelor of Fine Arts), Clare Clark (Department of Geography, Geology, and the Environment, Environmental Science major), Kathryn Fitzgerald, Erin Pandolfino, Mikaela Skiljo, Bernard Stote, Tyra Welsh (Department of Art, Bachelor of Fine Arts candidate), and Sarahmay Schlea (Department of Physics major)

The project also included the following SRU students: Chase Upchurch (Department of Music), Maria Crist, Kylie Hushon, Patricia Kohler, Darrin Mosley, and Kacie Womak (Department of Dance).

The idea began as an artist, while racing, looked up and connected her passion for painting and sailing. The sail shape beckoned for imagery. The artist started working with a dancer and photographer to capture improvisational movements of figures. The built environments include collaged figures of dancers floating up away from the sails to share the experiential and freeing feeling through sailing.

The Sailcloth Art Project is a multi-faceted project including artists, sailors, dancers, musicians, poets, and scientists extending cross-disciplinary interactions to the community at both art and sailing venues. The first exhibition culminated at the Bayfront Maritime Center, in Erie, PA, during Tall Ships Erie 2016. The goal of the project is to evoke the motion and fluidity of sailing, and the energy of the wind, with both indoor and outdoor installations consisting of large-scale painting and sculpture on recycled racing sails.

Collaborations exude: dance performances interwoven with the art environment, poetry and musical scores at receptions, the intermingling of science research and exploration to inform imagery and structure. The Sailcloth Art Project is a grant recipient of: Erie Arts & Culture and the SRU Student/ Faculty Research Grant providing support for multi-disciplinary involvement.

The Sailcloth Art Project educates and connects
• (2016) Art Exhibition: Bayfront Maritime Center, Erie, PA; September 1 – 30. This project is the culmination of an interdisciplinary project where several SRU faculty members along with SRU Art, Science, Dance and Music students came together to produce a multi-disciplinary experience of art installations at a sailing venue. SRU Music Student: Chase Upchurch composed a musical score with the Rime of the Ancient Mariner, by Samuel T. Cooleridge, 1846. Performers: Nicholas Hess, Poet; and Laura Swedenborg, Dance to also collaborate at the opening: September 1, 6:00 to 8:00pm.

• (2016) Sailcloth Art Project: spray painted mural in Erie, PA part of the Erie Downtown Mural Arts, wall granted by Erie Logistics company, French Street between 14 and 15 under railroad pass. To support the Erie Downtown Mural Arts organization and promote the Sailcloth Art Project, Professor Hertel created her first aerosol mural with flying figures from the project.


• (2016) presented at the session: Dance with Me: How Visual Arts meet the Performing Arts, SECAC Art Conference in Roanoke, VA, October 19, 20, 2016. Professor Hertel also conducted a session of four national artist presentations, titled: Painting on Non-Traditional Surfaces.

• (2016) conducted a two session panel Art & Power 1 and Art & Power 2. Mid America College Art Association (MACAA) Art Conference, Cincinnati, OH. October 27.
  o Akiko Kotani, SRU Art Professor Emerita to present on Art & Power Session 1
  o Professor Hertel provided conference presentation experience for five SRU students: Clare Clark, Mikaela Skiljo, Tyra Welsh, Kathryn Fitzgerald, Bernard Stote
  o All five students were accepted to present
  o One artwork from the Sailcloth Art Project was accepted into the Juried Exhibition: Better Than Art, at Modern Makers, Cincinnati, OH, in tandem with MACAA Art Conference 2016. Exhibition: October 27 – November 1, 2016. Jurors: Catherine Richards, Rod Northcutt, Ahn Tran. “Wind Spirit” sailcloth art piece was accepted for display


Hilton, J. T. (Department of Secondary Education/Foundations of Education)


Hull, E., Kovacs, I., Liu, W. (Department of Physical and Health Education), Kostek, E., & Sarah, M. (2016) “Inclusion of high fitness students helps encourage increased movement in low fitness students.” Poster session presented at 2016 Annual Meeting of American College of Sports Medicine, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Energy Balance, Boston, MA. June.

Helmick, J. (Department of Music)

- (2016) played euphonium on Neal Corwell’s “Threnody” on the “9/11 – Remembering the Victims…Expressing Hope for Peace” recital, Slippery Rock University, Slippery Rock, PA. September 11.

Jirasakuldech, B. (School of Business) & Emekter, R.


Kovacs, I., Liu, W., & Hull, E. (Department of Physical and Health Education) (2016) “Predicting PACER laps from body mass index among college students.” Poster session presented at Research Program of 2016 National Convention of Society of Health and Physical Educators, Minneapolis, MN. April.

Kovacs, I., Hull, E., & Liu, W. (Department of Physical and Health Education) (2016) “Flexibility improves as a result of participating in general PA classes among university students?” Poster session presented at 2016 Annual Meeting of American College of Sports Medicine, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Energy Balance, Boston, MA. June.


Abstract:

In the past decade there has been some confusion over the application of the name Sonderophycus. Sonderophycus originally was placed as incertae sedis within the red algae. Today, individuals who apply the name Sonderophycus recognize that it belongs to the red algal crustose order Peyssonneliales. Recently, there has been revisionary research conducted in the Peyssonneliales that has led to apparent problems with the use of the name Sonderophycus by some Phycologists. A systematic study conducted in the early 1980s resolved the nomenclatural issues with Sonderophycus in which the name was to be no longer applied; however, it appears that some are no longer following this treatment of Sonderophycus. In this study herein, we clarify why the name Sonderopelta should be used over that of Sonderophycus.

Kuehn, S., Ridener, R. (Department of Criminology and Security Studies), Shay, T., & Roessler, N. (2016) “A longitudinal study of undergraduate students' perceptions of criminal justice-related issues,” poster presentation at the Symposium for Student Research, Scholarship, and Creative Achievement, Slippery Rock, PA.

Liu, W. (Department of Physical and Health Education)

  - “Competency in motor skills and physical activity participation among adolescents.”
  - “Physical fitness tracking review: Findings, limitations, and improvement needed.”

- (2016, June) Invited presentations in China:
  - “Opportunities and channels of physical activity participation among university students in the United States.” Presentation at China Pharmaceutical University, Nanjing, Jiangsu, China.
  - “Field dependence-independence and youth’s sports and physical activity participation.” Presentation at Nanjing Sports University, Nanjing, Jiangsu, China.
  - “American Federal Government’s Physical Activity Guidelines.” Presentation at Tianjin Sports University, Tianjin, China.
  - “American Federal Government’s Physical Activity Guidelines.” Presentation at Northwestern Polytechnical University, Xi’an, Shanxi, China.
  - “Field dependence-independence and youth’s sports and physical activity participation.” Presentation at Xi’an Jiao Tong University, Xi’an, Shanxi, China.
  - “Selection, submission, and review procedures for International conferences and journals.” Presentation at Xi’an Jiao Tong University, Xi’an, Shanxi, China.


Liu, W., Hull, E., & Kovacs, I. (Department of Physical and Health Education) (2016) “Changes in predicting PACER from BMI during middle school period: Boys versus girls,” poster session presented at 2016 Annual Meeting of American College of Sports Medicine, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Energy Balance, Boston, MA. June.

Lynch, J. M. (Department of Special Education), Grazier, A., & Sgattoni, V. (2016) “Mentoring first-year special education majors: the Professor Protégé Program,” presentation at the annual meeting of the Council for Exceptional Children (CEC), St. Louis, MO. April 13-16.


Lynch, S.D. & Lynch, J. M. (Department of Special Education)


- (2016) “Math club: A university-school partnership to promote learning for all,” presentation at the

Melago, K. (Department of Music)

- (2017) “Become a practicing Pro! Tricks and tools for junior high and high school flutists to develop effective practice routines,” presented at Central Ohio Flute Association Flute Festival – Columbus, Ohio. April 1.
- (2016) performed “Andante and Rondo” by Franz Doppler at Slippery Rock University Faculty Collaborative Recital, Slippery Rock, PA. October 13.

Payne, U. (Department of Dance)

- (2017) As a prominent Stager of dances from Labanotation score, Payne was invited to participate in the Dance Notation Bureau’s Oral History Project. The recording and transcript will be archived in the Jerome Lawrence and Robert E. Lee Theatre Research Institute at The Ohio State University (TRI), where it will be publicly available as part of OSU’s oral history projects. January 2017
- (2017) was invited to present her paper, “Teaching Laban Based Contemporary Movement Practices to Ugandan Students at STAWA University,” at the 30th Biennial Conference of the International Council of Kinetography Laban/Labanotation (ICKL) to be held at the Beijing Normal University, China from July 23 to July 30, 2017. The 2017 ICKL conference focuses on making connections between the various Laban-based systems using innovative and interdisciplinary methods as applied world-wide. January 2017 (received official notification).
- (2017) Served as the Artistic Director for Slippery Rock University Dance Theater in their production of “In Our Element” at Butler County Community College. 15 dances were presented on the program which included one faculty and one guest artist work. February.
- (2017) Traveled to the American College Dance Association Conference at the University of Maryland with 19 dance majors. Two dances from the SRUDT Winter Concert were adjudicated in front of a panel of distinguished professional dance teachers.
artists and one dance was presented on the informal dance concert. March.


- (2017) As the Frederick Douglass Institute Director, Payne coordinated the civil rights program “The Friendship Nine” featuring Dr. Thomas Gaither in the SSC. This event was hosted by the Frederick Douglass Institute, Office of Inclusive Excellence, and the DEI Leadership Team. There were over 300 people in attendance. February 2017.

- (2017) As the Frederick Douglass Institute Director, Payne coordinated the Women’s History event “Bad and Bougie: Shifting Perspectives and Social Media Commentary” featuring an interactive discussion with Damon Young about writing, new media, race, and black culture. The event also included a live DJ and performances by Jam Rock and the Department of Dance that reframe the female body in urban performance. March.

- (2017) Served as a distinguished adjudicator for the American College Dance Association Mid-Atlantic South Regional Conference hosted by Johnson C. Smith University in Charlotte, NC. As an adjudicator Payne is responsible for assessing dances performances from college and university dance programs in the region and teaching master classes. The top dances will be performed on a Gala Concert that is programmed by the adjudicators. March.

This roundtable discussed ways to figure out and think out of the box together of the best strategies to respond to these critical issues that are becoming matters of concern, and have been affecting different universities and colleges across the nation.


Topic:
This roundtable addressed the relationship between digital technologies and intercultural communication, as well as the pedagogical opportunities presented to educators.


Topic:
This panel provided different perspectives on the question: how do/can social networking technologies contribute to or detract from our ability to engage in civil discourse in the workplace?


Strahler, D. & Swarts, V. (Department of Communication) (2016) "'Graphics or infographics?' examining the growth of information-based visual storytelling since the 2010 launch of the iPad,” panel presentation at the 74th Annual New York State Communication Association Conference, Callicoon, NY.
October 14-16.

Chair: **Valerie Swarts, Department of Communication**

Topic: Panelists discussed the visual aspects of storytelling, information structures, and user engagement in the digital era.

**Swarts, V. (Department of Communication) (2016)**

“Welcome to college: the professor’s role(s) in socialization of first year students,” – “Visual literacy and the first year experience,” panel presentation at the 74th Annual New York State Communication Association Conference, Callicoon, NY. October 14-16.


“Blood pressure cuff selection: does one size fit all?” slide presentation at MARC ACSM Conference, Harrisburg, PA. November.

**Westman, B. (Department of Art)**

- (2016) 13th National Exhibition of Polish Tapestry, juried, Central Museum of Textiles, Lodz, Poland.
- (2016) Juror for The Scholastic Art Awards for the Pittsburgh Region. Invited to be the speaker at the Awards Ceremony at Community College of Allegheny County.
- (2016) “Impressions in Red”, three collaboration exhibitions; Co-organized and co-wrote the program of the International Fibers Studio Collaboration between SRU and Academy of Fine Arts, Gdańsk, Poland students and faculty in both Fiber Art Studios.
  - June 22 – July 7, Station Culture, Rumia, Poland
  - September 12 – 23, Slippery Rock University, Art Building
  - September 26 – October 28, Mary Hulton Phillips Gallery, BC3
- (2016) 20 x 20 TEXTILE, juried, Warsaw & Gdansk, Poland.
  - January 21 – February 27, at Jan Nowak-Jezioranski Information Center, Warsaw, Poland
  - March 9 – April 1, 2016 at GAK gallery, Sobieszewo, Poland [http://www.wyspaskarbow.gak.gda.pl/](http://www.wyspaskarbow.gak.gda.pl/)
- (2016) Faculty sponsor of two student research projects presented at the 2014 SRU Symposium for Research, Scholarship, and Creative Achievement.
  - Summer Weinheimer “textiles, Dues and Ink”
  - David Gordon “Printmaking Reborn”
- (2016) selected by the students and faculty in the Art Department for the Excellence in Teaching Award.
- (2016) sponsor of the undergraduate student research grant project by David Gordon “Printmaking Reborn”.
- (2016) the Fiber Art student Alexandra Kirsch, BFA had her artworks selected for the 2016 FiberArt International, a very selective international competition, May 6 – August 21, Pittsburgh Center for The Arts and Society for Contemporary Crafts.
- (2016) 10th International Baltic Mini Textile Triennial (juried) at Museum of the City of Gdynia, Poland. A well-established fiber art event presenting selected works from around the world.


- (2017) Faculty sponsor of a student research project presented at the 2014 SRU Symposium for Research, Scholarship, and Creative Achievement.
  - Jamie Mulac “Capturing Emotions in Portraiture”
  - Kasey Kurpakus “Lunar”
  - Megan Hulings “Traditional Japanese Printmaking”
  - David Gordon “Post Modern Parable”

- (2017) Juror for The Scholastic Art Awards for the Pittsburgh Region. Invited to be the speaker at the Awards Ceremony at La Roche College, Pittsburgh. Over 1800 artworks submitted.


Willford, J. (Department of Psychology) & Gallen, R.T.


Winters, A.M. (Department of Philosophy)


- (2017) presented “Horror Without Monsters: An Analysis of John Carpenter's In the Mouth of Madness” Media Studies Department Colloquium at University of South Florida, Tampa, FL. March.


Zamarripa, C. (Department of Nursing)


RECENT RESEARCH ACTIVITIES AND ACCOLADES

Ambrosio, N. (Department of Dance)
- (2016) continues to serve on the Board of Directors for Lincoln Park Performing Arts Charter School, and is now the Nominations Chair, and Arts and Academic Curriculum Chair. She recently organized a meeting to discuss arts advocacy, which included Board members, the CEO, and PA State Representatives.
- (2016) served as the Artistic Director of the senior dance concert Quiet Rising, which featured twenty dances created through the senior capstone course.
- (2016) serves as a writing mentor for new authors for the Dance Education in Practice Journal, published by Taylor and Francis Group. She also serves on the Editorial Board.
- (2016) conducted a site visit as Team Chairperson on behalf of the National Association of Schools of Dance.


Cowan, A. (Department of History) (2016) was awarded a Humanities Access Grant of $100,000 from the National Endowment for the Humanities Ladder program, an initiative that brings SRU faculty and students into Aliquippa High School to teach humanities enrichment, with the goals of improving students’ civic engagement and educational success.


Abstract:
Multiple-baseline across participants intervention study implemented to understand the effects of using the I-THINK problem solving framework to assist 1st grade students at risk for mathematical learning difficulties to self-regulated and monitor their thinking during problem solving tasks.


Abstract:
Led a team of undergraduate Elementary and Special Education majors as we assessed the relationship between grittiness and mathematical problem solving performance in 3rd grade students in a rural high needs district.

Lynch, J. M. (Department of Special Education) & Mc Cleary, M. (student researcher, Secondary Education major) (2017) “PSTs’ Perceptions of Full Inclusion after a Service-Learning Partnership with the Watson Institute,” Funded ($3,250) through a Faculty/Student Research Grant. this project will develop a service-learning partnership with the Watson Institute, “an approved private school that is licensed to serve children ages 3 to 21 with autism, cerebral palsy, neurological impairments and other developmental disabilities” (The Watson Institute, n.d.) and to understand how pre-service teachers’ (PSTs) perceptions of a full inclusion model of education for students with severe special needs changes, if at all, after participating in the project.

Melago, K. (Department of Music) (2016) Margaret S. Bauer Grant from the Pennsylvania Music Educators Association ($1,000) for “iPads for Distance-Learning Teaching Experience by Pre-Service Music Educators”. Fall 2016.

Mondal, S. (School of Business) (2016) The Vice President of the Pennsylvania Economic Association, and the Local Arrangements Chair for the 2016 Pennsylvania Economic Association (PEA) Annual Conference, held by the School of Business at Slippery Rock University. June 2-4.
Highlights of the Conference:

This conference is organized and sponsored by Pennsylvania Economic Association and Slippery Rock University. The PEA is a professional association of economists and allied social scientists in Pennsylvania and neighboring states. The conferences have attracted economists not only from Pennsylvania and the surrounding states of Maryland, New York, New Jersey, Connecticut, Ohio and West Virginia, but also from a variety of other countries.

- Around 100 conference registrants, 63 research papers presented at the conference.
- 11 School of Business faculty members presented their research, and 3 SRU students submitted papers to the conference.
- Best Undergraduate Paper Contest: to encourage undergraduate research, 3 prizes awarded to best undergraduate papers submitted to the conference.
- Opportunity to publish in one of the two peer-reviewed publications of the PEA: Papers and Proceedings, and the Pennsylvania Economic Review journal.
- Professional networking and collaborative research opportunities for attendees.
- Keynote Luncheon presentation "Fortress and Frontier: Health Care Innovation for a Digital World", by Dr. Robert Graboyes (Healthcare Economist, Senior Research Fellow, at George Mason University).
- Cleveland Federal Reserve Board lecture by Lisa Nelson and Kyle Fee, who shared their brand new research results on “Opportunity Occupations”.
- Healthcare Panel Discussion titled, “The 100-Year Doldrums of Health Economics”.

Sparrow, T. & Winters, A.M. (Department of Philosophy) (2016) co-coached two SRU teams at the regional ethics bowl competition held at Marian University, Indianapolis, IN. November 12.

Winters, A. M. (Department of Philosophy)

- (2016) National Science Foundation Travel Grant (Philosophy of Science Association Conference). November.

Winters, A.M. (Department of Philosophy) & Knafelc, S.J. (Philosophy and Psychology Major) (2016) received 2016 Summer Undergraduate Research Experience Grant for their project Process and Extended Mind.

http://www.sru.edu/academics/research/rock-research-expo
Frequently Asked Questions

1. **What is the Rock Research Expo?**
   The Rock Research Expo (RRE) is an annual newsletter that keeps our campus informed of the scholarly endeavors and potential research opportunities for faculty and students.

2. **Why is it important to participate?**
   The RRE shares, across disciplines throughout campus, new knowledge being gained through both faculty and student research. Additionally, the RRE serves to promote academic communication, collaboration, and a success-driven environment of learning for faculty and students.

3. **What types of submissions are appropriate?**
   - Recent publications by faculty members and students,
   - Research projects and grant acquisition information (title, authors, brief description),
   - Recent presentations, performances, and exhibitions by faculty and students.

4. **How do I submit my information?**
   Faculty and students (with faculty letter of support) may submit their information via email to: rockresearchexpo@sru.edu.

5. **When is the deadline to submit?**
   Submission deadline for the newsletter is February 27.

6. **When will the next issue be published?**
   The newsletter is published annually after spring break.

7. **How should I cite my submission?**
   Use whatever citation format is standard for your field of study. A short abstract may be included, if desired.

Please make sure to include the name of your department. See the example below.


http://www.sru.edu/academics/research/rock-research-expo