

Abigail Pajulas  
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## EDUCATION

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Fall 2018 -present    Ph.D. Candidate in Microbiology and Immunology  
Indiana University, Purdue University – Indianapolis

Spring 2018            B.S. in Exercise Science - Honors  
California State University, Northridge (CSUN)

## ACADEMIC HONORS & AWARDS

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2019 – present    **T32 Predoctoral Fellowship Recipient**, T32 AI060519 Immunology and Infectious Disease Training Program, IU School of Medicine

2014 – 2018        **Undergraduate Dean's List Honors**, CSUN  
GPA >3.5 (4.0 scale) in 12 graded classes

2014 – 2018        **General Education Honors Program**, CSUN

2016 – 2018        **NIH Maximizing Access to Research Careers (MARC) Fellowship**  
Undergraduate Student Training in Academic Research (U-STAR), CSUN

2017                **SACNAS – Travel Scholarship**  
Society for Advancing Chicanos/Hispanics & Native Americans in Science. The scholarship included conference registration, round-trip flight, and lodging (approximately \$1,500).

2017                **University of Colorado, Denver – Anschutz Medical Campus – Graduate Experiences for Multicultural Students**  
The GEMS program, a highly competitive summer research program, provided a rigorous biomedical research training opportunity with close mentoring for 10 weeks. The program also awarded scholars with a \$4,000 stipend.

2017                **Presidential Scholarship Award**  
This \$10,000 scholarship awarded undergraduate students the opportunity to work with faculty mentors on significant projects for one year. It is reserved for Cal State Northridge undergraduates who have earned at least 60 units with a 3.5 GPA.

2015                **Promising Sophomore Award – Asian-American Studies**, CSUN

2014                **Associated Students Scholarship**, CSUN  
Awarded \$2,000 to students with >3.5 GPA, a statement of purpose and 2 letters of recommendations.

## ACADEMIC APPOINTMENTS

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2019-present      **Graduate Research Assistant**  
*Department of Microbiology and Immunology – IUPUI, Mark Kaplan Ph.D*  
Investigated the role of T helper 9 cell-mediated mast cell expansion and function in immediate hypersensitivity reactions.

Fall 2018            **Graduate Research Assistant**  
*Department of Microbiology and Immunology – IUPUI, Haitao Guo, Ph.D.*  
Investigated the role of Hepatitis B virus precore and core protein's effects on cccDNA stability and/or transcription.

Fall 2018	<b>Graduate Research Assistant</b> <i>Department of Microbiology and Immunology – IUPUI, Frank Yang, Ph.D.</i> Screened for phenotypical and transcriptional mutations from a transposon mutant library to find important sites for OspC expression in <i>Borrelia burgdoerferi</i> .
2017 – 2018	<b>Undergraduate Research Assistant- MARC U-STAR Scholar</b> <i>Department of Microbiology – CSU Northridge, Sean Murray, Ph.D.</i> Investigated the role of PhaA, PhaB, and PhaC in promoting (p)ppGpp accumulation in <i>Caulobacter crescentus</i>
Summer 2017	<b>Undergraduate Research Assistant – GEMS Intern</b> <i>Department of Microbiology – UC Denver, Stefan Pukatzki, Ph.D.</i> Examined the role of toxin-coregulated pilus on <i>Vibrio cholerae</i> and its effects on type VI secretion system by using killing assays with <i>Escherichia coli</i> .
2016 – 2018	<b>Undergraduate Research Assistant</b> , Center of Achievements – Brown Center, <i>Department of Kinesiology – CSU Northridge, Taeyou Jung, Ph.D.</i> Analyzed Brain Activity using fNIR During Dual Task Walking in Individuals with Parkinson's Disease
Fall 2016	<b>Undergraduate Teacher's Assistant</b> Introduction to Gerontology, Department of Psychology – CSUN
2016 – 2018	<b>Undergraduate Research Assistant &amp; Lab Coordinator</b> <i>Department of Psychology – CSU Northridge, Luciana Laganá, Ph.D.</i> Assessed the impact of anti-bias films on reducing stereotypes and increasing empathy towards discriminated minorities

## PUBLICATIONS

\* Principal Investigator

- Ulrich BJ, Kharwadkar R, Chu M, **Pajulas A**, Muralidharan C, Koh B, Fu Y, Gao H, Hayes TA, Goplen NP, Nelson AS, Liu Y, Linnemann A, Licona-Limón P, Flavell RA, Jenkins MK, Sun J, and Kaplan MH.\* IL-9 is required for multi-cytokine producing tissue-resident memory CD4+ T cell-dependent allergic airway recall responses. *Manuscript in preparation to be submitted to Science Immunology*.
- Fu Y, Wang J, Zhou B, Gao H, Zhou H, Fisher AJ, Omstead D, Khan S, Han L, **Pajulas A**, Renauld JC, Paczesny S, Liu Y, Yang L, Tighe RM, Licona-Limón P, Flavell RA, Takatsuka S, Kitamura D, Sun J, Bilgicir B, Sears CR, Yang K, Kaplan MH.\* Pulmonary interstitial macrophages are required to mediate the pro-tumorigenic effects of IL-9. *Manuscript in preparation to be submitted to Journal of Clinical Investigation*.
- Fu Y, Wang J, Zhou B, Gao H, Ramdas B, Koh B, Ulrich BJ, Yang S, **Pajulas A**, Kapur R, Renauld JC, Paczesny S, Liu Y, Tighe RM, Licona-Limon P, Flavell RA, Takatsuka S, Kitamura D, Tepper RS, Sun J, Kaplan MH.\* An IL-9-pulmonary macrophage axis defines the allergic lung inflammatory environment. *Manuscript in preparation to be submitted to Science Immunology*.

Wang J, **Pajulas A**, Fu Y, Adom J, Zhang W, Nelson AS, Kaplan MH\*. T cell-mediated wound healing is diminished by allergic skin inflammation. *Manuscript in preparation to be submitted to Journal of Investigative Dermatology*.

## PRESENTATIONS

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\* Principal Investigator  
\_ Presenter

**Pajulas, A.** and Kaplan, M. (2021, May). *Generation of mice with a conditional Il9 allele*. Poster accepted for presentation at American Association of Immunologist Annual Meeting, Virtual Conference.

**Pajulas, A.** and Kaplan, M. (2020, October). *Elucidating the Role of IL-9 Secreting CD4+ T Helper Cells in Promoting Mast Cell Expansion in Pulmonary Models of Inflammation*. Poster accepted for oral presentation at SACNAS Conference, Virtual Conference.

**Pajulas, A.** and Kaplan, M. (2019, May). *The role of IL-9 secreting CD4+ T helper cells in promoting mast cell expansion in pulmonary models of inflammation*. Poster accepted for presentation at the American Association of Immunologist Annual Meeting, Honolulu, HI. Meeting cancelled due to COVID-19.

**Pajulas, A.**, Rocha, A., Stott, K., Bueno, D., Schreiner, S., Arvizu, I., Vu, S., and Murray, S. (2018, March). Identification of genes essential for PHB Biosynthesis in *Caulobacter crescentus*. Poster accepted for presentation at the Annual Bay Area Microbial Pathogenesis Symposium, San Francisco, CA.

**Pajulas, A.**, Anderegg, A., and Pukatzki, S. (2017, October). Bacterial Competition: Difference in the translocation of effector proteins from *Vibrio cholerae* to *Escherichia coli*. Poster accepted for presentation at the Society for Advancement of Chicanos and Native Americans in Science, Salt Lake City, UT.

## PROFESSIONAL APPOINTMENTS

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2021-2022	<b>President, Communicators at IUPUI (Toastmasters International)</b> <ul style="list-style-type: none"> <li>• 2020-2021 – VP of Education (Awarded President's Distinguished Club)</li> <li>• 2019-2020 – VP of Public Relations (Awarded President's Distinguished Club)</li> </ul>
2021 - 2022	<b>President, SACNAS at IU School of Medicine</b> <ul style="list-style-type: none"> <li>• 2020-2021 – Vice President</li> <li>• 2019-2020 – President</li> </ul>

## STUDENT MENTORING

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Spring 2021	Matthew Austin – MD/PhD student
Summer 2020	Jeffrey Bloodworth – PhD student