

Abigail Pajulas
apajulas@iu.edu

EDUCATION

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| 2018 -present | Ph.D. Candidate in Microbiology and Immunology Indiana University, Purdue University – Indianapolis |
| 2014-2018 | B.S. in Exercise Science - Honors California State University, Northridge (CSUN) |

ACADEMIC HONORS & AWARDS

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| May 2022 | AAI Trainee Abstract Awardee Awarded \$750 to present at a Block Symposium and poster presentation at AAI Immunology 2022 in Portland, Oregon |
| March 2022 | Toastmasters International Area level - International Speech Contest - Runner up Delivered a 5-7 minute speech at the area level |
| February 2022 | SACNAS CareerCon Participation Recipient |
| 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 <i>Department of Microbiology and Immunology – IUPUI, Mark Kaplan Ph.D.</i> Investigated the role of T helper 9 cell-mediated mast cell expansion and function in immediate hypersensitivity reactions. |
| Fall 2018 | Graduate Research Rotation <i>Department of Microbiology and Immunology – IUPUI, Haitao Guo, Ph.D.</i> Investigated the role of Hepatitis B virus precore and core protein's effects on cccDNA stability and/or transcription. |
| Fall 2018 | Graduate Research Rotation <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 burgdorferi</i> . |
| 2017 – 2018 | Undergraduate Research Assistant- MARC U-STAR Scholar <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 | Undergraduate Research Assistant – GEMS Intern <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 | Undergraduate Research Assistant, 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 | Undergraduate Teacher's Assistant Introduction to Gerontology, Department of Psychology – CSUN |
| 2016 – 2018 | Undergraduate Research Assistant & Lab Coordinator <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, Sun J, and Kaplan MH.* IL-9 is required for multi-cytokine producing tissue-resident memory CD4⁺ T cell-dependent allergic airway recall responses. *Science Immunology*. 2022
- 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, Bilgicer B, Sears CR, Yang K, Kaplan MH.* Pulmonary interstitial macrophages are required to mediate the pro-tumorigenic effects of IL-9. *Manuscript in revision for Nature Commun.*
- 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. *Science Immunology*. 2022

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 revision for the Journal of Investigative Dermatology*.

PRESENTATIONS

* Principal Investigator
_ Presenter

Pajulas, A. and Kaplan, M. (2022, May). *Th9-derived IL-9 promotes CCR2-dependent mast cell accumulation in the allergic lung*. Poster accepted for oral and poster presentation at American Association of Immunologist Annual Meeting, Portland, Oregon.

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.

Lagana, L.*, Mamikonian-Zarpas, A., S., Balian, O., Valencia, Y.E., and **Pajulas, A.** (2018, August). Assessment Strategies Targeting the Risk of Falling in Older Age: A Literature Review. Poster accepted for presentation at the American Psychological Association, San Francisco, CA.

Lagana, L.*, Nakhla, M., Chavez, S., Balian, O., Grewe, D., and **Pajulas, A.** (2018, April). A Literature Review on How to Improve Attitudes towards Individuals with Physical Impairments. Poster accepted for presentation at the 98th Annual Convention of the Western Psychological Association, Portland, Oregon.

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.

Lagana, L.*, Arellano, K., Zacarias, A., **Pajulas, A.**, and Martinez, M. (2017, March). Comparing Diabetic & Healthy Older Women on Desire to Improve Health, Health Screening Behaviors, & Cognitive Functioning. Poster session accepted for presentation at 38th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, San Diego, CA.

Sholl, K., Lagana, L.*, Gavrilova, L., **Pajulas, A.**, Zacarias, A., & Martinez, M. (2017, April). Changes in young adults' LGBT-related attitudes, knowledge, and empathy after viewing an LGBT documentary. Poster accepted for presentation at the 97th Annual Convention of the Western Psychological Association, Sacramento, CA.

PROFESSIONAL APPOINTMENTS

2021-present **President, Communicators at IUPUI (Toastmasters International)**

- 2020-2021 – VP of Education (Awarded President's Distinguished Club)
- 2019-2020 – VP of Public Relations (Awarded President's Distinguished Club)

2021-present **President, SACNAS at IU School of Medicine**

- 2020-2021 – President
- 2019-2020 – Vice-President

MEMBERSHIPS

Member, Society for the Advancement of Chicanos/Hispanics and Native Americans in Science

Member, American Association of Immunologists

Member, Association of American University Women

Member, Kappa Omicron Nu International Honor Society Member, CSU Northridge

STUDENT MENTORING

Spring 2021 Matthew Austin – MD/PhD Student

Summer 2020 Jeffrey Bloodworth – PhD Student

SERVICE AND OUTREACH

2021 IBMG Recruitment and Outreach - Attend SACNAS Meeting

2021 1st year IBMG Student Info Session - Think Talk Study

2020 SACNAS – Panelist for Diversity Conference Mini-Symposium

2020 IBMG Recruitment and Outreach - Attend SACNAS Meeting

2020 1st year IBMG Student Info Session - Think Talk Study

2019 SACNAS – Graduate Student Panel Discussions for Undergraduates

2019 1st year IBMG Student Info Session - Think Talk Study