

AANAPISI, LSAMP, & McNair Summer Research Institute

Program Handbook



**University of Nevada, Las Vegas
Center for Academic Enrichment & Outreach**

4505 S. Maryland Parkway
Box 452006
Las Vegas, NV 89154-2006

Campus Location: SSC-A 301



Program Overview

Administered through UNLV's Center for Academic Enrichment and Outreach (CAEO), the AANAPISI, LSAMP, and McNair Summer Research Institute (SRI) offers eligible undergraduates in CAEO's AANAPISI, AANAPISI STEM, LSAMP, and McNair projects the opportunity to conduct research under the guidance of a faculty mentor. The SRI program, lasting 10 weeks of the summer, provides students with a series of training activities and assignments designed to help students gain insight into research at UNLV. By participating in undergraduate research, students are exposed to the process of scholarly inquiry and develop a host of skills related to critical thinking, academic writing, and presenting research.

Program Guidelines

1. There are no set hourly requirements for student-faculty research—each academic discipline lends itself to unique research hours. Hourly commitments are established through student-faculty agreements. However, if a SRI student has concerns about the hours he or she is asked to commit to research work, the student should discuss the matter with Dr. Matthew Della Sala, CAEO's Assistant Director for Undergraduate Research.
2. Each SRI student will receive a stipend of \$2,700 to support research activities during the summer. Disbursement of the stipend occurs through three equal payments of \$900 rather than as a lump sum via UNLV's Financial Aid & Scholarships office. These payments will be issued on the first working day of each month upon completion of three major milestones, with the total amount of the payments being \$2,700. For example, a SRI student who completes the draft research paper assignment due July 25 will receive a payment of \$900 on 8/1/19.
3. Each SRI mentor will receive an incentive fund totaling \$750. Note: Only persons currently employed by the Nevada System of Higher Education (NSHE) are eligible to receive incentive funds for serving as a SRI faculty mentor. While a SRI student can be mentored by a non-NSHE faculty member, that faculty member will not receive incentive funds.

SRI Student Expectations

1. Each student must prepare a **research poster** to be presented at the CAEO undergraduate research symposium.
2. Each student must complete a full **manuscript** detailing the research conducted during the Summer Research Institute. The manuscript must be approved by the student's faculty mentor and will be published in the *AANAPISI, LSAMP, and McNair Research Journal* (non peer-reviewed).
3. Each student must attend the **training activities** and complete the **assignments** specified in the *Program Syllabus*.
4. Each student must participate in the bi-weekly **peer-mentoring group meetings** (handouts are provided).

SRI Faculty Mentor Expectations


1. Faculty mentors are expected to meet regularly with their mentee students to discuss their research projects.
2. Faculty mentors are expected to ensure that their mentee students receive proper guidance and supervision to successfully meet the outcomes described in the students' application/project descriptions.

Program Support


In addition to faculty mentors, the following staff are available to provide support for students involved in research:

CAEO Undergraduate Research & McNair	AANAPISI	LSAMP
Matthew Della Sala, Ph.D. <i>Asst. Director for Undergraduate Research</i> Contact: matthew.dellasala@unlv.edu Hours: Weekly drop-in hours on Thursdays from 9am to 11am.	Mary Valdez <i>Academic Coordinator</i> Contact: mary.valdez@unlv.edu Hours: Available by appointment Yodit Hagos <i>Academic Coordinator</i> Contact: yodit.hagos@unlv.edu Hours: Available by appointment	Jennifer Czajkowski <i>Academic Coordinator</i> Contact: jennifer.czajkowski@unlv.edu Hours: Available by appointment

Examples of Research Posters



Native American Identity: A review of Twenty-first Century Research
 Bridgett G. Giordmaina, McNair Scholar, Anthropology Major
 Dr. Carolee Dodge Francis, Faculty Mentor, Environmental & Occupational Health



Abstract

The purpose of this research was to review the literature on Native American identity. The research was conducted through a search of the literature on the topic. The research was conducted through a search of the literature on the topic. The research was conducted through a search of the literature on the topic.

Data Analysis

The data analysis was conducted through a search of the literature on the topic. The data analysis was conducted through a search of the literature on the topic. The data analysis was conducted through a search of the literature on the topic.

Conclusion

The conclusion of the research was that Native American identity is a complex and multifaceted concept. The research was conducted through a search of the literature on the topic. The research was conducted through a search of the literature on the topic.

Introduction

The purpose of this research was to review the literature on Native American identity. The research was conducted through a search of the literature on the topic. The research was conducted through a search of the literature on the topic.

Results

The results of the research were that Native American identity is a complex and multifaceted concept. The research was conducted through a search of the literature on the topic. The research was conducted through a search of the literature on the topic.

References

The references for this research were as follows: [List of references]

Methods

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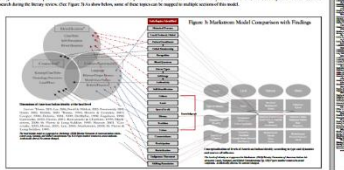



Figure 3: MindMap Comparison with Findings



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THE TESHKASH CHILD: EVOLUTIONARY MONTAGE DURING THE MIDDLE PALEOLITHIC
 Nirish Moodley & Ansha Patel
 Department of Anthropology & Ethnic Studies, University of Nevada Las Vegas

Background

The Teshkash child is a 10-year-old Neanderthal child who lived in the Middle Paleolithic period. The child's skull was discovered in 1991 in the Teshkash cave in the Caucasus region of the Caucasus Mountains. The child's skull is one of the most complete Neanderthal skulls ever discovered.




Figure 1: 3D reconstruction of the Teshkash child's skull.

Table 1: Cranial 11




Table 2: Revised Modern Human Skull

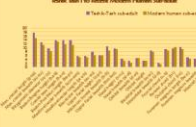



Table 3: La Chapelle Neanderthal (adult)



The Site

- Single, shallow burial
- Three cultural layers
- Middle Paleolithic assemblage
- Neanderthal skull
- Neanderthal grave goods
- Neanderthal burial

Results

- Clear examples of revised traits
- Illustrates variability in Late Pleistocene Neanderthal
- Cannot be termed fully Neanderthal or fully modern human
- Implications: Challenging for comparison; scarcity of Central Asian finds; More research necessary to draw further conclusions; Valuable study for phylogenetic tree

Further Reference

For more information on the Teshkash child, see the following references: [List of references]

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AANAPISI

Cancer-Related Fatigue Trajectory and Biological Correlates Of Acute Lymphoblastic Leukemia Patients During Chemotherapy
 Timothy D. Ogburn, Nada Luukkainen
 UNLV CENTER FOR ACADEMIC ENRICHMENT & OUTREACH

Abstract

Pediatric lymphoma included a patient with acute lymphoblastic leukemia. Blood chemistry and blood indices were analyzed and the patient reported physical, cognitive, and emotional distress in a PHQ-15 questionnaire at baseline, week 2, and week 3. Fatigue fluctuated over time with the most decrease in anxiety, pain, and depression. Suggested fatigue trajectory was not quantified.

Results

Correlation in Pain, Depression, and Anxiety

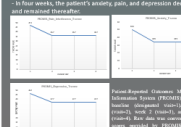


Figure 1: Correlation in Pain, Depression, and Anxiety

Conclusions

- Cannot link APOE to CBF
- Chemotherapy medications may have influenced data collected
- Timing of blood chemistry may not likely to cause fatigue in patient
- Link between fatigue, blood tests, and biological/biochemical were observed
- No clear conclusions because of case study
- Further investigation required

Introduction

Acute lymphoblastic leukemia is a blood cancer in which the bone marrow produces too much lymphocytes (B or T cells). This can affect the production of red blood cells, platelets, and other bone marrow derivatives. Patients undergoing chemotherapy typically report feeling tired or fatigued. There is no known cause of fatigue. However, we suspect that Apolipoprotein E may be a biomarker candidate.

Background

Apolipoprotein E is a lipid carrier molecule that helps transport lipids through the bloodstream. Certain alleles have been linked to Alzheimer's disease and have recently inflammation in research. Cancer and cancer treatment related fatigue is also ongoing research that links a person to perform daily activities that were previously enjoyed before.

References

The references for this research were as follows: [List of references]

Methods & Materials

This study is a preliminary report of an acute lymphoblastic leukemia patient. Children diagnosed with ALL were recruited into the study. Participants were asked to complete a Patient Reported Outcome Measurement Information System (PROMIS) questionnaire before starting chemotherapy at 1, 2, and 3 weeks after chemotherapy. Blood samples on each visit were collected and sent to the laboratory for analysis.

General Results

Blood chemistry results were reported to be within normal ranges. This included sodium, potassium, calcium, carbon dioxide, creatinine, urea, the electrolytes, and glucose. Blood chemistry panel indicates that there is a positive trend with all listed electrolytes. No differences observed from baseline to week 1 and decreased from week 2 to week 3. Self-reported physical mobility and geo-relationship scores had a negative correlation.

Fatigue & Anxiety and Fatigue & Blood Lead Levels

Fatigue levels fluctuated over four weeks. The graphs indicate there is a correlation between increase/decrease in fatigue and B2 and BCC levels. Blood chemistry indicates that there is no anemia in the patient though, triglycerides and cholesterol levels also had correlation with fatigue levels. High-density lipoprotein cholesterol had a negative correlation. Apolipoprotein E was not analyzed for.

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