Meeting Minutes

Associate Deans for Research

Friday, December 18, 2015, 9:00-10:30 a.m. SEB 2251

In Attendance: Jillian Inouye, Andrew Hardin, Jay Shen, Connie Mobley, Mohamed Trabia, Jennifer Keene, Javier Rodriguez, Tara Emmers-Sommer, Stan Smith, Carol Brodie, Sue DiBella, Lori Olafson, Liam Frink, Zach Miles, David Paul, John Brodie, Kwang Kim, Eche Ezeanolue, Tami Bruno, Dina Patel, and Jill Zimbelman

- 1. General Announcements/Updates Stan Smith
 - a. None
- 2. Top Tier Updates Stan Smith
 - a. Increasing Proposals (presentation attached) Kwang Kim
 - i. One of the major goals of the Top Tier initiative is for UNLV to achieve at least \$150 million per year of research expenditures by 2025.
 - ii. Top 10-20% of faculty typically carries the high load and pressure in terms of grant/contact activities
 - iii. Subcommittee noticed that UNLV's proposal output for FY 2015 actually went down
 - iv. A few recommendations/ideas to the RSCA Committee for consideration to address:
 - 1. Low number of grant proposals
 - 2. Low number of large volume/flagship grants
 - 3. Low number of "young investigator" awards
- 3. Global Health Initiative Dr. Ezeanolue
 - a. Dr. Eche Ezeanolue, Professor of Pediatrics and Public Health, who is a faculty member at the School of Community Health Sciences gave a broad overview of the Global Health Initiative (GHI)
 - b. The GHI aims to take advantage of existing resources, partnerships and funding established by faculty members around the globe to build an infrastructure for global health research.
 - c. The GHI objective is to expand interdisciplinary research efforts across multiple schools and disciplines at UNLV creating opportunities for collaborative research projects that can increase the number and amount of extramural funding awarded to UNLV
 - d. This is designed to achieve a bold goal of having UNLV footprint in all the countries under the United Nation either through the students we train, the graduate we have trained or the faculty working or collaborating in those countries

- e. VPR will be hosting a brown bag networking event in early 2016 to bring together faculty members from various school who are or might be interested in global health initiatives.
- 4. Spotlight on Research Presentation Jen Keene
 - a. College of Liberal Arts (presentation attached)
- 5. Volunteers for Spotlight on Research
 - a. Jan. 15 Billy Bai: Hotel Administration
 - b. Feb. 19 Volunteer Needed
 - c. Mar. 18 Volunteer Needed
 - d. Future Volunteer: Ramona Denby-Brinson

Next Associate Deans for Research Meeting:

Friday, January 15, 2016, 9:00-10:30 a.m., SEB 2251

Research, Scholarship, and Creative Activity (RSCA)

(FY 2016: Top Tier Subcommittee #2-3)

"Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities"

A short report prepared by:

Kwang Kim (Engineering) Barbara St. Pierre Schneider (Nursing and Allied Health) Brian Hedlund (Sciences)

in consultation with David Paul (Office of Sponsored Project) Deans Rama Venkat (COE), Tim Porter (COS), and Carolyn Yucha (SON)

Submitted to:

Thomas Piechota and Kate Korgan, Chairs of RSCA

and

Presented to:

UNLV Research Council (on December 11, 2015) UNLV Associate Deans' Council (on December 18, 2015)





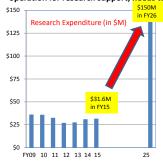
Version 13

RSCA Top Tier Subcommittee #2-3 Assignment

Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

Some Background Information & Urgency of Needs

- 1. One of the major goals of the Top Tier initiative is for UNLV to achieve AT LEAST \$150 M/YEAR of research expenditure by 2025.
- Where we are NOW?
 - FY15 Research expenditure of \$31.6M. FY15 Research awards of \$32.1M.
 - FY15 Research proposals of \$226.7M.
- FY09-FY15 Total Proposal \$ Amount=\$1.858 Billions
- Note: Approximately 12% (in terms of \$ volume) of the submitted proposals are materialized.
- To achieve such a challenging goal, the RSCA Top Tier Subcommittee #2-3 strongly feels that the UNLV operation for research support, needs to become MORE RISK-TAKING, CREATIVE, AND BUSINESS-MINDED!





FY09-FY15 Total Research Expenditure=\$222 Millions

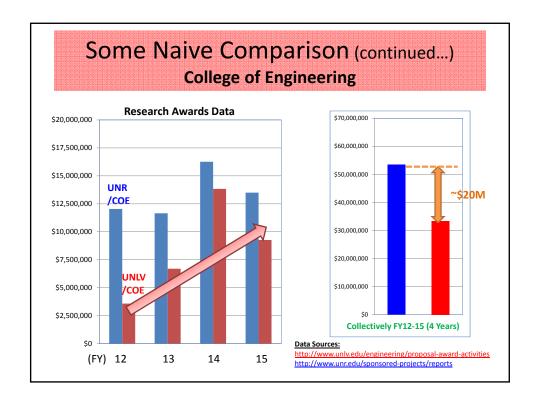
Considering the success rate at around 12%, UNLV needs to produce more proposal submissions!

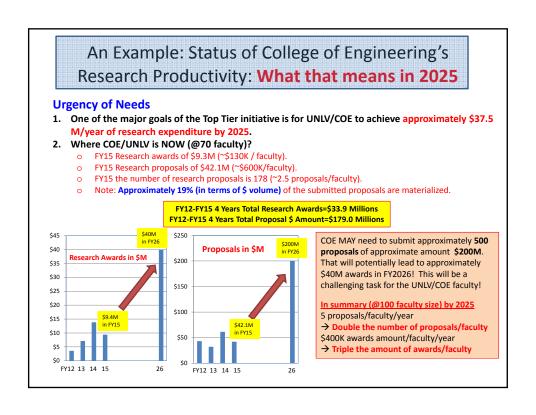
For example \$500M/year proposal submission will produce about \$60M.

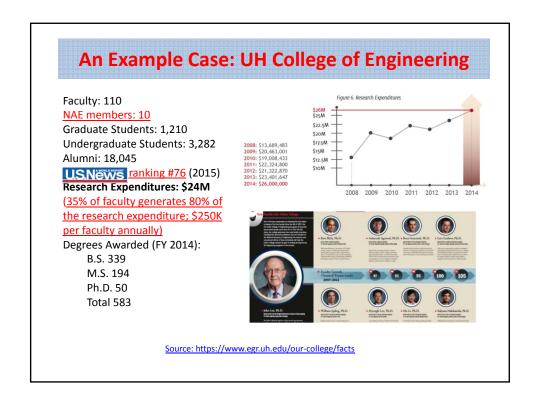
Some Naive Comparison (peer institutions?)

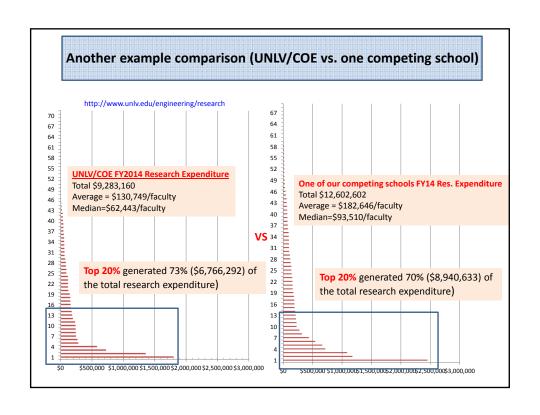
- UNIX
 - FY15 Research proposals of \$226.7M.
 - FY15 Research awards of \$32.1M (~14% conversion).
- Univ. of Houston (www.uh.edu/research)
 - FY14 Research proposals of \$737.0M.
 - FY14 Research awards of \$119.0M (~16% conversion).
- Univ. of Central Florida (www.ucf.edu/research)
 - FY13 Research proposals of \$622.8M.
 - FY13 Research awards of \$113.2M (~18% conversion).
- Univ. of New Mexico (www.unm.edu/research-reports)
 - FY15 Research proposals of \$402.6M.
 - FY15 Research awards of \$124.2M (~30% conversion).
- Short-term: Some targeted goals(?) it could be very stiff goal(s)
 - UNLV may need to write proposals at least \$400M annually by 2020.
 - UNLV need to improve the winning rate to at least 15% by 2020.
 - → This will help UNLV produce about \$60M research annually by 2020???

Some Naive Comparison FY 15 # of Proposals Submitted by UNR UNLV COLLEGE SCIENCE Average 168 185 (163/156) ENGINEERING SCHOOL OF MEDICINE Average 169 [178 (AY14) /205 (AY13) / 143 (AY12) / 149 (AY11)] AGRICULTURE, BIOTECHNOLOGY..(CABNR) 120 HEALTH SCIENCES, VP NV COOPERATIVE EXTENSION 60 COLLEGE OF LIBERAL ARTS 52 EDUCATION BUISNESS RESEARCH & INNOVATION, VP ENROLLMENT SERVICES **GRADUATE SCHOOL** POLICE SERVICES, UNIVERSITY EXTENDED STUDIES FACILITIES SERVICES LIBRARIES OFFICE OF PROVOST STUDENT LIFE SERVICES STUDENT SERVICES, VP 1,001









Findings / Question(s)

- At the moment, top 10-20% of the faculty typically carries high load and pressure
 in terms of grant/contract activities and, most likely, will be in a situation to carry
 much more load and pressure as UNIV wants to become a Top-Tier institution.
- Some operation flexibility or strategic investments are needed (Q: in where?) to bring the overall performance up?
 - 1. Spread them out (?), Bottom 20% (?), Top 20% (?)
 - 2. What are the associated cost and ROI?

Similarities are everywhere!: Initial investment on the top producers and then expand to others.. (make up the volume first!)

An example: Univ. of Houston / Cullen College of Engineering's Strategic Plan 2014 to 2020 (https://www.egr.uh.edu/sites/ccoe.egr.uh.edu/files/files/strategic-plan-web 2014-2020.pdf)

Vision: To become a "Top 50" Engineering Program, as defined by U.S. News and World Report, in support of the University of Houston's Tier One initiative.

Increase Research Activity across the College: Currently, 35% of CCE faculty generates 80% of the research expenditures for the college. By 2020, "the CCE's goal is not only to increase overall research activity, but to broaden research activity among faculty so that a substantial majority of faculty are contributing to the research enterprise." To support this goal, the CCE will ensure......

RSCA Top Tier Subcommittee #2-3 Assignment

Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities



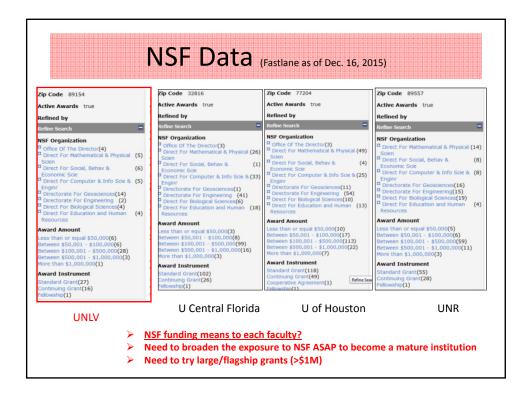
AN EXAMPLE DATA for FY13-FY15: National Science Foundation

- 1. Number of NSF grant proposals "directly" submitted by UNLV annually is low.
- 2. Large volume (>\$1M)/flagship grants "directly" submitted/received by UNLV is low.
 - 13 submissions/1 funded
 - Since 1976 (Fastlane data): 3 grants > \$1M; 13 grants are between \$500K and \$1M
- 3. Number of NSF CAREER awards received by UNLV
 - 11 awards: Luke (1998, the first?), Bae*, Ahmad (2009), Fu*, Rennels, Sapochak*, Lee (2009), van Breukelen, Piechota, Hedlund, and Snook* (*left UNLV) – None after 2009.



Zip Code	Institution	# of Active NSF Grants	# of Active CAREER Awards
80309	UC Boulder	543	34
84112	U of Utah	278	23
77204	University of Houston	174	20
97403	University of Oregon (no Engineering)	141	4
32816	University of Central Florida	134	10
89557	UNR	81	4
92182	San Diego State University	76	1
89154	UNLV	47	1 (no cost ext.)

(NSF Fastlane data as of August 7, 2015)



RSCA Top Tier Subcommittee #2-3 Assignment

Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

SWOT ANALYSIS

- Strengths in:
 - 1. Small but a number of strong areas of faculty research,
 - 2. Not enough but good support for faculty grant applications, and
 - 3. Good investment/intension for faculty grant applications from the administration
- Weaknesses in:
 - 1. Number of grant proposals is low.
 - 2. Number of large volume/flagship grants is low.
 - 3. Number of "Young Investigator" awardees is low→ Questions (Recruiting? Mentoring?)
- Opportunities in:
 - 1. UNLV Uniqueness: EPSCoR, MSI, KF, others...
 - 2. Growing interest in UNLV medical school and health care research
 - 3. Slowly but growing faculty-participation in campus research initiatives (FOA, limited submission, etc..)
- Threats in:
 - 1. Federal budget cut in research
 - 2. Increasing competition in grant applications as more universities pursue research funding
 - 3. Limited research infrastructure at UNLV
 - 4. UNLV Campus culture on research
 - 5. Difficulty in recruitment of high caliber researchers (resource, student quality, location..?)

RSCA Top Tier Subcommittee #2-3 Assignment

Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

A few recommendations/ideas to the RSCA Committee for consideration to address (1) low number of grant proposals; (2) low number of large volume/flagship grants; and (3) low number of "Young Investigator" awards

- 1. Provide the PIs with incentives to submit more proposals.
 - > Identify any faculty without federal funding in the last 5 years and help them submit proposal(s) to NSF (may be \$XXX per proposal?).
- 2. Provide some creative and meaningful incentives to research-active Pls.
 - For 9 Mon. salary faculty: (1) Allow summer/over-load up to 48% of their salary (UNR model?); (2) Allow summer salary saving for rainy days (Penn State model?); (3) Matching (U of Florida model?)
 - For 12 Mon. salary faculty (for example Nursing/Dental faculty): Create a mechanism for teaching release or other financial incentives.

Urgency: The subcommittee noticed that the UNLV's proposal output for FY2015 actually went down!

Thus, for UNLV to achieve \$150M/year research expenditure and write more proposals, it is so obvious that UNLV needs to provide the research active PIs with:

- 1. More TIME,
- 2. Meaningful INCENTIVES, and
- 3. Effective SUPPORT

RSCA Top Tier Subcommittee #2-3 Assignment

Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

- 3. For large grant applications and institution-limited (time sensitive) submissions
 - Form a task force (VPR/Deans/other research leaderships) to strategize so the campus infrastructure will support large funded grant applications in an unfragmented and efficient way.
 - > Streamline the institution-limited submission process to allow the PI to have enough time to prepare the proposal (if necessary, the executive decisions by the leaderships are needed for decision making.)
- 4. To help TT faculty to win Young Investigator awards:
 - Providing early-career researchers with seed investment and mentorship support to help them effectively launch their research and prepare to apply for early career or selected research awards (for example, NSF CAREER, DoD/DoE/NASA Young Investigator, and other programs).
 - ✓ Host NSF CAREER workshop(s) at the UNLV campus.
 - ✓ Send TT faculty to "NSF supported" NSF CAREER workshop(s).
 - ✓ Help TT faculty have proposal reviewing opportunities.
 - ✓ Help TT faculty have "NETWORKING" and "BRENDING" (setting up informative websites, etc).
 - Special support programs for TT faculty: mini-sabbatical, appropriate teaching load, first grant program, mentoring...? TT → Being/Becoming PERSISTENT!
- 5. "Improved" Research Space Utilization (RSU)
 - The current level of RSU is sitting at approximately \$150/SF annual expenditure. This number is expected to go up as UNLV will bring more research \$. A short-term solution to deal with such an increased demand rather than adding more research space, could be more centrally controlled management (similar to class-rooms that are centrally managed)? This will create more interchangeable space utilization (and provide the chairs/deans with some tools?)?
 - An example scenario: Suppose a PI/team wants to make a bid to bring a federally funded Center of Excellence, one usual evaluation criteria is "availability of space/location of the proposed center." With the current research space management practice, it is extremely challenging for a PI to propose a convening Space Management Plan. Thus, the proposal will be less favored by the reviewers.

RSCA Top Tier Subcommittee #2-3 Assignment

Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

- "Entrepreneurial" ways for providing matching (or reallocating the existing resources) toward grant applications (we recognize that it is a tough issue for resource-poor institutions including UNLV)
 - Often times, grant applications require MATCHING (in particular DOE)! In this regard, the UNLV communities at all levels (central administration/VPR/Graduate School/Deans/Chairs/PIs) may need to look for some aggressive but creative matching mechanisms to overcome this huddle?
 - Properly packaged matching plan(s) included in grant proposals will greatly help the PIs win more grants/contacts – in particular for large/flagship grants.
- Encourage the UNLV faculty to go to federal funding agencies as a program director (or provide the faculty with some incentives - via IPA / in connection with sabbatical or development leave).
- 8. Further effective utilization of "Centers of Excellence" to help secure external funding and recruit dynamic faculty and capable students
 - College of Eng. and College of Sci.: a targeted volume of \$1.5M expenditure/year
 - ➤ Centrally administrative → needs some investment (?) (administrative support (?)
- 9. "Distinguished professorships/Endowed professorships" will also help the PIs to secure large volume-flagship programs.

RSCA Top Tier Subcommittee #2-3 Assignment

Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

- 10. Help the PIs bringing "focused workshops" to the UNLV campus.
- 11. Some External Input (or consultants) to UNLV's Research Enhancement
 - UNLV may need to bring some "external advisor groups" from our comparative schools and/or agencies & consultants (some from our targeted schools and agencies and national labs.. consultants??) and look for their advice and wisdom regarding research-enhancement decision-making?
- 12. Place some strategical existence and/or collaborations in the DC areas to have more connections with federal agencies?
- 13. Look into a model to hire **very capable RESEARH ONLY FACULTY** who can started with some initial investment (University of Central Florida model, most medical schools..?)
- 14. Strategically place some "graduate fellowships" that can target upon "High-risk / High-pay-off research."
- Encourage the faculty (particularity TT faculty) to participate in grant writing clubs having a mock review element.
- 16. Provide the UNLV faculty with fastlane access capability?

Many thanks for your attention!









UNLV COLLEGE OF LIBERAL ARTS: SPOTLIGHT ON RESEARCH

Jennifer Keene Associate Dean

FOUNDATIONS OF THE UNIVERSITY

- Skills for Freedom: Liberales "to liberate" "free", Artes "skills"
- Education is essential for preserving democratic freedom
- Self-directed, critical thinkers
- Social Sciences: Anthropology, Political Science, Psychology, Sociology
- Humanities: English, History, Philosophy, World Languages & Cultures
- Inderdisciplinary Studies Programs
- ▶Black Mountain Institute

RESEARCH IN LIBERAL ARTS

- ■143 faculty
- Discovery through research and scholarship
 - Classes and coursework
 - Internships, labs, and hands-on research experiences
 - Membership in communities of scholars
- Strong, reciprocal, and interdependent relationships between UNLV and the region around us
- Graduate student job placement
- Interdisciplinary research

RESEARCH FUNDING

\$10m in grant proposals 2014-2015

The heaviest hitters:

- Psychology: Behavioral and cognitive sciences, Brain health, Neurological Disorders
 - NSF, Cleveland Clinic
- Sociology: Neighborhood and community focused research projects.
 - DOJ, SN Regional Housing Authority
- Anthropology: Physical anthropology
 - NSF
- Political Science
 - NSF

ANTHROPOLOGY

The study of the complete human experience—past, present, and future.

- Food and Nutrition
- Adaptive Strategies
- Parenting, Childhood, and Development
- Sexuality, Romance, Gender, & Identity



Brian Villmoare and colleagues found a 2.8 million year old jawbone of what may be the earliest human, providing important clues about the timeline of human evolution.

Dr. Levent Atici, Associate Professor of Anthropology, received the Barrick Scholar Award (zooarcheology).





In 2014, Dr. Debra Martin, Lincy Professor of Anthropology, received the Barrick Senior Scholar Award (human osteology and bioarchaeology).

ANTHROPOLOGY

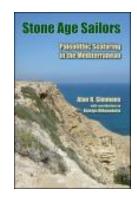
Ethnoecology and Experimental Studies Lab

Ethnoarchaeological and experimental examination of the Alaskan seal poke storage system (NSF Office of Polar Programs \$232,750)

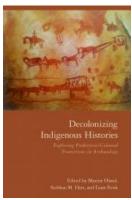




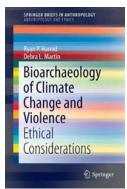
Examining subsistence foods, health and changes in technology as generations move away from more traditional subsistence food storage methods.

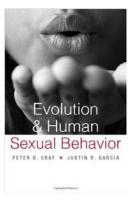












POLITICAL SCIENCE

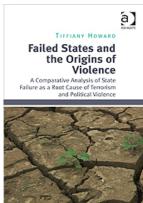
The study of systems of government; the analysis of political activity and behavior.

- American politics
- Comparative politics
- International relations
- Public law
- Political theory
- Public policy

Rebecca Gill received a \$171,000 NSF grant to study Objective Measures and Implicit Bias in Evaluating Public Officials







Tiffiany Howard studies international security, immigration and refugee policies, and political violence, conflict and terrorism.



David Damore studies campaigns and elections and public policy at the state and national levels. He appears regularly in the local news and on NPR.

PSYCHOLOGY

Science of the mind, especially focused on behaviors in certain contexts. Clinical, cognitive, & developmental

Connections with many organizations including private schools, Clark County agencies, and mental health, medical, and neuroscience centers.

Jefferson Kinney looks for cellular mechanisms reconsible for phr

nd molecular neimer's and veland Clinic



Cleveland Clinic Lou Ruvo
Center for Brain Health and
UNLV earn \$11.1 million
grant from National
Institutes of Health to
tackle Alzheimer's and
Parkinson's diseases!

Jennifer Rennels studies how as, chit ren, and adults perceive and process ces to understand how stereotypes become associated with facial appearance. NSF, NICHD

PSYCHOLOGY

Not just Sports Psychology: \$2m National Institute on Drug Abuse to study how Family Behavior Therapy works among UNLV student-athletes.





James Hyman: Neuropsychology, Biological Psychology. Uses <u>electrophysiological</u> recordings to better understand how the brain encodes information related to actions and their outcomes.

SOCIOLOGY

The scientific study of society.

- The Sex Industry in NV and Las Vegas
 - Brothels, strip clubs, online sexual commerce, sex worker outreach
- Gambling and the Gaming industry
 - Problem gambling and international gaming
- Crime and Sexual assault
- Health in Nevada
 - Social Health of Nevada, mental health, health disparities
- Las Vegas' Urban Environment and Community
 - LVMASS, Life is Beautiful, Immigration Issues
- Environmental Issues
 - Nevada Test Site, water use and conservation
- Aging and Volunteerism

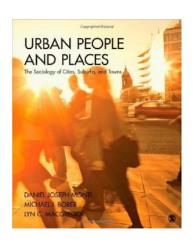


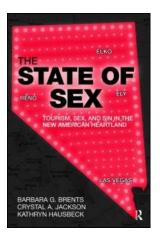


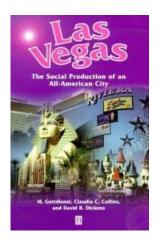
What happens in Las Vegas is Sociology!

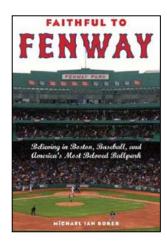


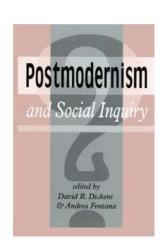
SOCIOLOGY

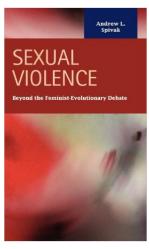


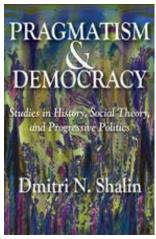


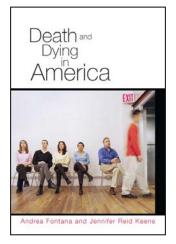


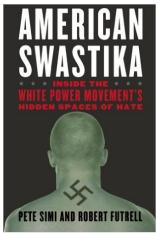


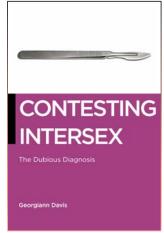






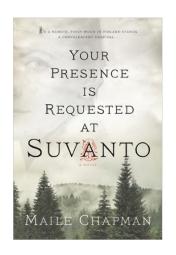


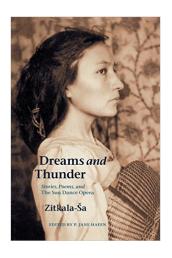




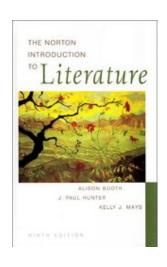
ENGLISH

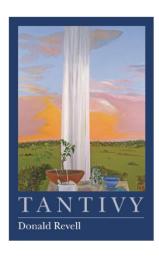
Read the World! Literature, Composition, & Creative Writing

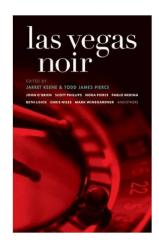


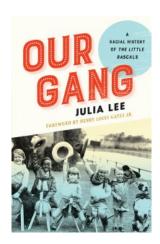


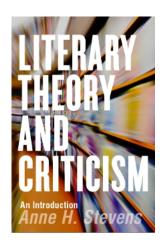


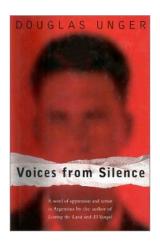


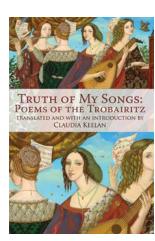






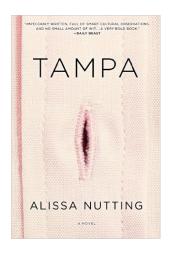


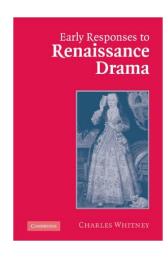


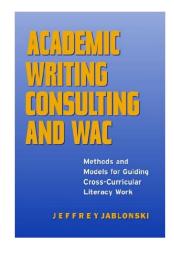


ENGLISH

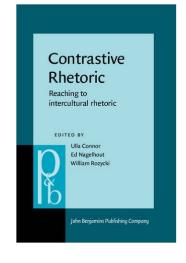


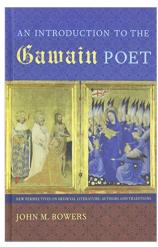












BLACK MOUNTAIN INSTITUTE

BMI's goal is advancing literary and cross-cultural dialogue:

- public programs
- residential fellowships
- publishing initiatives

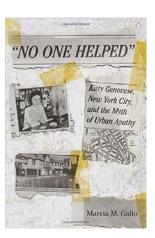
BMI provides a cultural lens through which today's most pressing issues can be addressed and evaluated.

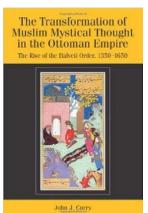
BMI is affiliated with the university's MFA and Ph.D. programs in creative writing.

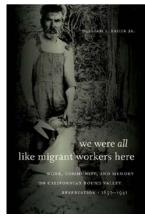


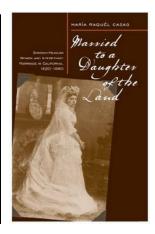
HISTORY

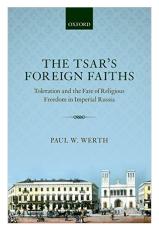
- American West
- Empire & Dominion
- Environmental History
- Gender & Sexuality
- Public History
- Urban History

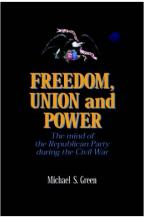




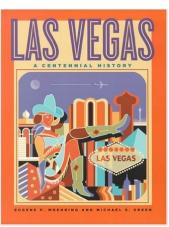








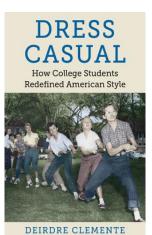






PUBLIC HISTORY

- Connections between LV History and current issues: immigration, labor, race and equality, energy and water.
 - Atomic Culture, LV Entertainment History, LV Labor Relations, Walking Box Ranch.
- >\$2m in external funding since 2000!



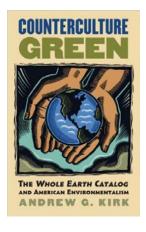




Nevada Test Site Oral History

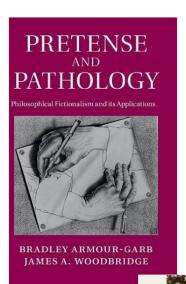
Documenting, preserving and disseminating the remembered past of persons affiliated with and affected by the Nevada Test Site during the era of Cold War nuclear testing

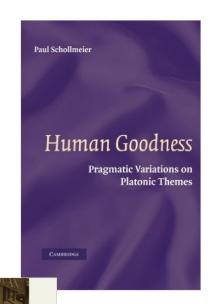
http://digital.library.unlv.edu/ntsohp/
US Dept of Energy, US Dept of Education



PHILOSOPHY

- Expertise ranges from ancient to recent philosophy, Plato and Aristotle to Kripke and Lewis.
- Particular expertise in philosophical logic and in the region of analytic thought where issues in metaphysics, epistemology, and the philosophies of mind, language and science come together.

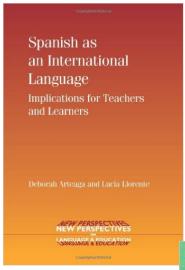


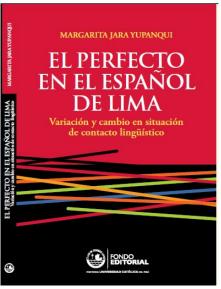


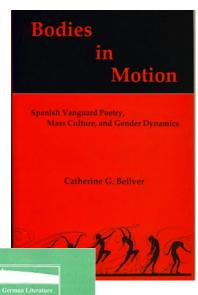
What People Believe
When They Say
That People Believe
Folk Sociology and the
Nature of Group Intentions
Todd Jones

WORLD LANGUAGES & CULTURES

- Chinese
- French
- German
- Italian
- Japanese
- Spanish







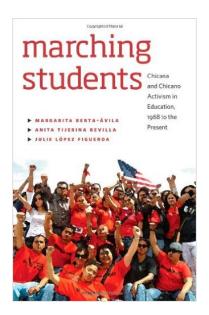
Ralph W. Buechler

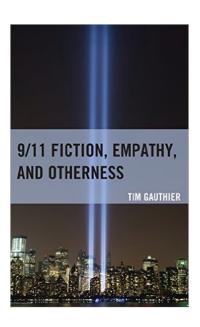
Science, Satire and Wit

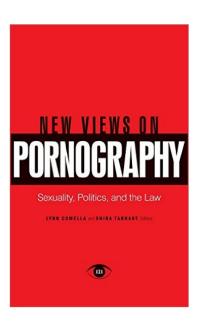
The Essays of Georg Christoph Lichtenberg

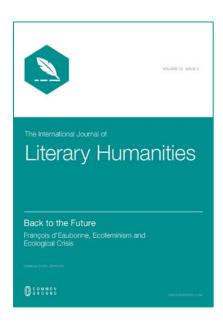
INTERDISCIPLINARY DEGREE PROGRAMS

- African American Studies
- Asian Studies
- Latin American Studies
- Multidisciplinary Studies
- Social Sciences Studies
- Gender & Sexuality Studies









THAT'S ALL FOLKS!

