

MICHAEL J. LAWSON

901 Riverside Dr. SW
Albuquerque, NM 87105
mjlawson4@comcast.net
928-255-2902 cell

EDUCATION

- 2003 Ph.D., History, Arizona State University, Dissertation title: "Baskets, Pots, and Prayer Plumes: The Southwest Ethnographic Collections of the Smithsonian Institution." Chair: Peter Iverson.
1989 M.A., Anthropology (with Distinction), University of New Mexico.
1976 B.A., History, California State University, Chico.

TEACHING EXPERIENCE

2014-Pr **Instructor**, San Juan College, Encore Program, Farmington, New Mexico
Courses: Zuni Pueblo ♦ Hopi History and Culture.

2014-Pr **Instructor**, Story of New Mexico, University of New Mexico, Continuing Education, Albuquerque, New Mexico.
Courses: Kit Carson and the Navajo Long Walk.

Field Studies (non-credit): Bosque Redondo Memorial at Fort Sumner State Monument ♦ Black Lava and Red Sandstone: El Malpais, El Morro and Canyon de Chelly ♦ El Morro National Monument ♦ Hopiland ♦ Zuni Pueblo.

2004-13 **Professor, Anthropology and History**, Department of Social and Behavioral Sciences, Northland Pioneer College, Holbrook, Arizona.

Courses: U.S. History surveys ♦ Cultural Anthropology ♦ Human Origins and Prehistory ♦ Southwestern History ♦ History of Southwest Indians ♦ Southwest Native American Cultures ♦ Navajo History ♦ Southwest Archaeology ♦ Cultural Preservation

Field Studies Courses: Southwest Indian Cultures ♦ American Indians of Northern Mexico ♦ Apache Cultures ♦ Pueblo Cultures ♦ Hopi Cultural Preservation Workshops ♦ Southwest Archaeology ♦ Anasazi (Ancestral Puebloan) ♦ Mogollon Prehistory ♦ Southwestern History ♦ Arizona History ♦ New Mexico History.

2001-04 **Adjunct Faculty**, Department of Social and Behavioral Sciences, Northland Pioneer College.

Courses: U.S. History surveys ♦ Cultural Anthropology ♦ World Regional Geography ♦ Southwestern History ♦ Southwest Native American Cultures ♦ Southwest Archaeology ♦ Archaeological Field Methods.

Field Studies Courses: Southwest Indian Cultures ♦ Pueblo Cultures ♦ Southwestern History ♦ Arizona History ♦ New Mexico History.

- 2001 **Adjunct Instructor**, New Mexico State University-Grants.
Courses: Southwestern History.
- 2000 **Adjunct Instructor**, Department of History and Philosophy, South Texas Community College (STCC), McAllen, Texas. Summer.
Courses: U.S. History Surveys.
- 1996-97 **Instructor**, Department of History, Arizona State University, Tempe.
Courses: U.S. History surveys.
- 1996 **Adjunct Faculty**, Department of History, STCC. Summer.
Courses: U.S. History surveys
- 1996 **Faculty Associate**, Department of History, Arizona State University, Tempe.
Courses: American Indian History (upper division).
- 1991-94 **Graduate Assistant**, Department of History, Arizona State University, Tempe
- 1988 **Assistant Instructor**, Department of Anthropology, University of New Mexico, Archaeological Field School, Reserve, New Mexico. Summer.

AWARDS, GRANTS, AND SCHOLARSHIPS

- 2012 NEH Summer Scholar, Legacies and Landmarks of the Plains Native Americans, Central Community College, Columbus, NE.
- 2009-Pr *Who's Who in America*.
- 1998 Phi Alpha Theta Doctoral Scholarship Award.
- 1998 ASU Graduate College Research Award.
- 1997-98 Smithsonian Institution Predoctoral Fellowship (9 months). Department of Anthropology, National Museum of Natural History, Washington, D.C.
- 1997 Predoctoral Grant (6239), Wenner-Gren Foundation for Anthropological Research .
- 1997 Graduate Research Support Program, ASU Associated Students.
- 1996 Max Millett Family Scholarship, Department of History, ASU.
- 1994 Phillips Native American Fund, American Philosophical Society.
- 1991-95 ASU Regents Graduate Academic, and Regents Tuition Scholarships.
- 1993 ASU Department of History Jacob Javitts Scholarship nomination.
- 1993 Phi Kappa Phi.
- 1991 Phi Alpha Theta.

PUBLICATIONS

- 1997 *Trinity at Fifty: Trinity Site National Historic Landmark, White Sands Missile Range, Socorro County, New Mexico, Technical Report No. 1* (with Morgan Rieder). Human Systems Research Report No. 9241, Tularosa, New Mexico.
- 1996 *Star Throwers of the Tularosa: The Early Cold War Legacy of White Sands Missile Range* by Peter Eidenbach, et al. Human Systems Research Inc. Tularosa, NM. Contributed historic building survey of WWII and Cold War facilities.
- 1995 *Trinity at Fifty: The Archaeology of Trinity Site National Historic Landmark, White Sands Missile Range, Socorro County, New Mexico* (with Morgan Rieder). Human Systems Research Report No. 9439. Tularosa, New Mexico.
- 1994 *Review of The Beautiful and the Dangerous: Encounters with the Zuni Indians*, by Barbara Tedlock. In *The History Teacher* 27 (May): 369-370 (with Rose Wyaco).
- Fifteen additional publications authored or redesign authorized in southwest public history or cultural resource management for Zuni Archaeology Program, Death Valley Natural History Association, and others, available upon request

PAPERS/PRESENTATIONS (Selected)

- 2013 Acoma Revisited: The Railroad, Smallpox, and the Smithsonian Institution, Little Colorado River Chapter, Arizona Archaeological Society (AAS), Springerville, AZ. With George F. Shaw.
- 2012 Remembering Sand Creek Massacre, Little Colorado River Chapter (AAS), Springerville, AZ.
- 2011 Hubbell, Keam & Graham: Trade Relations in the Southwest. Homolovi Chapter (AAS), Winslow, AZ.
- 2010 Graham, Keam & Hubbell: Indian Traders, Little Colorado River Chapter (AAS), Springerville, AZ.
- 2010 Keam, Hubbell, & Graham: Indian Traders. Arizona Lecture Series, Apache Junction Unified School District, Apache Junction, AZ.
- 2009 Powell's Bureau and Southwest Traders: Douglas Graham, Thomas Keam and J. J. Hubbell. Little Colorado River Chapter (AAS), Springerville, AZ.

- 2008 New Rails to Old Towns: The Atlantic & Pacific Railroad, Smithsonian Institution Anthropologists, and Stephen A. Frost & Son, Bead Merchants. Arizona History Association, Chandler, AZ.
- 2008 New Rails to Old Towns: The Atlantic & Pacific Railroad, Smithsonian Institution Anthropologists, and Pueblos. Annual Meeting of the Historical Society of New Mexico, Deming, NM.
- 2008 The Images of George Sanders: Atlantic & Pacific Railroad Photographer. Homolovi Chapter (AAS), Homolovi Ruins State Park, AZ.
- 2007 Roundtable. Intersections, Currents, and Resurgence: Approaches, Methodologies, and Problems in the Study and Teaching of Diné History. Seventeenth Navajo Studies Conference, Diné College, Tsaiile, AZ.
- 2007 All Aboard the Atlantic and Pacific Railroad: Smithsonian Anthropologists Among the Pueblos of Arizona and New Mexico. Arizona-New Mexico Joint History Convention, Pinetop-Lakeside, AZ. With George F. Shaw.
- 2005 Science at Casa Malpais: "Early Pioneers or Scoundrels." Arizona Archaeology Awareness, Little Colorado River Chapter (AAS), Springerville, AZ.
- 2004 Making the Southwest American: The Smithsonian Institution and the Pueblos. Annual Meeting of the Western History Association, Las Vegas, NV.
- 2004 Pueblos, Anthropologists, and the Smithsonian Institution: Acquiring Ethnographic Collections. Little Colorado River Chapter (AAS), Springerville, AZ.
- 2002 "Trading with Indians for Specimens:" The Smithsonian Institution's 1882 Expedition to the Pueblos. Annual Meeting of the Western History Association, Colorado Springs, CO.
- 2002 "Trading with Indians for Specimens:" The Smithsonian Institution's 1880 Expedition to the Pueblos. New Mexico-Arizona Joint History Convention, Las Cruces, NM.
- 2001 "Articles for Distribution to the Indians:" The Smithsonian Institution's 1881 Expedition to the American Southwest. Annual Meeting of the Historical Society of New Mexico, Roswell, NM.
- 2001 "Mythic Western Heroes, Trails, and Water." Discussant, Annual Conference of the Western Social Science Association, Reno, NV.

- 2001 "Three Indians-sitting for photos @ \$1.00 each:" The Smithsonian Institution's 1880 Expedition to the Pueblos. Annual Western Social Science Association Conference, Reno, NV.
- 1997 Pueblo Behavior as a Contributing Factor in the Historic Formation of Southwest Ethnographic Collections by the Bureau of American Ethnology. Annual Conference of the Western Social Science Association, Albuquerque, NM.
- 1997 The Origins of Southwest Ethnographic Collections by the Bureau of American Ethnology: The Fiscal Record. Annual Meeting of the Historical Society of New Mexico, Deming, NM.
- 1995 Baskets, Pots, and Prayer Plumes: Anthropological Expeditions to Southwest Native American Communities, 1879-1914. Annual Meeting of the American Society for Ethnohistory, Kalamazoo, MI.
- 1995 The Archaeology of the Trinity Site, Fifty Years Later (with Meli Duran). Annual Meeting of the New Mexico Archaeological Society, El Paso, TX.
- 1990 Linear and Small-Scale Surveys as a Regional Pattern Recognition Strategy (with Dr. Lawrence C. Todd and Kelly Klein). Fifty-fifth Annual Society of American Archaeology Meeting, Las Vegas, NV.

PUBLIC HISTORY AND ANTHROPOLOGY EXPERIENCE

- 2013-Pr **Collections Research**, Arizona State Railroad Museum, Williams, Arizona.
- 2013-Pr **Education Consultant**, Volunteer Ladakh: Responsible Volunteering and Cultural Exchange in India.
- 2007-08 **Arizona Historical Society Grant**, Collections and Exhibits Enhancement, Old Trails Museum, Winslow Historical Society (WHS), Winslow, AZ.
- 2006-07 **Historical Advisor & Assistant Team Leader**, National Park Service Route 66 Corridor Preservation Program Grant, WHS, Winslow, AZ.
- 2006-07 **Historical Advisor & Assistant Team Leader**, Arizona Historical Records Advisory Board Grant, WHS, Winslow, AZ.
- 1994-95 **Historian and Archaeologist/Crew Chief, Archaeologist/Crew Member** (Summers 1992-93) Human Systems Research, Inc., Las Cruces, NM.
- 1989-90 **Archaeologist/Crew Chief**, Zuni Archaeology Program, Zuni, New Mexico; Navajo Nation Chambers-Sanders Trust Lands, Arizona.
- 1987-89 **Archivist/Museum Tech III/Committee Chair**, Clark Field Archive-Library, Department of Anthropology, University of New Mexico, Albuquerque, NM.
- 1987 **Crew Member**, University of New Mexico Field School, SU Site, Reserve, NM.
- 1986-87 **Museum Aide**, Museum Store, Maxwell Museum of Anthropology, University of New Mexico, Albuquerque, NM.

- 1984 **Museum Store Manager**, Millicent Rogers Museum, Taos, NM.
1982-84 **Business Manager**, Death Valley Natural History Association, Death Valley National Monument (DVNM), CA.

COLLEGE SERVICE

- 2011-13 **Faculty Senate, Instructional Council, Learning Technologies Committee**
 Northland Pioneer College (NPC)
2007-09 **President and Vice-President**, Northland Pioneer College Faculty Association
2008-09 **Instructional Council, College Council, Strategic Planning and Accreditation Steering Committee**, NPC
2007-13 **Arizona Articulation Task Force (ATF) in Anthropology, NPC Representative**
2004-13 **Arizona Articulation Task Force (ATF) in History, NPC Representative**
1996-97 **Faculty Coordinator**, "A Conversation with American POWs in WWII," Arizona State University and Phi Alpha Theta, Chapter Iota Gamma

COMMUNITY SERVICE

- 2008-Pr **Advisor**, Homolovi Chapter, Arizona Archaeological Society, Winslow, AZ
2008-09 **Chair, Historic Preservation Commission**, City of Winslow, AZ. (Member 2005-09)
2007-10 **Board of Directors**, Winslow Historical Society, Winslow, AZ (Treasurer 2009)
2007-13 **Management Committee Member**, Broken K Pueblo Archaeological Preserve, The Archaeological Conservancy, Albuquerque, NM.
2006-09 **Working Group Member**, Proposed Little Colorado River Valley National Heritage Area, Center for Desert Archaeology, Tucson, AZ
2003-Pr **Advisor**, Little Colorado River Chapter, Arizona Archaeological Society, Springerville, AZ
1985 **Honorary Lifetime Member**, Death Valley Natural History Association
1982-83 **Board of Directors**, (DVNHA) (Publication Committee Coordinator 1982-84)

PROFESSIONAL MEMBERSHIPS

- Western History Association
Arizona Historical Society
Historical Society of New Mexico
Arizona Archaeological Society
Winslow Historical Society
Death Valley Natural History Association
Phi Alpha Theta
Phi Kappa Phi

REFERENCES

Dr. Peter Iverson
Regents Professor Emeritus
Department of History
Arizona State University
Tempe, Arizona 85287-4302
(480) 829-8642
peter.iverson@asu.edu

Dr. Eric Henderson
Dean of Arts & Sciences
Northland Pioneer College
Holbrook, Arizona 86025
(928) 524-7350
eric.henderson@npc.edu

Dr. James S. Jacob
Professor and Chair Emeritus
Department of Biology
Northland Pioneer College
Holbrook, Arizona 86025
(602)-402-3198
jamessjacob@gmail.com

Dr. William B. Carter
Department of History
South Texas College
McAllen, Texas 78501
(956) 225-6551
wcarter@southtexascollege.edu

George F. Shaw
AT&SFRyCo. Collection Archivist
Arizona State Railroad Museum
204 West Railroad Avenue
Williams, Arizona 86046
(928) 985-4935
geofshaw07@bresnan.net

MICHAEL J. LAWSON

901 Riverside Dr. SW
Albuquerque, NM 87105
mjlawson4@comcast.net
928-255-2902 cell

EDUCATION

- 2003 Ph.D., History, Arizona State University, Dissertation title: "Baskets, Pots, and Prayer Plumes: The Southwest Ethnographic Collections of the Smithsonian Institution." Chair: Peter Iverson.
1989 M.A., Anthropology (with Distinction), University of New Mexico.
1976 B.A., History, California State University, Chico.

TEACHING EXPERIENCE

2014-Pr **Instructor**, San Juan College, Encore Program, Farmington, New Mexico
Courses: Zuni Pueblo ♦ Hopi History and Culture.

2014-Pr **Instructor**, Story of New Mexico, University of New Mexico, Continuing Education, Albuquerque, New Mexico.
Courses: Kit Carson and the Navajo Long Walk.

Field Studies (non-credit): Bosque Redondo Memorial at Fort Sumner State Monument ♦ Black Lava and Red Sandstone: El Malpais, El Morro and Canyon de Chelly ♦ El Morro National Monument ♦ Hopiland ♦ Zuni Pueblo.

2004-13 **Professor, Anthropology and History**, Department of Social and Behavioral Sciences, Northland Pioneer College, Holbrook, Arizona.

Courses: U.S. History surveys ♦ Cultural Anthropology ♦ Human Origins and Prehistory ♦ Southwestern History ♦ History of Southwest Indians ♦ Southwest Native American Cultures ♦ Navajo History ♦ Southwest Archaeology ♦ Cultural Preservation

Field Studies Courses: Southwest Indian Cultures ♦ American Indians of Northern Mexico ♦ Apache Cultures ♦ Pueblo Cultures ♦ Hopi Cultural Preservation Workshops ♦ Southwest Archaeology ♦ Anasazi (Ancestral Puebloan) ♦ Mogollon Prehistory ♦ Southwestern History ♦ Arizona History ♦ New Mexico History.

2001-04 **Adjunct Faculty**, Department of Social and Behavioral Sciences, Northland Pioneer College.

Courses: U.S. History surveys ♦ Cultural Anthropology ♦ World Regional Geography ♦ Southwestern History ♦ Southwest Native American Cultures ♦ Southwest Archaeology ♦ Archaeological Field Methods.

Field Studies Courses: Southwest Indian Cultures ♦ Pueblo Cultures ♦ Southwestern History ♦ Arizona History ♦ New Mexico History.

- 2001 **Adjunct Instructor**, New Mexico State University-Grants.
Courses: Southwestern History.
- 2000 **Adjunct Instructor**, Department of History and Philosophy, South Texas Community College (STCC), McAllen, Texas. Summer.
Courses: U.S. History Surveys.
- 1996-97 **Instructor**, Department of History, Arizona State University, Tempe.
Courses: U.S. History surveys.
- 1996 **Adjunct Faculty**, Department of History, STCC. Summer.
Courses: U.S. History surveys
- 1996 **Faculty Associate**, Department of History, Arizona State University, Tempe.
Courses: American Indian History (upper division).
- 1991-94 **Graduate Assistant**, Department of History, Arizona State University, Tempe
- 1988 **Assistant Instructor**, Department of Anthropology, University of New Mexico, Archaeological Field School, Reserve, New Mexico. Summer.

AWARDS, GRANTS, AND SCHOLARSHIPS

- 2012 NEH Summer Scholar, Legacies and Landmarks of the Plains Native Americans, Central Community College, Columbus, NE.
- 2009-Pr *Who's Who in America*.
- 1998 Phi Alpha Theta Doctoral Scholarship Award.
- 1998 ASU Graduate College Research Award.
- 1997-98 Smithsonian Institution Predoctoral Fellowship (9 months). Department of Anthropology, National Museum of Natural History, Washington, D.C.
- 1997 Predoctoral Grant (6239), Wenner-Gren Foundation for Anthropological Research .
- 1997 Graduate Research Support Program, ASU Associated Students.
- 1996 Max Millett Family Scholarship, Department of History, ASU.
- 1994 Phillips Native American Fund, American Philosophical Society.
- 1991-95 ASU Regents Graduate Academic, and Regents Tuition Scholarships.
- 1993 ASU Department of History Jacob Javitts Scholarship nomination.
- 1993 Phi Kappa Phi.
- 1991 Phi Alpha Theta.

PUBLICATIONS

- 1997 *Trinity at Fifty: Trinity Site National Historic Landmark, White Sands Missile Range, Socorro County, New Mexico, Technical Report No. 1* (with Morgan Rieder). Human Systems Research Report No. 9241, Tularosa, New Mexico.
- 1996 *Star Throwers of the Tularosa: The Early Cold War Legacy of White Sands Missile Range* by Peter Eidenbach, et al. Human Systems Research Inc. Tularosa, NM. Contributed historic building survey of WWII and Cold War facilities.
- 1995 *Trinity at Fifty: The Archaeology of Trinity Site National Historic Landmark, White Sands Missile Range, Socorro County, New Mexico* (with Morgan Rieder). Human Systems Research Report No. 9439. Tularosa, New Mexico.
- 1994 *Review of The Beautiful and the Dangerous: Encounters with the Zuni Indians*, by Barbara Tedlock. In *The History Teacher* 27 (May): 369-370 (with Rose Wyaco).
- Fifteen additional publications authored or redesign authorized in southwest public history or cultural resource management for Zuni Archaeology Program, Death Valley Natural History Association, and others, available upon request

PAPERS/PRESENTATIONS (Selected)

- 2013 Acoma Revisited: The Railroad, Smallpox, and the Smithsonian Institution, Little Colorado River Chapter, Arizona Archaeological Society (AAS), Springerville, AZ. With George F. Shaw.
- 2012 Remembering Sand Creek Massacre, Little Colorado River Chapter (AAS), Springerville, AZ.
- 2011 Hubbell, Keam & Graham: Trade Relations in the Southwest. Homolovi Chapter (AAS), Winslow, AZ.
- 2010 Graham, Keam & Hubbell: Indian Traders, Little Colorado River Chapter (AAS), Springerville, AZ.
- 2010 Keam, Hubbell, & Graham: Indian Traders. Arizona Lecture Series, Apache Junction Unified School District, Apache Junction, AZ.
- 2009 Powell's Bureau and Southwest Traders: Douglas Graham, Thomas Keam and J. J. Hubbell. Little Colorado River Chapter (AAS), Springerville, AZ.

- 2008 New Rails to Old Towns: The Atlantic & Pacific Railroad, Smithsonian Institution Anthropologists, and Stephen A. Frost & Son, Bead Merchants. Arizona History Association, Chandler, AZ.
- 2008 New Rails to Old Towns: The Atlantic & Pacific Railroad, Smithsonian Institution Anthropologists, and Pueblos. Annual Meeting of the Historical Society of New Mexico, Deming, NM.
- 2008 The Images of George Sanders: Atlantic & Pacific Railroad Photographer. Homolovi Chapter (AAS), Homolovi Ruins State Park, AZ.
- 2007 Roundtable. Intersections, Currents, and Resurgence: Approaches, Methodologies, and Problems in the Study and Teaching of Diné History. Seventeenth Navajo Studies Conference, Diné College, Tsaiile, AZ.
- 2007 All Aboard the Atlantic and Pacific Railroad: Smithsonian Anthropologists Among the Pueblos of Arizona and New Mexico. Arizona-New Mexico Joint History Convention, Pinetop-Lakeside, AZ. With George F. Shaw.
- 2005 Science at Casa Malpais: "Early Pioneers or Scoundrels." Arizona Archaeology Awareness, Little Colorado River Chapter (AAS), Springerville, AZ.
- 2004 Making the Southwest American: The Smithsonian Institution and the Pueblos. Annual Meeting of the Western History Association, Las Vegas, NV.
- 2004 Pueblos, Anthropologists, and the Smithsonian Institution: Acquiring Ethnographic Collections. Little Colorado River Chapter (AAS), Springerville, AZ.
- 2002 "Trading with Indians for Specimens:" The Smithsonian Institution's 1882 Expedition to the Pueblos. Annual Meeting of the Western History Association, Colorado Springs, CO.
- 2002 "Trading with Indians for Specimens:" The Smithsonian Institution's 1880 Expedition to the Pueblos. New Mexico-Arizona Joint History Convention, Las Cruces, NM.
- 2001 "Articles for Distribution to the Indians:" The Smithsonian Institution's 1881 Expedition to the American Southwest. Annual Meeting of the Historical Society of New Mexico, Roswell, NM.
- 2001 "Mythic Western Heroes, Trails, and Water." Discussant, Annual Conference of the Western Social Science Association, Reno, NV.

- 2001 "Three Indians-sitting for photos @ \$1.00 each:" The Smithsonian Institution's 1880 Expedition to the Pueblos. Annual Western Social Science Association Conference, Reno, NV.
- 1997 Pueblo Behavior as a Contributing Factor in the Historic Formation of Southwest Ethnographic Collections by the Bureau of American Ethnology. Annual Conference of the Western Social Science Association, Albuquerque, NM.
- 1997 The Origins of Southwest Ethnographic Collections by the Bureau of American Ethnology: The Fiscal Record. Annual Meeting of the Historical Society of New Mexico, Deming, NM.
- 1995 Baskets, Pots, and Prayer Plumes: Anthropological Expeditions to Southwest Native American Communities, 1879-1914. Annual Meeting of the American Society for Ethnohistory, Kalamazoo, MI.
- 1995 The Archaeology of the Trinity Site, Fifty Years Later (with Meli Duran). Annual Meeting of the New Mexico Archaeological Society, El Paso, TX.
- 1990 Linear and Small-Scale Surveys as a Regional Pattern Recognition Strategy (with Dr. Lawrence C. Todd and Kelly Klein). Fifty-fifth Annual Society of American Archaeology Meeting, Las Vegas, NV.

PUBLIC HISTORY AND ANTHROPOLOGY EXPERIENCE

- 2013-Pr **Collections Research**, Arizona State Railroad Museum, Williams, Arizona.
- 2013-Pr **Education Consultant**, Volunteer Ladakh: Responsible Volunteering and Cultural Exchange in India.
- 2007-08 **Arizona Historical Society Grant**, Collections and Exhibits Enhancement, Old Trails Museum, Winslow Historical Society (WHS), Winslow, AZ.
- 2006-07 **Historical Advisor & Assistant Team Leader**, National Park Service Route 66 Corridor Preservation Program Grant, WHS, Winslow, AZ.
- 2006-07 **Historical Advisor & Assistant Team Leader**, Arizona Historical Records Advisory Board Grant, WHS, Winslow, AZ.
- 1994-95 **Historian and Archaeologist/Crew Chief, Archaeologist/Crew Member** (Summers 1992-93) Human Systems Research, Inc., Las Cruces, NM.
- 1989-90 **Archaeologist/Crew Chief**, Zuni Archaeology Program, Zuni, New Mexico; Navajo Nation Chambers-Sanders Trust Lands, Arizona.
- 1987-89 **Archivist/Museum Tech III/Committee Chair**, Clark Field Archive-Library, Department of Anthropology, University of New Mexico, Albuquerque, NM.
- 1987 **Crew Member**, University of New Mexico Field School, SU Site, Reserve, NM.
- 1986-87 **Museum Aide**, Museum Store, Maxwell Museum of Anthropology, University of New Mexico, Albuquerque, NM.

- 1984 **Museum Store Manager**, Millicent Rogers Museum, Taos, NM.
1982-84 **Business Manager**, Death Valley Natural History Association, Death Valley National Monument (DVNM), CA.

COLLEGE SERVICE

- 2011-13 **Faculty Senate, Instructional Council, Learning Technologies Committee**
 Northland Pioneer College (NPC)
2007-09 **President and Vice-President**, Northland Pioneer College Faculty Association
2008-09 **Instructional Council, College Council, Strategic Planning and Accreditation Steering Committee**, NPC
2007-13 **Arizona Articulation Task Force (ATF) in Anthropology, NPC Representative**
2004-13 **Arizona Articulation Task Force (ATF) in History, NPC Representative**
1996-97 **Faculty Coordinator**, "A Conversation with American POWs in WWII," Arizona State University and Phi Alpha Theta, Chapter Iota Gamma

COMMUNITY SERVICE

- 2008-Pr **Advisor**, Homolovi Chapter, Arizona Archaeological Society, Winslow, AZ
2008-09 **Chair, Historic Preservation Commission**, City of Winslow, AZ. (Member 2005-09)
2007-10 **Board of Directors**, Winslow Historical Society, Winslow, AZ (Treasurer 2009)
2007-13 **Management Committee Member**, Broken K Pueblo Archaeological Preserve, The Archaeological Conservancy, Albuquerque, NM.
2006-09 **Working Group Member**, Proposed Little Colorado River Valley National Heritage Area, Center for Desert Archaeology, Tucson, AZ
2003-Pr **Advisor**, Little Colorado River Chapter, Arizona Archaeological Society, Springerville, AZ
1985 **Honorary Lifetime Member**, Death Valley Natural History Association
1982-83 **Board of Directors**, (DVNHA) (Publication Committee Coordinator 1982-84)

PROFESSIONAL MEMBERSHIPS

- Western History Association
Arizona Historical Society
Historical Society of New Mexico
Arizona Archaeological Society
Winslow Historical Society
Death Valley Natural History Association
Phi Alpha Theta
Phi Kappa Phi

REFERENCES

Dr. Peter Iverson
Regents Professor Emeritus
Department of History
Arizona State University
Tempe, Arizona 85287-4302
(480) 829-8642
peter.iverson@asu.edu

Dr. Eric Henderson
Dean of Arts & Sciences
Northland Pioneer College
Holbrook, Arizona 86025
(928) 524-7350
eric.henderson@npc.edu

Dr. James S. Jacob
Professor and Chair Emeritus
Department of Biology
Northland Pioneer College
Holbrook, Arizona 86025
(602)-402-3198
jamessjacob@gmail.com

Dr. William B. Carter
Department of History
South Texas College
McAllen, Texas 78501
(956) 225-6551
wcarter@southtexascollege.edu

George F. Shaw
AT&SFRyCo. Collection Archivist
Arizona State Railroad Museum
204 West Railroad Avenue
Williams, Arizona 86046
(928) 985-4935
geofshaw07@bresnan.net

First Year Steering Committee

September 19, 2014

10:00-11:30 p.m.

Scholes Hall 246

AGENDA

1. Opening	Kate Krause	5 min
2. Communication Subcommittee	Carolina Aguirre	20 min
3. MyUniversity	Tomas Aguirre	15 min
4. Tracker Roll Call & Evidence Library	Joe Suilmann	20 min
5. Open Discussion		25 min
6. Next Steps		5 min

Curriculum Vitae

Timothy L. Howard
thowardz@unm.edu
tim@eosess.com

505-821-0656 (home) 714-883-3821 (mobile)
505-510-0854 (office)
12004 Ranchitos Rd NE, Albuquerque, NM 87122

Current Positions:

- Adjunct Lecturer, Dept. of Physics and Astronomy, University of New Mexico
- Independent Consultant in Optical Instruments/Space Systems, EOSESS LLC

Expertise

- Electro-optical Systems/Instrument Design and Development (hardware & software); Optical design; Modeling and simulation; Systems Engineering; Space Systems

Career Highlights

- Optics/Sensors Lead for development of first Airborne laser Relay Mirror System (ARMS), delivered to Air Force Research Lab, Fall 2006
- Chief Engineer for Boeing Terrestrial Planet Finder Architecture Study team; identified use of apodized/shaped pupils for Exoplanet Coronography, 2000-2001
- Principal Investigator for NASA Institute for Advanced Concepts (NIAC) study of astronomical missions to Jovian Lagrange points, 1999-2000
- Spacecraft development: Attitude Determination and Control System, X-37B prototype (1997-98); Advanced Microwave Sounding Unit, DMSP Block 5-d2 (1988-89)
- Project Engineer for Laser Interferometer Gravitational Wave Observatory (LIGO), Phase II prototype (1991-93)
- Developed first dual-wavelength (Vis/IR) cryogenic BRDF scatterometer for space-based optical contamination and cleaning system (1987-89)

Professional Experience

- 2010 – current: CEO (Independent Consultant), EOSESS LLC, Albuquerque NM
- 2010 – current: Adjunct Lecturer, Dept. of Physics and Astronomy, U. New Mexico (Albuquerque)
- 1993 – 2010: Associate Technical Fellow, Electro-optics and Imaging, The Boeing Company, Seal Beach, California and Albuquerque, New Mexico (retired 2010)
- 1991 – 1993: Project Manager, LIGO Project, Dept. of Physics and Astronomy, California Institute of Technology, Pasadena, CA
- 1987 – 1991: Senior Technical Specialist, Optical Systems, Aerojet, Azusa, CA
- 1979 – 1987: Technical Specialist, Rockwell International, Anaheim, CA

Education

- M.S. in Physics, University of Memphis, August 1979
Thesis Title: Selective Absorption Properties of Diffusely Reflecting Lead Sulfide-Aluminum Films
- B.S. (Honors) in Physics, University of Memphis, December 1977

Certifications

- Certificate in Microcomputer Systems Engineering, U. California, Irvine, June 1983
- IEEE Computer Society *Certified Software Development Professional (CSDP)*, certificate # 6503, 2011 – current.

Additional Training and Professional Education

- AIAA Short Course, Design of Experiments, January 2008
- Graduate courses in Management of Technology, Globalization, and Microeconomics, Anderson Graduate School of Management, U. New Mexico, Spring 2007
- Graduate course in Advanced Astrophysics, U. New Mexico, Fall 2006
- Short Course, Nanoscience and Nanotechnology, Stanford University, May 2005
- Graduate course in Wireless Communications, U. California, Irvine, Fall 2003
- Graduate courses in Artificial Intelligence, Neural Networks, Fuzzy Logic, U. California, Irvine, 1985 – 88
- Graduate course in Astrodynamics, UCLA, 1986
- Undergraduate courses in Programming Languages, Data Structures, California State U., Fullerton, 1983 - 84

Teaching Experience

- Undergraduate Physics, Astrophysics, and Astronomy, U. of New Mexico, 2010-current (Introductory Astronomy and Physics courses for non-majors; undergraduate Astrophysics for Astronomy majors)
- Short Course, *Unmanned Sensor Networks and Applications*, Unmanned Systems Conference, RF Alliance, Indianapolis, IN, Sept. 2011
- Short Course, *Electro-optical Sensing Applications in Aerospace Systems*, University of Naples "Federico II", May 2011, School of Aerospace Engineering (European Union Guest Lecturer)
- Short Course, *Electro-optical Systems for Aerospace Sensing Applications*, AIAA Professional Development, 2009 – current (offered on demand)
- Short Course, *Acquisition, Tracking, and Pointing*, for the Directed Energy Professional Society, 2001, 2003, 2004; for SPIE, 2002, 2004; and for Boeing (various divisions) annually 2000 – 2009, via classroom, WebEx, and online
- Short Course, *Stabilization and Laser Pointing Systems*, for SPIE (onsite at Lockheed Martin, Palo Alto), Dec. 2002
- Short Courses, *Electro-optics and Computer Simulation*, Rockwell International, Professional Development program, 1984 – 1986
- Undergraduate courses in General Physics, Astronomy (with labs), 1977 – 1979, University of Memphis (Graduate Teaching Assistant)

Professional Memberships

- American Institute of Aeronautics and Astronautics; American Association for the Advancement of Science; American Physical Society; IEEE/IEEE Computer Society; SPIE

Professional Service

- Technical Program Chair, AIAA Infotech@Aerospace 2012, and Deputy Technical Program Chair, Infotech 2011. Topic Area Chair for: Aerospace Sciences Meeting, 2007-2008, Space conference 2009 – current
- Chair, AIAA Sensor Systems Technical Committee, 2008-2010, 2012- current. Member, 2001 – current. Lead author for several end-of-year "Review" articles in *Aerospace America*.
- Member, AIAA Space Systems Technical Committee, 2014 – current.
- Associate Editor, AIAA *Journal Of Computing, Information, and Communications* (JACIC), special issue on Sensor Technology, October 2008. Reviewer for JACIC and AIAA *Journal of Aerospace Information Systems* (JAIS).
- Chair, AIAA Orange County section, 1997-2000. Region VI Liaison, 2001. Director-at-

- Large and Evolution of Flight Officer (pre-college outreach), 2002 - 2004.
- AIAA Regional Leadership Conference instructor, 1999; Student Conference judge, 1998, 2005, 2007

Community Service

- Board of Directors, Rio Rancho (NM) Symphonic Band, 2006 – 2008. Development of band funding, grant applications, constitution and bylaws.

Honors and Awards

- AIAA Associate Fellow (1999), AIAA Superior Service Awards (1995, 1996) and Special Service Citation (2004)
- Boeing Technical Fellowship (2002). Boeing Special Achievement Award (1999), Pride@Boeing Awards 2002, 2005, 2006
- NASA Institute for Advanced Concepts Fellow (1999)
- Fellow, Institute for the Advancement of Engineering (Los Angeles, CA), 1996
- Nominated by students for UNM Excellence in Teaching Award, 2012, 2013

Patents

- U.S. Patent 5,430,543, "Ring Laser Gyroscope Detector Lens System", July 4, 1995
- U.S. Patent 5,359,414, "Ring Laser Gyroscope Detector Lens System with Radiation Photocurrent Compensation", Oct. 25, 1994 (with C. Kohlenberger)

Other qualifications

- Developed and led Boeing Mentor Circle group (One-to-many and peer-to-peer mentoring for junior to mid-level engineers), 2003 – 2008.
- Languages: German
- Programming & Web technologies: C/C++, UNIX, Python, HTML, JavaScript
- Tools: Matlab/Simulink; ZEMAX; MathCAD/Maple; STK; Telelogic Rhapsody/DOORS; MS Office
- Licensed Radio Amateur, Extra class, call: AD5VF

Bibliography

Timothy L. Howard, "A Framework for Data Skimming in UAS Sensor Net Imagery", AIAA paper no. 2012-2465, presented at *AIAA Infotech@Aerospace* Conference, Garden Grove, CA, June 2012.

Timothy L. Howard, "The Evolving Paradigm for Aerospace Sensor Networks", *AIAA Infotech@Aerospace 2011*, St. Louis, MO, April 2011.

Timothy L. Howard, "A Fractionated Spacecraft Sensing Mode for Surveillance and Remote Sensing", AIAA paper no. 2010-8924, presented at *AIAA Space 2010 Conference and Expositions*, Anaheim, CA, Aug. 2010.

Michael K. Martin, Phillip R. Cunningham, and Timothy L. Howard, "Relay Mirror Technology Application to Laser Orbital Debris Removal", presented at the *NASA/DARPA International Conference on Orbital Debris Removal*, Chantilly VA, 8-10 Dec 2009.

Timothy L. Howard and the AIAA Sensor Systems Technical Committee, "Sensor Systems Impacts to SATCOM", presentation to the *National Security Space Office Future Needs Workshop*, Jet Propulsion Laboratory, Pasadena, CA, 18 Sept. 2009.

AIAA Journal of Aerospace Computing, Information, and Communications, Topical Issue on "Sensor Applications in Aerospace Systems", Vol. 5, No. 10, October 2008 (Guest Editor).

Timothy L. Howard, "Airborne Relay Mirrors as Communication and Sensing Nodes in Networked Systems", AIAA paper no. 2005-7124, presented at *Infotech @ Aerospace Conference*, Crystal City, VA, 26-29 Sept. 2005.

Timothy L. Howard et. al., "New Space-based Interferometer Concepts for the Terrestrial Planet Finder Mission", *AIAA Southern California Aerospace Systems and Technology Conference*, 15 May 2004; available from the author.

Steve Ridgway and SVS-Boeing Study Team, "Terrestrial Planet Finder: Architectures and Search Strategy", *Bull. Am. Astro. Soc.*, 32, No 4 (AAS Winter meeting, San Diego, Jan. 2001).

Jerry Buckley and Timothy L. Howard, "Survey of Terrestrial Planet Finder Telescope Options", *American Astronautical Society* vol. 107, 497-514 (presented at AAS Rocky Mountain Guidance and Control Conference, 31 Jan- 4 Feb. 2001, Breckenridge, CO); also presented at International Space Development Conference, Albuquerque, NM, May 2001.

Timothy L. Howard, Lee M. Gutheinz, John Sanders-Reed, Carl Tuttle, William Witt, "Large-scale, Large-aperture Space Astronomy: Beyond the Next Generation", AIAA paper no. 2000-5299; presented at *AIAA Space 2000 Conference and Exposition*, 19-21 September, 2000, Long Beach, CA.

Timothy L. Howard (Principal Investigator) et. al., *Planetary-Scale Astronomical Bench Phase I Final Report*, NASA Institute for Advanced Concepts, 9 Jan 2000, available at www.niac.org, or directly from author.

Timothy L. Howard, "Cooperative Microsat Imaging Using Novel Image Overlay Concepts", AIAA paper no. 99-4659; presented at *AIAA 1999 Space Technology Conference and Exposition*, 28-30 September 1999, Albuquerque, NM.

T. L. Howard, P. M. George, and R. F. Fisher, "BRDF Measurements for Contamination Assessment in a Spacecraft Environment", *Proc. SPIE* 1329, 266 (1990).

R. F. Fisher, P. M. George, S. M. Flammang, and T. L. Howard, "Ion Beam Cleaning of Contaminated Optics", *Proc. SPIE* 1329, 86 (1990).

T. L. Howard, P. M. George, and R. F. Fisher, "Contamination, Scatter, and Cleaning of Spacecraft Optics: Ground-based Experiments", presented at *USAF Rome Air Development Center Large Optics Conference*, Rome, N.Y. Jun. 26, 1990.

T. L. Howard, P. M. George, S. Flammang, and D. Mossman, "Vacuum BRDF Measurements of Cryogenic Optical Surfaces", *Proc. SPIE* 1165, 350 (1989).

T. L. Howard, "Rotational Interferometry for High-resolution Angle Measurement", presented at *OSA Workshop on Optical Fabrication and Test*, Santa Clara, CA, Nov. 3, 1988.

R. R. Marchini and T. L. Howard, "Maxwell-Garnett Analysis of Thick PbS-Al Selective Absorbers", *Solar Energy* 40, 147 (1988).

T. L. Howard, "Optoelectronic Design Using Detector Signal Simulation", presented at *Optical Society of America Annual Meeting*, Rochester, N.Y., Oct. 22, 1987.

MICHAEL J. LAWSON

901 Riverside Dr. SW
Albuquerque, NM 87105
mjlawson4@comcast.net
928-255-2902 cell

EDUCATION

- 2003 Ph.D., History, Arizona State University, Dissertation title: "Baskets, Pots, and Prayer Plumes: The Southwest Ethnographic Collections of the Smithsonian Institution." Chair: Peter Iverson.
1989 M.A., Anthropology (with Distinction), University of New Mexico.
1976 B.A., History, California State University, Chico.

TEACHING EXPERIENCE

2014-Pr **Instructor**, San Juan College, Encore Program, Farmington, New Mexico
Courses: Zuni Pueblo ♦ Hopi History and Culture.

2014-Pr **Instructor**, Story of New Mexico, University of New Mexico, Continuing Education, Albuquerque, New Mexico.
Courses: Kit Carson and the Navajo Long Walk.

Field Studies (non-credit): Bosque Redondo Memorial at Fort Sumner State Monument ♦ Black Lava and Red Sandstone: El Malpais, El Morro and Canyon de Chelly ♦ El Morro National Monument ♦ Hopiland ♦ Zuni Pueblo.

2004-13 **Professor, Anthropology and History**, Department of Social and Behavioral Sciences, Northland Pioneer College, Holbrook, Arizona.

Courses: U.S. History surveys ♦ Cultural Anthropology ♦ Human Origins and Prehistory ♦ Southwestern History ♦ History of Southwest Indians ♦ Southwest Native American Cultures ♦ Navajo History ♦ Southwest Archaeology ♦ Cultural Preservation

Field Studies Courses: Southwest Indian Cultures ♦ American Indians of Northern Mexico ♦ Apache Cultures ♦ Pueblo Cultures ♦ Hopi Cultural Preservation Workshops ♦ Southwest Archaeology ♦ Anasazi (Ancestral Puebloan) ♦ Mogollon Prehistory ♦ Southwestern History ♦ Arizona History ♦ New Mexico History.

2001-04 **Adjunct Faculty**, Department of Social and Behavioral Sciences, Northland Pioneer College.

Courses: U.S. History surveys ♦ Cultural Anthropology ♦ World Regional Geography ♦ Southwestern History ♦ Southwest Native American Cultures ♦ Southwest Archaeology ♦ Archaeological Field Methods.

Field Studies Courses: Southwest Indian Cultures ♦ Pueblo Cultures ♦ Southwestern History ♦ Arizona History ♦ New Mexico History.

- 2001 **Adjunct Instructor**, New Mexico State University-Grants.
Courses: Southwestern History.
- 2000 **Adjunct Instructor**, Department of History and Philosophy, South Texas Community College (STCC), McAllen, Texas. Summer.
Courses: U.S. History Surveys.
- 1996-97 **Instructor**, Department of History, Arizona State University, Tempe.
Courses: U.S. History surveys.
- 1996 **Adjunct Faculty**, Department of History, STCC. Summer.
Courses: U.S. History surveys
- 1996 **Faculty Associate**, Department of History, Arizona State University, Tempe.
Courses: American Indian History (upper division).
- 1991-94 **Graduate Assistant**, Department of History, Arizona State University, Tempe
- 1988 **Assistant Instructor**, Department of Anthropology, University of New Mexico, Archaeological Field School, Reserve, New Mexico. Summer.

AWARDS, GRANTS, AND SCHOLARSHIPS

- 2012 NEH Summer Scholar, Legacies and Landmarks of the Plains Native Americans, Central Community College, Columbus, NE.
- 2009-Pr *Who's Who in America*.
- 1998 Phi Alpha Theta Doctoral Scholarship Award.
- 1998 ASU Graduate College Research Award.
- 1997-98 Smithsonian Institution Predoctoral Fellowship (9 months). Department of Anthropology, National Museum of Natural History, Washington, D.C.
- 1997 Predoctoral Grant (6239), Wenner-Gren Foundation for Anthropological Research .
- 1997 Graduate Research Support Program, ASU Associated Students.
- 1996 Max Millett Family Scholarship, Department of History, ASU.
- 1994 Phillips Native American Fund, American Philosophical Society.
- 1991-95 ASU Regents Graduate Academic, and Regents Tuition Scholarships.
- 1993 ASU Department of History Jacob Javitts Scholarship nomination.
- 1993 Phi Kappa Phi.
- 1991 Phi Alpha Theta.

PUBLICATIONS

- 1997 *Trinity at Fifty: Trinity Site National Historic Landmark, White Sands Missile Range, Socorro County, New Mexico, Technical Report No. 1* (with Morgan Rieder). Human Systems Research Report No. 9241, Tularosa, New Mexico.
- 1996 *Star Throwers of the Tularosa: The Early Cold War Legacy of White Sands Missile Range* by Peter Eidenbach, et al. Human Systems Research Inc. Tularosa, NM. Contributed historic building survey of WWII and Cold War facilities.
- 1995 *Trinity at Fifty: The Archaeology of Trinity Site National Historic Landmark, White Sands Missile Range, Socorro County, New Mexico* (with Morgan Rieder). Human Systems Research Report No. 9439. Tularosa, New Mexico.
- 1994 *Review of The Beautiful and the Dangerous: Encounters with the Zuni Indians*, by Barbara Tedlock. In *The History Teacher* 27 (May): 369-370 (with Rose Wyaco).
- Fifteen additional publications authored or redesign authorized in southwest public history or cultural resource management for Zuni Archaeology Program, Death Valley Natural History Association, and others, available upon request

PAPERS/PRESENTATIONS (Selected)

- 2013 Acoma Revisited: The Railroad, Smallpox, and the Smithsonian Institution, Little Colorado River Chapter, Arizona Archaeological Society (AAS), Springerville, AZ. With George F. Shaw.
- 2012 Remembering Sand Creek Massacre, Little Colorado River Chapter (AAS), Springerville, AZ.
- 2011 Hubbell, Keam & Graham: Trade Relations in the Southwest. Homolovi Chapter (AAS), Winslow, AZ.
- 2010 Graham, Keam & Hubbell: Indian Traders, Little Colorado River Chapter (AAS), Springerville, AZ.
- 2010 Keam, Hubbell, & Graham: Indian Traders. Arizona Lecture Series, Apache Junction Unified School District, Apache Junction, AZ.
- 2009 Powell's Bureau and Southwest Traders: Douglas Graham, Thomas Keam and J. J. Hubbell. Little Colorado River Chapter (AAS), Springerville, AZ.

- 2008 New Rails to Old Towns: The Atlantic & Pacific Railroad, Smithsonian Institution Anthropologists, and Stephen A. Frost & Son, Bead Merchants. Arizona History Association, Chandler, AZ.
- 2008 New Rails to Old Towns: The Atlantic & Pacific Railroad, Smithsonian Institution Anthropologists, and Pueblos. Annual Meeting of the Historical Society of New Mexico, Deming, NM.
- 2008 The Images of George Sanders: Atlantic & Pacific Railroad Photographer. Homolovi Chapter (AAS), Homolovi Ruins State Park, AZ.
- 2007 Roundtable. Intersections, Currents, and Resurgence: Approaches, Methodologies, and Problems in the Study and Teaching of Diné History. Seventeenth Navajo Studies Conference, Diné College, Tsaiile, AZ.
- 2007 All Aboard the Atlantic and Pacific Railroad: Smithsonian Anthropologists Among the Pueblos of Arizona and New Mexico. Arizona-New Mexico Joint History Convention, Pinetop-Lakeside, AZ. With George F. Shaw.
- 2005 Science at Casa Malpais: "Early Pioneers or Scoundrels." Arizona Archaeology Awareness, Little Colorado River Chapter (AAS), Springerville, AZ.
- 2004 Making the Southwest American: The Smithsonian Institution and the Pueblos. Annual Meeting of the Western History Association, Las Vegas, NV.
- 2004 Pueblos, Anthropologists, and the Smithsonian Institution: Acquiring Ethnographic Collections. Little Colorado River Chapter (AAS), Springerville, AZ.
- 2002 "Trading with Indians for Specimens:" The Smithsonian Institution's 1882 Expedition to the Pueblos. Annual Meeting of the Western History Association, Colorado Springs, CO.
- 2002 "Trading with Indians for Specimens:" The Smithsonian Institution's 1880 Expedition to the Pueblos. New Mexico-Arizona Joint History Convention, Las Cruces, NM.
- 2001 "Articles for Distribution to the Indians:" The Smithsonian Institution's 1881 Expedition to the American Southwest. Annual Meeting of the Historical Society of New Mexico, Roswell, NM.
- 2001 "Mythic Western Heroes, Trails, and Water." Discussant, Annual Conference of the Western Social Science Association, Reno, NV.

- 2001 "Three Indians-sitting for photos @ \$1.00 each:" The Smithsonian Institution's 1880 Expedition to the Pueblos. Annual Western Social Science Association Conference, Reno, NV.
- 1997 Pueblo Behavior as a Contributing Factor in the Historic Formation of Southwest Ethnographic Collections by the Bureau of American Ethnology. Annual Conference of the Western Social Science Association, Albuquerque, NM.
- 1997 The Origins of Southwest Ethnographic Collections by the Bureau of American Ethnology: The Fiscal Record. Annual Meeting of the Historical Society of New Mexico, Deming, NM.
- 1995 Baskets, Pots, and Prayer Plumes: Anthropological Expeditions to Southwest Native American Communities, 1879-1914. Annual Meeting of the American Society for Ethnohistory, Kalamazoo, MI.
- 1995 The Archaeology of the Trinity Site, Fifty Years Later (with Meli Duran). Annual Meeting of the New Mexico Archaeological Society, El Paso, TX.
- 1990 Linear and Small-Scale Surveys as a Regional Pattern Recognition Strategy (with Dr. Lawrence C. Todd and Kelly Klein). Fifty-fifth Annual Society of American Archaeology Meeting, Las Vegas, NV.

PUBLIC HISTORY AND ANTHROPOLOGY EXPERIENCE

- 2013-Pr **Collections Research**, Arizona State Railroad Museum, Williams, Arizona.
- 2013-Pr **Education Consultant**, Volunteer Ladakh: Responsible Volunteering and Cultural Exchange in India.
- 2007-08 **Arizona Historical Society Grant**, Collections and Exhibits Enhancement, Old Trails Museum, Winslow Historical Society (WHS), Winslow, AZ.
- 2006-07 **Historical Advisor & Assistant Team Leader**, National Park Service Route 66 Corridor Preservation Program Grant, WHS, Winslow, AZ.
- 2006-07 **Historical Advisor & Assistant Team Leader**, Arizona Historical Records Advisory Board Grant, WHS, Winslow, AZ.
- 1994-95 **Historian and Archaeologist/Crew Chief, Archaeologist/Crew Member** (Summers 1992-93) Human Systems Research, Inc., Las Cruces, NM.
- 1989-90 **Archaeologist/Crew Chief**, Zuni Archaeology Program, Zuni, New Mexico; Navajo Nation Chambers-Sanders Trust Lands, Arizona.
- 1987-89 **Archivist/Museum Tech III/Committee Chair**, Clark Field Archive-Library, Department of Anthropology, University of New Mexico, Albuquerque, NM.
- 1987 **Crew Member**, University of New Mexico Field School, SU Site, Reserve, NM.
- 1986-87 **Museum Aide**, Museum Store, Maxwell Museum of Anthropology, University of New Mexico, Albuquerque, NM.

- 1984 **Museum Store Manager**, Millicent Rogers Museum, Taos, NM.
1982-84 **Business Manager**, Death Valley Natural History Association, Death Valley National Monument (DVNM), CA.

COLLEGE SERVICE

- 2011-13 **Faculty Senate, Instructional Council, Learning Technologies Committee**
 Northland Pioneer College (NPC)
2007-09 **President and Vice-President**, Northland Pioneer College Faculty Association
2008-09 **Instructional Council, College Council, Strategic Planning and Accreditation Steering Committee**, NPC
2007-13 **Arizona Articulation Task Force (ATF) in Anthropology, NPC Representative**
2004-13 **Arizona Articulation Task Force (ATF) in History, NPC Representative**
1996-97 **Faculty Coordinator**, "A Conversation with American POWs in WWII," Arizona State University and Phi Alpha Theta, Chapter Iota Gamma

COMMUNITY SERVICE

- 2008-Pr **Advisor**, Homolovi Chapter, Arizona Archaeological Society, Winslow, AZ
2008-09 **Chair, Historic Preservation Commission**, City of Winslow, AZ. (Member 2005-09)
2007-10 **Board of Directors**, Winslow Historical Society, Winslow, AZ (Treasurer 2009)
2007-13 **Management Committee Member**, Broken K Pueblo Archaeological Preserve, The Archaeological Conservancy, Albuquerque, NM.
2006-09 **Working Group Member**, Proposed Little Colorado River Valley National Heritage Area, Center for Desert Archaeology, Tucson, AZ
2003-Pr **Advisor**, Little Colorado River Chapter, Arizona Archaeological Society, Springerville, AZ
1985 **Honorary Lifetime Member**, Death Valley Natural History Association
1982-83 **Board of Directors**, (DVNHA) (Publication Committee Coordinator 1982-84)

PROFESSIONAL MEMBERSHIPS

- Western History Association
Arizona Historical Society
Historical Society of New Mexico
Arizona Archaeological Society
Winslow Historical Society
Death Valley Natural History Association
Phi Alpha Theta
Phi Kappa Phi

REFERENCES

Dr. Peter Iverson
Regents Professor Emeritus
Department of History
Arizona State University
Tempe, Arizona 85287-4302
(480) 829-8642
peter.iverson@asu.edu

Dr. Eric Henderson
Dean of Arts & Sciences
Northland Pioneer College
Holbrook, Arizona 86025
(928) 524-7350
eric.henderson@npc.edu

Dr. James S. Jacob
Professor and Chair Emeritus
Department of Biology
Northland Pioneer College
Holbrook, Arizona 86025
(602)-402-3198
jamessjacob@gmail.com

Dr. William B. Carter
Department of History
South Texas College
McAllen, Texas 78501
(956) 225-6551
wcarter@southtexascollege.edu

George F. Shaw
AT&SFRyCo. Collection Archivist
Arizona State Railroad Museum
204 West Railroad Avenue
Williams, Arizona 86046
(928) 985-4935
geofshaw07@bresnan.net

FYSC Road Show Sign-up Sheet

Audience	Presenter	Date
Parent Association: Annual Mtg – Family Weekend	Greg	Sept. 27, 9am (SUB C)
CAPS	Joe	Completed
GEO	Kate	Arranged
Staff Council	Jen GC, Terry	Rescheduling
Advisors	Vanessa	Completed
Retirees	Tim G.,	
ASUNM	Vanessa, Jen GC, Isaac	Call-out
GPSA	Joe	(emailed)
UNM Foundation	Kate, Terry	
Student Affairs Groups (list below?)	Tim G.,	
Faculty Senate	Greg, Amy?	
Alumni	Jen	Completed

First Year Steering Committee

September 19, 2014

10:00-11:30 p.m.

Scholes Hall 246

AGENDA

1. Opening	Kate Krause	5 min
2. Communication Subcommittee	Carolina Aguirre	20 min
3. MyUniversity	Tomas Aguirre	15 min
4. Tracker Roll Call & Evidence Library	Joe Suilmann	20 min
5. Open Discussion		25 min
6. Next Steps		5 min

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY									
1.01.1	PROJECT								
1.01.2	LEADER								
1.01.3	CONNECTIONS								
	GOAL								
	GOAL								
	GOAL								
	GOAL								
	GOAL								
	GOAL								
	TACTIC 1		Deadline (MM/YY)		Status		Completion Measure(s)		Assessment Measure (s)
	TACTIC 2		Deadline (MM/YY)		Status		Completion Measure(s)		Assessment Measure (s)
	TACTIC 3		Deadline (MM/YY)		Status		Completion Measure(s)		Assessment Measure (s)
	TACTIC 4		Deadline (MM/YY)		Status		Completion Measure(s)		Assessment Measure (s)
	TACTIC 5		Deadline (MM/YY)		Status		Completion Measure(s)		Assessment Measure (s)

THEME CATEGORY			
Number	Category		Leader(s)
1.x.x	Front Door: Improving student transitions to UNM		Terry Babbitt
2.x.x	Curriculum		Kate Krause, Greg Heileman
3.x.x	Student Support		Jennifer Gomez-Chavez, Vanessa Harris, Tim Gutierrez
4.x.x	Faculty, Staff and Grad Student TA Support		Amy Neel, Diane Marshall
5.x.x	Campus Quality and Out-of-Classroom Experiences		Tomas Aguirre
6.x.x	Data and Assessment		Greg Heileman

FYSC PROJECTS			
Number	Category	Name	Leader(s)
1.01.1	1. Front Door	First-Year Communications	Carolina Aguirre
1.02.1		New Student Orientation	Sonia Rankin
1.03.1		Placement - Introductory Studies Courses	Diane Marshall, Terry Babbitt, Kate Krause
2.01.1	2. Curriculum	FLC Offerings	Kate Krause, Sonia Rankin
2.02.1		Freshman Honors Curriculum	Kate Krause, Ursula Shepherd
2.03.1		First Year Math Academy	Kate Krause, Sonia Rankin, Terry Loring
2.04.1		UNIV Offerings	Kate Krause, Sonia Rankin
3.01.1	3. Student Support	Electronic One-Stop for Students	Jennifer Gomez-Chavez
3.02.1		Academic Coaching Program	Jennifer Gomez-Chavez
3.03.1		Advisement Redesign	Vanessa Harris
3.04.1		Early Alerts - Lobo Achieve	Vanessa Harris
3.05.1		Front Line Culture for Faculty and Staff	Amy Neel, Jennifer Gomez-Chavez
4.01.1	4. Faculty/Staff Support	Coordinating Student Support	Tim Gutierrez
4.02.2		Reward and Support Quality Teaching in First-Year Classroom	Amy Neel, Diane Marshall, Greg Heileman
5.01.1	5. Out-of-Classroom	MyUniversity - Student Learning Outcomes	Tomas Aguirre
6.01.1	6. Data & Assessment	Assessment of FYSC Progress	Tim Schroeder
6.02.1		Assessment of FYSC Project Progress	Tim Schroeder
6.03.1		Assessment of High Impact Practices	Tim Schroeder

Institutional Initiatives Related to the First Year			
Not Tracked Monthly	Category	Name	Who
	1. Front Door	Recruiting Internship - Telling the Student Story	Terry Babbitt Joe Suilmann, Ethan Rule
	2. Curriculum	Lobo Reading Experience Degree Maps Service Learning & Community Engagement Student Learning Outcomes STEM Redesign Project Writing in the Curriculum	Jennifer Gomez-Chavez Greg Heileman Monica Kowal Kate Krause, Sonia Rankin Tim Schroeder, Gary Smith Dan Sanford, Aeron Haynie
	3. Student Support	Physical One-Stop for Students Operation Registration Electronic First-Year Newsletter	Jennifer Gomez-Chavez Jennifer Gomez-Chavez Tomas Aguirre
	4. Faculty/Staff Support	Center for Teaching Excellence Career Path for Lecturers	Aeron Haynie Amy Neel
	5. Out-of-Classroom	Themed Residence Floors	Tomas Aguirre
	6. Data & Assessment		

Number	Date	Status	Tactic	Category	Project	Leader
3.02.4	11/01/2013	Completed	Work with OIA to institutionalize an evaluation plan	Student Support	Academic Coaching	Jennifer Gomez-Chavez
3.05.3	01/12/2014	At Risk	Develop video clip discussing faculty as being first responders to students	Student Support	Front Line Culture for Faculty and Staff	Jennifer Gomez-Chavez, Amy Neel, Joe Suilmann
3.04.2	02/01/2014	Completed	Identify faculty teaching high failure-rate courses	Student Support	Early Alerts - LoboAchieve	Vanessa Harris
2.02.1	04/01/2014	Completed	Schedule courses to meet the demand of freshman class	Curriculum	Challenging Curriculum for High-Achieving Students	Kate Krause, Ursula Shepherd
1.02.2	05/01/2014	Completed	Develop academically centered assessment tool	Front Door	New Student Orientation	Sonia Rankin
3.04.4	05/01/2014	Completed	Organize flags for advisors to manage better.	Student Support	Early Alerts - LoboAchieve	Vanessa Harris
2.03.1	06/01/2014	Completed	Identify math instructors willing to offer MATH 162, 180, STAT 145 or other post-algebra math courses as a freshman academy	Curriculum	Develop Innovative Math Academies for First-Year Students	Kate Krause, Sonia Rankin, Terry Loring
2.03.3	06/01/2014	Completed	Enroll freshmen in appropriate math classes during NSO	Curriculum	Develop Innovative Math Academies for First-Year Students	Kate Krause, Sonia Rankin, Terry Loring
2.04.3	06/01/2014	Completed	Adopt SLOs for all UNIV courses	Curriculum	UNIV Offerings - Increase number offered and academic content	Kate Krause, Sonia Rankin
2.04.4	06/01/2014	Completed	Recruit and train instructors for transition courses	Curriculum	UNIV Offerings - Increase number offered and academic content	Kate Krause, Sonia Rankin
5.01.3	07/01/2014	Completed	Complete Essential Skills for all of Student Affairs	Out-of-Classroom Experiences	MyUniversity	Tomas A. Aguirre
3.06.1	07/14/2014	Completed	Identify SAS programs at the institution that should be a part of the Collaborative	Student Support	Create a Collaboratively Integrated Student Academic Services (SAS) Program	Tim E. Gutierrez
3.06.2	07/14/2014	At Risk	Re-align SAS program in Student Affairs and Academic Affairs	Student Support	Create a Collaboratively Integrated Student Academic Services (SAS) Program	Tim E. Gutierrez
2.01.1	01/01/2013	Completed	Expand FLCs to Spring Semester	Student Support	Freshman Learning Communities	Kate Krause, Sonia Rankin
3.04.1	02/01/2013	Completed	Establish benchmark for use of LoboAchieve for advisors and faculty	Curriculum		
3.01.1	05/15/2013	Completed	Develop Landing Page template- Phase I	Student Support	Early Alerts - LoboAchieve	Vanessa Harris
3.01.3	05/15/2013	Completed	Launch Web page	Student Support	Student Website	Jennifer Gomez-Chavez
1.03.1	08/01/2013	Completed	Pilot Summer English Stretch	Student Support	Student Website	Jennifer Gomez-Chavez
3.01.2	08/01/2013	Completed	Identify top FAQs	Front Door	Placement	Terry Babbitt, Diane Marshall, Kate Krause
3.02.1	08/15/2013	Completed	Identify students who will receive coaching	Student Support	Student Website	Jennifer Gomez-Chavez
3.02.5	08/15/2013	Completed	Develop feed back form for coaches	Student Support	Academic Coaching	Jennifer Gomez-Chavez
1.02.1	09/01/2013	Completed	Create sub-subcommittee structure that involves partners from diverse parts of campus	Student Support	Academic Coaching	Jennifer Gomez-Chavez
3.02.2	09/15/2013	Completed	Provide training for academic coaches	Front Door	New Student Orientation	Sonia Rankin
3.03.1	01/01/2014	Completed	Review the number of students and advisors in each college	Student Support	Academic Coaching	Jennifer Gomez-Chavez
1.02.3	02/01/2014	Completed	Devise NSO curriculum and format aligned to mission statement	Student Support	Advising Redesign	Vanessa Harris
3.03.2	04/01/2014	Completed	Determine which college gets UC or new advisors.	Front Door	New Student Orientation	Sonia Rankin
3.03.3	04/01/2014	Completed	Determine how to redirect UC advisors to other colleges.	Student Support	Advising Redesign	Vanessa Harris
3.03.5	05/01/2014	Completed	Create an advising rubric	Student Support	Advising Redesign	Vanessa Harris
3.01.4	05/15/2014	Completed	Develop redesign initial landing Page - Phase II	Student Support	Advising Redesign	Vanessa Harris
5.01.1	05/15/2014	Completed	Identify and Define Essential Skills	Student Support	Student Website	Jennifer Gomez-Chavez
1.02.4	06/01/2014	Completed	create extended academic orientation session before freshman convocation	Out-of-Classroom Experiences	MyUniversity	Tomas A. Aguirre
5.01.2	06/14/2014	Completed	Identify and Create Examples of Sub-Categories	Front Door	New Student Orientation	Sonia Rankin
5.01.4	07/30/2014	Completed	Design Pre-Essential Skills Test	Out-of-Classroom Experiences	MyUniversity	Tomas A. Aguirre
		Completed		Out-of-Classroom Experiences	MyUniversity	Tomas A. Aguirre

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY				
1.01.1	PROJECT			
1.01.2	LEADER			
1.01.3	CONNECTIONS			
	GOAL			
	TACTIC 1		Deadline (MM/YY)	Status
	TACTIC 2		Deadline (MM/YY)	Status
	TACTIC 3		Deadline (MM/YY)	Status
	TACTIC 4		Deadline (MM/YY)	Status
	TACTIC 5		Deadline (MM/YY)	Status

	Completion Measure(s)		Assessment Measure (s)	
	Completion Measure(s)		Assessment Measure (s)	
	Completion Measure(s)		Assessment Measure (s)	
	Completion Measure(s)		Assessment Measure (s)	
	Completion Measure(s)		Assessment Measure (s)	

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY 1.03.1										
1.01.1	PROJECT	Front Door (1)								
1.01.2	LEADER	New Student Orientation, Degree Maps, FLCs, UNIV 101s, UC Student to Advisor Ratio, LoboAchieve, Front Line Culture for Fac & Staff, Challenging Curriculum, 1st year Communications, Non Traditional Students								
1.01.3	CONNECTIONS	Assessment								
	GOAL	Better introduce students to the academic rigors of UNM								
	GOAL	Set a tone for students' perspective of UNM that is civil, congenial, and captivating, expressing our commitment to excellence, innovation, and inclusion								
	GOAL	support and guide students in their transition to the university, delivering information at appropriate intervals								
	GOAL									
	GOAL									
	GOAL									
	GOAL									
	TACTIC 1	Create sub-subcommittee structure that involves partners from diverse parts of campus	Deadline (MM/YY)	09/13	Status	completed	Completion Measure(s)	list of subcommittee members,	Assessment Measure (s)	all pertinent campus partners on subcommittee (participate)
	TACTIC 2	Develop academically centered assessment tool	Deadline (MM/YY)	05/14	Status	on target	Completion Measure(s)	assessment plan completed	Assessment Measure (s)	assessment plan implemented Summer 2014
	TACTIC 3	Devise NSO curriculum and format aligned to mission statement	Deadline (MM/YY)	02/14	Status	completed	Completion Measure(s)	curriculum created	Assessment Measure (s)	review assessment over course of Summer 2014 for student responses
	TACTIC 4	create extended academic orientation session before freshman convocation	Deadline (MM/YY)	06/14	Status	at risk	Completion Measure(s)	ExceedU held	Assessment Measure (s)	attendance increase each year
	TACTIC 5		Deadline (MM/YY)		Status		Completion Measure(s)		Assessment Measure (s)	

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Front Door			
1.01.1	PROJECT	Placement		
1.01.2	LEADER	Terry Babbitt, Kate Krause, Vanessa Harris, Diane Marshal		
1.01.3	CONNECTIONS	curriculum, student support, faculty, first-year courses		
	GOAL	1. Improve student outcomes in introductory courses		
	GOAL	a. Enable students to receive credit for introductory classes		
	GOAL	2. Increase persistence for those students who would be placed at remedial levels		
	GOAL	a. Specific analysis should be on Fall 2014 English students since they were placed at remedial levels		
	GOAL	3. Eliminate remedial Introductory Studies classes from UNM		
	GOAL			
	GOAL			
	TACTIC 1	Pilot Summer English Stretch	Deadline (08/13)	Status
	TACTIC 2	Fully implement English Stretch as a replacement for remedial English	Deadline (08/14)	Status
	TACTIC 3	Revise placement rules for remedial Math	Deadline (08/14)	Status
	TACTIC 4	Revise placement rules for remedial Reading	Deadline (08/14)	Status
	TACTIC 5	Implement UNM courses through MaLL for remedial math	Deadline (08/15)	Status

lial levels

re not placed in remedial courses

complete	Completi on Measure(s)	A pilot for English Stretch students entering UNM in summer should be completed.	Assessmen t Measure (s)
complete	Completi on Measure(s)	English Stretch sections will completely replace remedial English in Fall 2014	Assessmen t Measure (s)
complete	Completi on Measure(s)	Implement changes to math placement rules regarding sequence and number of testing opportunities	Assessmen t Measure (s)
complete	Completi on Measure(s)	Adjust reading placement rules to reflect skills needed for college success	Assessmen t Measure (s)
in-process	Completi on Measure(s)	There are no remedial math courses scheduled for UNM students	Assessmen t Measure (s)

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Curriculum		
1.01.1	PROJECT	Double number of FLCs	
1.01.2	LEADER	Kate Krause and Sonia Rankin	
1.01.3	CONNECTIONS	Placement; Degree Maps; Student Learning Outcomes; NSO; teachers	
	GOAL	Introduce students to college-level coursework in smaller seminars	
	GOAL	Demonstrate integration and collaboration across curriculum through	
	GOAL	Provide students with realistic expectations about the rigors of higher	
	GOAL	Develop skills that will lead to success at UNM	
	GOAL		
	GOAL		
	GOAL		
	TACTIC 1	Expand FLCs to Spring Semester	Deadline (MM/YY)
	TACTIC 2	Increase number of Fall FLCs	Deadline (MM/YY)
	TACTIC 3	Increase variety of FLC pairings to limit reliance on English	Deadline (MM/YY)
	TACTIC 4	Enhance instructor professional development	Deadline (MM/YY)

: in first year classes,
 paired classes
 education at a research university.

Status	Completed	Completion Measure(s)	Courses offered; enrollment in the courses	Assessment Measure (s)	Assess SLOs using SGIDs; track outcomes for students who enrolled in spring FLCs.
Status	On Target	Completion Measure(s)	Courses offered; enrollment in the courses	Assessment Measure (s)	Assess SLOs using AAC&U Rubrics; track outcomes for students who enrolled in FLCs
Status	On Target	Completion Measure(s)	Count of courses with unique pairings; Pairings with Math, Philosophy, etc.	Assessment Measure (s)	Compare success rates of students in FLCs with students who took the course un-paired (esp math).
Status	On Target	Completion Measure(s)	Number of workshops, institutes offered to FLC instructors	Assessment Measure (s)	SGID outcomes; faculty feedback

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY (2.04.10)		Curriculum								
1.01.1	PROJECT	Challenging Curriculum for High-Achieving students (2.02.1)								
1.01.2	LEADER	Kate Krause and Ursula Shepherd								
1.01.3	CONNECTIONS	Recruiting; SLOs; Center for Teaching Excellence; Quality Teachers; Assessment								
	GOAL	Offer Legacy Courses in sufficient number to serve every 1st Year Honors Student								
	GOAL	Provide opportunities for interdisciplinary learning; introduce students to higher-level learning								
	GOAL	Prepare students for the rigors of Honors and introduce to the culture of learning in Honors								
	GOAL	Assure high level of rigor in Honors Legacy courses through assessment mechanisms.								
	GOAL	Retain the high-achieving students we have recruited by offering high quality educational experiences								
	TACTIC 1	Schedule courses to meet the demand of freshman class	Deadline (MM/YY)	04/14	Status	on target	Completion Measure(s)	Courses offered; enrollment in the courses	Assessment Measure (s)	retention to 3rd semester of high-achieving students
	TACTIC 2	Hire Term Instructors (instead of PTIs) to teach Legacy Courses	Deadline (MM/YY)	08/14	Status	On Target	Completion Measure(s)	contracts signed by ~6 highly qualified instructors	Assessment Measure (s)	SGIDs, Classroom observation of term instructors
	TACTIC 3	Retain practice of mentoring all Legacy Instructors in the ways of Honors	Deadline (MM/YY)	08/14	Status	On Target	Completion Measure(s)	Professional development workshops held, attendance,	Assessment Measure (s)	Faculty feedback of effectiveness; SGIDs
	TACTIC 4	Assess learning outcomes in every Legacy course	Deadline (MM/YY)	12/14	Status	On Target	Completion Measure(s)	Assessment instruments submitted for scoring	Assessment Measure (s)	Improvement in progress made on SLOs
	TACTIC 5	Conduct classroom observation of Legacy instructors as a quality control measure.	Deadline (MM/YY)	2015	Status	On Target	Completion Measure(s)	Letters submitted by Honors Faculty who have reviewed Legacy courses	Assessment Measure (s)	Improvement in teaching in Legacy courses evidenced by SGIDs, student evaluations and feedback

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Curriculum		
1.01.1	PROJECT	Develop Innovative Math Academies for First Year students	
1.01.2	LEADER	Kate Krause and Sonia Rankin	
1.01.3	CONNECTIONS	Placement; FLC Offerings; Student Learning Outcomes; NSO; Teaching in 1st	
	GOAL	Offer sections of Calc or Stat that are limited to freshmen and to ~25 studer	
	GOAL	Increase math skills and success in math courses	
	GOAL	Transition students from math as taught in HS to math as taught at the Univ	
	GOAL		
	GOAL		
	TACTIC 1	Identify math instructors willing to offer MATH 162, 180, STAT 145 or other post-algebra math courses as a freshman academy	Deadline (MM/YY) 06/14
	TACTIC 2	Work with math instructors to develop approaches to support 1st year students in post-algebra courses	Deadline (MM/YY) 08/14
	TACTIC 3	Enroll freshmen in appropriate math classes during NSO	Deadline (MM/YY) 06/14
	TACTIC 4	Deliver effective math curriculum	Deadline (MM/YY) 12/14

Year Classes; Center for Teaching Excellence.

nts

iversity

Status	on target	Completion Measure(s)	Instructors identified and courses scheduled	Assessment Measure (s)
Status	On Target	Completion Measure(s)	Syllabi developed; workshops attended	Assessment Measure (s)
Status	On Target	Completion Measure(s)	Course enrollment	Assessment Measure (s)
Status	On Target	Completion Measure(s)	enrollment count at end of semester	Assessment Measure (s)

SLOs assessed, success in the course and in subsequent math courses.

success in courses and subsequent courses.

Assessment of math dept's SLOs;
Student feedback indicates satisfaction with courses and instructors.

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Curriculum			
1.01.1	PROJECT	Increase number of and Academic content in UNIV Offerings		
1.01.2	LEADER	Kate Krause and Sonia Rankin		
1.01.3	CONNECTIONS	Placement; FLC Offerings; Student Learning Outcomes; NSO;		
	GOAL	Give students important general - not discipline specific - skills for future success		
	GOAL	Provide opportunities for interdisciplinary learning; introduce students to higher education		
	GOAL	Provide students with realistic expectations about the rigors of higher education		
	GOAL			
	TACTIC 1	Develop curriculum for "big question" interdisciplinary courses and offer 2 pilots	Deadline (MM/YY)	08/14
	TACTIC 2	Identify specific topical seminar courses and instructors	Deadline (MM/YY)	08/14
	TACTIC 3	Adopt SLOs for all UNIV courses	Deadline (MM/YY)	06/14
	TACTIC 4	Recruit and train instructors for transition courses	Deadline (MM/YY)	06/14
	TACTIC 5	Enroll freshmen in sections of UNIV courses, gradually increasing to 25 in two years.	Deadline (MM/YY)	2016

cess at UNM

higher-level learning

tion at a research university.

Status	on target	Completion Measure(s)	Courses offered; enrollment in the courses	Assessment Measure (s)
Status	On Target	Completion Measure(s)	Courses offered; enrollment in the courses	Assessment Measure (s)
Status	On Target	Completion Measure(s)	adoption and inclusion in all syllabi	Assessment Measure (s)
Status	On Target	Completion Measure(s)	10 instructors chosen and participating in professional development.	Assessment Measure (s)
Status	At Risk	Completion Measure(s)	25 courses on the books and enrolled.	Assessment Measure (s)

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY					
1.01.1	PROJECT	Electronic One Stop			
1.01.2	LEADER	Jennifer Gomez-Chavez			
1.01.3	CONNECTIONS	All students, NSO, Faculty, Advisement, Fast Info, Student Success, Academic Co			
	GOAL				
	TACTIC 1	Develop Landing Page template- Phase I	Deadline (MM/YY)	05/15/2013	Status
	TACTIC 2	Identify top FAQs	Deadline (MM/YY)	08/01/2013	Status
	TACTIC 3	Launch Web page	Deadline (MM/YY)	05/15/2013	Status
	TACTIC 4	Develop redesign initial landing Page - Phase II	Deadline (MM/YY)	05/15/2014	Status
	TACTIC 5	Ongoing quarterly review of website for updates	Deadline (MM/YY)	05/15/2015	Status

Completed	Completion Measure(s)	Website built and launched	Assessment Measure (s)	Student focus groups /
Completed	Completion Measure(s)	Inventory of FAQs	Assessment Measure (s)	Track top questions through Fast Info & Student Success Center Triage
Completed	Completion Measure(s)	Launch web page in May 2013 at NSO	Assessment Measure (s)	Track # of website visits
Completed	Completion Measure(s)	Launch web page to NSO incoming students	Assessment Measure (s)	Reviewed by FYSC & UCAM
On Target	Completion Measure(s)	Every three months changes are suggested and implemented.	Assessment Measure (s)	Review suggested changes by FYSC, UCAM, Student Success Team

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY					
1.01.1	PROJECT	Academic Coaching			
1.01.2	LEADER	Jennifer Gomez-Chavez & Tanya Bryant			
1.01.3	CONNECTIONS	Student Success, FACS, Graduation, Retention, Support Services			
	GOAL	To match first year students with an academic coach to provide academic, social, an			
	GOAL				
	TACTIC 1	Identify students who will receive coaching	Deadline (MM/YY)	08/15/2013	Status
	TACTIC 2	Provide training for academic coaches	Deadline (MM/YY)	09/15/2013	Status
	TACTIC 3	Recruit Volunteer Academic Coaches	Deadline (MM/YY)	05/15/2015	Status
	TACTIC 4	Work with OIA to institutionalize an evaluation plan	Deadline (MM/YY)	11/01/2013	Status
	TACTIC 5	Develop feed back form for coaches	Deadline (MM/YY)	08/15/2013	Status

d personal support with the intention to increase retention to the third semesrer				
Completed	Completion Measure(s)	List of students	Assessment Measure (s)	Student data from Enrollment Mgt to determine students
Completed	Completion Measure(s)	List of training dates	Assessment Measure (s)	Training evaluation forms
On Target	Completion Measure(s)	List of Academic Coaches	Assessment Measure (s)	Registration form submission to ensure individuals qualify to serve as academic coaches
At Risk	Completion Measure(s)	fall and spring end of the semester report	Assessment Measure (s)	Comparison report, Control groups, and use of historical data to determine impact.
Completed	Completion Measure(s)	Electronic feed back form	Assessment Measure (s)	Review and # of submissions, cluster feed back, and make changes to program as needed.

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY			
1.01.1	PROJECT	Advising Design	
1.01.2	LEADER	Jarris and Greg Heileman	
1.01.3	CONNECTIONS		
	GOAL	Reduce student advisor ratio in UC	
	GOAL	Review the advisor student ratio in other colleges	
	GOAL	Redistribute advisors in C to other colleges	
	GOAL	Create a new college premajor program in Banner for each college	
	GOAL	Create an assessment rubric for centers	
	GOAL		
	GOAL		
	TACTIC 1	Review the number of students and advisors in each college	Deadline (MM/YY) 01/14
	TACTIC 2	Determine which college gets UC or new advisors.	Deadline (MM/YY) 04/14
	TACTIC 3	Determine how to redirect UC advisors to other colleges.	Deadline (MM/YY) 04/14
	TACTIC 4	Facilitate the move of students to their college as premajors	Deadline (MM/YY) 08/14
	TACTIC 5	Create an advising rubric	Deadline (MM/YY) 05/14

	Completed		Report from Hyerion to determine actual numbers of students. Surveyed advising directors on the number of advisors they have and would like to have.	
Status	Completed	Completion Measure(s)	Analyzed the number of new students that will be moved to a college and compare that to the advising needs.	Assessment Measure (s)
Status	Completed	Completion Measure(s)	Used the NACADA standard of 350:1 as the guide. Ensure that UCAC is not left without enough advisor. Assign advisors to college based on majors they are already advising in UC.	Assessment Measure (s)
Status	On schedule	Completion Measure(s)	New major program codes	Assessment Measure (s)
Status	Completed	Completion Measure(s)	Adoption in all advising centers	Assessment Measure (s)

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY					
1.01.1	PROJECT	Early Alerts/LoboAchieve			
1.01.2	LEADER	Vanessa Harris And Amy Neel			
1.01.3	CONNECTIONS	Faculty, Staff, Advisor, Student and Banner			
	GOAL	Increase faculty teaching high fail rate courses			
	GOAL	Organize alerts for advisors			
	GOAL	Increase the amount of colleges/programs usage			
	GOAL				
	TACTIC 1	Establish benchmark for use of LoboAchieve for advisors and faculty	Deadline (MM/YY)	02/13	Status
	TACTIC 2	Identify faculty teaching high failure-rate courses	Deadline (MM/YY)	02/14	Status
	TACTIC 3	Increase student usage by 60 percent by end of Fall 2014	Deadline (MM/YY)	Ongoing	Status
	TACTIC 4	Organize flags for advisors to manage better.	Deadline (MM/YY)	05/14	Status

Student Academic Progress Monitoring				
Student Status		Action Items		
Category	Description	Action Item	Assessment Measure(s)	Feedback
On Target	Completion Measure(s)	All advising centers using the LoboAchieve and participating in training and workshops.	Assessment Measure (s)	Feedback from faculty.
At Risk	Completion Measure(s)	One-on-one meetings with key faculty	Assessment Measure (s)	Feedback from faculty.
On Target	Completion Measure(s)	Advising centers using LoboAchieve for appointment scheduling.	Assessment Measure (s)	
At Risk	Completion Measure(s)	Identify how many flags and what flags to group for advisors. Create a plan to determine what academic coach to assign to the student.	Assessment Measure (s)	Feedback from advisor. Measure the amount of flags that are cleared.

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Front Line Culture		
1.01.1	PROJECT	Amy Neel & Jennifer Gomez-Chavez	
1.01.2	LEADER	Student Success, retention, graduation	
1.01.3	CONNECTIONS	To foster a student success culture across faculty and staff by providing	
	GOAL		
	TACTIC 1	Offer a CTE Course for faculty on student resources	Deadline (MM/YY) 08/18/2014
	TACTIC 2	Inform new faculty of campus resources for students	Deadline (MM/YY) 08/18/2014
	TACTIC 3	Develop video clip discussing faculty as being first responders to students	Deadline (MM/YY) 01/12/2014
	TACTIC 4	Promote Student Success Center to faculty	Deadline (MM/YY) 08/18/2014

↳ information and tools to help them connect students to appropriate resources

Status	At Risk	Completion Measure(s)	Course developed	Assessment Measure (s)	Course evaluations
Status	On Target	Completion Measure(s)	New Faculty Orientation, brochure, FYSC presentation	Assessment Measure (s)	Evaluations & # of faculty referrals to student success center
Status	At Risk	Completion Measure(s)	Completed Video	Assessment Measure (s)	Evaluation & feed back form
Status	On Target	Completion Measure(s)	New Faculty Orientation, brochure	Assessment Measure (s)	# of referrals faculty to Student Success Center

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Student Support		
1.01.1	PROJECT	Create a Collaboratively Integrate Student Academic Services (SAS) program	
1.01.2	LEADER	Tim E. Gutierrez	
1.01.3	CONNECTIONS	Coordination and accountability of Student Academic Support Program	
	GOAL	Align SAS programs	
	GOAL	Intergate SAS programs in Student Affairs and Academic Affairs	
	GOAL	Institutionalize SAS best practices. Create accountability	
	GOAL	Develop Institutional Assesment program for SAS	
	GOAL	Develop Stratigic plan for SAS for the next 5 years	
	GOAL		
	GOAL		
	TACTIC 1	Identify SAS programs at the instituition that should be a part of the Collaborative	Deadline (MM/YY) Jul 14
	TACTIC 2	Re-align SAS program in Student Affairs and Academic Affairs	Deadline (MM/YY) Jul 14
	TACTIC 3	Create common measures for all SAS programs to be measured by	Deadline (MM/YY) Aug 14
	TACTIC 4	Create a process by which programs will be held accountable	Deadline (MM/YY) Aug 14
	TACTIC 5	Develop an assesment plan which will assist programs to make decisions	Deadline (MM/YY) Aug 14

Program to improve Student Success

18

Status	Completion Measure(s)	Inventory of programs with contact information	Assessment Measure (s)
Status	Completion Measure(s)	Organizational Chart Mission/Vision Articulated	Assessment Measure (s)
Status	Completion Measure(s)	Refine Key Performance Indicators (i.e., 3rd semester retention, credit success, 3rd semester completion, STEM completion, etc.) Develop interim success indicators	Assessment Measure (s)
Status	Completion Measure(s)	Futher develop student datamart Develop more systematic model for the evaluation of student success	Assessment Measure (s)
Status	Completion Measure(s)	Create evaluation matrix Develop model for process evaluation	Assessment Measure (s)

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Faculty & Staff Support		
1.01.1	PROJECT	Reward and Support Quality Teaching in First-Year Classrooms	
1.01.2	LEADER	Diane Marshall and Amy Neel	
1.01.3	CONNECTIONS	Center for Teaching Excellence, FS - Teaching Enhancement Committee,	
	GOAL	Improve the quality of instruction in first-year classrooms	
	GOAL	Prepare faculty members to provide a high-quality education to all students	
	GOAL	Prepare faculty members to serve a highly-diverse student body	
	TACTIC 1	Develop and institutionalize teaching portfolio process for evaluating teaching in first-year courses	Deadline (MM/YY) 12/15/2014
	TACTIC 2	Create a new category of the Teacher of the Year Awards for first-year teaching	Deadline (MM/YY) 09/01/2014
	TACTIC 3	Identify and provide the resources that teachers of first-year students need	Deadline (MM/YY) 12/15/2014
	TACTIC 4	Provide high-quality data and information about the characteristics of each first-year class, which could be presented annually at faculty meetings, such as New Faculty Orientation.	Deadline (MM/YY) 09/01/2014

its within a challenging and supportive environment					
Status	On-target	Completion Measure(s)	Create rubric, develop portfolio process	Assessment Measure (s)	Count of colleges and departments who have adopted the first-year portfolio process
Status	At-Risk	Completion Measure(s)	Locate Funding, advertise the award, evaluate nominations, announce the award	Assessment Measure (s)	Decrease the proportion of first-year courses taught by temporary part-time faculty
Status	On-target	Completion Measure(s)	Complete inventory, provide resources	Assessment Measure (s)	An increased number of faculty will attend workshops on first year teaching.
Status	On-target	Completion Measure(s)	Number of colleges and departments who have received data on the first year.	Assessment Measure (s)	Gather feedback from departments on whether they are using the information to improve first-year performance.

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY			
1.01.1	PROJECT		
1.01.2	LEADER		
1.01.3	CONNECTIONS		
	GOAL		Increase student engagement
	GOAL		Tie
	GOAL		
	TACTIC 1	Identify and Define Essential Skills	Deadline (MM/YY)
	TACTIC 2	Identify and Create Examples of Sub-Categories	Deadline (MM/YY)
	TACTIC 3	Complete Essential Skills for all of Student Affairs	Deadline (MM/YY)
	TACTIC 4	Design Pre-Essential Skills Test	Deadline (MM/YY)
	TACTIC 5	Design, Build and Launch Mobile App	Deadline (MM/YY)

Out-of-Classroom
MyUniversity
Tomás A. Aguirre
it engagement in the "out of classroom" experience
essential skills into student involvement

Status	Complete	Completion Measure(s)	essential skills	Assessment Measure (s)	Align essential skills with national standards (National Association of Colleges, Employers, TalentABQ, etc.).
Status	Complete	Completion Measure(s)	sub-categories	Assessment Measure (s)	Each essential skill will have five clearly defined sub-categories with specific examples.
Status		Completion Measure(s)	completed grid	Assessment Measure (s)	Ensuring that every program, activity, event, club, org, etc. has clearly defined essential skills.
Status		Completion Measure(s)	pre-test	Assessment Measure (s)	Pre-test accurately measures essential skills strengths and weaknesses.
Status		Completion Measure(s)	mobile app	Assessment Measure (s)	Through the use of the MyUniversity mobile app overall student engagement at UNM increases by at least 10% while employment of students that use the app and graduate increases by 5%.

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Assessment										
1.01.1	PROJECT	Assessment of FYSC Impact									
1.01.2	LEADER	Tim Schroeder									
1.01.3	CONNECTIONS	All projects									
	GOAL	Determine the extent to which FYSC (all projects combined) is improving academic achievement for first-year students									
	GOAL	Determine the extent to which FYSC (all projects combined) is improving academic achievement for traditionally underrepresented first-year students.									
	GOAL	Determine the extent to which FYSC (all projects combined) is improving academic achievement for high-performing first-year students.									
	GOAL	Where possible and supported by UNM data, provide FYSC with suggestions to improve achievement for first-year students (including subpopulations)									
	GOAL										
	GOAL										
	TACTIC 1	Establish a set of intermediate student achievement outcomes (i.e., semester GPA) and long-term outcomes (i.e., time to graduation) that reflect the ultimate goals of FYSC; Correlate short-term outcomes to long-term outcomes	Deadline (MM/YY)	12/14	Status	On Target	Completion Measure(s)	Outcomes approved by FYSC and the Provost Office	Assessment Measure (s)	Intermediate outcomes correlate to long-term measures	
	TACTIC 2	Finalize short-term and long-term outcomes into a set of Key Performance Indicators (KPIs) for FYSC	Deadline (MM/YY)	2/15	Status	On Target	Completion Measure(s)	KPIs approved by FYSC and the Provost Office	Assessment Measure (s)	The majority of FYSC members agree that KPIs are appropriate, crucial and aligned with UNM strategic plans	
	TACTIC 3	Finalize definitions for FYSC student subpopulations	Deadline (MM/YY)	12/14	Status	On Target	Completion Measure(s)	Subpopulation list and definitions approved by FYSC and the Provost Office	Assessment Measure (s)	The majority of FYSC members agree that subpopulations list (including definitions) is appropriate, crucial and aligned with UNM strategic plans	
	TACTIC 4	Create a UNM FYSC Dashboard that allows stakeholders to monitor FYSC progress towards KPIs (drillable by pre-set subpopulations)	Deadline (MM/YY)	5/15	Status	On Target	Completion Measure(s)	Dashboard is publicly available on the FYSC website and linked to other key UNM departmental websites	Assessment Measure (s)	Anonymous survey connected to dashboard reveals that >75% of users find the site to be somewhat or very helpful	
	TACTIC 5	Provide FYSC with an annual Briefing document that measures FYSC progress towards KPIs, and describes findings that may be used to improve FYSC programming	Deadline (MM/YY)	5/15	Status	On Target	Completion Measure(s)	Briefing is accepted by FYSC	Assessment Measure (s)	Majority of FYSC members agree that the briefing is useful; suggestions have made regarding improvements for the next year	

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Assessment										
1.01.1	PROJECT Assessment of FYSC Individual Project Impact										
1.01.2	LEADER Tim Schroeder										
1.01.3	CONNECTIONS All projects										
	GOAL Determine the extent to which individual FYSC projects are improving academic achievement for first-year students										
	GOAL Determine the extent to which individual FYSC projects are improving academic achievement for traditionally underrepresented first-year students.										
	GOAL Determine the extent to which individual FYSC projects are improving academic achievement for high-performing first-year students.										
	GOAL Where possible and supported by UNM data, provide FYSC individual projects with suggestions to improve achievement for first-year students (including subpopulations)										
	GOAL										
	GOAL										
	GOAL										
	TACTIC 1 Work with each project team to identify appropriate data-driven assessment measures that will accurately show the impact of their project; work with each project team to identify the student subpopulations targeted by their project	Deadline (MM/YY)		10/14	Status	At Risk	Completion Measure(s)	Data-driven assessment measures and subpopulations approved by each project team and FYSC	Assessment Measure (s)	The majority of each project team agrees that assessment measures are accurate, crucial and align with UNM and FYSC strategic plans	
		TACTIC 2 Collect student participation data from each project team		Deadline (MM/YY)	10/14	Status	At Risk	Completion Measure(s)	Data collected on a secure server	Assessment Measure (s)	Data is used by analysis team to analyze results
	TACTIC 3 Correlate student participation in each project to the project's data-driven assessment measures (disaggregated by student subpopulation)	Deadline (MM/YY)		12/14	Status	At Risk	Completion Measure(s)	Correlation tables complete	Assessment Measure (s)	Peer review team approves process	
	TACTIC 4 Provide FYSC and each project team with an annual Briefing document that shows progress towards assessment measures	Deadline (MM/YY)		2/15	Status	At Risk	Completion Measure(s)	Briefing is accepted by FYSC and each project team	Assessment Measure (s)	Majority of project team and FYSC members agree that the briefing is useful; suggestions have made regarding improvements for the next year	

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Assessment									
1.01.1	PROJECT	Assessment of High Impact Practices								
1.01.2	LEADER	Tim Schroeder								
1.01.3	CONNECTIONS	All projects								
	GOAL	Provide UNM leaders with the information needed to identify which high impact practices most need to be scaled up or receive additional investment								
	GOAL	Provide UNM leaders with the information needed to identify gaps in high impact practices								
	GOAL	Help students select the high impact practices that are most likely to contribute to their academic success								
	GOAL									
	GOAL									
	GOAL									
	TACTIC 1	Identify the impact practices on campus and their participation data collection methods	Deadline (MM/YY)	8/14	Status	On Target	Completion Measure(s)	Inventory complete and approved by FYSC	Assessment Measure (s)	FYSC and FYSC Data Subcommittee agree that Inventory is accurate
	TACTIC 2	Establish a set of intermediate student achievement outcomes (i.e., semester GPA) and long-term outcomes (i.e., time to graduation) that reflect the ultimate goals of FYSC; Correlate short-term outcomes to long-term outcomes	Deadline (MM/YY)	12/14	Status	On Target	Completion Measure(s)	Outcomes approved by FYSC and the Provost Office	Assessment Measure (s)	Intermediate outcomes correlate to long-term measures
	TACTIC 3	Collect student participation data from HIP-sponsoring organizations	Deadline (MM/YY)	12/14	Status	On Target	Completion Measure(s)	Data collected and vetted by FYSC	Assessment Measure (s)	Data is used by analysis team to analyze results
	TACTIC 4	Analyze data from HIP-sponsoring organizations in relation to student outcome measures, inclusive of student sub-populations; Develop predictive models	Deadline (MM/YY)	4/15	Status	On Target	Completion Measure(s)	Analysis vetted by FYSC	Assessment Measure (s)	Peer review team approves process and certifies results
	TACTIC 5	Share findings with FYSC, HIP-sponsoring programs, faculty and other stakeholders, inclusive of a public dashboard	Deadline (MM/YY)	6/15	Status	On Target	Completion Measure(s)	Annual report completed and submitted to FYSC. Website available to the public.	Assessment Measure (s)	>75% of UNM leaders surveyed find the report and/or website to be helpful in making decisions

Completed

On Target

At Risk

FYSC PROJECT ASSESSMENT SUMMARY

THEME CATEGORY	Curriculum			
1.01.1 1.01.2 1.01.3	PROJECT	SLOs for the First Year		
	LEADER	Kate Krause and Sonia Rankin		
	CONNECTIONS	FLC Offerings; UNIV Offerings; NSO; Quality Teachers in First Year Class		
	GOAL	Develop Student Learning Outcomes to be adopted in all FLC and UNIV		
	GOAL	Develop an Assessment Plan for SLOs in FLCs, UNIV courses		
	GOAL	Report regularly outcomes of SLO Assessment to larger community and		
	GOAL			
	TACTIC 1	Adopt SLOs for all FLCs and UNIV courses	Deadline (MM/YY)	08/14
	TACTIC 2	Develop instruments to measure progress on SLOs	Deadline (MM/YY)	12/14
	TACTIC 3	Conduct SGIDs in all FLCs and UNIV courses	Deadline (MM/YY)	ongoing
	TACTIC 4	Develop Assessment Plan and report outcomes of assessment practices	Deadline (MM/YY)	12/15

es; Center for Teaching Excellence; Assessment
' courses
l to instructors

Status	on target	Completion Measure(s)	adoption and inclusion in all syllabi	Assessment Measure (s)	Assessment instruments used during semester.
Status	On Target	Completion Measure(s)	Instruments distributed to all instructors	Assessment Measure (s)	Assess SLOs using AAC&U Rubrics; track outcomes for students.
Status	On Target	Completion Measure(s)	SGID reports on file for all offered courses.	Assessment Measure (s)	Feedback from SGIDs provided to faculty and improvement over time.
Status	On Target	Completion Measure(s)	Assessment data is collected and preferably entered into TK20 or other reporting mechanism.	Assessment Measure (s)	Data reveal improvement in student achievement of SLOs.

FYSC

9-5-2014

Attendance: Greg Heileman, Kate Krause, Tim Schroeder, Tim Gutierrez, Terry Babbitt, Joe Suilmann, Sonia Rankin, Terry Turner, Tomas Aguirre, Diane Marshall, Vanessa Harris,

Open – 10:03 am

1. Data & Assessment Subcommittee and STEM Gateway Grant – Tim Schroeder

Data & Assessment – Connect HIPs to Student Success at UNM, correlate HIPs to graduation rates, through KPIs, which are those short-term measures that correlate highly with graduation.

The committee also worked on identifying which kinds of HIP practices each program provides, and where they keep their data. They are beginning with a spreadsheet, and can eventually dump that into the datamart.

Heather and OIA has already started working on the KPIs. Tim and the Data & Assessment committee is working on collecting data, from SAS Office, Student Activities, STEM Gateway data, UC data, Student Services (along with Renee's data committee: Impact Outlook Group).

Looking into a professional intern or GA to do the harassing for the data collection. The anticipated date to get that data collected is December.

Some data is already available, advising and student employment.

Goals: get the data by December, the outcomes prioritized, and then hand it over to OIA by the Spring.

Terry Turner – No one from OIA was involved in the collection of data on HIPs (point is disputed, collection is being collected now)

Tim – You, Terry Turner, are on the distribution list for this committee, so someone else could have been appointed.

Greg – let's take this conversation offline.

This report to the HLC is due in 2 years, so let's keep that on the radar.

Tim S. – Collective Impact Group, looking at student participation in student services programs. The only difference is that the Impact group looked at participation and individual success, and the FYSC model adds in the HIPs component.

Kate – The non-course-connected practices aren't easy to find in Banner.

2. STEM Gateway Grant –
(see presentation)

DataMart Programmer for STEM Datamart Tools – We will be hiring a datamart programmer.

State of STEM report, planning to deliver the annual report around end of summer or early fall, or April/May for the budget process.

Greg – Some of the Math Boost and other programs can be put online for the summer, to help students still take advantage of these opportunities even if they have to go home during summer.

Is FYSC OK with this STEM stuff being a FYSC project? The answer seems to be a “Yes.”

STEM Graduate – Providing Jen with a .5 GA, working with students who have stopped out to get them back in, and to make sure students are making progress toward degree.

3. SAS Collaboration – Tim G.

Student Academic Support Structure – This will take more time because of all of the moving pieces. What we need to do is to create a small committee review, and make recommendations. Also, being consistent with measurement among all programs, most of which are under Academic Affairs, Student Services, Enrollment Management, and University College.

A small committee with Tim G., Greg, Terry B., and Sonia.

Connecting kids to majors sooner: “they’re in a major until they’re out.” (Betty Capaldi Phillips).

Agenda for 9/19/2014: Tracker Rollcall, including faculty, evidence reminder, Gardner Report Phase III, Road Show updates, Faculty Support, Communication Subcommittee, and Tomas and Jenna Crab.

Heather and Renee to present on Evaluation on Effectiveness of some student services programs (for meeting on 10/7/14, along with NSO on evaluation.

CHRISTOPHER C. GUIDER

3509 Inca St. NE
Albuquerque, NM 87111
505-263-2535
christopherguider@gmail.com

EDUCATION

Ph.D. in English and Comparative Literature, University of Sussex, UK, 2006
Fulbright Research Award, Freie Universität Berlin, 2001-2002
M.Phil. in European Literature, Uni. of Cambridge (King's College), UK, 2001
B.A. in English Literature and Plan-II Honors, German minor, Uni. of Texas at Austin,
High Honors (3.91 GPA), 2000

DOCTORAL DISSERTATION

"Autobiogeography and the Art of Peripatetic Memorialization in Works by W. G. Sebald, Iain Sinclair, Patrick Modiano, William Least Heat-Moon and Jonathan Raban"

AREAS OF SPECIALIZATION

Twentieth-century and contemporary Anglo-American literature
Autobiography and theories of life-writing, memory and the self
Literary memoir and the diasporic experience
Ecocriticism
The Holocaust and cultural memory
Travel writing
Literature and photography

TEACHING EXPERIENCE

"Associate Teacher" accreditation through the Staff and Educational Development Association (SEDA), 2004, University of Sussex (UK)

This qualification required completion of an eight-session training program and the submission of a substantial portfolio in which I reflected at length on my teaching experience and demonstrated a commitment to a wide range of pedagogical principles.

An Introduction to the Humanities, The Open University, 2005-2007 (taught twice)
Interdisciplinary course covering a diverse range of time periods and subjects; with the exception of two tutorials, delivered entirely through Internet-based discussions and exercises using various e-learning software and techniques
Supervision of a 20,000-word master's dissertation on memory, architecture, and twentieth-century fiction, Uni. of Sussex, 2006
Holocaust Representation and Cultural Memory (junior level), Uni. of Sussex, 2006
Examination of the various ways in which the experience of the Holocaust has been transmitted through a diverse array of media and representational modes; strong emphasis on literary representations

- Modernism and the Cinematic City (master's seminar), Uni. of Sussex, 2006
Consideration of selected filmic and literary representations of the Modernist and Postmodernist city
- Modernism in the Arts (senior seminar), Uni. of Sussex, 2003-2005 (taught twice)
Exploration of manifestations of key Modernist themes and preoccupations in literary texts and other works of art

All of the above courses included significant components devoted to compositional instruction.

PUBLICATIONS

Book chapters

“Memorial Sites/Sights: Sebald, Photography, and the Art of Autobiogeography,” in Lise Patt (ed.), *Searching for Sebald: W. G. Sebald and the Photographic Image*. Los Angeles: ICI Press, 2007

Journal articles

“The ‘Sixth Emigrant’: Travelling Places in the Works of W. G. Sebald,” *Contemporary Literature*, Fall 2005, Vol. 46, No. 3

“Iain Sinclair’s *Rodinsky’s Room* and the Art of Autobiogeography,” in *Literary London: Interdisciplinary Studies in the Representation of London*, <<http://www.literarylondon.org/london-journal/index.html>>, Vol. 3, No. 2, (Special Issue on Iain Sinclair edited by Jenny Bavige), Autumn 2005

“Deep Maps”: William Least Heat-Moon’s Psychogeographic Cartography,” in *E-Sharp* (a peer-reviewed, online journal), <http://www.sharp.arts.gla.ac.uk>, Issue 4, ‘Journeys of Discovery,’ 19 May 2005

Reviews

“Adam Z. Newton’s *The Elsewhere: On Belonging at a Near Distance*,” *Journal of Modern Jewish Studies*, vol. 5, issue 3, 2006

“Mark R. McCulloh’s *Understanding W. G. Sebald*,” *Textual Practice*, 18.1 (Spring 2004), pp. 121-6

Selected entries in Peter Boxall (ed.), *1001 Books You Must Read Before You Die*. London: Cassell Illustrated, 2006

Recent

“Be a Crossroads: Digital projects bridge geographies, cultures and media”, *Alibi*, vol. 23, no. 23, June 5-11, 2014, <http://alibi.com/art/47068/Be-a-Crossroads.html>

“Sometimes Poison is the Only Cure: *Gibraltar* stages edgy relationship at the heart of Joyce’s *Ulysses*”, *Alibi*, vol. 23, no. 15, April 10-16, 2014, <http://alibi.com/art/46741/Sometimes-Poison-Is-the-Only-Cure.html>

“A Terrible State of Chaos: Laughter lands amidst tragedy at the Southwest Irish Theater Festival”, *Alibi*, vol. 23, no. 12, March 20-26, 2014, <http://alibi.com/art/46518/A-Terrible-State-of-Chaos.html>

“The Art of Losing” (review of Julian Barnes’ memoir, *Levels of Life*), *Alibi*, vol. 23, no. 2, January 9-15, 2014, http://alibi.com/art/46164/Levels-of-Life.html?utm_source=at_alibi_sections_art&utm_campaign=Alibi+Newsletter+RSS+links&utm_medium=email

"Embracing the Decisive Moment: David Muench's *National Parks*", *Alibi*, vo. 22, no. 46, November 14-20, 2013, <http://alibi.com/art/45772/David-Muench-s-National-Parks.html>

SCHOLARLY PRESENTATIONS

- "Unanchored Geographies: The Displacement of Place in the Works of W. G. Sebald,"
MLA (Modern Languages Association) convention in Philadelphia, Dec. 2006
- "Memorial Interventions into the Audio-Visual Archive: W. G. Sebald, Dariusz Jabłonski, Shimon Attie, and Susan Hiller," conference on "The Afterlife of Memory: Memoria/Historia/Amnesia," Uni. of Leeds, July 2006
- "The Architectural Afterlife of Trauma in the Works of W. G. Sebald and Iain Sinclair," conference on "The Future of Memory," Uni. of Manchester, Nov. 2005
- "Deep Maps": William Least Heat-Moon's Psychogeographic Cartography," conference on "The Culture of Travel," Uni. of Glasgow, Oct. 2004
- "The Fictionalization of Fact as a Post-Holocaust Aesthetic in the Works of W. G. Sebald," conference on "Autobiografictions," Goldsmiths College, Sept. 2003
- "Memory, Ethics, and Peripateia in the Works of W. G. Sebald," workshop/conference on the Kindertransport, Center for German-Jewish Studies (Uni. of Sussex), June 2003

GUEST PRESENTATIONS

- "Claustrophobia and Confinement in Jean Rhys's *Wide Sargasso Sea*," Open University Lecture Forum (UK), March 2006
- "Memorial Sites/Sights: W. G. Sebald, Photography, and Autobiogeography," colloquium on "Memory and Displacement: W. G. Sebald," Wiener Library (London), June 2005

WORK EXPERIENCE

- GfK, Jan. 2008-present
Marketing Manager
Copywriting and translation for global market research company; promotion of products and services through full range of marketing collateral; organization and delivery of webinars on the business applications of GIS technologies; composition of articles for trade journals on the use of geodata and maps as a business planning tool
- Miami Dade College, May 2014-present
Freelance writer for Marketing and Publications Department
- Miami Dade College, Feb. 2007-Jan. 2008
Copywriter in Marketing and Publications Department
Composition of articles promoting the College's mission in various publications; interviewing of students, staff and faculty; shaping of College's brand and editorial mission through contributions to College magazine and other publications
- Open University (UK), Sept. 2005-Dec. 2007
Associate lecturer

Teaching of interdisciplinary courses that introduced students to a broad range of media and genres; both face-to-face and online instruction
University of Sussex (UK), Sept. 2003-Dec. 2006
Associate lecturer
Teaching of upper-division and master's level courses on twentieth-century and contemporary culture
Cambridge University Press, Sept. 2003-April 2004
Freelance editorial assistant

VOLUNTEER WORK

Ambercare, hospice volunteer, April 2013-present
Big Brothers Big Sisters, June 2009-Dec. 2012
Rethink, hotline providing mental-health support, 2004-2005

LANGUAGES

Fluency in German, reading ability in French

REFERENCES

academic references

Prof. Laura Marcus (dissertation supervisor), Goldsmiths' Professor of English Literature, Dept. of English Literature, New College, Uni. of Oxford, Oxford OX1 3BN, UK, laura.marcus@ell.ox.ac.uk, +44 1865 271233
Prof. Douglas Biow (academic mentor), Superior Oil Company-Linward Shivers Centennial Professor in Medieval and Renaissance Studies, Dept. of French and Italian, Uni. of Texas at Austin, 201 W 21St Street, B7600, HRH 2.114A, Austin, TX 78712, biow@austin.utexas.edu, 512-471-7267
Prof. Adam Z. Newton (academic mentor), Ronald P. Stanton Chair in Literature and Humanities, Dept. of English, Yeshiva Uni., 500 West 185th Street, New York, NY 10033, aznewton@yu.edu, 212-960-5400, ext. 6876

other job references (Miami Dade College)

Irene Muñoz, Marketing Director, Marketing and Publications, Suite 1358, Miami Dade College, 300 NE Second Ave., Miami, FL 33132, imunoz@mdc.edu, T 305-237-3030
Gariot Louima (supervisor), Director of Admissions, Goddard College, 123 Pitkin Road Plainfield, Vermont 05667, gariot.louima@goddard.edu, T 802-322-1676

character references

Megan Robert, We Honor Veterans Coordinator and Community Liaison, Ambercare 2129 Osuna NE, Albuquerque, NM 87113, mrobert@ambercare.com, T 505-244-0046, M 505-331-2524
Kristen Erickson, Support and Retention Manager, Big Brothers Big Sisters of Central New Mexico, 2500 Louisiana NE, Suite 200, Albuquerque, NM 87110, T 505-837-9223 ext. 44, M 505-550-3149



Temporary Part-Time Faculty Letter of Understanding

Date: July 23, 2014

Name: Guider, Christopher

College/School: UNM-Valencia Campus

Faculty Title: Adjunct Lecturer

Department: English

Banner ID: _____

Org Code: AGD

This letter will confirm our understanding regarding your conditional appointment as a temporary part-time (TPT) faculty member of the University of New Mexico.

By signing below you understand and accept that cancellation of classes due to under enrollments, significant mid-year budget rescissions (as determined by UNM administration) or other necessary changes in the work schedule of the department, may result in revision or cancellation of this agreement. Minimum undergraduate enrollments are 13 per class and minimum graduate enrollments are 6 per class. Faculty appointments are governed by applicable policies stated in the *Faculty Handbook*, as amended from time to time, published and distributed by the University, and available at <http://handbook.unm.edu/>. Please check with your department, college, or branch campuses for specific policies they may have regarding minimum enrollments and/or class cancellations related to online, EU, or other specialized courses.

Description of duties/additional information regarding appointment:

Fall 2014 Semester:

Instructor of Record

Pay Level: PhD

You have agreed to the following appointment(s) for the salary listed below:

Subject/Course/Section OR Preceptor/Proctor	Credit Hours OR Total Hours	Appt %	Start Date	End Date	Salary	Index-Account Code
51180 ENGL 110-505 (3 cr hrs) Accelerated Composition	03	.20	08/18/14	12/13/14	\$2,460.00	220000-2007

This appointment carries no other monetary benefits and does not alter positively or negatively, your chances of receiving future appointments as a temporary faculty member.

Please sign the original and return it to Department of UNM-VC Academic Office no later than ASAP.

I accept the appointment described above:

Department Chair/Director/Dean

7/23/14

Date

TPT Faculty Member

07/23/2014

Date

Department Contact: Margaret Anaya, Unit Administrator Telephone # (505) 925-8602 Email: muriaga@unm.edu

New Hire

Rehire UNMJobs Posting # or EPAF Transaction #: _____ Position #: _____

Curriculum Vitae

Timothy L. Howard
thowardz@unm.edu
tim@eosess.com

505-821-0656 (home) 714-883-3821 (mobile)
505-510-0854 (office)
12004 Ranchitos Rd NE, Albuquerque, NM 87122

Current Positions:

- Adjunct Lecturer, Dept. of Physics and Astronomy, University of New Mexico
- Independent Consultant in Optical Instruments/Space Systems, EOSESS LLC

Expertise

- Electro-optical Systems/Instrument Design and Development (hardware & software); Optical design; Modeling and simulation; Systems Engineering; Space Systems

Career Highlights

- Optics/Sensors Lead for development of first Airborne laser Relay Mirror System (ARMS), delivered to Air Force Research Lab, Fall 2006
- Chief Engineer for Boeing Terrestrial Planet Finder Architecture Study team; identified use of apodized/shaped pupils for Exoplanet Coronography, 2000-2001
- Principal Investigator for NASA Institute for Advanced Concepts (NIAC) study of astronomical missions to Jovian Lagrange points, 1999-2000
- Spacecraft development: Attitude Determination and Control System, X-37B prototype (1997-98); Advanced Microwave Sounding Unit, DMSP Block 5-d2 (1988-89)
- Project Engineer for Laser Interferometer Gravitational Wave Observatory (LIGO), Phase II prototype (1991-93)
- Developed first dual-wavelength (Vis/IR) cryogenic BRDF scatterometer for space-based optical contamination and cleaning system (1987-89)

Professional Experience

- 2010 – current: CEO (Independent Consultant), EOSESS LLC, Albuquerque NM
- 2010 – current: Adjunct Lecturer, Dept. of Physics and Astronomy, U. New Mexico (Albuquerque)
- 1993 – 2010: Associate Technical Fellow, Electro-optics and Imaging, The Boeing Company, Seal Beach, California and Albuquerque, New Mexico (retired 2010)
- 1991 – 1993: Project Manager, LIGO Project, Dept. of Physics and Astronomy, California Institute of Technology, Pasadena, CA
- 1987 – 1991: Senior Technical Specialist, Optical Systems, Aerojet, Azusa, CA
- 1979 – 1987: Technical Specialist, Rockwell International, Anaheim, CA

Education

- M.S. in Physics, University of Memphis, August 1979
Thesis Title: Selective Absorption Properties of Diffusely Reflecting Lead Sulfide-Aluminum Films
- B.S. (Honors) in Physics, University of Memphis, December 1977

Certifications

- Certificate in Microcomputer Systems Engineering, U. California, Irvine, June 1983
- IEEE Computer Society *Certified Software Development Professional (CSDP)*, certificate # 6503, 2011 – current.

Additional Training and Professional Education

- AIAA Short Course, Design of Experiments, January 2008
- Graduate courses in Management of Technology, Globalization, and Microeconomics, Anderson Graduate School of Management, U. New Mexico, Spring 2007
- Graduate course in Advanced Astrophysics, U. New Mexico, Fall 2006
- Short Course, Nanoscience and Nanotechnology, Stanford University, May 2005
- Graduate course in Wireless Communications, U. California, Irvine, Fall 2003
- Graduate courses in Artificial Intelligence, Neural Networks, Fuzzy Logic, U. California, Irvine, 1985 – 88
- Graduate course in Astrodynamics, UCLA, 1986
- Undergraduate courses in Programming Languages, Data Structures, California State U., Fullerton, 1983 - 84

Teaching Experience

- Undergraduate Physics, Astrophysics, and Astronomy, U. of New Mexico, 2010-current (Introductory Astronomy and Physics courses for non-majors; undergraduate Astrophysics for Astronomy majors)
- Short Course, *Unmanned Sensor Networks and Applications*, Unmanned Systems Conference, RF Alliance, Indianapolis, IN, Sept. 2011
- Short Course, *Electro-optical Sensing Applications in Aerospace Systems*, University of Naples "Federico II", May 2011, School of Aerospace Engineering (European Union Guest Lecturer)
- Short Course, *Electro-optical Systems for Aerospace Sensing Applications*, AIAA Professional Development, 2009 – current (offered on demand)
- Short Course, *Acquisition, Tracking, and Pointing*, for the Directed Energy Professional Society, 2001, 2003, 2004; for SPIE, 2002, 2004; and for Boeing (various divisions) annually 2000 – 2009, via classroom, WebEx, and online
- Short Course, *Stabilization and Laser Pointing Systems*, for SPIE (onsite at Lockheed Martin, Palo Alto), Dec. 2002
- Short Courses, *Electro-optics and Computer Simulation*, Rockwell International, Professional Development program, 1984 – 1986
- Undergraduate courses in General Physics, Astronomy (with labs), 1977 – 1979, University of Memphis (Graduate Teaching Assistant)

Professional Memberships

- American Institute of Aeronautics and Astronautics; American Association for the Advancement of Science; American Physical Society; IEEE/IEEE Computer Society; SPIE

Professional Service

- Technical Program Chair, AIAA Infotech@Aerospace 2012, and Deputy Technical Program Chair, Infotech 2011. Topic Area Chair for: Aerospace Sciences Meeting, 2007-2008, Space conference 2009 – current
- Chair, AIAA Sensor Systems Technical Committee, 2008-2010, 2012- current. Member, 2001 – current. Lead author for several end-of-year "Review" articles in *Aerospace America*.
- Member, AIAA Space Systems Technical Committee, 2014 – current.
- Associate Editor, AIAA *Journal Of Computing, Information, and Communications* (JACIC), special issue on Sensor Technology, October 2008. Reviewer for JACIC and AIAA *Journal of Aerospace Information Systems* (JAIS).
- Chair, AIAA Orange County section, 1997-2000. Region VI Liaison, 2001. Director-at-

- Large and Evolution of Flight Officer (pre-college outreach), 2002 - 2004.
- AIAA Regional Leadership Conference instructor, 1999; Student Conference judge, 1998, 2005, 2007

Community Service

- Board of Directors, Rio Rancho (NM) Symphonic Band, 2006 – 2008. Development of band funding, grant applications, constitution and bylaws.

Honors and Awards

- AIAA Associate Fellow (1999), AIAA Superior Service Awards (1995, 1996) and Special Service Citation (2004)
- Boeing Technical Fellowship (2002). Boeing Special Achievement Award (1999), Pride@Boeing Awards 2002, 2005, 2006
- NASA Institute for Advanced Concepts Fellow (1999)
- Fellow, Institute for the Advancement of Engineering (Los Angeles, CA), 1996
- Nominated by students for UNM Excellence in Teaching Award, 2012, 2013

Patents

- U.S. Patent 5,430,543, "Ring Laser Gyroscope Detector Lens System", July 4, 1995
- U.S. Patent 5,359,414, "Ring Laser Gyroscope Detector Lens System with Radiation Photocurrent Compensation", Oct. 25, 1994 (with C. Kohlenberger)

Other qualifications

- Developed and led Boeing Mentor Circle group (One-to-many and peer-to-peer mentoring for junior to mid-level engineers), 2003 – 2008.
- Languages: German
- Programming & Web technologies: C/C++, UNIX, Python, HTML, JavaScript
- Tools: Matlab/Simulink; ZEMAX; MathCAD/Maple; STK; Telelogic Rhapsody/DOORS; MS Office
- Licensed Radio Amateur, Extra class, call: AD5VF

Bibliography

Timothy L. Howard, "A Framework for Data Skimming in UAS Sensor Net Imagery", AIAA paper no. 2012-2465, presented at *AIAA Infotech@Aerospace* Conference, Garden Grove, CA, June 2012.

Timothy L. Howard, "The Evolving Paradigm for Aerospace Sensor Networks", *AIAA Infotech@Aerospace 2011*, St. Louis, MO, April 2011.

Timothy L. Howard, "A Fractionated Spacecraft Sensing Mode for Surveillance and Remote Sensing", AIAA paper no. 2010-8924, presented at *AIAA Space 2010 Conference and Expositions*, Anaheim, CA, Aug. 2010.

Michael K. Martin, Phillip R. Cunningham, and Timothy L. Howard, "Relay Mirror Technology Application to Laser Orbital Debris Removal", presented at the *NASA/DARPA International Conference on Orbital Debris Removal*, Chantilly VA, 8-10 Dec 2009.

Timothy L. Howard and the AIAA Sensor Systems Technical Committee, "Sensor Systems Impacts to SATCOM", presentation to the *National Security Space Office Future Needs Workshop*, Jet Propulsion Laboratory, Pasadena, CA, 18 Sept. 2009.

AIAA Journal of Aerospace Computing, Information, and Communications, Topical Issue on "Sensor Applications in Aerospace Systems", Vol. 5, No. 10, October 2008 (Guest Editor).

Timothy L. Howard, "Airborne Relay Mirrors as Communication and Sensing Nodes in Networked Systems", AIAA paper no. 2005-7124, presented at *Infotech @ Aerospace Conference*, Crystal City, VA, 26-29 Sept. 2005.

Timothy L. Howard et. al., "New Space-based Interferometer Concepts for the Terrestrial Planet Finder Mission", *AIAA Southern California Aerospace Systems and Technology Conference*, 15 May 2004; available from the author.

Steve Ridgway and SVS-Boeing Study Team, "Terrestrial Planet Finder: Architectures and Search Strategy", *Bull. Am. Astro. Soc.*, 32, No 4 (AAS Winter meeting, San Diego, Jan. 2001).

Jerry Buckley and Timothy L. Howard, "Survey of Terrestrial Planet Finder Telescope Options", *American Astronautical Society* vol. 107, 497-514 (presented at AAS Rocky Mountain Guidance and Control Conference, 31 Jan- 4 Feb. 2001, Breckenridge, CO); also presented at International Space Development Conference, Albuquerque, NM, May 2001.

Timothy L. Howard, Lee M. Gutheinz, John Sanders-Reed, Carl Tuttle, William Witt, "Large-scale, Large-aperture Space Astronomy: Beyond the Next Generation", AIAA paper no. 2000-5299; presented at *AIAA Space 2000 Conference and Exposition*, 19-21 September, 2000, Long Beach, CA.

Timothy L. Howard (Principal Investigator) et. al., *Planetary-Scale Astronomical Bench Phase I Final Report*, NASA Institute for Advanced Concepts, 9 Jan 2000, available at www.niac.org, or directly from author.

Timothy L. Howard, "Cooperative Microsat Imaging Using Novel Image Overlay Concepts", AIAA paper no. 99-4659; presented at *AIAA 1999 Space Technology Conference and Exposition*, 28-30 September 1999, Albuquerque, NM.

T. L. Howard, P. M. George, and R. F. Fisher, "BRDF Measurements for Contamination Assessment in a Spacecraft Environment", *Proc. SPIE* 1329, 266 (1990).

R. F. Fisher, P. M. George, S. M. Flammang, and T. L. Howard, "Ion Beam Cleaning of Contaminated Optics", *Proc. SPIE* 1329, 86 (1990).

T. L. Howard, P. M. George, and R. F. Fisher, "Contamination, Scatter, and Cleaning of Spacecraft Optics: Ground-based Experiments", presented at *USAF Rome Air Development Center Large Optics Conference*, Rome, N.Y. Jun. 26, 1990.

T. L. Howard, P. M. George, S. Flammang, and D. Mossman, "Vacuum BRDF Measurements of Cryogenic Optical Surfaces", *Proc. SPIE* 1165, 350 (1989).

T. L. Howard, "Rotational Interferometry for High-resolution Angle Measurement", presented at *OSA Workshop on Optical Fabrication and Test*, Santa Clara, CA, Nov. 3, 1988.

R. R. Marchini and T. L. Howard, "Maxwell-Garnett Analysis of Thick PbS-Al Selective Absorbers", *Solar Energy* 40, 147 (1988).

T. L. Howard, "Optoelectronic Design Using Detector Signal Simulation", presented at *Optical Society of America Annual Meeting*, Rochester, N.Y., Oct. 22, 1987.