



## Alexander Cocker

Postdoctoral Scholar, Structural Biology

### Bio

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#### BIO

Following two years working in clinical trials Dr Cocker started his PhD under the supervision of Professor Mark Johnson and Dr Nesrina Imami, studying the impact of HIV-1 infection on pregnancy related immunological changes using fluorescent cytometry and functional assays to explore natural killer, dendritic and T cell populations longitudinally.

Dr Cocker is continuing his work in HIV and other infectious diseases, and is especially focussed on how chronic infection can affect natural killer cell education, development and function.

#### PROFESSIONAL EDUCATION

- Bachelor of Science, University Of Leeds (2012)
- Doctor of Philosophy, Imperial College of Science, Technology & Medicine (2019)

#### STANFORD ADVISORS

- Peter Parham, Postdoctoral Faculty Sponsor
- Peter Parham, Postdoctoral Research Mentor

### Publications

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#### PUBLICATIONS

- **Natural LILRB1 D1-D2 variants show frequency differences in populations and bind to HLA class I with various avidities.** *Immunogenetics*  
Liu, F., Cocker, A. T., Pugh, J. L., Djaoud, Z., Parham, P., Guethlein, L. A.  
2022
- **Phosphoantigen-stimulated gammadelta T cells suppress natural killer cell-responses to missing-self.** *Cancer immunology research*  
Walwyn-Brown, K., Pugh, J., Cocker, A. T., Beyzaie, N., Singer, B. B., Olive, D., Guethlein, L. A., Parham, P., Djaoud, Z.  
2022
- **Meta-analysis of the CD56-negative NK cell subset indicates altered functional responses and unique KIR regulation**  
Cocker, A., Parham, P.  
AMER ASSOC IMMUNOLOGISTS.2021
- **Pregnancy Gestation Impacts on HIV-1-Specific Granzyme B Response and Central Memory CD4 T Cells** *FRONTIERS IN IMMUNOLOGY*  
Cocker, A. H., Shah, N. M., Raj, I., Dermont, S., Khan, W., Mandalia, S., Imami, N., Johnson, M. R.  
2020; 11: 153
- **Short Communication: Therapeutic Immunization Benefits Mucosal-Associated Invariant T Cell Recovery in Contrast to Interleukin-2, Granulocyte-Macrophage Colony-Stimulating Factor, and Recombinant Human Growth Hormone Addition in HIV-1+Treated Patients: Individual Case Reports from Phase I Trial** *AIDS RESEARCH AND HUMAN RETROVIRUSES*

Cocker, A. H., Greathead, L., Herasimtschuk, A. A., Mandalia, S., Kelleher, P., Imami, N.  
2019; 35 (3): 306–9

● **Enrichment of HLA Types and Single-Nucleotide Polymorphism Associated With Non-progression in a Strictly Defined Cohort of HIV-1 Controllers.** *Frontiers in immunology*

Westrop, S. J., Cocker, A. T., Boasso, A. n., Sullivan, A. K., Nelson, M. R., Imami, N. n.  
2017; 8: 746

● **A stepwise advance out of the shadows: leading HIV to its clearance** *FUTURE VIROLOGY*

Hardy, G. D., Cocker, A. H., Imami, N.  
2015; 10 (12): 1263–66