The McNair Journal is the official journal of the Ronald E. McNair Scholars Post Baccalaureate Achievement Program at the University of Nevada, Reno. The program is designed to provide research opportunities and other related academic experiences that promote the acquisition of the doctoral degree (Ph.D.) for first generation, low-income, and underrepresented college juniors and seniors. The McNair program is federally funded at $231,000 per year. The program was created by congress in an effort to increase the number of underrepresented persons pursuing teaching, research, and administrative careers in higher education.

Acknowledgments
A very special thank you to the University of Nevada, Reno Graduate School for their generous and invaluable support of the McNair Scholars Program! We are also thankful for faculty and administrators on the UNR campus who support this program. Faculty mentors fill the most important role in guiding scholars to success.
Foreword:

It is my great pleasure to introduce the fifth edition of the University of Nevada, Reno McNair Scholars Journal. Our program is named for astronaut and Challenger crew member Ronald E. McNair who exemplifies the potential of underrepresented students to reach the highest rungs on the ladder of academic achievement. The purpose of our McNair program is to assist undergraduate students from backgrounds that are traditionally underrepresented in graduate school to prepare for the pursuit of a doctoral degree. The foundation of the program is based on the services provided by our academic mentors who guide scholars through the development, execution, and presentation of a substantive research project. The research papers published in this edition of the McNair Scholars Journal are the product of the strong collaborative relationships between our scholars and their academic mentors. Our McNair Scholars are preparing to become part of a highly educated generation that will contribute to a prosperous future for our country; they will also serve as role models and mentors for those who follow in their footsteps. I would like to acknowledge the scholars whose papers were selected for publication and offer my most sincere thanks to our academic faculty who have given so generously of their time and talent to mentor our scholars. I am happy to report that our program was selected for an additional five year funding cycle beginning in October of 2012. Congratulations to all who have contributed to the success of our scholars and our program!

Rita Escher, Director
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The Full Version of the Research Journal Can be Found on CD at the Back of This Publication and at:

http://www.unr.edu/mcnair/mcnair-publications
**Background:**
The purpose of the Ronald E. McNair Post-Baccalaureate Program is to encourage undergraduates from backgrounds that have been historically underrepresented in university faculty and research professions to pursue doctoral degrees. The federally funded program is in its eighth year at the University of Nevada, Reno. Dr. Ronald McNair, whose journey to become an astronaut inspires all who seek to achieve ambitious dreams, is a fitting namesake for the program. Although Dr. McNair died in the explosion of the Challenger space craft, his strong message of self-determination still resonates with those who strive for excellence:

"Whether or not you reach your goals in life depends entirely on how well you prepare for them and how badly you want them."

- Ronald E. McNair, Ph.D.

**Program Overview:**
The foundation of the McNair Scholars Program is the summer research institute. For seven weeks, scholars engage in research projects closely guided by academic faculty mentors. For many students, the summer institute provides their first experience conducting original research and their first opportunity to work closely with a faculty mentor. The relationship forged between scholar and mentor can be the most significant academic connection that a scholar makes at the university.

In addition to conducting research, scholars also take part in GRE preparation workshops during the summer institute. During the academic year, scholars participate in McNair seminars that assist them to complete competitive graduate school applications and provide information related to financing graduate education. Scholars attend national McNair conferences where they present their research and connect with other scholars and faculty from across the country.

In addition to receiving a $2,800 research stipend during the summer institute, scholars also benefit from waived application fees at many graduate schools. GRE fee waivers are also available to McNair Scholars. The greatest benefits, though, are not financial. The McNair program enables scholars to form lasting bonds with fellow scholars and with academic mentors. These relationships allow scholars to see themselves in roles they might not otherwise have considered possible such as professors, researchers, and administrators in institutions of higher education.

**Eligibility:**
Students are eligible for the McNair program if they have completed at least 30 credits, but not more than 92 credits and have a cumulative grade point average of at least 2.9. Students must also meet the federal criteria for selection: neither parent has a bachelor’s degree and the student demonstrates financial need OR the student is a member of a group that is traditionally underrepresented in graduate school: African American, Native American, Hawaiian / Pacific Islander, or Hispanic/Latino. Students must be U.S. citizens or eligible non-citizens (eligible for U.S. federal aid).

**Application Process:**
Applications are available on the McNair web site: www.unr.edu/mcnair or from the TRiO Office located in Suite 200 of the Thompson Building.
McNair Scholars Abstracts

2011-2012
Benjamin Del Rosario

Mentor: Dr. Kam K. Leang

Major: Mechanical Engineering


Benjamin Del Rosario was born in Monterey Park, CA. His parents moved the family to Las Vegas, NV where Benjamin graduated from the Clark High School Academy of Mathematics, Science, and Applied Technology in 2008. Benjamin entered the University of Nevada, Reno in the fall of 2008 majoring in mechanical engineering with a minor in mathematics. Benjamin compiled an impressive academic record at UNR, becoming a Presidential Scholarship recipient starting his freshman year and achieving academic Dean’s List distinction in the UNR College of Engineering in seven of his eight semesters. In 2011, Benjamin was accepted into the McNair Scholars Program and presented his research titled Design and Characterization of a Three Degrees of Freedom Micro/Nano Positioning Platform at the regional McNair Scholars Research Conference in Berkeley, CA. He completed his research in February 2012 for publication in the 2011-2012 edition of the UNR McNair Scholars Research Journal. Benjamin graduated in corsu honorum magna cum laude in Spring 2012 after completing his honors capstone team project GreenGlove: A Solar Powered Heated Glove for Maintaining Comfortable Temperatures. Benjamin has been accepted into the mechanical engineering Ph.D. program at the University of California, Santa Barbara and will begin work on his doctorate starting September 2012.

ABSTRACT

The purpose of this research is to design, fabricate, and characterize a three degree of freedom piezoactuator-based micro/nano positioning platform. Such a platform can be used to position tools and probes relative to a sample for application in micro and nano technology. The platform itself consists of three piezoelectric actuators, each mounted to a flexure-based cantilever beam that serves as a displacement amplifier. Motion for the positioning platform is achieved through “stick-slip” actuation. The design of the positioning platform is described in detail and a prototype is fabricated from aluminum alloy using the wire electric discharge machining process. Several waveforms of different shapes and frequencies were applied to a single piezoelectric actuator to characterize the dynamic response of the cantilever beam and to determine whether the input was sufficient to initiate “stick-slip” motion. Frequency response graphs were obtained for the platform to characterize the mechanical dynamics. Based on the preliminary experiments, it was determined that slip-stick motion was possible for moving the platform, thus demonstrating proof of concept of the positioning platform.
Jennifer Halen

**Mentors:** Dr. Stacy Gordon Fisher and Dr. Robert Ostergard

**Major:** Political Science

**Research Topic:** Gender Quota Systems in Western Europe: A Comparative Analysis

Jennifer Halen was an outstanding political science major at the University of Nevada, Reno. She contributed to several important research projects including presenting her findings at the Midwestern Political Science Association Conference in Chicago, IL. This work on lobbying activity in the California state legislature, a paper she co-authored with Ryan Halen and Dr. Stacy Gordon-Fisher, received ample attention at the conference. Jennifer also presented her paper “Gender Quota Systems in Western Europe: A Comparative Analysis” at the McNair Research Symposium in Berkeley, CA during the summer of 2011. She was fortunate enough to be awarded a scholarship from the Nevada Women's Fund in order to complete her academics and research projects. Jennifer would like to thank Dr. Stacy Gordon-Fisher and Dr. Robert Ostergard for all of their support, guidance, and help during her time at the University of Nevada, Reno. She is very grateful. Recently, Jennifer, along with her husband, was accepted into a PhD program at the University of Minnesota - Twin Cities. She will be moving to Minneapolis with her husband and little sister in August of 2012 to enroll in the Political Science Ph.D. program at the University of Minnesota in fall 2012.

**ABSTRACT**

The encouragement offered during the 1995 United Nations Fourth World Conference on Women led to a major shift in the conversation regarding women’s representation, as well as the practice of making government institutions more open and equal. One of the primary ways that governments have attempted to increase women’s representation is through quota systems. In Western European states, quotas have been instituted in two forms, legislative and voluntary. In this paper, I study whether the type of system chosen affects the rate of change of female representation in these countries. I compare representation of women in national legislatures in elections nearest the UN Fourth Conference in 1995 with the level of representation in the most recent election. I find that countries that employ voluntary quota systems have not had a significantly higher percentage increase in comparison to non Quota using countries. However, countries that employ a legislative system, in tandem or without separate voluntary systems, have had a significantly higher positive percent change since 1995.
Ryan Halen

Mentors: Dr. Stacy Gordon Fisher
Major: Political Science

Research Topic: Linking Economic and Electoral Inequality: Redistribution and its Effect on Voter Turnout

Ryan was born on the outskirts of Chicago, and while he’s moved around a bit, he’s spent most of his life in rural Nevada. While in high school, Ryan participated in Upward Bound, a sister program of McNair Scholars, which helps high school students prepare for and enter into college. Since attending the University of Nevada, Reno, Ryan has been on the dean's list for two colleges throughout his academic career. He presented co-authored research at the 2011 Midwestern Political Science Association Conference in Chicago and original research at the 2011 McNair Symposium at Berkeley, CA. Starting in fall of 2012, Ryan will be studying comparative politics and welfare states at the University of Minnesota where he has been accepted into the political science PhD program.

ABSTRACT

On the national level, economic inequality has been consistently related to electoral inequality. Electoral inequality, the difference in election turnout amongst different groups in society, has been steadily on the rise in most democratic nations. This disparity in voter turnout has tended to be class based: having a stronger effect on lower wage earners than higher wage earners. Such a trend in voter turnout has negative implications for representation and policy outcomes for the least advantaged citizens in a democracy. The complicated nature of voter turnout, however, has made a parsimonious explanation of the relationship between voter turnout and income inequality difficult to establish. In this paper, I seek to explore whether redistributive policy can serve as a mediating link between voter turnout and income inequality. I test for the relationship between redistributive policy and economic and electoral inequality by examining turnout levels and GINI Index coefficients for 21 industrial democracies from 1994-2005 and comparing them to levels of social transfer payments made during the election years in those countries. I find that income inequality levels correlate negatively with social spending levels while voter turnout correlates positively with social spending levels.
ABSTRACT

Current advancements in the fields of nanotechnology and biophysics have led to the development of a number of experimental techniques for the measurement and characterization of the mechanical properties of micro bio-entities, such as cells and embryos. These techniques have become necessary in better understanding the processes and interactions of bio-entities occurring at the micro/nano level. In this project, the development of an integrated micro force sensing system is addressed that consists of a commercially available micro force sensor (model AE-800) and its signal conditioning circuit. The system can be used to measure bio interaction forces and quantitatively characterize the mechanical properties of micro bio-entities. Potential biomedical applications of this sensing system include force guided embryo and cell injection, investigation into mechanosensing and mechanochemical transduction, and force feedback enhanced telesurgery. The sensing system is also suitable for micro assembly and various other micromanipulation tasks requiring real time force feedback.
Kety Luna was born in Peru and moved to the United States when she was a teenager. She graduated from Smith Valley High School where she proudly represented her high school, for four years, on the track and field varsity team. As an undergraduate, she attended Truckee Meadows Community College and the University of Nevada, Reno. In 2009, she was part of the Student Ambassadors Club where she gave two hour weekly tours to prospective students. In 2011, she became a member of Toastmasters International. That same year, she was invited to participate in the Ronald E. McNair Post-Baccalaureate Achievement Program. There she was able to present a research project at the 2011 McNair Research Symposium in Berkeley, California. She completed her bachelor’s degree in secondary education in May, 2012. Kety will start her graduate studies in Educational Leadership at the University of Nevada, Reno in the fall of 2012.

ABSTRACT

The Latino population in the United States has increased significantly during the last two decades. Many Latino students have not pursued higher education because of factors including accessibility, tuition cost, degree of intention, lack of information, part time enrollment, and wrong perception about four year institutions. More than half of Latino students start their education in a community college; yet (less than a quarter) end up completing their major or transferring to the university (Suarez 2003, Crisp & Nora, 2010, Kurlaender, 2006 ). Therefore, the purpose of this study was to learn about the college experiences of Latino students and to explore potential barriers the Latino students face in transferring from a community college to a university. This study utilized a qualitative research method. Thus, an in-depth retrospective interview of 12 Latino/a transfer students at the University of Nevada, Reno was utilized to gather insight about their experiences. The interviews were analyzed for patterns that emerged regarding students’ educational goals and experiences while transferring to the university. Latino parents and students potentially could learn from transfer students who have been successful. This information will also assist community college and university personnel understand Latino students’ experiences before and after transferring to a university.
Rogina Mojumder

Mentors: Dr. Ronald Pardini

Major: Biochemistry, Molecular Biology, and Neuroscience

Research Topic: The Effect of Eicosapentaenoic Acid on A549 and BT474 Cell Lines

Rogina Mojumder is originally from Bangladesh. She came to the United States with her family when she was young and earnestly set out to get the best grades and the best education America had to offer. She distinguished herself as an accomplished student in the sciences at the University of Nevada, Reno where her love of the sciences became clear in her decision to triple major in biochemistry, molecular biology, and neuroscience. Rogina was a devoted student who took her time in the lab very seriously. However, she also dabbled in poetry and has had her verses published. Rogina was a lab assistant for Microbiology 251 and a discussion leader for Biology 190. At UNR, Rogina was in the honors program as well as a member of Women in Dialogue, the Muslim Student Association, and Nevadans into Medicine. At the moment, Rogina is preparing to take the MCAT in the summer of 2012 and apply to medical school programs for fall 2013.

ABSTRACT

Cancer is the second leading cause of death in the United States. Researchers have found that docosahexaenoic acid and eicosapentaenoic acid can inhibit the progression of tumors in various organs especially the breast and prostate. In this study, we particularly focus on eicosapentaenoic acid’s (EPA) effect on A549, adenocarcinoma cell line, and BT-474, a breast cancer cell line, and compare its effect to the effect of docosahexaenoic acid (DHA) and linoleic acid (LA)—a main component of the western diet. We have found cell proliferation decreases when treated with EPA and DHA. The results showed DHA had the highest level of lipid peroxidation compared with EPA and LA even though the total oxidative stress was highest for LA. After that, we measured the prostaglandin E2 (PGE2) and thromboxane B2 (TXB2) levels in response to EPA since it has been reported that EPA has a higher level of eicosanoid levels than DHA. We found that EPA does have higher levels of both PGE2 and TXB2 than DHA but LA had the highest production of PGE2 and lowest production of TXB2. Some future goals are to research what other components contribute to oxidative stress and why LA has low production of TXB2.
Alexandra Pearce

**Mentor:** Dr. Thomas Bell

**Major:** Mathematics and Professional Chemistry

**Research Topic:** Synthesis of Macrocyclic Polyamines and Their Metal Complexes Targeting HIV-1

Alexandra grew up in Fallon Nevada with her parents and two younger sisters. She was an exemplary student at the University of Nevada, Reno becoming both a Presidential Scholar and a member of the Honors Program. Among her other noteworthy honors, Alex was inducted into the Phi Kappa Phi Honor Society and she made the Dean’s List nearly every semester of her undergraduate career. She worked in Dr. Thomas Bell’s research lab for two years, studying the synthesis of macrocyclic polyamines and metal complexes thought to target HIV-1. She presented this research at the McNair Symposium at The University of California, Berkeley in the summer of 2011. Alex graduated magna cum laude with a dual degree in professional chemistry and discrete mathematics / operations research. Alex received a scholarship to attend the Academy of Art University in the fall of 2012. She will be working in the 3D animation program.

**ABSTRACT**

M40401 is a well-known antioxidant and as of late, it has been studied for anti-HIV properties. It was reported to reduce apoptosis of astrocytes caused by HIV-1 infected macrophages (M/M) supernatants, and in 2005, a poster presented at the International Conference for Antiviral Research claimed that HIV-1 replication was reduced in infected M/M when treated with M40401. Our goal is to synthesize M40403, a similar molecule, as well as other related molecules for further study. M40403 and previously synthesized related molecules have been shown to have anti-HIV properties. We will synthesize more related molecules in an attempt to maximize the ratio of potency to toxicity. Hopefully by tweaking the molecules, we will find one that can eventually be made into a drug to help the fight against HIV-1.
Iris Petty, throughout her undergraduate career at University of Nevada, Reno tried her best to marry the dual fields of literature and history. She succeeded in her research paper about the medieval monk Augustine and his rule for nuns. Iris came to love Augustine through Dr. Schoolman's Medieval History course and got to know him exceptionally well through the UNR Latinistas group. Iris adores traveling and hopes to spend her graduate and professional career studying German, French, and Latin, while travelling to archives and historical sites in Europe. She will be studying late antique/medieval history at Western Michigan University in the fall of 2012. She wants to extend a big shout out / thank you to her mentor, Dr. Edward Schoolman, (if there was a best mentor award, he should get it).

ABSTRACT

Late antiquity in the Roman Empire was characterized by burgeoning intellectual freedom and social reorganization. These phenomena were especially apparent with the advent of organized religious brotherhoods. Men who chose the ascetic lifestyle in the early fifth century CE had numerous resources available to them, as well as their own rules by which to live. But what of their holy sisters? Those women who wished to live a communal ascetic life relied on all-male rules such as that of Saint Basil to guide their conduct. It was not until 423 CE that Saint Augustine of Hippo penned the first widely utilized—and specifically female—Rule for Nuns. Augustine’s Rule reflects his unique views of women in late antiquity and provides a glimpse into gender equality within the early Christian church. Albeit the early church was reordering social conceptions, women still lacked status therein. Augustine himself was the exception among his contemporaries—and not the norm—when it came to early Christian notions of female sanctity. He not only admired nuns but believed they could achieve equality with monks by embracing the ascetic lifestyle. Furthermore, Saint Augustine utilized his own precedent for scriptural interpretation detailed in On Christian Doctrine to argue that a nun’s unique relationship with Jesus allowed her to be a spiritual mother to the community—setting her above and apart from her male counterparts. By examining the gender ideas and theological revolutions of Saint Augustine, a more balanced portrait of the early church begins to emerge, shedding light on the complex conceptions of both its institutions and founders.
Mikhail Serafico-Agcaoili was shaped by several forces during his time at the University of Nevada, Reno. First, he was greatly molded and supported by his parents. Through them, he realized that a fundamental aspect of who we are is believing in and persevering for those which we cherish the most. Aside from his parents, Mikhail’s brothers each imparted their own little lessons that were pivotal during his development. Lastly, there are the friends who he met along the way including those in the McNair program most definitely - individuals who have in their own way shaped the ideas which have become a life-long endeavor for him. For all those mentioned and many others, he would like to express gratitude which eludes the restriction of words. Mikhail presented his original research at the University of CA, Berkeley symposium in the summer of 2011. He also participated in a fundraising play by the Filipino Club (PUSO), and he was on the dean's list all throughout his stay at UNR. To write, teach, travel, and give back, these are the roots of his devotion.

ABSTRACT

We live in a globalized world of interconnected beings. In such a setting, the consequences of one’s individual actions and behaviors are no longer limited to a few people. The intricacy of modern human relations means that an individual’s impact on others is no longer limited to traditional conceptions based on proximity. So, to discover and understand how one affects another, regardless of how near or far, is slowly becoming a responsibility that needs to be addressed and upheld. This obligation holds especially in cases of global, modern-day issues like climate change and poverty. There are several avenues a person can pursue to fulfill this duty. One option is to examine the products one consumes and retrace their origins. On one hand, there is consumption in order to live and prosper. On the other is the possibility of overconsumption. The consequences of the latter are magnified by the fact that products are not mere objects. They are both materials taken from the earth and the labors of another person. Here lies the connection between individual consumption, climate change, and social injustice. The conditions in which products are manufactured could mean both irreparable damage to the environment and the exploitation of another person’s livelihood. Thus, the aim of this paper is to find examples of the interconnections between laborers, consumers, and the environment. From this first imperative of discovering responsibility comes the development of possible solutions.
Megan was born in Omaha, Nebraska but moved to Las Vegas, Nevada in 2004 and so attended high school there. While attending the University of Nevada, Reno Megan excelled at academics earning a place on the College of Liberal Arts and College of Science Dean’s List and receiving an Honor’s Undergraduate Research Award. She kept busy at the University as a member of Psi Chi (the Psychology National Honor Society), being an Honors Ambassador and acting as a Student Orientation Staff Board Member. She completed an Honors Thesis on “Selectivity of Facial Aftereffects for Changes in Gender and Expression” and has presented original research at the UC Berkeley McNair Conference, the Vision Sciences Society Conference in Florida, and the Undergraduate Research Poster Conference at UNR. While an undergraduate, she was able to participate in two visitation programs at the University of Rochester and at MIT. In her free time, she volunteered at Renown hospital and was a caregiver at Home Instead Senior Care. Megan was accepted into the PhD program at UC Davis for the fall of 2012.

**ABSTRACT**

Color provides a wealth of information that allows us to interact with our environment. A fundamental question in psychology is how color perception and memory interact and produce images that we can react to. Furthermore, it has been noted that color can increase memory abilities in various tasks, such as object recognition and word associations. The purpose of this study was to determine how color affects an individual’s ability to memorize unfamiliar words and statements. To test this, participants were asked to memorize a list of words and statements, displayed in either a single color (i.e. red, green, or white) or in multiple colors (i.e. red, green, yellow, and blue). Then participants were tested with a series of questions to determine how accurately the words and statements were memorized depending on the color condition. The results showed that text displayed in a single color was memorized with higher accuracy than text in multiple colors. This may suggest that the use of multiple colors reduces the easiness of reading the text and thus inhibits the ability to memorize the text.
Enrique Valdivia

**Mentor:** Dr. Marybeth Nevins

**Major:** Anthropology

**Research Topic:** Stewart Indian School and the Washo Language

Enrique Valdivia had the unrelenting support of his wife Jenni and daughter Bradley as he obtained his B.A. in Anthropology at the University of Nevada. Without their love and help it would not have been possible to maintain a high grade point average and participate in the McNair program. Enrique presented his research on the impact of the Stewart Indian School on the Washoe language at the McNair Scholars Conference at U.C. Berkeley in August 2011. He also presented his research on the use of the Spanish word *Dios* in Colonial Valley Zapotec at the Conferencia de Lenguas Otomengues y Vecinas in Oaxaca, Mexico in April, 2012. Enrique will be attending the University of Michigan in the fall of 2012, where he received a fellowship from the Master’s of Information Science Program.

**ABSTRACT**

The Stewart Indian School, located south of Carson City, Nevada, operated for approximately a hundred years from 1890 to 1980. Part of a national endeavor specifically designed for the acculturation of Native Americans, the Stewart Indian School was a boarding school which housed thousands of Northern Nevada indigenous people. Many indigenous languages in the U.S. are in a dire situation, with fewer and fewer new speakers each generation. The language of the Washo people, a tribe from the Lake Tahoe area in both Nevada and California, is one example of a community dealing with language loss. Language represents a key component of both individual and tribal identity, something which government officials understood quite well when they purposed a strictly English speaking environment and curriculum at the Indian Schools across the U.S. Indian School policies aimed at eliminating indigenous languages were effective in "civilizing" Native communities and those effects can be seen today. People trying to restore and maintain their aboriginal languages have a long and painful history to overcome, and the Washo are one of many tribes currently dealing with this process. The purpose of this research is to examine the ethno-historic record of people's experiences at Stewart Indian School. The study analyzes these student experiences and the policies installed by the administrators of the school and examines the impact and influence it continues to have on the Washo community. Understanding the specific historical and personal context of the Stewart Indian School could offer insight as to how the current state of the Washo language came to be. Although this study does not offer any solutions to revitalize the Washo language, it is hoped that it will shed some light on the conditions endured by generations of students as their language and way of life was institutionally attacked.
Kristina Wiggins

Mentor: Dr. Geoffrey Smith

Major: Anthropology

Research Topic: XRF Sourcing of Late Holocene Artifacts From Paiute Creek Shelter, Nevada

Kristina was born in Grand Junction, Colorado. Her father was in the Air Force, so the family moved around a lot, and she lived in Japan from infancy to the age of five. She believes this early exposure to a culture so different from her own sparked her interest in the study of culture and humanity in general. From a very young age, she had a strong interest in archaeology; she even used to have “archaeological digs” in her back yard. In her junior year of college, Kristina decided to major in anthropology and minor in archaeology. Since then she has been very active in the anthropology department. She has been employed in the prehistoric archaeology lab, has presented her research at the Annual Meeting of the Society for American Archaeology in Memphis, and she is planning a publication with her mentor for the summer of 2012. Kristina was the winner of a Dean’s Students Award for Outstanding Graduate in the Social Sciences. She plans to enter a master’s program in Anthropology at Washington State University in the fall of 2012. Kristina’s research looks at Prehistoric trade and mobility at Paiute Creek Rockshelter in Northwestern Nevada.

ABSTRACT

Paiute Creek Shelter is located in the Black Rock Desert of northwest Nevada. Occupation there began during the late Holocene ~4700 years ago and continued through Euro-American contact. Occupants deposited numerous lithic artifacts including obsidian projectile points, bifaces, and debitage. Over 100 artifacts were submitted for geochemical sourcing and the results indicate that groups acquired toolstone from varied and often distant sources. Furthermore, the results suggest that groups utilized toolstone sources differently, depending on distance to source, raw material quality, and functional requirements. We consider these data using current models of prehistoric mobility and land-use in the western Great Basin.
Full / Extended Version of the Research Journal on CD