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# The Faculty Notebook, April 2016

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# The Faculty Notebook, April 2016

**Abstract**
*The Faculty Notebook* is published periodically by the Office of the Provost at Gettysburg College to bring to the attention of the campus community accomplishments and activities of academic interest. Faculty are encouraged to submit materials for consideration for publication to the Associate Provost for Faculty Development. Copies of this publication are available at the Office of the Provost.

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*THE FACULTY NOTEBOOK*

**APRIL 2016**

**Vol. XXI, No. 2**

## PUBLICATIONS

**Jonathan Amith, Research Fellow in Anthropology**, with co-authors Enrique L. Palancar and Rey Castillo García, published "Verbal Inflection in Yoloxóchitl Mixtec" in *Tone and Inflection: New Facts and New Perspectives*, edited by Enrique L. Palancar and Jean Léo Léonard (Boston: De Gruyter Mouton, 2016). Based on an extensive textual corpus that supports research on verbal morphology, this article presents and analyzes the role of tone in marking tense, aspect, and mood in Yoloxóchitl Mixtec.

**Kurt Andresen, Associate Professor of Physics**, with co-authors He Meng and John van Noort, published "Quantitative Analysis of Single-Molecule Force Spectroscopy on Folded Chromatin Fibers" in *Nucleic Acids Research* 43.7 (2015): 3578-3590. In this article, we pulled apart an array of (string of repeating) nucleosomes (the basic unit of DNA packing in our bodies), and measured the force that it took to pull them apart. This told us a lot about the structure of nucleosome arrays, and the implications this has for how genes are turned off and on in our bodies.

**Abou B. Bamba, Assistant Professor of History**, published "Producing an Imperial Bridgehead: The Making of Abidjan in Ivory Coast, 1908-1955" in *World History Connected* 13.1 (2016, online). This article argues that the rise of Abidjan as the main city in colonial Ivory Coast confirms the insight that urban configurations are the product and the reproduction of particular social relations at both local and global levels. While the mediating forces that helped give birth to colonial urbanism in Ivory Coast were innumerable, none matched the power of imperial capitalism. In particular, the article suggests that the French doctrine of *pacte colonial* (mercantilist arrangement) that sustained colonial development (*mise en valeur*) played a decisive role in the production and/or restructuring of historical urban networks in this part of the French empire. As in so many other colonial cities, the political economy of the foundation and subsequent development of Abidjan is the story of a desperate search for the ideal tropical beachhead to link the Ivorian periphery to the larger capitalist world-system.

**Bamba** published "Conspicuous, Yet Invisible: Migration, Whiteness, and the French Residents of Ivory Coast, 1950-1985" in *Journal of Modern European History* 13.4 (2015): 549-565. This article focuses on the recent history of French residents in (post)colonial Ivory Coast. I argue that the majority of the French candidates for expatriation to the territory were not fundamentally different from other migrants, mostly Africans, who relocated to the West African country to improve their chances for a better life. Although the French have been invisible in the scholarly literature on immigration to Ivory Coast, largely due to the mystique of their whiteness, they were quite visible in the local socio-demographic landscape. The essay illustrates the benefits of a renewed and robust engagement with the "statistical fact," social structures, and historical privileges of these transnational "white tribes" of Africa. More generally, it suggests that people from the Global North have consistently migrated to the Global South as both temporary migrants and long-term immigrants.

**Kathy Berenson, Assistant Professor of Psychology**, with co-authors Christine Paprocki, Marget Thomas Fishman, Devika Bhushan, Nabila El-Bassel, and Geraldine Downey, published "Rejection Sensitivity, Perceived Power and HIV Risk in the Relationships of Low-Income Urban Women" in *Women & Health* 55.8

(2015): 900-920. This study found that sensitivity to rejection was associated with lower perceived power, and, in turn, more high-risk sexual behavior, in women's long-term heterosexual relationships.

**Michael Birkner, Professor of History and Benjamin Franklin Professor of Liberal Arts**, published "James Buchanan, 1791-1868" in *America in the World, 1776 to the Present: A Supplement to the Dictionary of American History* (Vol. 1), edited by Edward J. Blum (Farmington Hills, MI: Charles Scribner's Sons, 2016). This encyclopedia essay examines Buchanan's views on foreign policy during a long political career, with special emphasis on his four years as Secretary of State (1845-1849) and his single term as President (1857-1861).

**Bret Crawford, Professor of Physics**, with co-authors W.M. Snow, E. Anderson, L. Barrón-Palos, C.D. Bass, T.D. Bass, C. Crawford, J.M. Dawkins, D. Esposito, J. Fry, H. Gardiner, K. Gan, C. Haddock, B.R. Heckel, A.T. Holley, J.C. Horton, C. Huffer, J. Lieffers, D. Luo, M. Maldonado-Velázquez, D.M. Markoff, A.M. Micherdzinska, H.P. Mumm, J.S. Nico, M. Sarsour, S. Santra, E.I. Sharapov, H.E. Swanson, S.B. Walbridge, and V. Zhumabekova, published "A Slow Neutron Polarimeter for the Measurement of Parity-Odd Neutron Rotary Power" in *Review of Scientific Instruments* 86 (2015, online). This paper describes an apparatus used to study fundamental forces by measuring minute rotations in the polarization axis of neutrons passing through a target.

**Amy Dailey, Associate Professor of Health Sciences**, with co-authors Xiaohui Xu, Xinguang Chen, Hui Hu, and Brandie D. Taylor, published "Current Opinion on the Role of Testosterone in the Development of Prostate Cancer: A Dynamic Model" in *BMC Cancer* 15.806 (2015, online). In this paper, we present a novel dynamic model of the relationship between testosterone and prostate cancer by hypothesizing that the magnitude of age-related declines in testosterone, rather than a static level of testosterone measured at a single point, may trigger and promote the development of prostate cancer.

**Daniel DeNicola, Professor of Philosophy**, published "Higher Education, the Professions, and the Place of Expertise" in *Higher Education and Society*, edited by Joseph L. DeVitis and Pietro A. Sasso (New York: Peter Lang, 2015). This chapter explores the tension between increased professional specialization and the public rejection of expertise. It argues that the former contributes to the latter and concludes with advice for those who educate professionals.

**Jenny Dumont, Assistant Professor of Spanish**, published *Third Person References: Forms and Functions in Two Spoken Genres of Spanish* (Amsterdam: John Benjamins, 2016). This volume, a case study on the grammar of third-person references in two genres of spoken Ecuadorian Spanish, examines from a discourse-analytic perspective how genre affects linguistic patterns and how researchers can look for and interpret genre effects. It is relevant for scholars who work with referentiality, genre differences, third-person references, and interactional linguistics, as well as those interested in Spanish morphosyntax.

**Christopher Fee, Professor and Chair, Department of English**, with co-author David Leeming, published *The Goddess: Myths of the Great Mother* (London: Reaktion Press, 2016). The Goddess is all around us: Her face is reflected in the burgeoning new growth of every ensuing spring; her power is evident in the miracle of conception and childbirth and in the newborn's cry as it searches for the nurturing breast; we glimpse her in the alluring beauty of youth, in the incredible power of sexual attraction, in the affection of family gatherings, and in the gentle caring of loved ones as they leave the mortal world. The Goddess is with us in the everyday miracles of life, growth, and death which always have surrounded us and always will, and this ubiquity speaks to the enduring presence and changing masks of the universal power people have always recognized in their lives. Such power is the Goddess, at least in part, and through its workings we may occasionally catch a glimpse of the divine.

**Peter Fong, Professor of Biology**, with staff co-author **Lucas Thompson, Assistant Professor of Chemistry**, student co-author **Andrea Sitton '14**, and Gerardo Carfagno, published "Long-Term Exposure to Gold

Nanoparticles Accelerates Larval Metamorphosis without Affecting Mass in Wood Frogs (Lithobates sylvaticus) at Environmentally Relevant Concentrations" in *Environmental Toxicology and Chemistry* (2016, online). This paper documents how exposure to gold nanoparticles for as long as 55 days disrupts the timing of larval development in wood frog tadpoles without significant changes in body mass. This is the first paper to show the effects of nanoparticles on the development of amphibian larvae, a group of animals that has been declining globally for 25 years.

**Darren Glass, Associate Professor of Mathematics**, with student co-author **Ryan Becker '12**, published "Cyclic Critical Groups of Graphs" in *Australasian Journal of Combinatorics* 64.1 (2016): 366-375. This paper was based in part on Ryan's senior thesis, and has been expanded with several new results and examples. It explores a family of graphs that we prove all have cyclic critical groups, and in many cases we are able to compute these groups explicitly.

**Julia Hendon, Professor of Anthropology and Director of the Johnson Center for Creative Teaching and Learning**, published "Producing Goods, Shaping People: The Materiality of Crafting" in *Archaeological Papers of the American Anthropological Association* 26 (2015): 149-165. This article takes a comparative approach to the study of craft specialization by comparing working with fibers to working with metals. I use evidence from archaeological excavations, experimental reconstructions, historical documents, and visual imagery to study textile production among the Maya of Mexico and Central America, and metal-working among the Moche of South America. Through these two case studies I illustrate the role crafting plays in the development of identities and personhood, in the process contributing to the meaning of everyday life to people in these societies.

**Alvaro Kaempfer, Associate Professor of Spanish and Director of Latin American, Caribbean, and Latino Studies**, published "*El crimen de la guerra*, de Juan Bautista Alberdi: 'Sólo en defensa de la vida se puede quitar la vida" in *Entre el humo y la niebla. Guerra y cultura en América Latina*, edited by Felipe Martínez-Pinzón and Javier Uriarte (Pittsburgh: Instituto Internacional de Literatura Iberoamericana, 2016). Impacted by a global and bellicose landscape, and the shameful outcomes of the Paraguayan War, J.B. Albert states in his book that war is a crime that would live as long as humans exist. Therefore, he explores the viable options to neutralize its occurrences and effects by promoting a balance of forces among Nation-States framed by an international juridical system to deal with their conflicts.

**Kaempfer** published "Andrés Bello, el *Poema de Mio Cid* y las ruinas originales del hispanismo" in *Revista de Crítica Literaria Latinoamericana* 41.82 (2015): 21-35. This reading of Andrés Bello's "Prólogo" to his edition of *Poema de Mio Cid* underlines his recognition of the corrupted state of the manuscript. To organize such a reading was for Bello to restore the text and guide the reader through the critical production around it, locating the poem as the beginning of a cultural journey for participants authorized by the affiliation to its language and able to recognize its limits to engage in such a critical dialogue.

**Ryan Kerney, Assistant Professor of Biology**, with co-authors Gayani Senevirathne, Sonali Garg, Madhava Meegaskumbura, and S.D. Biju, published "Unearthing the Fossorial Tadpoles of the Indian Dancing Frog Family Micrixalidae" in *PLoS One* 11.3 (2016, online). This was the first discovery of the last family of frogs to have their tadpoles known to science. They were unknown for over 100 years because the tadpoles live underground. I worked with a team in India and Sri Lanka to describe the internal anatomy of these fascinating animals.

**Kerney**, with co-authors Gayani Senevirathne, Ashish Thomas, James Hanken, S.D. Biju, and Madhava Meegaskumbura, published "From Clinging to Digging: The Postembryonic Skeletal Ontogeny of the Indian Purple Frog, *Nasikabatrachus sahyadrensis* (Anura: Nasikabatrachidae)" in *PLoS One* 11.3 (2016, online). In this paper we describe the skeletal development of the bizarre "Indian Purple Frog" as it progresses through metamorphosis. The tadpoles are adapted for life, clinging to rocks in fast-flowing streams, while the adults live

underground and are highly specialized diggers. As a result, strange changes are required of their anatomical transformations through metamorphosis.

**Will Lane, Lecturer in English and Interim Director of the Writing Center**, published *Trust Rust* (Gettysburg, PA: Middle Street Bindery, 2015), a book of poems rooted in the landscape of south-central Pennsylvania that explore the ambiguities of our relationship with nature and one another.

**Jing Li, Associate Professor of Asian Studies**, published "The Love Story, Female Images, and Gender Politics: Folktale Films in the People's Republic of China (PRC)" in *Fairy-Tale Films beyond Disney: International Perspectives*, edited by Jack Zipes, Pauline Greenhill, and Kendra Magnus-Johnston (New York: Routledge, 2016). This chapter reviews the historical development of folktale films in the specific political-social-cultural contexts of post-1945 China. By specifically focusing on the love story, which is central to cinematic adaptations of traditional tales, this chapter shows that, with distinctive voices of their own, these films indicate their ideological conservatism by maintaining a discursive distance from both politicized mainstream themes and the critical edge of experimental films. This distance renders these films as alternatives in communication with their contemporaries on the discourses of gender, womanhood, and love.

**Tsu-ting Tim Lin, Assistant Professor of Economics**, published "Working Capital Requirement and the Unemployment Volatility Puzzle" in *Journal of Macroeconomics* 46 (2015): 201-217. This paper proposes a modification to the search-and-matching model of unemployment to address the unemployment volatility puzzle.

**Keir Lockridge, Assistant Professor of Mathematics**, with student lead author **Karenna Genzlinger '14**, published "Sophie Germain Primes and Involutions of Z×n" in *Involve: A Journal of Mathematics* 8.4 (2015): 653-663. In this paper, we study the positive integers *n* for which there is a given fixed proportion of 1*s* on the diagonal of the multiplication table for the integers modulo *n*. For example, when *p* is prime, we prove that there exists a positive integer *n* such that 1/*p* of the 1*s* lie on the diagonal if and only if *p* is a Sophie Germain prime.

**Lockridge**, with co-authors Sunil K. Chebolu and Gaywalee Yamskulna, published "Characterizations of Mersenne and 2-Rooted Primes" in *Finite Fields and their Applications* 35 (2015): 330-351. We give several characterizations of Mersenne primes and of primes for which 2 is a primitive root. These characterizations involve group algebras, circulant matrices, binomial coefficients, and bipartite graphs.

**Lockridge**, with co-author Sunil K. Chebolu, published "Fuchs' Problem for Indecomposable Abelian Groups" in *Journal of Algebra* 438 (2015): 325-336. More than 50 years ago, László Fuchs asked which abelian groups can be the group of units of a commutative ring. We provide an answer to this question in the case of indecomposable abelian groups by classifying the indecomposable abelian groups that are realizable as the group of units of a ring of any given characteristic.

**Laurence Marschall, Professor Emeritus of Physics**, with co-authors P.F.L. Maxted, R.J. Hutcheon, G. Torres, C.H.S. Lacy, J. Southworth, B. Smalley, K. Pavlovski, and J.V Clausen, published "Precise Mass and Radius Measurements for the Components of the Bright Solar-Type Eclipsing Binary Star V1094 Tauri" in *Astronomy & Astrophysics* 578 (2015): A25-35. This study of a bright eclipsing binary star uses several telescopes to derive high-precision values of the masses, radii, and surface temperatures of each member of the pair, along with the parameters of their orbit around each other. These values are used to determine the age of the pair (around six billion years) and to check the accuracy of theoretical models of how stars evolve over time.

**Karen Salyer McElmurray, Visiting Assistant Professor of English**, with Adrian Blevins, co-edited *Walk Till the Dogs Get Mean: Meditations on the Forbidden from Contemporary Appalachia* (Athens: Ohio University Press, 2015). This book collects essays from today's finest established and emerging writers with

roots in Appalachia. Together, the essays take on the theme of silencing in Appalachian culture, whether the details of that theme revolve around faith, class, work, or family legacies.

**Brian Meier, Associate Professor of Psychology**, with Brian D. Ostafin and Michael D. Robinson, co-edited *Handbook of Mindfulness and Self-Regulation* (New York: Springer-Verlag, 2015). This empirically robust resource examines multiple ways in which mindfulness can be harnessed to support self-regulation. Its authoritative coverage examines connections from neuroscience, cognitive, personality, social, clinical, and Buddhist perspectives.

**Salma Monani, Associate Professor of Environmental Studies**, with Stephen Rust and Sean Cubitt, co-edited *Ecomedia: Key Issues* (New York: Routledge, 2015). Part of the *Key Issues in Environment and Sustainability* series, this is a comprehensive textbook introducing the burgeoning field of ecomedia studies to provide an overview of the interface between environmental issues and the media globally. Linking the world of media production, distribution, and consumption to environmental understandings, the book addresses ecological meanings encoded in media texts, the environmental impacts of media production, and the relationships between media and cultural perceptions of the environment. Prof. Monani also co-authored the introduction and the chapter devoted to cinema.

**Wendy Piniak, Assistant Professor of Environmental Studies**, with co-authors Sarah E. Nelms, Caroline R. Weir, and Brendan J. Godley, published "Seismic Surveys and Marine Turtles: An Underestimated Global Threat?" in *Biological Conservation* 193 (2016): 49-65. This article examines the potential impacts of seismic surveys on marine turtles through a systematic review of available research studies, global policy comparison, and stakeholder analysis. We find that turtles have been largely neglected both in terms of research and their inclusion in mitigation guidelines, and make recommendations for future empirical research needed to develop appropriate mitigation strategies.

**Rutherford Platt, Associate Professor and Chair, Department of Environmental Studies**, with staff co-author **Monica Ogra, Associate Professor of Environmental Studies**, and co-authors Ruchi Badola and Syed Ainul Hussain, published "Conservation-Induced Resettlement as a Driver of Land Cover Change in India: An Object-Based Trend Analysis" in *Applied Geography* 69 (2016): 75-86. This paper was a collaboration between two Gettysburg faculty members (Monica Ogra and myself), two students who assisted with fieldwork in India (**Ethan Dively '14** and **Jessie Pierce '14**), an additional student who helped with GIS analysis (**Heather Ipsen '15**), and two faculty members from the Wildlife Institute of India.

**James Puckett, Assistant Professor of Physics**, with co-authors Rui Ni, Eric R. Dufresne, and Nicholas T. Ouellette, published "Intrinsic Fluctuations and Driven Response of Insect Swarms" in *Physical Review Letters* 115 (2015, online). Animals of all sizes form groups, as acting together can convey advantages over acting alone; thus, collective animal behavior has been identified as a promising template for designing engineered systems. We quantify the swarm's frequency-dependent linear response and its spectrum of intrinsic fluctuations, and show that the ratio of these two quantities has a simple scaling with frequency.

**Susan Russell, Associate Professor and Chair, Department of Theatre Arts**, published "Make Love, Not War?: The Role of the Chorus in Kokoschka's *Murderer Hope of Women*" in *Journal of Dramatic Theory and Criticism* 30.1 (Fall 2015): 51-63. The artist Oskar Kokoschka wrote a short play, *Murderer Hope of Women*, which is often touted as the first Expressionist play and described as illustrating a key hallmark of Expressionism: the battle of the sexes. I argue that almost all previous Kokoschka scholarship has neglected the male and female chorus, who, I contend, suggest a "third way" of being that subverts this contentious binary and advocates pacifism.

**Magdalena Sánchez, Professor of History**, with Joan-Lluís Palos, co-edited *Early Modern Dynastic Marriages and Cultural Transfer* (Burlington, VT: Ashgate, 2016). This book examines marriage as an

important mechanism of cultural transfer in early modern Europe. It also includes my chapter, "'She Grows Careless': The Infanta Catalina Micaela and Spanish Etiquette at the Court of Savoy."

**Timothy Shannon, Professor of History**, published "Iroquoia" in *The Oxford Handbook of American Indian History*, edited by Frederick E. Hoxie (New York: Oxford University Press, 2016). This essay provides a historical overview of the Native American peoples affiliated with the Iroquois confederacy, c. 1400-2000. It focuses on Iroquois relations with other Native peoples and Europeans during the era of colonization.

**Shannon**, with Victoria Bissell Brown, co-edited *Going to the Source: The Bedford Reader in American History*, 2 vols., 4th ed. (Boston: Bedford/St. Martin's Press, 2016). This is the latest edition of a textbook designed for college courses in US history.

**Nikki Shariat, Assistant Professor of Biology**, with co-authors Yury V. Ivanov, Karen B. Register, Bodo Linz, Israel Rivera, Kai Hu, Edward G. Dudley, and Eric T. Harvill, published "A Newly Discovered *Bordetella* Species Carries a Transcriptionally Active CRISPR-Cas with a Small Cas9 Endonuclease" in *BMC Genomics* 16.683 (2015, online). Our whole genome bioinformatic analysis led to the discovery of a new CRISPR-Cas system in a new species of the bacteria, Bordetella. Further experiments showed this system is expressed.

**Stephen Siviy, Professor of Psychology**, with student co-authors **Lana McDowell '16**, **Samatha Eck '16**, and **Alexandra Turano '15**, and co-authors Garnik Akopian and John P. Walsh, published "Effects of Amphetamine on Striatal Dopamine Release, Open-Field Activity, and Play in Fischer 344 and Sprague-Dawley Rats" in *Behavioural Pharmacology* 26 (2015): 720-732. This paper describes the results of an ongoing collaborative effort between our lab and colleagues at the University of Southern California. Using both behavioral and neurophysiological endpoints, we tested a hypothesis that rats of the inbred F344 strain are impaired in their ability to release the neurotransmitter dopamine and that this impairment may account for some of the behavioral anomalies associated with this strain. The results partially supported our hypothesis and provide more information on dopamine handling in this strain of rat.

**Carolyn S. Snively, Professor of Classics**, published "Golemo Gradište at Konjuh: An International Archaeological Project in R. Macedonia" in *VIII Македонско-Северноамериканска Конференција за Македонистика (Охрид 7-8 Јули 2012)* (Skopje: 2015), 165-183. The article provides a general account of our work at the site of Golemo Gradište since 2000 for an audience that knows a great deal about Macedonia but little about archaeology.

**Sharon Stephenson, Professor of Physics**, with co-authors M.D. Jones, N. Frank, T. Baumann, J. Brett, J. Bullaro, P.A. DeYoung, J.E. Finck, K. Hammerton, J. Hinnefeld, Z. Kohley, A.N. Kuchera, J. Pereira, A. Rabeh, W.F. Rogers, J.K. Smith, A. Spyrou, K. Stiefel, M. Tuttle-Timm, R.G.T. Zegers, and M. Thoennessen, published "Two-Neutron Sequential Decay of $^{24}$O" in *Physical Review C* 92 (2015, online). In this article we present the first observation of two-neutron sequential decay, exposed by energy and angular correlations, in $^{24}$O.

**Stephenson**, with co-authors B.R. Marks, P.A. DeYoung, J.K. Smith, T. Baumann, J. Brown, N. Frank, J. Hinnefeld, M. Hoffman, M.D. Jones, Z. Kohley, A.N. Kuchera, B. Luther, A. Spyrou, C. Sullivan, M. Thoennessen, N. Viscariello, and S.J. Williams, published "Population of $^{13}$Be in a Nucleon Exchange Reaction" in *Physical Review C* 92 (2015, online). The $^{13}$B(1p + 1n) nucleon exchange reaction was used to populate the neutron-unbound nucleus $^{13}$Be. In general, nucleon exchange reactions offer an alternative reaction mechanism to selectively populate states in neutron-rich nuclei.

**Baird Tipson, Adjunct Professor of Religious Studies**, published "Thomas Hooker, Martin Luther, and the Terror at the Edge of Protestant Faith" in *Harvard Theological Review* 108.4 (2015): 530-551. For traditional Protestants, a dreadful hidden God lurked behind the "revealed God" of the Bible.

**Chitvan Trivedi, Assistant Professor of Management**, with co-author Shalini Misra, published "Relevance of Systems Thinking and Scientific Holism to Social Entrepreneurship" in *The Journal of Entrepreneurship* 24.1 (2015): 37-62. Social enterprises are said to meet two conditions: they address long-standing social problems, and develop innovative solutions to do so. However, many social enterprises satisfy these two conditions but are unsuccessful in creating sustained positive social change. This article argues that a necessary condition for social enterprises to create and sustain social change is the ability to cognize the ecology of the social problem – the relationship and interaction between a social problem and its context. We examine how social enterprises conceptualize and address social problems by applying the principles of scientific holism and systems thinking to social entrepreneurial theory and practice. We also present social-problem archetypes and develop key lessons for devising effective strategies for addressing social problems.

**David Walsh, Assistant Professor of Religious Studies**, published "Babylon Inna Hopiland: Articulations of Tradition and Social Injustice by the Hopi Reggae Musician Casper Loma-da-wa Lomayesva" in *Indigenous Pop: Native American Music from Jazz to Hip-Hop*, edited by Jeff Berglund, Jan Johnson, and Kimberli Lee (Tucson: University of Arizona Press, 2016). In this chapter, I explore how popular Hopi musician Casper Loma-da-wa uses reggae music and its themes of social injustice and religious uplifting to speak about Hopi social ills and the importance of Hopi religious tradition to combat those ills.

**Kerry Walters, Professor of Philosophy**, published *Perfect Joy: 30 Days with Francis of Assisi* (Cincinnati, OH: Franciscan Media, 2016). This book explores Franciscan understandings of joy.

**Walters** published *American Slave Revolts and Conspiracies* (Santa Barbara, CA: ABC-CLIO/Praeger, 2015). This the final volume in a trilogy that examines the practice and politics of slavery in colonial America and the antebellum United States. The other volumes are *The Underground Railroad* (2012) and *Lincoln, the Rise of the Republicans, and the Coming of the Civil War* (2013).

## REVIEWS

**Marie-Jo Binet, Associate Professor of French**, reviewed *Jacques Demy ou l'enfance retrouvée*, by Alain Naze, in *The French Review* 89.1 (2015): 239. Inspired by Kracauer and Benjamin, Naze's work offers a new and philosophical approach to the study of Demy's cinema.

**Binet** reviewed *Cinema and Development in West Africa*, by James E. Genova, in *The French Review* 88.3 (2015): 290. Genova's work is a thorough and erudite study of West African cinema's struggles to liberate itself from the French Colonial Empire and find its own voice, images, and identity – especially from the 1930s to the 1970s, years after the official decolonization.

**Binet** reviewed *Queer Enchantments: Gender, Sexuality, and Class in the Fairy-Tale Cinema of Jacques Demy*, by Anne Duggan, in *The French Review* 88.1 (2014): 204. While revealing the multicultural and literary wealth in Demy's cinema, Duggan explains how the director proposes new definitions for the literary categories of "fairy tale," "melodrama," and "camp queer." As she thoroughly studies each film, Duggan shows how Demy denounces contradictions in the patriarchal discourse and its construction of normativity/heteronormativity applied to notions of gender, class, hierarchical order, and economic status.

**Binet** reviewed *La petite chamber*, a film by Stéphanie Chuat and Véronique Raymond, in *The French Review* 87.2 (2013): 208. This film, the first feature by two young actresses from Suisse Romande, appeared in Switzerland in 2010 and in France in 2011, a year before Haneke's highly-noticed *Amour*. While discussing issues related to the treatment of the elderly in a very different way, the title indicates two major questions: How do we live with death? Where is the place for our elders? The contrasted rhythm of the film is built on the

music, which is directly part of the narrative, and on the work with light, colors, and movements in the *mise-en-scène*. Recognized by international juries, named Best Swiss film of the year, *La petite chambre* won the Meilleur film de fiction at the Prix du cinéma suisse Quartz in 2011.

**Binet** reviewed *Opening Bazin: Post-War Film Theory and Its Afterlife*, edited by Dudley Andrew and Hervé Joubert-Laurencin, in *The French Review* 86.5 (2013): 1017. From research in archives, accessing until now unknown correspondence and new readings of Bazin's writings, *Opening Bazin* presents 33 articles that reveal the genius and remarkable intuitions of a film critic who remained misunderstood or ignored for too many years.

**Binet** reviewed *French Minority Cinema*, by Cristina Johnson, in *The French Review* 86.4 (2013): 811. A cultural study of a number of films, Johnston's book observes gay and ethnic minorities in their onscreen representations while clearly situating their socio-cultural contexts. The argument is that, as they expose identity conflicts, those films reveal the flaws in the Republique Française and attempt to open negotiations regarding the rights of minorities to both belong to their groups and be recognized as French citizens.

**Stephanie Sellers, Adjunct Associate Professor of English and Women, Gender, and Sexuality Studies**, reviewed *Gathering Together: The Shawnee People through Diaspora and Nationhood, 1600-1870*, by Sami Lakomaki, in *The Pennsylvania Magazine of History and Biography of the Historical Society of Pennsylvania* 140 (2016): 116-117. Lakomaki's research looks closely at the spiritually-bonded Shawnee nation during colonial "shatter zones" of war, and how they maintained a common cultural identity.

## PROFESSIONAL PAPERS OR PRESENTATIONS

**Rimvydas Baltaduonis, Associate Professor of Economics**, presented a paper titled "Risk and Abnormal Returns in Markets for Financial Transmission Rights" at the 33rd USAEE/IAEE North American Conference on the Dynamic Energy Landscape, Pittsburgh, PA, October 27, 2015. This paper, written with student co-authors **Nathan Blyler '13** and **James Myers '12**, provides a framework to measure and analyze the risk and abnormal returns of the financial instruments known as financial transmission right (FTR) obligations. Better understanding of the patterns of risk and abnormal returns in FTR markets can save money for both energy suppliers and consumers as the demand for energy expands and the grids' infrastructure continues to age.

**Kathy Berenson, Assistant Professor of Psychology**, with student co-authors **Wesley Gregory '15**, **Sarah Van De Weert '16**, **Fanghui Zhao '17**, and **Jessica Johnson '16**, presented a poster titled "Self-Compassion, Pain Tolerance, and Nonsuicidal Self-Injury" at the annual conference of the Anxiety and Depression Association of America, Philadelphia, PA, April 2, 2016. In an experiment based on Wesley's honors research project, we showed that a values-affirmation exercise that momentarily increases feelings of self-compassion reduces the unusually high pain tolerance otherwise found in people with a history of nonsuicidal self-injury.

**Berenson**, with student co-author **Olga Nynas '16**, presented a poster titled "Attributions for Rejection and Acceptance in Young Adults with Features of Borderline and Avoidant Personality Disorders" at the annual conference of the Anxiety and Depression Association of America, Philadelphia, PA, April 1, 2016. Our research identified specific types of maladaptive interpersonal attributions associated with symptoms of borderline personality disorder and depression.

**Berenson** gave an invited presentation titled "Affective and Interpersonal Experiences among Individuals with Avoidant Personality Disorder: An Experience-Sampling Study" at the 14th Annual Meeting of the International Society for the Study of Personality Disorders, Montreal, Canada, October 15, 2015. The presentation (based on a paper co-authored with A. Snir, R. Gadassi, E. Bar-Kalifa, G. Downey, and E. Rafaeli)

focused on the emotional and interpersonal experiences of people with avoidant personality disorder in their daily lives, as evidenced from a study which prompted participants to record these experiences at random times throughout their day for three weeks. It was part of the symposium "Ambulatory Assessment in Personality Disorders," chaired by Timothy Trull.

**Michael Birkner, Professor of History and Benjamin Franklin Professor of Liberal Arts**, delivered a paper titled "This is Martin Agronsky, Reporting from Somewhere in Australia" at the Annual Conference of the Australian and New Zealand Association of North America (ANZSANA), Rollins College, Winter Park, FL, February 5, 2016. This paper examines the reporting from Australia in 1942 by NBC Radio war correspondent Martin Agronsky, at a time when the Pacific War lay in the balance and Australian fears of a Japanese invasion were at their peak. It discusses Agronsky's iconoclastic approach to war news and his relations with wartime military figures and military censors.

**Bret Crawford, Professor of Physics**, delivered a contributed presentation titled "Simulations of Neutron Spin Rotation Measurements by the NSR Collaboration" for the Neutron Spin Rotation (NSR) Collaboration at the Fall Meeting of the American Physical Society (APS) Division of Nuclear Physics, Santa Fe, NM, October 29, 2015. The Neutron Spin Rotation collaboration measures minute rotations (~10 millionths of a degree) of vertically polarized neutrons passing through a target in order to investigate fundamental forces. The current experiment at the Los Alamos National Laboratory seeks evidence for a new fifth force. These high-precision measurements require detailed study of systematic errors through experimental methods and computer simulation.

**Shannon Egan, Director of Schmucker Art Gallery**, delivered a presentation at the symposium "Branding the American West," held in conjunction with an exhibition of the same name at Brigham Young University Museum of Art, Provo, UT, March 4, 2016. The lecture, titled "Incidents of Travel and Adventure in the Far West: The Lost Daguerreotypes of Solomon Carvalho," examines the photographs, writings, and paintings of the artist who accompanied John Fremont's fifth expedition to find a route for the transcontinental railway in 1853-54.

**Felicia Else, Associate Professor of Art and Art History**, and **Kay Etheridge, Professor of Biology**, delivered a presentation titled "The College Curiosity Cabinet: Bringing the Renaissance to the Present" at the 62nd Annual Meeting of the Renaissance Society of America, Boston, MA, April 2, 2016. The presentation focused on a team-taught course that used pedagogy and methodology emphasizing an interdisciplinary approach, creativity, and hands-on work. The course culminated in a student-created exhibition, "The Gettysburg Cabinet," modeled after a Renaissance collection cabinet.

**Else** delivered a presentation titled "Colossal Failures: The Language of Derision and Large Size" at the Annual Conference of the College Art Association, Washington, DC, February 3-6, 2016. The presentation, part of a session on "The Language of Fame and Failure in the Renaissance," dealt with the genre of colossal statuary in 16th century Florence and the negative connotations of giants. This more carnivalesque tradition, one relating to the grotesque and the monstrous, was drawn on in biting critiques of statuary that used large size to convey derision.

**Caroline A. Hartzell, Professor of Political Science**, with co-author Matthew Hoddie, presented a paper titled "Power Sharing and the Rule of Law in the Aftermath of Civil War" at the 57th Annual Convention of the International Studies Association, Atlanta, GA, March 19, 2016. The paper considers the potential that power-sharing institutions have to encourage the development of the rule of law in the aftermath of an intrastate war. Focusing on all civil wars fought and ended between 1945 and 2006, we find that, in the decade following the end of their respective civil wars, countries that adopt a range of power-sharing institutions score higher on the rule of law measure we employ than those countries that craft no or few such measures.

**Hartzell** presented a paper titled "Political Power Sharing and Women's Political Rights Following Civil War" at the 57th Annual Convention of the International Studies Association, Atlanta, GA, March 16, 2016. In this paper I develop and test a mediational hypothesis that allows me to examine two paths, one direct and one indirect, by which political power-sharing measures may exercise an effect on women's political rights following the end of civil war.

**Alvaro Kaempfer, Associate Professor of Spanish and Latin American, Caribbean and Latino Studies**, taught an invited seminar at the School of Social Sciences and Humanities, Universidad Autónoma de San Luis Potosí, San Luis, S.L.P, México, November 10-13, 2015. The seminar focused on the mutations and changes in the Latin American Studies field after the collapse of the Cold War. Tracing the beginnings of Latin American Studies across disciplines and different latitudes, all those trajectories were redefined by the Cold War. By the same token, once the Cold War was over, there has been a crisis and reformulations of Latin American Studies as a field in order to respond to new global realities. However, the dialogue between Social Sciences and Humanities in its construction remains at its core.

**Devin McKinney, Archives Assistant, Musselman Library**, with Kelsey Duinkerken and Jeanne Swadosh, co-led a workshop titled "How to Create an Oral History Program" at the Spring Conference of the Mid-Atlantic Region Archives Conference (MARAC), Pittsburgh, PA, April 15, 2016. The workshop instructed participants on how to plan, create, and publicize oral history programs in their own institutions.

**Wendy Piniak, Assistant Professor of Environmental Studies**, with student lead author **Bethany Holtz '16**, presented a poster titled "Orientation and Behavioral Responses of Hatchling Loggerhead Sea Turtles, *Caretta caretta*, to Environmental Acoustic Cues" at the International Sea Turtle Symposium, Lima, Peru, February 29-March 4, 2016. Visual and geologic orientation cues utilized by hatchlings while finding the sea have been well studied, but the role of acoustic cues has not been explored. Hatchlings exhibited a negative phonotaxic response to beach wave sounds, indicating the need for further acoustic orientation experiments to examine the potential for anthropogenic beach sounds to disorient hatchlings while seafinding.

**Sarah Principato, Associate Professor of Environmental Studies**, with student co-authors **Alexis Moyer '13**, **Alyson Hampsh '14**, and **Heather Ipsen '16**, gave a talk titled "Geomorphic Evidence for Paleo-Ice Stream Activity in Northern Iceland" at the Northeast Geological Society of America Meeting, Albany, NY, March 21-23, 2016. This talk presented detailed GIS analyses of streamlined landforms including drumlins and mega-scale glacial lineations. The results provide evidence for a paleo-ice stream in northern Iceland.

**Principato**, with Karin Ebert and Moa Hamre, gave a presentation titled "Lake Density as a Measure of Glacial Erosional Impact on Lowland Bedrock Terrain (Or Not)" at the 46th International Arctic Workshop, Institute of Arctic and Alpine Research (INSTAAR), University of Colorado at Boulder, April 2-3, 2016. The presentation detailed an analysis of more than 12 million lakes to examine patterns of erosion from past ice sheets.

**Principato**, with Amanda Houts and Joseph Licciardi, gave a presentation titled "Reconstructing the Glacial History of the Húnaflói Bay Region in Northwest Iceland Using Cosmogenic 36Cl Surface Exposure Dating" at the Northeastern Section Meeting of the Geological Society of America, Albany, NY, March 21-23, 2016. The presentation, based on work authored by the collaborators with S.M. Zimmerman and R.C. Finkel, presented some of the first cosmogenic 36Cl surface exposure dates from the Húnaflói region in northern Iceland.

**Principato**, with student authors **Rachael Grube '16** and **Heather Ipsen '16**, gave a presentation titled "Comparison of Cirques in Three Regions of Iceland Using GIS" at the Northeastern Section Meeting of the Geological Society of America, Albany, NY, March 21-23, 2016. Based on the honors thesis research of Grubre and Ipsen, the presentation examined a glacial landform, called a cirque, and created a new database of cirques on Iceland. Results of statistical analyses show that distance to the coastline is one of the most important factors in cirque formation in Iceland.

**Principato**, with student co-author **Heather Ipsen '16**, presented a paper titled "A Morphometric Analysis of Cirques on East Iceland Using GIS" at the Annual Meeting of the Geological Society of America, Baltimore, MD, November 1-4, 2015. This study examined cirques from eastern Iceland to interpret climate change.

**Principato**, with student co-author **Rachael Grube '16**, presented a paper titled "A Quantitative Analysis of Cirques on Trollaskagi, Northern Iceland" at the Annual Meeting of the Geological Society of America, Baltimore, MD, November 1-4, 2015. This paper presented results of a study of glacial landforms in northern Iceland, used to interpret climate change.

**Jack Ryan, Vice Provost and Dean of Arts and Humanities**, presented a paper titled "Saltwater Cowboy: From Acclaimed Literary Novelist to Failed Hollywood Director – Thomas McGuane's *92 in the Shade*" at the Literature/Film Association Annual Conference, York College, York, PA, October 15-18, 2015. The paper examines how writer Thomas McGuane adapted his third novel, *92 in the Shade*, for the screen with disastrous results. Jack also chaired a panel titled "Authorship, Adaptation, and Production Histories."

**Carolyn Snively, Professor of Classics**, presented a paper titled "Excavation in the Late Antique City at Golemo Gradište, Konjuh, 2014-2015" at the 117th Annual Meeting of the Archaeological Institute of America, San Francisco, CA, January 6-9, 2016. The paper summarized the investigations and discoveries by the Macedonian-American project at the site of Golemo Gradište, Konjuh, R. Macedonia, during the 2014 and 2015 seasons. Gettysburg College and the Archaeological Museum of Macedonia in Skopje are the sponsoring institutions for the project.

**Snively** presented a paper titled "Late Antique Dardania: A Moveable Province?" at the 9th Macedonian-North American Conference on Macedonian Studies, University of Chicago, Chicago, IL, November 12-14, 2015. The ancient kingdom and/or Roman province of Dardania has been claimed by some Kosovars as their ancestral land. This claim is causing problems for archaeologists and historians who are investigating the ancient kingdom or province--whose territory did not entirely correspond with modern Kosovo.

**Barbara A. Sommer, Professor of History and Edwin T. Johnson and Cynthia Shearer Johnson Distinguished Teaching Professor in the Humanities**, delivered a paper titled "The Confluence of Identity and Place in Seventeenth and Eighteenth Century Amazonia" at the 63rd Annual Meeting of the Rocky Mountain Conference for Latin American Studies, Santa Fe, NM, March 31, 2016. This paper explores how the waterways of equatorial South America facilitated interethnic conflict and cooperation and how the occupation of geographical and ecological zones defined social identities.

**Eileen Stillwaggon, Professor of Economics**, presented her research on "The Economic Costs and Benefits of Morbidity Management and Disability Prevention for Lymphatic Filariasis" at the 64th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Philadelphia, PA, October 25-29, 2015. She also presented two posters: "Maternal Screening to Prevent Congenital Toxoplasmosis in Austria: Modeling the Cost-Minimizing Option," and "HIV and Tropical Cofactors: Lessons from the STI-treatment Trials in Sub-Saharan Africa."

**Stillwaggon** presented her work on "The Economic Burden of Lymphatic Filariasis" at the Coalition for Operational Research on NTDs (COR-NTD), Philadelphia, PA, October 22-23, 2015.

## PROFESSIONAL DISTINCTIONS AND AWARDS

**Paul Carrick, Adjunct Professor of Philosophy**, was honored for devoting 32 years as a pro bono bioethics consultant to Pinnacle Health Hospitals. On December 8, 2015, he received a plaque and letter of

commendation from Michael A. Young, President and CEO of Pinnacle, for rendering invaluable service. Carrick served for 18 years as a founding member of the Hospital Ethics Committee, and for an additional 14 on the federally mandated Institutional Review Board (IRB), which closely monitors experimental medical treatments for consenting patients.

**Sherman Hendrix, Professor Emeritus of Biology**, was elected president of the Helminthological Society of Washington at its Anniversary Dinner meeting, October 23, 2015. The Helminthological Society is an international society of parasitologists based in Washington DC. Its journal, *Comparative Parasitology*, is published twice a year, in January and July.

**Salma Monani, Associate Professor of Environmental Studies**, was among the 7% of applicants competitively chosen for a research writing fellowship at the Rachel Carson Center in Munich, Germany, a highly-regarded international hub for environmental humanities scholarship. Prof. Monani will be working on her research looking specifically at the eco-sensibilities of indigenous film.

**Monani** gave an invited keynote speech titled "Ecocinema: Pasts, Presents, and Futures" at the second edition of the tiNai Ecofilm Festival, held on the K.K. Birla Goa Campus of the Birla Institute of Technology and Science – Pilani, Zuari Nagar, Goa, India, October 9-11, 2015. Sponsored by the Humanities Department at BITS-Pilani and the Organization for the Study of Literature and Environment (OSLE-India), the keynote was attended by both academics and filmmakers. Prof. Monani focused on her personal engagement with the growing field of ecocinema studies, and through the use of examples specific to her research overviewed the pasts, presents, and futures of the field to answer a few key questions central to ecocine critics: 1) Why ecocinema? 2) How do we conceptualize and practice ecocinema? 3) How might Indian ecocritics enrich the field as we move forward? Ultimately, the talk invited Indian ecocritics to participate in the vibrant, growing field of ecocinema studies.

**Peter Pella, Professor Emeritus of Physics**, is featured on the "Science Network" page of the website of the Union of Concerned Scientists. Headed "Who We Are," the profile lists Pella's accomplishments and his efforts toward educating the public about issues related to nuclear nonproliferation.

**Nikki Shariat, Assistant Professor of Biology**, was awarded a grant from the US Department of Agriculture's National Institute of Food and Agriculture for her proposal, "Using CRISPR-SeroSeq to Investigate Salmonella Ecology and the Prevalence of Antibiotic Resistance during Poultry Processing." The approach will be used to identify Salmonella exhibiting antibiotic resistance, and to develop a new high-throughput technique to determine differential Salmonella populations in poultry. The grant was announced on December 22, 2015.

## PROFESSIONAL OR CREATIVE ACTIVITY

**Caroline A. Hartzell, Professor of Political Science**, was appointed to the editorial board of the journal *Foreign Policy Analysis*. This peer-reviewed journal publishes academic research focusing on the processes, outcomes and theories of foreign policy.

**Amanda Heim, Adjunct Assistant Professor of Music, Sunderman Conservatory of Music**, arranged Avner Dorman's *Spices, Perfumes, Toxins!* for concert band and percussion duo. The piece was performed by the Joint Venture Percussion Duo and the European Youth Wind Orchestra, conducted by Jan Cober, at Artikuss, Soleuvre, Luxembourg, November 12, 2015. Dorman's piece was composed for percussion duo and symphony orchestra. My arrangement, published by G. Schirmer, set the piece for the same duo with concert band, introducing the work to an entirely different ensemble, with a penchant for new repertoire.

**Heim**'s arrangement of the Dorman piece was performed by the Joint Venture Percussion Duo and the European Youth Wind Orchestra, conducted by Jan Cober, at the Luxembourg Conservatory, Luxembourg, November 15, 2015.

**Heim**'s arrangement of the Dorman piece was performed by the Joint Venture Percussion Duo and the Luxembourg Musique Militaire Grand-Ducale, conducted by Jean-Claude Braun, at the Luxembourg Philharmonie, March 26, 2015.

**Barbara A. Sommer, Professor of History and Edwin T. Johnson and Cynthia Shearer Johnson Distinguished Teaching Professor in the Humanities**, presented a lecture on the photography of Manuel Álvarez Bravo in conjunction with the exhibit "Paul Strand and Manuel Álvarez Bravo: Photography in Mexico," Schmucker Art Gallery, Gettysburg College, February 25, 2016. Álvarez Bravo's work shows an inherent concern with the photographic process and with the contradiction of both exposing and covering the white surface of the paper to reveal the image. His photographs transform the everyday into mysterious, playful invitations to look.