



SUMMER 2012

Welcome to the summer edition of the quarterly Research Newsletter for faculty and graduate students at WSU Vancouver. The purpose of the newsletter is to share with the university academic community the accomplishments of our faculty in the publication of books, chapters, and journal articles, conference presentation, exhibits, invited lectures and awards during the previous quarter (January 1 – March 31, 2012). We will announce research project awards and contracts and grants from philanthropic foundations that have been funded in the previous quarter. Periodically, we will include feature articles or matters of interest to the research community as well as honors and awards received by faculty.

Books

Thabiti Lewis (English)

Conversations with Toni Cade Bambara

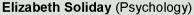
Jackson, Mississippi: University of Mississippi Press, 2012.

Dr. Lewis offers a collection of interviews conducted with famed author, filmmaker, educator and activist, Toni Cade Bambara. The most important interviews conducted with the author are presented here, along with a chronology of Bambara's life and an introduction discussing the importance and impact of her work on African American letters and film.

Pavithra Narayanan (English)

What Are You Reading? The World Market and Indian Literary Production New Delhi, India: Routledge Press, 2012.

Examining the constructions of the archive of postcolonial works by Indian writers in relation to nationalist histories, language wars, academic practices and the relationship between economic policies and literature, this book forcefully argues that why we read what we read is more than coincidental.

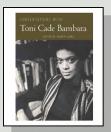


Childbirth in a Technocratic Age: The Documentation of Women's Expectations and

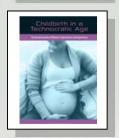
Experiences

Amherst, NY: Cambria Press, 2012.

This book includes extensive interview material drawn from 75 diverse women who spoke freely on their childbirth expectations and subsequent experiences. Dr. Soliday's unique approach indicates that biological forces only partly explain how and why maternal expectations of childbirth may align with or stray far from what they originally anticipated.







Recent Publications Journal Articles and Book Chapters

Cory Bolkan (Human Development) C. Bolkan and K. Hooker, "Self-Regulation and Social Cognition in Adulthood: The Gyroscope of Personality." In The Wiley-Blackwell Handbook of Adulthood and Aging, Eds., M. Sliwinski and S. Witbourne. Hoboken, NJ: Wiley-Blackwell, 2012, pages 357-380. In this book chapter the authors analyze the intersection between personality and self-regulatory and social cognitive processes. They discuss how both internal psychological factors (e.g., selfregulation, personality) and external factors (social context) play an important role in maintaining psychological and physical wellbeing across the lifespan, but particularly in later life.

Jahi Chappell (School of the Environment) M.J. Chappell, et al. "Food Security in Latin America." In Europa Regional Surveys of the World: South America, Central America, Caribbean, Ed., J. West. London: Europa Publications, 2012. The 20th Edition of this survey brings together the latest data on and detailed analysis of the region.

Allison Coffin (Veterinary and Comparative Anatomy, Pharmacology, and Physiology/College of Liberal Arts) A.B. Coffin, et al. 2012. "Saccular-Specific Hair Cell Addition Correlates with Reproductive State-Dependent Changes in the Auditory Saccular Sensitivity." Journal of Neuroscience, 32/4: 1366-1376. The plainfin midshipman fish is a seasonal breeding teleost fish for which vocalacoustic communication is essential for its reproductive success. Previous work has shown that female auditory sensitivity changes seasonally with reproductive state. The authors demonstrate that seasonal differences in sensory cell receptor density likely contribute to these physiological changes. They suggest that hormonal surges prior to the breeding season stimulate cell proliferation and sensory cell addition in the female midshipman ear.

Marcelo Diversi (Human Development)

M. Diversi and D. Henhawk. 2012. "Indigenous Qualitative Inquiry: (Re)Awakening, Together, from a Long Colonizing Slumber." International Review of Qualitative Research, 5: 51-72. Five

centuries after the first arrival of European settlers in what they called the Americas, indigenous peoples and ways of knowing continue to be largely represented and reified by Western scholars and epistemologies. Even with critical paradigms, indigenous bodies and narratives continue to be scarce. In this manuscript, the authors argue that this persistent segregation is related to an academic structure that continues to privilege Western paradigms (e.g., theoretical sophistication over visceral knowledge of oppression) and ways of knowing (e.g., reductionist binary definitions of indigeneity still too obsessed with authenticity).

Marcelo Diversi (Human Development) M. Diversi and C. Moreira. 2012. "Decolonizing Constructions of Childhood and History: Interrupting Narratives of Avoidance to Children's Questions about Social Justice." International Journal of Qualitative Studies in Education, 25/2: 189-203. Using autoethnographic reflections, memories, street poetry, and decolonizing wanderings, the authors try to make sense of the persistent disconnect between the "discovery" of Brazil by the Portuguese in 1500 A.D. and the brutal social injustices of our everyday life. They bring constructions of childhood and history right into the center of this critique. Throughout, they invite the reader to imagine new ways of seeing and teaching children, and thus ourselves as educators and parents, and to interrupt the avoidance approach to questions of inequalities in favor of decolonizing versions of history.

Dawn Doutrich, Lida Dekker and **Janet Spuck** (Nursing)

D. Doutrich, L. Dekker, J. Spuck, et al. 2012. "Cultural Safety in New Zealand and the United States: Looking at a Way Forward Together." Journal of Transcultural Nursing, 23/2: 143-150. The purpose of this research is to describe the meaning of cultural safety as depicted by nurses in New Zealand and to illustrate the potential for this to inform U.S. nursing education and practice. Interpretive analysis uncovered five themes. Cultural safety considers the perspective of the patient as the norm in contrast to health care. Understanding historical power differences and personal biases can help challenge victimblaming responses by health care providers. Incorporating these understandings into reflective practice enhances the possibility of safe learning for students and safe patient care.

Recent Publications continued Journal Articles and Book Chapters

John P. Garofalo and Elizabeth Soliday (Psychology)

J. P. Garofalo, E. Soliday, et al. 2012. "Multiple Roles and Stress Burden in Women: A Conceptual Model of Heart Disease Risk." *Journal of Applied Biobehavioral Research*, 17: 4-22. This literature review examines the effect of multiple roles on women's cardiovascular health. A conceptual model of heart disease risk is proposed, which introduces background stress, a chronic stress burden, as a potential pathway between multiple roles and heart disease.

Stephen Henderson (School of the Environment)

S. Henderson and B. Deemer. 2012. "Vertical Propagation of Lakewide Internal Waves." Geophysical Research Letters, 39/6. Currents measured in Lacamas Lake are dominated by a type of wave that has not previously been identified in any lake. The observed "internal waves," which are associated with density differences between warm surface water and cooler deep water, propagated vertically, carrying energy to the lakebed where it was dissipated. This contrasts with the standard "seiche" model, where waves are reflected from the bed. Simple models for dissipation suggest that similar waves might be found in many small, strongly stratified lakes.

Daniel Jaffee (Sociology)

D. Jaffee. 2012. "Weak Coffee: Co-Optation and Certification in the Fair Trade Movement." Social Problems, 59/1: 94-116. This article explores the case of the international fair trade movement, which aims to change the inequitable terms of global trade in commodities for small farmers. Drawing on interviews with a range of participants in fair trade movement organizations and certification bodies, the article describes fair trade's growing relationship with multinational coffee firms, particularly Starbucks and Nestle, It explores intra-movement conflicts over the terms and the effects of corporate participation in fair trade, and illuminates tensions between conceptualizations of fair trade as movement, market and system.

J. Xu. et al. 2012. "How to Cool a Burn: a Heat Transfer Point of View." *Journal of Burn Care and Research*, 33/2: 176-187. The authors developed and validated a numerical model that

Jie Xu (Mechanical Engineering)

and Research, 33/2: 176-187. The authors developed and validated a numerical model that can conduct a transient analysis of heat transfer and the corresponding damage in skin burns. They found that the most influential way to significantly reduce the damage from a burn is to immediately cool the burn. In addition, it was found that cooling a burn for a prolonged period of time or with very cold water cannot be justified from purely a heat transfer point of view.

Linda Mabry (Teaching and Learning)
L. Mabry, et al. 2012. "Worksite Wellness
Program Implementation: A Model of
Translational Effectiveness." Translational
Behavioral Medicine: Practice, Policy, and
Research (online). Research was undertaken to
examine a worksite wellness program
implemented by twelve fire departments in
Washington and Oregon. From quantitative
data a model of program translation was
developed, which was supplemented by
interview data that explained how the program
was implemented, experienced, and received by
participants, illuminating how and why the
program worked.

Clay Mosher (Sociology)

<u>C. Mosher</u> and M. Pickerill. 2012. "Methodological Issues in Biased Policing Research with Applications to the Washington State Patrol." *Seattle University Law Review*, 35/3: 769-794. This article examines important methodological and theoretical issues in conducting research on racial profiling and racially biased policing, including a detailed discussion of the authors' research with the Washington State Patrol.

Recent Publications continued Journal Articles and Book Chapters

Sue Phelps and Nicole Campbell (Library) Sue Phelps and Nicole Campbell. 2012. "Commitment and Trust in Librarian-Faculty Relationships: A Systematic Review of the Literature." The Journal of Academic Librarianship, 38/1: 13-19. The goal of this study was to examine the methodologies used to study librarian-faculty relationships and to use the Key Mediating Variable Model of the Trust and Commitment Theory of Relationship Marketing to assess the quality of the librarianfaculty relationships as portrayed in the literature. A focus on communication, shared values and benefits of the relationship fosters commitment and trust between faculty and librarians.

Tahira Probst (Psychology)

<u>Tahira Probst.</u> "Safety and Insecurity: How Fear of Job Loss Can Threaten Employee Safety." In Workplace Health and Safety: A Managerial Perspective, Eds., E.A. de Chatillon, O. Bachelard, and S. Carpentier. Paris: Vuibert AGRH, 2012, pages 135-148. This chapter reviews research evidence for the link between job insecurity and poor worker safety outcomes.

Recent Presentations

Conference Presentations, Exhibits, Invited Lectures, Awards

June Canty (Teaching and Learning) presented a paper at the Annual Meeting of the American Association for Colleges of Teacher Education in Chicago in February. The paper was entitled "Effective Induction Strategies: Implications for Partnerships" and it focused on her research findings about the strategies teacher preparation programs and P-12 school districts need to bring together to meet the needs of beginning teachers.

Allison Coffin (Veterinary and Comparative Anatomy, Pharmacology, and Physiology/College of Liberal Arts) delivered an invited seminar at the University of Minnesota Duluth on March 23rd. Her seminar was entitled "Can You Hear Me Now? Translating Hair Cell Life and Death in the Zebrafish Lateral Line."

Karen Diller (Library) did a poster presentation at the 2012 Association for Library and Information Science Education Annual Conference, January 16th-18th. The poster, "Academic Libraries as 'Lakes of Mental Energy'," presented her research plan to answer the question "Does studying in 'greenery-enhanced' spaces in the library have a positive impact on student learning?"

Gisela Ernst-Slavit (Teaching and Learning) presented a paper at the International Conference on Education in Honolulu in January. The title was "Academic Discourse, ELLs, and Language Awareness: A Critical Balance."

Gisela Ernst-Slavit (Teaching and Learning) also presented a paper at the 8th International Globalization, Diversity, and Education Conference in Vancouver, WA on February 23rd. The paper, "Academic Language as a Third Language: Challenges and Opportunities for English Language Learners," highlights how learning the language of disciplines can appear to be a third language for students who are learning English as a second language.

Kathleen Fountain (Library) and Dana Baker (Public Affairs) also presented "Qualitative Analysis of Diversity Qualifications and Expertise Used by Candidates for a Diversity Faculty Fellow Position" at the conference mentioned above. This research was coauthored with Art Blume (Psychology), Randy Boose (Human Resources) and Karen Schmaling (Academic Affairs). Their paper draws on an analysis of diversity articulation in a set of Diversity Fellow cover letters.

Linda Frederiksen (Library) was an invited speaker at the 2012 ILLiad International Conference in Virginia Beach, VA, which took place March 22nd and 23rd. Her presentation, "Tune In and Tune Up: Improving ILLiad Workflows," detailed departmental workflow efficiencies.

Recent Presentations continued

Conference Presentations, Exhibits, Invited Lectures, Awards

Dene Grigar (Creative Media and Digital Culture Program) curated the Electronic Literature Exhibit at the 2012 Modern Language Association in Seattle from January 5th – 8th. The exhibit held 160 works by over 100 artists and it aimed to introduce scholars to a broad cross-section of born digital literary writing, both historic and current, and to provide scholarship and resources to scholars interested in further study of this literary form. Dr. Grigar also gave two papers entitled "Art and Platforms: Artistic Practices of Electronic Literature" and "Contracts and Convergences of Electronic Literature."

Cassandra Gulam (Foreign Languages and Cultures) presented at the Hawaii International Conference in Arts & Humanities in Honolulu on January 11th. "Making the Most of 'Lab' Time: Ideas for Using Online Forums in Introductory Language Classes" provides several concrete techniques for structuring interactive L2 exercises; these suggestions are intended for both language teachers who have dedicated "lab" time, as well as those whose courses include an online module.

Linda Mabry (Teaching and Learning) was invited to make a presentation in Portland in January to the Oregon Program Evaluation Network entitled "The Responsibility of Evaluation." This presentation considered the differing responsibilities program evaluators face regarding professional, societal and personal expectations and commitments. Whether evaluators should engage in advocacy was explored, as well as how our society can and does regulate the ethics and methodology of evaluation.

Clay Mosher (Sociology) delivered a paper on "Studying Racial Bias in the Criminal Justice System" at the Seattle University Law School Symposium on Racial Bias in the Criminal Justice System on February 16th.

Tamara Nelson, David Slavit, and Angie Deuel (Teaching and Learning) presented a paper entitled "Talking about Student Learning: Science and Mathematics Teachers' Collaborative Inquiry

Processes" at the annual meeting of the National Association for Research in Science Teaching.

Wendy Olson (English) presented "Mapping and Exploiting Transnational Writing Programs in U.S. Community Colleges" at the National Conference on College Composition and Communication in Atlanta on March 22nd. This study examined the rise of language-intensive programs within U.S. community colleges, focusing in particular on the curricular and pedagogical implications of how academic literacy is both constructed and taught as students move from English language learning programs into first-year composition programs.

Brett Oppegaard (Creative Media and Digital Culture Program) presented "Through a Portal to the Past and Back Again: Experiments in Composition for Mobile Devices in Historic Spaces" at the Conference on College Composition and Communication in St. Louis, MO on March 24th. The presentation focused on best practices for content producers and multimedia designers who are working in mobile environments. The session also raised the distinct challenges of composition in mobile spaces, as well as key areas in the environment that offer ripe opportunities.

Susan Peabody (History) gave an invited paper in Paris at the International Colloquium on Women and Gender in Colonial Contexts in January. Her paper, entitled "Strategic Silences: Sex, Gender and Slavery in the Indian Ocean," examines the legal structures regulating families in slavery, particularly the injunction against naming free fathers of children born to enslaved mothers.

Brian Tissot (School of the Environment) was invited to speak in Kona, Hawaii by SeaGrant on January 26th. The presentation was called "Research on the West Hawaii Aquarium Fishery: Reef Impacts and Sustainability" and it summarized 15 years of research in Hawaii.

Funded Research

Spotlight on Tahira Probst

It was recently announced that **Tahira Probst** has been awarded a grant of \$31,119 by the **Society for Human Resource Management** (SHRM) **Foundation** to conduct a research study entitled **Organizational Safety Climate** and **Supervisor Safety Enforcement: Multilevel Explorations of the Causes of Accident Under-Reporting.**

Officially, over 4 million employees are injured at work each year, yet research indicates that these numbers may be grossly underestimated. Using survey data collected from over 2200 employees in 43 organizations, Dr. Probst will examine the extent to which organizational-level safety climate and supervisor enforcement predict individual-level accident reporting behaviors. She hopes that her results will help increase the accuracy of accident reporting, reduce actual safety incidents, and reduce the costs to individuals and organizations that result from under-reporting.

Dr. Probst oversees that Occupational Health and Safety (OHS) Lab at WSU Vancouver, where she focuses on issues related to employee health, well-being and safety. She is particularly interested in the effects that economic stressors such as job insecurity have on employee health and safety, as well as organizational interventions that can mitigate these negative effects.

Says Dr. Probst, "In an era of record unemployment, massive layoffs, and a sluggish economy, many of today's workers face the economic stressors of unemployment and job insecurity. A person's job is one of the most important mechanisms through which he or she gains a sense of identity. Whether that job is threatened, compromised financially, or lost, the research overwhelmingly suggests that the resulting consequences are significant, negative and widespread."

To learn more about this research, please visit the OHS Lab website http://research.vancouver.wsu.edu/ohs-lab.



Dr. Probst (left) consults with former graduate student, Maja Graso, and delivers a talk on economic stress at the Chancellor's Seminar Series. She was also an invited speaker at the Oregon Governor's Occupational Safety and Health Conference.



Funded Research continued

Thanh Dang, Intel Corporation - \$60,000 Platform-attached Sensors Integration and Management in Office Buildings
Platform-attached sensors that are being built into personal computing devices such as laptops can enhance sensing in office buildings, enabling new applications in energy efficiency, health care, and security. However, existing building sensing systems do not integrate platform-attached sensors well. Dr. Dang will explore how to leverage platform-attached sensors for personal sensing in general, and building sensing in particular.

Dave Kim, Phygen Coatings - \$15,057
Phygen Drill Coating Evaluations for Drilling
Composite/Titanium Stacks
New aircraft design extensively demands the
use of composite/titanium stacks. Generating
holes in such hybrid composite stacks is very
challenging due to the dissimilar physical and
mechanical properties of composites and
titanium. Recently developed arc plasma
acceleration (APA) techniques result in excellent
coating performance in many applications. This
study aims to investigate the effect of the APA
drill coating process parameters on
composite/titanium drilling performance.

Jie Xu, DOD-DARPA - \$86,253 Ear on a Chip: Microfluids for Characterization and Control of Hair-Cell Sensing with Acoustic Stimuli

Dr. Xu's DARPA Young Faculty Award has been continued into the second year. See our feature article in the *Winter 2011 Academic Affairs Research Newsletter*.