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WELCOME

Aims

Rock Research Expo is published online twice yearly, in spring and fall. Rock Research Expo (RRE) serves as a newsletter that keeps our campus informed of the exciting accomplishments, scholarly endeavors and potential research opportunities for both faculty members and students. Specifically, Rock Research Expo aims to:

- Introduce new knowledge of different disciplines to campus students,
- Provoke students' interests and curiosity in knowledge exploration,
- Promote long term academic communication and collaboration on campus, and most importantly,
- Develop a success-driven environment of learning for both professors and students.

Scope

- Recent publications of faculty members and students on campus (title, authors, and short abstract),

- Research Projects and Grant Acquisition (title, authors, brief introduction),
- Recent conference presentations of faculty members and students,
- Announcement of grant opportunities,
- Announcement of visiting scholars on campus and a short biography for each scholar,
- Announcement of research related activities on campus.

Policies

- Information submitted should be an in-depth elaboration in layman's terms to excite the readers,
- Anyone on campus can submit their information online or by 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.

Editorial Board

Dr. Jeffrey Forrest, Department of Mathematics
 Dr. Jialing Wang, Department of Geography, Geology, and the Environment
 Mr. Philip Tramdock, Bailey Library
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FEATURE STORY

Dr. Junko Yamamoto



Each issue of Rock Research Expo highlights the recent achievements and activities of some of our faculty members. This Fall 2011 newsletter shines the spotlight on Junko Yamamoto, EdD, Assistant

Professor of Secondary Education/ Foundations of Education.

Dr. Yamamoto earned her Master degree in University of Pittsburgh in 2000 and her EdD in Duquesne University, Pittsburgh in 2007. She joined Slippery Rock University in 2005. Dr. Yamamoto was recently elected to become an executive council member for Pennsylvania State Modern Language Association (PSMLA). The council introduced her to the general membership during the PSMLA conference in State College, which was held October 20-22, 2011. She also presented a workshop about creating a digital video to facilitate interpersonal oral communication during the conference. "It was very inspiring to mingle with K-12 and higher education teachers who are interested in enhancing the best classroom practices," says Dr. Yamamoto. "The group also knows how to enjoy themselves. Some of us went to a Mexican restaurant during the conference and it turned out that everyone except me spoke fluent Spanish. It was interesting to listen to them interact with the waiters."

When going abroad, Dr. Yamamoto studies local languages and communicates in the language as much as possible. Dr. Yamamoto has presented at technology conferences in

Singapore; Vienna, Austria; Rome, Italy; Timisoara, Romania and Lisbon, Portugal. "It is rewarding when the locals understand me and I understand them." When she presented at ED-Media 2011 in Lisbon, Portugal, she took a bus to Fátima. When she arrived at the house of Lucia Santos, one of the tourist spots in Fátima, Dr. Yamamoto was surrounded by children around the age of 5. They took turns trying to teach her Portuguese. It was very exciting for her to see how children seem to have a natural interest in communication. It was also interesting that one can use Latin cognate to pick up Portuguese. Dr. Yamamoto studied Latin in order to sing for St. Peter Parish.

Dr. Yamamoto grew up speaking Japanese, but later learned English as a Foreign Language, and then as a Second Language. She combined her background knowledge in language acquisition theories, her journey to master English, and classroom observations in Eastern Pennsylvania, to earn Teachers of English to Speakers of Other Languages (TESOL) certificate. She taught Japanese as a foreign language at Mt. Lebanon High School. In Slippery Rock University, she has taught Teaching Foreign Language K-12, Methods for Teaching English as a Second Language and Bilingual Education, ELL Strategies and Practice, Production and Utilization of Instructional Technologies, Technologies for Instruction, Middle Level Learning Theory, and Methods of Instruction in Secondary Content Areas at the Secondary Education / Foundations of Education Department. Dr. Yamamoto is also a certified institutional reviewer for the American Council on the Teaching of Foreign Languages (ACTFL) accreditation.

Recent Publications and Presentations

- Yamamoto, J. (2010). Pedagogy and content knowledge based podcasting project for preservice teaches. In D. Ifenthaler, P. Isaias, D. G. Sampson, & J. M. Spector (Eds.), *Multiple Perspectives on Problem Solving and Learning in the Digital Age*. New York: Springer.
- Yamamoto, J., Penny, C., Leight, J., & Winterton, S. (Eds.). (2010). *Technology Leadership in Teacher Education: Integrated Solutions and Experience*. Hershey, PA: IGI-Global
- Yamamoto, J. Lombard, R., Kush, J. Hertzog, J. (Eds.). (2010). *Technology Implementation and Teacher Education: Reflective Models*. Hershey, PA: IGI-Global
- "The Muddy Field of Social Networking: Implications for Teacher Educators" ED-MEDIA 2011, Lisbon, Portugal, June 27, 2011-July 1, 2011
- "Reflection from service-learning" Resources for the Electronic Classroom: A Faculty-Student Partnership (REACAP), West Chester, Pennsylvania, May 12, 2011
- "Preservice Teachers' Reflection on Teaching Technology in the Community" Association of Teacher Educators Annual Meeting, Orlando, Florida, February 2011
- "Future Teachers' Reflection on Teaching Technology: What Did They Learn from Service-Learning?" Cognition and Exploratory Learning in Digital Age, IADIS International Conference, Timisoara, Romania, October 2010
- "Credibility Management in the Era of Social Networking" Association of Teacher Educator Conference, Kansas City, Kansas, August 2010
- "TPACK based Podcasting and Vodcasting Projects for Preservice Teachers" International Conference on Teaching and Learning with Technology, Singapore, March 2010
- "Preservice Teachers' Attitude about Podcasting for Classroom Use: Pre-Post Comparison after a TPACK Instruction" The Association of Teacher Educators Annual Meeting, Chicago, Illionos, February 2010

RECENT PUBLICATIONS

Nuzzo, J. L., **Anning, J. H. (Department of Exercise & Rehabilitative Sciences)**, & Scharfenberg, J. M. (2011). The Reliability of Three Devices Used for Measuring Vertical Jump Height. *Journal of Strength and Conditioning Research*, 25 (9), 2580-2590. (Note: Nuzzo is a past SRU temporary instructor and Jessica Scharfenberg is a past student).

Arnhold, R. (Department of Physical Education) and Auxter, D. (2011). Physical activity and disability over the life-spectrum. *Palaestra*, 26 #1, p. 8-9.

Falconer, N., Reicherter, E.A., **Billek-Sawhney, B. (School of Physical Therapy)**, Chesbro, S. (2011). An Analysis of the Readability of Educational Materials on the Consumer Webpage of a Health Professional Organization: Considerations for Practice. *The Internet Journal of Allied Health Sciences and Practice*. July 2011. Volume 9, Number 3.

Lamagna, L. A., Tomcho, K., & **Birckbichler, P. J. (Department of Chemistry)** (2011). Progressive glomeruli damage in type 2 diabetic rats. *Abstracts of Papers of the American Chemical Society*, 241. (Meeting abstract about presentation).

Baldauf, Paul and **Patrick Burkhart (Department of Geography, Geology and the Environment)** (2011). Mass Wasting and Quaternary Landscape Development, Badlands National Park, South Dakota, at Geological Society of America Meeting, Minneapolis, GSA Abstracts with Programs 43 (5), p. 579.

Eric W. MacIntosh and **Brian Crow (Department of Sport Management)** (2011). Positioning a brand within the

controversial sport of mixed martial arts, *Journal of Sponsorship*, Volume 4, Number 2 / March, 2011, Pages: 163-177.

Jun Woo Kim, **Brian Crow (Department of Sport Management)**, Yu Kyoum Kim (2011). Relationship between corporate image and purchase behavior: moderating effects of personal characteristics and situational factors. *Event Management*, Vol 15(3), pages 267-277. (Note: Jun Woo Kim, lead author, earned a master's degree from SRU in 2008).

Danette Dimarco (Department of English). "Going Wendigo: The Emergence of the Iconic Monster in Margaret Atwood's *Oryx and Crake* and Antonia Bird's *Ravenous*." *College Literature*, 38.4 (2011): 134-155.

A. Renee Staton, **William J. Evans (Department of Counseling and Development)**, Chris Lucey (2012) "Chapter 2: Understanding Social Class in the US", in Sturm, D.C., & Gibson, D.M. (Eds.). *Social class and the helping professions: A clinician's guide to navigating the landscape of class in America*. New York: Routledge.

Duan, X. J., & **Lin, Y. (Jeffrey Forrest) (Department of Mathematics)**. (2011) 1. Conservation law of information and its application in evaluation and estimation of complex systems. *Kybernetes*, 40(1-2), 262-274. Note: Yi Lin is Jeffrey Forrest.

Si-feng Liu, Nai-ming Xie, **Jeffrey Forrest (Department of Mathematics)** (2011). "Novel models of grey relational analysis based on visual angle of similarity and nearness," *Grey Systems: Theory and Application*, Vol. 1 Iss: 1, pp.8-18.

Elhadj Zeraoulia (Author, Editor), Julien Clinton Sprott (Editor); Sloucheng OuYang and **Yi Lin (Jeffrey Forrest) (Department of**

Mathematics), Chapter 1 "Problems with Lorenz's Modeling and the Algorithm of Chaos Doctrine" in *Frontiers in the Study of Chaotic Dynamical Systems With Open Problems* (World Scientific Series on Nonlinear Science, Series B p. 1-30 ©2011 World Scientific Publishing Company).

Yi Lin (Jeffrey Forrest) (Department of Mathematics) and S. C. OuYang (2010). "Irregularities and Prediction of Major Disasters – Systems Evaluation, Prediction, and Decision-Making", CRC Press, New York, 627p. ISBN: 978-1-4200-8745-1.

Abstract: In this book, the authors pointed out why modern science fails when applied to make predictions of sudden changes in nature while detailing their newly developed methods of predicting disastrous weather conditions. The book concludes with a set of exciting weather system predictions of real-life case studies, each of which represent a difficult problem for modern science.

K. Y. Z. Forrest (Department of Public Health and Social Work), J. M. Zmuda, J. A. Cauley, S. M. Roth, R. E. Ferrell (2011). The Interleukin 6 G-174C Promoter Polymorphism Is Associated with Hip Bone Loss in Older Men, *Journal of Bone and Mineral Research, Supplement: ASBMR 25th Annual Meeting* Volume 18, Issue Supplement S1, pages S100–S175, 2003. p. SA138.

Füsun F. Gönül (School of Business) and Peter T.L. Popkowski Leszczyc, Snipe bidding behaviour in eBay auctions, *International Journal of Electronic Marketing and Retailing*, Volume 4, Number 1, 2011, 16-29. (Dr. Gonul has been an associate editor of Journal of Research in Interactive Marketing since August 2010.)

Hadley, S. E. (Department of Music), & Yancey, G. (Eds.). (2011). *Therapeutic uses of rap and hip-hop*. London: Routledge.

Hahna, N. D. (Department of Music), & Schwantes, M. (2011). Feminist Music Therapy Pedagogy: A Survey of Music Therapy Educators. *Journal of Music Therapy*, 48 (3), 289-316.

Harrington, M. C. R. (Department of Computer Science) (2011). Empirical Evidence of Priming, Transfer, Reinforcement, and Learning in the Real and Virtual Trillium Trails. *Learning Technologies, IEEE Transactions on Issue*, 4(2), 175-186. (Digital Object Identifier: 10.1109/TLT.2010.20 Date of Publication: 05 August 2010 Date of Current Version: 09 June 2011 Sponsored by: IEEE Education Society IEEE Computer Society)

Abstract: Over the past 20 years, there has been a debate on the effectiveness of virtual reality used for learning with young children, producing many ideas but little empirical proof. This empirical study compared learning activity in situ of a real environment (Real) and a desktop virtual reality (Virtual) environment, built with video game technology, for discovery-based learning. The experiences were in the form of two field trips featuring statistically identical wildflower reserves. While the results support that the Real is superior for learning activity, they also show that the Virtual is useful for priming and reinforcing in-curriculum material, or for situations when the real environment is inaccessible. Offering the Virtual first primes for learning activity in the Real; if used second, it reinforces the Real experience, as supporting evidence shows significant transfer effects. Thus, the Virtual may serve educational goals, if used appropriately, and can come close to the Real. As informal learning environments, such as field trips and video games, are accepted as

motivational, an attitudinal survey was conducted postexperiences to capture motivational factors at play, to aid in comparison and contrast, and to provide context to the empirical results on learning activity in situ; however, more work is needed.

Harrington, M. C. R. (Department of Computer Science) (2011). The Virtual Trillium Trail and the Empirical Effects of Freedom and Fidelity on Discovery-based Learning. Virtual Reality, Springer, March 3, 2011, OnlineFirst DOI: 10.1007/s10055-011-0189-7

<http://www.springerlink.com/content/rkh1j7631l412w66/>

<http://resources.metapress.com/pdf-preview.axd?code=rkh1j7631l412w66&size=largest>

Abstract: The Virtual Trillium Trail is a new kind of desktop virtual reality application that crosses over into the area of geospatial, educational simulations. Visual fidelity significantly impacts intrinsic learning, activity in situ, and knowledge gained, independent of other factors. The main empirical contribution of this report is on the impact of the user interface design parameters of graphical fidelity and navigational freedom on learning outcomes. A planned orthogonal contrast, Two-way ANOVA with the factors of Visual Fidelity and Navigational Freedom—both scaled, and set to high and low levels—shows significant impacts on the variables of Salient Events, a proxy for discovery-based learning, and Knowledge Gained, as measured between a pre-test and a post-test. Thus, there is strong empirical evidence to support the use of desktop virtual environments, built with high-fidelity, photo-realistic, and free navigational game engine technology, as educational simulations for informal education. The high-level Visual

Fidelity combined with the high-level Navigational Freedom condition showed a mean learning gain of 37.44% and is significantly superior to the low-level Visual Fidelity, low-level Navigational Freedom condition, ceteris paribus.

Peter M. Magolda (Editor), Marcia B. Baxter Magolda (Editor). **Michael G. Ignelzi (Department of Counseling and Development)** Chapter 22: "What Forms Would Supervision Take to Model Inclusive, Learning-Oriented Practice? The Case for Developmental Supervision" in Contested Issues in Student Affairs: Diverse Perspectives and Respectful Dialogue, 2011 Stylus Publishing, p. 416-426.

Kemeny, E., Arnhold, R. (Department of Physical Education) & Marge, M. (2011). I can do it, you can do it: a community development approach to health promotion for individuals with disabilities. *Community Development*, 42, 137-151.

Krayesky, D. M. (Department of Biology), Norris, J. N., West, J. A., & Fredericq, S. (2011). The *Caloglossa lepieurii* complex (Delesseriaceae, Rhodophyta) in the Americas: the elucidation of overlooked species based on molecular and morphological evidence. *Cryptogamie Algologie*, 32 (1), 37-62.

Fredericq, S., **Krayesky, D. (Department of Biology)**, Schmidt, W., Gabriel, D., & Norris, J. N. (2011). NEW INSIGHTS INTO THE SYSTEMATICS OF THE RED ALGAL FAMILY PEYSSONNELIACEAE (PEYSSONNELIALES). *Journal of Phycology*, 47, 7-7. (Meeting abstract about presentation)

Krayesky, D. M. (Department of Biology), Norris, J. N., West, J. A., Wysor, B., & Fredericq, S. (2011). A UNIQUE NEW SPECIES OF *CALOGLOSSA* (DELESSERIACEAE,

RHODOPHYTA) FROM PEDRO MIGUEL LOCKS, MIRAFLORES LAKE, PANAMA, CENTRAL AMERICA. *Journal of Phycology*, 47, 44-44. (Meeting abstract about presentation)

Smiley, K. J., **Lim, M. S. (Department of Chemistry)**, & Gawalt, E. S. (2011). Chemical modification on the surface of cobalt oxide. *Abstracts of Papers of the American Chemical Society*, 241. (Meeting abstract about presentation)

Min Soo Lim (Department of Chemistry), Katelyn Smiley, Ellen S. Gawalt, "Thermally Treated Octadecylphosphonic Acid Thin Film Grown on SS316L and Its Stability in Aqueous Environment", *ACS Symposium Series Book; In Amphiphiles: Molecular Assembly and Applications*, 2011.

Kelly M. Lindenberg (School of Physical Therapy), MSPT, PhD, Christopher R. Carcia, PT, PhD, SCS, OCS, Amy L. Phelps, PhD, RobRoy L. Martin, PT, PhD, and Anne M. Burrows, PhD. The Influence of Heel Height on Sagittal Plane Knee Kinematics During Landing Tasks in Recreationally Active and Athletic Collegiate Females. *International Journal of Sports Physical Therapy*. 2011; 6(3): 186-198.

Jianyu Wang, **Wenhao Liu (Department of Physical Education)**, What Skills and Tactics Are Needed to Play Adult Pick-Up Basketball Games? *ICHPER•SD Journal of Research* Volume V, No. 2 Fall & Winter 2010 p. 41-47.

S. J. Rehorek (Department of Biology), J. R. Holland, J. L. Johnson, J. M. Caprez, J. Cray, M. P. Mooney, W. J. Hillenius, and **T. D. Smith (School of Physical Therapy)**, Development of the Lacrimal Apparatus in the Rabbit (*Oryctolagus cuniculus*) and Its Potential Role as an Animal Model for Humans, Hindawi Publishing Corporation, Anatomy Research International, Volume 2011, Article ID 623186,

13 pages. (Note: **Holland** was an undergraduate in the cyotechnology track in Biology. She has since graduated. **Caprez** graduated last year with a B.S. in biology. She is currently working as a physicians scribe with aim of getting into a PA program. **Johnson** graduated last year with a B.A. in Art and a Biology minor. She is now postbaccing her BA in biology and wants to work in the field of scientific illustration. **Bruening** is currently in her clinical year as a cytotech).

Bruening, A. E., Deleon, V. B., Holmes, M. A., Erwin, M. C., **Rehorek, S. J. (Department of Biology)**, & **Smith, T. D. (School of Physical Therapy)** (2011). Perinatal remodeling patterns in the orbit of tarsiers. *American Journal of Physical Anthropology*, 144, 98-98. (Meeting abstract about presentation) (Note: Bruening and Erwin are current SRU students).

Jennifer L. Sanftner (Department of Psychology) (2011) Quality of Life in Relation to Psychosocial Risk Variables for Eating Disorders in Women and Men, *Eating Behaviors: An International Journal*, 12, 136-142.

Abstract: Health-Related Quality of Life was examined in relation to variables that put one at risk for developing an eating disorder. Women (n=266) and men (n=114) completed questionnaires asking about both generic and eating disorder health-related Quality of Life, as well as Body Dissatisfaction, Objectified Body Consciousness, Internalization of Sociocultural Ideals, and Restrained Eating. Overall, women reported significantly higher levels of risk variables than men. In addition, all of the risk variables were found to be associated with lower Quality of Life for women, with the exception of Body Dissatisfaction. Gender was found to moderate the relationship between Quality of

Life and Objectified Body Consciousness, such that women's reports indicated a stronger association between these two variables. Comparisons between a generic and eating disorder specific Quality of Life scale revealed higher sensitivity for the eating disorder specific scale for use with a college student population. These results suggest that women suffer from lower Quality of Life prior to developing eating disorders when they develop risk factors for eating disorders (e.g., a strong sense of one's body as being an aesthetic object to be viewed by others; beliefs that sociocultural and media-based ideals of appearance are important to match; consciously attempting to monitor and control food intake). Also, the results indicate that eating disorder specific Quality of Life scales are useful in understanding women and men in a non-eating disorder population.

Jeremy J. Baker, Katherine J. Searight, Madeliene Atzeva Stump, et al. (includes **Timothy D. Smith (School of Physical Therapy)**, "Hip Anatomy and Ontogeny of Lower Limb Musculature in Three Species of Nonhuman Primates," *Anatomy Research International*, vol. 2011, Hindawi Publishing Corporation, 13 pages, 2011. (Note: Searight is a graduate from the School of Physical Therapy; Baker and Stump are former biology majors who then went onto the School of Physical Therapy).

Abstract: This study included data collected over the course of a decade, and involved collaboration with six DPT students, spanning from recent years back to 1999. In this study, the remains of non-human primates that died in captivity were dissected. The hind limb was examined to determine what aspects of muscular and skeletal anatomy are well developed at birth in primate species with highly specialized modes of locomotion. Results indicated that a primate species with a

specialized types of locomotion (leaping), the gain in muscle mass of the thigh is relatively more pronounced than in a species with non-specialized, quadrupedal locomotion. We suggest muscle mass gain to specific limb segments may be a critical milestone for primates with extremely specialized types of locomotion.

Smith, T. D. (School of Physical Therapy), Eiting, T. P., & Rossie, J. B. (2011). Distribution of Olfactory and Nonolfactory Surface Area in the Nasal Fossa of *Microcebus Murinus*: Implications for Microcomputed Tomography and Airflow Studies. *Anatomical Record-Advances in Integrative Anatomy and Evolutionary Biology*, 294 (7), 1217-1225.

Timothy D. Smith (School of Physical Therapy), James B. Rossie, Gregory M. Cooper, Robin M. Schmieg, Christopher J. Bonar, Mark P. Mooney, and Michael I. Siegel (2011), Comparative micro CT and histological study of maxillary pneumatization in four species of New World monkeys: The perinatal period, the American Journal of Physical Anthropology, 144: 392-410.

Abstract: The study, entitled "Comparative micro CT and histological study of maxillary pneumatization in four species of New World monkeys: The perinatal period," was coauthored by Timothy D. Smith, James B. Rossie, Gregory M. Cooper, Robin M. Schmieg, Christopher J. Bonar, Mark P. Mooney, and Michael I. Siegel. This study was done in collaboration with a recent graduate from the DPT program (RMS). The study focused on the early development of the maxillary sinus in non-human primates. Findings suggest that sinus development in some species is suppressed by growth of nearby structures, such as the eyes or teeth. These results may explain variation in sinus size among primates, and perhaps within species, including humans.

Burrows, A. M., Docherty, B. A., **Smith, T. D. (School of Physical Therapy)**, & Parr, L. A. (2011). Fiber-type characteristics of the primate orbicularis oris muscle: evolutionary divergence of lip function. *American Journal of Physical Anthropology*, 144, 100-100. (Meeting abstract about presentation)

Garrett, E. C., & **Smith, T. D. (2011) (School of Physical Therapy)**. Reconstructing the vomeronasal system of the earliest primates. *American Journal of Physical Anthropology*, 144, 140-140. (Meeting abstract about presentation)

Smith, T. D. (School of Physical Therapy), Garrett, E. C., Bhatnagar, K. P., Bonar, C. J., Bruening, A. E., Dennis, J. C., & Morrison, E. E. (2011). New findings on the vomeronasal complex of platyrrhine primates. *American Journal of Physical Anthropology*, 144, 279-279. (Meeting abstract about presentation) (Note: Bruening is a current SRU student.)

Muchlinski, M. N., Durham, E. L., **Smith, T. D. (School of Physical Therapy)**, & Burrows, A. M. (2011). A COMPARATIVE EXAMINATION OF VIBRISSA MUSCULATURE AMONG PRIMATES. *American Journal of Primatology*, 73, 111-111. (Meeting abstract about presentation)

Strano, D.A. & Ignelzi, M.G. (Department of Counseling and Development) (2011). Teaching Theories for the constructivist counselor. In, McCauliff, G.J. & Erikson, K. P. (Eds), *Handbook of Counselor Preparation, Constructivist, Developmental, and Experiential Approaches*. Thousand Oaks, CA: Sage Publications.

Pavani Tallapally (School of Business), Michael S. Luehlfig, Madhu Motha, The Partnership Of EDGAR Online And XBRL - Should Compustat Care?, *Review of Business*

Information Systems – Fourth Quarter 2011
Volume 15, Number 4.

Yamamoto, J. Y. (Department of Secondary Education) (2010). Pedagogy and content knowledge based podcasting project for preservice teachers. In D. Ifenthaler, P. Isaias, D. G. Sampson, & J. M. Spector (Eds.), *Multiple Perspectives on Problem Solving and Learning in the Digital Age*. New York: Springer.

Wang, Jialing (Department of Geography, Geology, and the Environment), Yang, Xiaojun (2011), A Hierarchical Approach to Forest Landscape Pattern Characterization, *Environmental Management*, DOI: 10.1007/s00267-011-9762-9 (in press).

RECENT PRESENTATIONS

Arnhold, R. and Kemeny, E. (Department of Physical Education), "I Can Do It, You Can Do It: Health Promotion Mentoring for Individuals with Disabilities", American Public Health Association National Conference, October 30-November 2, Washington, D.C.

Arnhold, R. (Department of Physical Education), Davis, R., McCubbin, J., Tymeson, G., Winnick, J. "Past-President's Panel: Future of the Consortium", National Consortium for Physical Education and Recreation. July 18, 2011, Reston, VA.

Andresky, L., McDeavitt, C, Stevens, J., Litzinger, N., **Burkhart, P. (Department of Geography, Geology, and the Environment)** and **Mickle, K. (Department of Art)** "TREC Paleosols: Badlands Working Group", Student oral presentation, the Regional Science Consortium's Annual Research Symposium, Tom Ridge Environmental Center, November 3, 2011, Erie, PA. (Note: The non-bolded names are all SRU students).

Christe, Anthony (Department of Computer Science), **Shuler, Jessica (Department of Geography, Geology, And Environment)**, **Burns, Megan (Department of Geography, Geology, And Environment)** and **Zywith, Nina (Department of Chemistry)**, "Using NOAA Hysplit and GIS to Investigate Air Quality Variability in Western Pennsylvania", Geological Society of America Joint Meeting Northeastern and North-Central, Pittsburgh PA, 20-22 March 2011. (Note: all presenters are SRU students).

Gönül, Füsün F. (School of Business) and **Solano, Roger (School of Business)**, "Innovative Teaching: A test of the Impact of the Khan Academy in Business Statistics

Course", the Eastern Council Conference (Region 2) of Accreditation Council for Business Schools and Programs (ACBSP), Latrobe, PA, 11-12 November, 2011.



Abstract:

Purpose: Our study aims to test the impact of Khan Academy (a free web-based resource that aims to increase math skills) on student performance in Business Statistics courses.

Methodology: One of the coauthors of this study teaches 2 sections of the course in Fall 2011. The experiment group in one section consists of 30 students. All students registered participate in the study. The control group consists of 29 students registered in the other section. Both classes are held in the same computer lab on the same days.

Findings: We find that HW score increases Exam Score ($p\text{-value} < 0.01$). Khan Academy increases Exam Score ($p\text{-value} < 0.20$). HW score decreases Time in Exam ($p\text{-value} < 0.05$). Khan Academy decreases Time in Exam ($p\text{-value} < 0.15$). Time Spent on HW increases Time in Exam ($p\text{-value} < 0.01$)

Originality/Value: The study offers valuable insights to both students and faculty in quantitative courses in business schools. In current times, when higher education institutions face a reduction in public funds, it becomes increasingly important to exploit such free resources, in order to produce graduates

with sufficient quantitative/analytical skills to help them succeed in the workplace.

Jackson, D. J. (Department of Physical Education) (2011, June), "Efficacy of evidence-based physical activity within a secure juvenile correctional facility", Paper presented at the 7th Annual International Conference on Kinesiology and Exercise Sciences, Athens, Greece.

Jackson, D. J. (Department of Physical Education) (2011, July). "Evidence-based practice and inclusive physical activity: Implications for adjudicated youth", Free communication session at the National Consortium for Physical Education and Recreation for Individuals with Disabilities Annual Conference, Reston, VA.

Mickle, K. (Department of Art) and **Burkhart, P. (Department of Geography, Geology, and the Environment)**, "Joint Art & Science Research in the White River Badlands: Pedagogical Approaches and Outcomes", Oral presentation at the Regional Science Consortium's Annual Research Symposium, Tom Ridge Environmental Center, November 3, 2011, Erie, PA.

Bires, B., Charlton, E., Blasko, E., Rozzi, V., **Mickle, K. (Department of Art)** and **Burkhart, P. (Department of Geography, Geology, and the Environment)** "Art and Geology: An Interdisciplinary Approach to Field Research in Badlands National Park, SD", Student poster presentation at the Regional Science Consortium's Annual Research Symposium, Tom Ridge Environmental Center, November 3, 2011, Erie, PA. (Note: The non-bolded names are all SRU students).

Liu, W. (Department of Physical Education), & Tang, Lijun. (2011, June). "Practice and Issues of PETE in the United

States: Slippery Rock University as a Case", Paper presented at International Society for Comparative Sport and Physical Education (ISCPES) World Conference on Physical Education and Sport: Challenges and Future Directions, Shanghai, China.

Liu, W. (Department of Physical Education), & Tang, Lijun. (2011, June). "Strategies for Physical Activity Based K-12 PE in the US: A Review", Paper presented at International Society for Comparative Sport and Physical Education (ISCPES) World Conference on Physical Education and Sport: Challenges and Future Directions, Shanghai, China.

Liu, W. (Department of Physical Education), Nichols, R. A., & Zillifro, T. D. (2011, June). "Relationship between body fat and other health-related fitness components among children", Poster session presented at 58th Annual Meeting of American College of Sports Medicine and 2nd World Congress on Exercise is Medicine, Denver, CO.

Nichols, R. A., Zillifro, T. D., & **Liu, W. (Department of Physical Education)** (2011, June). "Body mass index and aerobic capacity among eighth-grade boys and girls", Poster session presented at 58th Annual Meeting of American College of Sports Medicine and 2nd World Congress on Exercise is Medicine, Denver, CO.

Pu, Li (Department of Communication) and Wellman, William. "The Western Media Players in China", Paper presented for the Asian Studies Development Program (ASDP) 17th National Conference, March 24-26, 2011, in Boston, MA (Note: William Wellman is a former SRU communication major who graduated in May 2011).

Pu, Li (Department of Communication)

"Professionals in Chinese Media Conglomeration: The Case Study of Southwest China's Chongqing Broadcasting Group", Paper presented at the National Communication Association (NCA) 97th Annual Convention, November 17-20, 2011 in New Orleans, LA.

attaching it to email. During this session participants will use flip video and iMovie to create a digital video.

Yamamoto, J. Y. (Department of

Secondary Education) "The Muddy Field of Social Networking: Implications for Teacher Educators", ED-MEDIA 2011, Lisbon, Portugal, June 27, 2011-July 1, 2011 (Conference report from EdMedia:

<http://junkoyamamotodotorg.wordpress.com/2011/07/13/edmedia-2011-report/>)

Yamamoto, J. Y. (Department of

Secondary Education) "Reflection from service-learning" Resources for the Electronic Classroom: A Faculty-Student Partnership (REACAP), West Chester, Pennsylvania, May 12, 2011.

Yamamoto, J. Y. (Department of

Secondary Education) "Pre-service Teachers' Reflection on Teaching Technology in the Community", Association of Teacher Educators Annual Meeting, Orlando, Florida, February 2011.

Yamamoto, J. Y. (Department of

Secondary Education) "Using Digital Video to Communicate with Native Speakers", Pennsylvania State Modern Language Association Fall Conference, State College, PA Oct 20-22, 2011.

Abstract: Use of a target language in order to communicate with native speakers motivates language learners. Video production gives plenty of opportunities for interpersonal or presentational communication: it can be shared with native speakers abroad publically or privately either by uploading online or by

RECENT AWARDS

Arnhold, R. (Department of Physical Education)

(2011) "Classroom to Curbside: Integrating Academics into the Community," funded by FISA Foundation for 2 years, \$70,416, September 2011.

Min Soo Lim (Department of Chemistry)

(2011) "Development of Biocompatible Organic Thin Films for Implant Materials," funded by Faculty Professional Development Council Annual Grant Program 2011-2012, PASSHE, \$7,250.

Abstract: Due to great mechanical properties metals/alloys have been widely used for orthopedic load-bearing medical implants. However, there is a growing concern about the continuous use of metallic implants because the wear and corrosion experienced in the body environment can cause mechanical failures and the release of metallic ions acting as allergens and carcinogens. There concerns emphasize the need to develop thin films to act as lubricants that will reduce interfacial friction and consequently prevent loss of the protective oxide layer from wear and corrosion. Alkyl phosphonic acids form strong covalent bonds to metallic surfaces and form a molecularly thin lubricating film. The structure and chemical nature of the film greatly is known to influence the frictional properties of the surface. It is anticipated the interfacial friction may be significantly reduced by modifying the structure and chemical composition of the film. A series of chemically diverse (structure and functionality) alkyl phosphonic acid monomers will be obtained commercially or synthesized in the laboratory of the Project Director. The

monomers will provide a molecularly thin film on the surface of medical grade metals/alloys. Alkyl carboxylic acid monolayers that have the same backbone structures with alkylphosphonic acids will be also grown in the single crystal aluminum oxide surface that provides topographically and energetically homogeneous substrate condition in order to study fundamental origin of interfacial friction.

OTHER RESEARCH ACTIVITIES

Arnhold, R. (Department of Physical Education) Proposal: Transitioning Together for a Pre-Employment Skill Building and Physical Activity Mentoring Program for Youth with Intellectual Disabilities, submitted to Edith L. Trees Charitable Trust:
Classroom-to-Community: Under review, Fall 2011.

Arnhold, R. (Department of Physical Education) Proposal: Transitioning Together: Using Mentoring to Enhance Health Promotion, Employment, Socialization, Mobility, and Community Integration of Youth with Physical and other Developmental Disabilities, submitted to the Christopher and Dana Reeve Foundation: Under Review, Fall 2011.

Tianxiang Yao, Assistant Professor, College of Economics and Management, Nanjing University of Information Science and Technology, China. Dr. Yao is currently a visiting scholar at Slippery Rock, hosted by Modern China Center of SRU. His research interests focus on grey systems theories, fuzzy decision making, and energy economics. During his visiting at SRU between September, 2011 and February, 2012, Dr. Yao works with Dr. Jeffrey Forrest to closely investigate grey forecasting models and their applications,

which mainly includes two parts: (1) the study of different extending discrete grey forecasting models based on the interval grey number theories and how to utilize Grey forecasting models to study energy consumption in China; (2) Segmental Correction Connotation GM (1, 1) Model and its expanding forms.

<http://www.sru.edu/administration/academicaffairs/Expo/PublishingImages/fall2011/Zack-Li-1-s-mall.jpg>

Xiangdong Li, Associate Professor, School of Business, Jiangsu Teachers University of Technology, China. Mr. Li is currently a visiting scholar at Slippery Rock, hosted by Modern China Center of SRU. His research interests focus on management science and engineering, especially Optimization Management under Uncertain Terms and Technological Innovation Risk Management in High-Tech Industrial Field in China. During his visiting at SRU between October, 2011 and March, 2012, Mr. Li works with Dr. Jeffrey Forrest and Zack Hopkins on the currency flows and its monetary policy effects in China. (Note: Zack Hopkins is currently a SRU mathematics major).