

Kevin Ayala Pineda

Curriculum Vitae

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Education

2016 – **Undergraduate Degree**
Current University of Nevada, Las Vegas, BS Physics and Mathematics

2012 – **High School Diploma**
2016 Chaparral High School, Las Vegas, Nevada, Advanced Honors Diploma

Publications - 2

(2) Yost D, Chang C, LeBlanc L, Cassin E, Peterman C, Rai P, Salisbury A, Barroga N, Cisneros R, Fersini, J, Juste J, Ines J, Leyva G, Macalinao D, Muscelli S, Reyes S, Rhoden H, Tan R, Torres E, Tran K, Uriarte-Valle G, Wallace C, Wong S, **Ayala Pineda K**, Cadiz VM, Jeanite T, Nhan S, Strong C, Grose JH, Amy PS, Tsourkas P (2019) Complete Genome Sequences of Mycobacterium Smegmatis Phages Chewbacca, Reptar 3000, and Riparian, Isolated in Las Vegas, Nevada. *Microbiol Resour Announc*. 8:e01558-18. <https://doi.org/10.1128/MRA.01558-18>

(1) Yost D, Chang C, LeBlanc L, Cassin E, Peterman C, Rai P, Salisbury A, Barroga N, Cisneros R, Fersini, J, Juste J, Ines J, Leyva G, Macalinao D, Muscelli S, Reyes S, Rhoden H, Tan R, Torres E, Tran K, Uriarte-Valle G, Wallace C, Wong S, **Ayala Pineda K**, Cadiz VM, Jeanite T, Nhan S, Strong C, Grose JH, Amy PS, Tsourkas P (2018) Complete genome sequences of four *Paenibacillus larvae* bacteriophages from the Las Vegas area. *Microbiol Resource Announc*. 7(12):e00877-18. DOI: 10.1128/MRA00977-18.

Experience

Jan 2019 – **Condensed Matter Physics Lab**
Current *Supervisor*: Dr. Michael Pravica
Description: Investigating materials under extreme conditions such as varying temperatures, pressures, and irradiation. Specifically working in a new field of science called useful *hard x-ray photochemistry*, where we utilize the properties of hard-X-rays to initiate chemistry under extreme conditions. Experimental tools involve diamond anvil cells, large volume press, raman spectroscopy and irradiation beams.

Jan 2018 – **Annotation of Phage Genome (computational research)**
May 2018 *Supervisor*: Dr. Philippos Tsourkas
Description: Annotation of Phage genome was conducted with a computer software program, DNA Master. Genome annotation involved identifying genes, identifying start codons, and assigning protein functions. The annotated genome was submitted to GenBank and was published in the Journal of Genome Announcements.

Aug 2017 – **Bacteriophage Discovery (wet lab)**
Dec 2017 Supervisors: Dr. Christy Strong and Dr. Kurt Regner
Description: Lab included Isolation of phages from environmental samples, characterization using electron microscopy and extracted/amplified phage DNA. Kept an online lab notebook on labarchives throughout the wet lab. Virus was selected for genome sequencing the following semester.

Research Poster Presentation

Oct 2019 UNLV's Honors + Research Symposium
Oct 2019 UNLV's The Center's 20th Annual Undergraduate Research Symposium
Aug 2019 UNLV's Summer 2019 Undergraduate Research Symposium

Scholarship, Awards, and Recognition

Aug 2019 – May 2020	Recipient of CSUN Undergraduate Research Stipend
June 2019 – Aug 2019	Summer Research Institute : Research Scholarship
June 2019 – Aug 2019	UNLV's OUR Summer Undergraduate Research Funding
Aug 2016 - Current	Governor Guinn Millennium Scholarship
Aug 2016 - Current	Fulfillment Fund Scholarship
Aug 2017 - Jan 2018	Academic Success Center Scholarship

Service and Membership

Aug 2018 – **Member of Society of Physics Students (SPS)**
Present Currently an active member of the Society of Physics Student.

Aug 2017 – **Sunrise Hospital Volunteer**
Dec 2017 Aided patients inside the emergency department. Helped navigate individuals to victims of unfortunate events. Managed well in a high-pressure environment.

May 2017– **UNLV Toastmaster Club**
Aug 2017 Was an active member of UNLV's toastmaster speech club. During this time period, public speaking and leadership skills were enhanced.

Jan 2017 – **National Society of Collegiate Scholars**
Aug 2017 Helped volunteer throughout UNLV events during the 2017 spring semester.

Extracurriculars

Aug 2016 – **UNLV Marching Band**
Aug 2017 Participated in UNLV's marching band throughout first semester of college. Committed 10 hours a week throughout the fall semester.

Nov 2016 – **Vegas Vanguard: WGI**
Aug 2017 Performed and competed out of state in the non-profit drumline organization Vegas Vanguard. Regular practice for the group involved 17 hours a week. Accomplished while maintaining full course load.

Relevant Coursework

<i>PHYS 180L</i>	Physics for Scientist and Engineers I Lab
<i>PHYS 181L</i>	Physics for Scientist and Engineers II Lab
<i>PHYS 182L</i>	Physics for Scientist and Engineers III Lab
<i>MATH 181-283</i>	Calculus 1,2, and 3
<i>CHEM 121-122</i>	General Chemistry 1 and 2

Lab Techniques

<i>Raman Spectroscopy</i>	Utilization of laser for vibrational spectroscopic technique
<i>Preparation of Diamond anvil Cell</i>	Familiar with protocols for assembling Diamond Anvil Cell
<i>Pressure Studies</i>	Familiar with protocols for conducting pressure studies in DAC
<i>hazard Wastes</i>	Familiar with protocols of handling toxic waste

References

References available upon request