



## Jeffrey Bunker

- Postdoctoral Medical Fellow, Infectious Diseases
- Fellow in Medicine - Med/Infectious Diseases

### Bio

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#### BIO

Jeffrey Bunker is an infectious diseases physician-scientist, immunologist, and microbiologist. He is currently a clinical fellow in infectious diseases at Stanford University; he previously completed residency training in internal medicine at Stanford University and an M.D. and Ph.D. in immunology at the University of Chicago. Bunker's research investigates interactions between the microbiome and the immune system, including fundamental questions about how and why certain microbes generate immune responses and how this interplay influences both normal homeostasis and infectious or inflammatory diseases. His clinical interests include microbial pathogenesis, antimicrobial resistance, and the diagnosis and treatment of complex infections.

#### CLINICAL FOCUS

- Infectious Diseases
- Internal Medicine
- Fellow

#### HONORS AND AWARDS

- Translational Investigator Program (TIP) Trainee, Stanford University Department of Medicine (2021 - present)
- Graduation with Honors, University of Chicago Pritzker School of Medicine (2021)
- Alpha Omega Alpha, University of Chicago Prizker School of Medicine (2020)
- Interdisciplinary Scientist Training Program Award for Outstanding Achievement in Research, University of Chicago (2018)
- Kirschstein-NRSA F30 Fellowship, NIH/NIAID (2016-2020)
- Frank Family Fellow, University of Chicago Medical Scientist Training Program (2014-2021)
- Medical Scientist Training Program (MSTP) Trainee, University of Chicago (2012-2021)
- Phi Beta Kappa, University of Nebraska-Lincoln (2012)
- INBRE Biomedical Research Scholar, University of Nebraska Medical Center (2010-2012)
- Benjamin M. Sahagian Biochemistry Scholarship, University of Nebraska-Lincoln. (2011)
- Milton E. Mohr Research Scholar, University of Nebraska-Lincoln (2010-2012)
- C.J. and I.V. Killian Memorial Music Scholarship, University of Nebraska-Lincoln (2007-2011)
- Regents Scholar, University of Nebraska-Lincoln (2007-2011)

#### PROFESSIONAL EDUCATION

- Fellowship, Stanford University , Infectious Diseases

- Residency, Stanford University , Internal Medicine (2023)
- MD, University of Chicago , Pritzker School of Medicine (2021)
- PhD, University of Chicago , Immunology (2018)
- BS, University of Nebraska-Lincoln , Biochemistry, Biological Sciences (2012)
- BA, University of Nebraska-Lincoln , Music (2012)

## INTERNET LINKS

- Google Scholar: <https://scholar.google.com/citations?hl=en&user=3udiX7MAAAAJ>

## Publications

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### PUBLICATIONS

- **B cell superantigens in the human intestinal microbiota** *SCIENCE TRANSLATIONAL MEDICINE*  
Bunker, J. J., Drees, C., Watson, A. R., Plunkett, C. H., Nagler, C. R., Schneewind, O., Eren, A., Bendelac, A.  
2019; 11 (507)
- **IgA Responses to Microbiota** *IMMUNITY*  
Bunker, J. J., Bendelac, A.  
2018; 49 (2): 211-224
- **Natural polyreactive IgA antibodies coat the intestinal microbiota** *SCIENCE*  
Bunker, J. J., Erickson, S. A., Flynn, T. M., Henry, C., Koval, J. C., Meisel, M., Jabri, B., Antonopoulos, D. A., Wilson, P. C., Bendelac, A.  
2017; 358 (6361)
- **Crossreactive alpha beta T Cell Receptors Are the Predominant Targets of Thymocyte Negative Selection** *IMMUNITY*  
McDonald, B. D., Bunker, J. J., Erickson, S. A., Oh-Hora, M., Bendelac, A.  
2015; 43 (5): 859-869
- **Innate and Adaptive Humoral Responses Coat Distinct Commensal Bacteria with Immunoglobulin A** *IMMUNITY*  
Bunker, J. J., Flynn, T. M., Koval, J. C., Shaw, D. G., Meisel, M., McDonald, B. D., Ishizuka, I. E., Dent, A. L., Wilson, P. C., Jabri, B., Antonopoulos, D. A., Bendelac, A.  
2015; 43 (3): 541-553
- **Biochemical and biophysical characterization of natural polyreactivity in antibodies.** *Cell reports*  
Borowska, M. T., Boughter, C. T., Bunker, J. J., Guthmiller, J. J., Wilson, P. C., Roux, B., Bendelac, A., Adams, E. J.  
2023; 42 (10): 113190
- **The molecular characterization of antibody binding to a superantigen-like protein from a commensal microbe** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Borowska, M. T., Drees, C., Yarawsky, A. E., Viswanathan, M., Ryan, S. M., Bunker, J. J., Herr, A. B., Bendelac, A., Adams, E. J.  
2021; 118 (39)
- **Refined protocol for generating monoclonal antibodies from single human and murine B cells** *JOURNAL OF IMMUNOLOGICAL METHODS*  
Ho, I. Y., Bunker, J. J., Erickson, S. A., Neu, K. E., Huang, M., Cortese, M., Pulendran, B., Wilson, P. C.  
2016; 438: 67-70
- **Histone reader BRWD1 targets and restricts recombination to the Igk locus** *NATURE IMMUNOLOGY*  
Mandal, M., Hamel, K. M., Maienschein-Cline, M., Tanaka, A., Teng, G., Tuteja, J. H., Bunker, J. J., Bahroos, N., Eppig, J. J., Schatz, D. G., Clark, M. R.  
2015; 16 (10): 1094-+
- **Elevated T Cell Receptor Signaling Identifies a Thymic Precursor to the TCR alpha beta(+)CD4(-)CD8 beta(-) Intraepithelial Lymphocyte Lineage** *IMMUNITY*  
McDonald, B. D., Bunker, J. J., Ishizuka, I. E., Jabri, B., Bendelac, A.  
2014; 41 (2): 219-229

- **A negative feedback loop mediated by the Bcl6-cullin 3 complex limits Tfh cell differentiation** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Mathew, R., Mao, A., Chiang, A. H., Bertozzi-Villa, C., Bunker, J. J., Scanlon, S. T., McDonald, B. D., Constantinides, M. G., Hollister, K., Singer, J. D., Dent, A. L., Dinner, A. R., Bendelac, et al  
2014; 211 (6): 1137-1151
- **N-5-Phosphonoacetyl-L-ornithine (PALO): A convenient synthesis and investigation of influence on regulation of amino acid biosynthetic genes in *Saccharomyces cerevisiae*** *BIOORGANIC & MEDICINAL CHEMISTRY LETTERS*  
Johnson, B., Steadman, R., Patefield, K. D., Bunker, J. J., Atkin, A. L., Dussault, P.  
2011; 21 (8): 2351-2353