

# Kevin O Saunders

## List of Publications by Year in descending order

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Version: 2024-02-01

75  
papers

5,213  
citations

117625

34  
h-index

110387

64  
g-index

94  
all docs

94  
docs citations

94  
times ranked

6919  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | SARS-CoV-2 Neutralizing Antibodies for COVID-19 Prevention and Treatment. Annual Review of Medicine, 2022, 73, 1-16.   | 12.2 | 91        |
| 2  | A broadly cross-reactive antibody neutralizes and protects against sarbecovirus challenge in mice. Science Translational Medicine, 2022, 14, eabj7125.   | 12.4 | 93        |
| 3  | Development of mRNA manufacturing for vaccines and therapeutics: mRNA platform requirements and development of a scalable production process to support early phase clinical trials. Translational Research, 2022, 242, 38-55. | 5.0  | 41        |
| 4  | Structural diversity of the SARS-CoV-2 Omicron spike. Molecular Cell, 2022, 82, 2050-2068.e6.  | 9.7  | 125       |
| 5  | Mouse and human antibodies bind HLA-E-leader peptide complexes and enhance NK cell cytotoxicity. Communications Biology, 2022, 5, 271.   | 4.4  | 14        |
| 6  | mRNA-encoded HIV-1 Env trimer ferritin nanoparticles induce monoclonal antibodies that neutralize heterologous HIV-1 isolates in mice. Cell Reports, 2022, 38, 110514.   | 6.4  | 23        |
| 7  | Frequent Development of Broadly Neutralizing Antibodies in Early Life in a Large Cohort of Children With Human Immunodeficiency Virus. Journal of Infectious Diseases, 2022, 225, 1731-1740.                                   | 4.0  | 5         |
| 8  | Safety and tolerability of AAV8 delivery of a broadly neutralizing antibody in adults living with HIV: a phase 1, dose-escalation trial. Nature Medicine, 2022, 28, 1022-1030.   | 30.7 | 34        |
| 9  | Cryo-EM structures of SARS-CoV-2 Omicron BA.2 spike. Cell Reports, 2022, 39, 111009.   | 6.4  | 74        |
| 10 | B cells expressing IgM B cell receptors of HIV-1 neutralizing antibodies discriminate antigen affinities by sensing binding association rates. Cell Reports, 2022, 39, 111021.   | 6.4  | 6         |
| 11 | Recapitulation of HIV-1 Env-antibody coevolution in macaques leading to neutralization breadth. Science, 2021, 371, .  | 12.6 | 49        |
| 12 | Broad neutralization of H1 and H3 viruses by adjuvanted influenza HA stem vaccines in nonhuman primates. Science Translational Medicine, 2021, 13, .   | 12.4 | 49        |
| 13 | Lipid nanoparticle encapsulated nucleoside-modified mRNA vaccines elicit polyfunctional HIV-1 antibodies comparable to proteins in nonhuman primates. Npj Vaccines, 2021, 6, 50.   | 6.0  | 46        |
| 14 | Neutralizing antibody vaccine for pandemic and pre-emergent coronaviruses. Nature, 2021, 594, 553-559.   | 27.8 | 199       |
| 15 | Mapping the SARS-CoV-2 spike glycoprotein-derived peptidome presented by HLA class II on dendritic cells. Cell Reports, 2021, 35, 109179.  | 6.4  | 63        |
| 16 | Fab-dimerized glycan-reactive antibodies are a structural category of natural antibodies. Cell, 2021, 184, 2955-2972.e25.  | 28.9 | 57        |
| 17 | Functional Homology for Antibody-Dependent Phagocytosis Across Humans and Rhesus Macaques. Frontiers in Immunology, 2021, 12, 678511.  | 4.8  | 11        |
| 18 | Effect of natural mutations of SARS-CoV-2 on spike structure, conformation, and antigenicity. Science, 2021, 373, .  | 12.6 | 318       |

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|----|---|------|-----------|
| 19 | Structural and genetic convergence of HIV-1 neutralizing antibodies in vaccinated non-human primates. <i>PLoS Pathogens</i> , 2021, 17, e1009624.   | 4.7  | 2         |
| 20 | HIV envelope antigen valency on peptide nanofibers modulates antibody magnitude and binding breadth. <i>Scientific Reports</i> , 2021, 11, 14494.   | 3.3  | 6         |
| 21 | Rapid selection of HIV envelopes that bind to neutralizing antibody B cell lineage members with functional improbable mutations. <i>Cell Reports</i> , 2021, 36, 109561.  | 6.4  | 9         |
| 22 | InÂvitro and inÂvivo functions of SARS-CoV-2 infection-enhancing and neutralizing antibodies. <i>Cell</i> , 2021, 184, 4203-4219.e32.   | 28.9 | 228       |
| 23 | Chimeric spike mRNA vaccines protect against Sarbecovirus challenge in mice. <i>Science</i> , 2021, 373, 991-998.   | 12.6 | 144       |
| 24 | Cold sensitivity of the SARS-CoV-2 spike ectodomain. <i>Nature Structural and Molecular Biology</i> , 2021, 28, 128-131.  | 8.2  | 65        |
| 25 | Strategies for induction of HIV-1 envelope-reactive broadly neutralizing antibodies. <i>Journal of the International AIDS Society</i> , 2021, 24, e25831.   | 3.0  | 19        |
| 26 | Structure and Fc-Effector Function of Rhesusized Variants of Human Anti-HIV-1 IgG1s. <i>Frontiers in Immunology</i> , 2021, 12, 787603.   | 4.8  | 1         |
| 27 | Polyclonal Broadly Neutralizing Antibody Activity Characterized by CD4 Binding Site and V3-Glycan Antibodies in a Subset of HIV-1 Virus Controllers. <i>Frontiers in Immunology</i> , 2021, 12, 670561.   | 4.8  | 3         |
| 28 | Immunogenicity, safety, and efficacy of sequential immunizations with an SIV-based IDLV expressing CH505 Envs. <i>Npj Vaccines</i> , 2020, 5, 107.  | 6.0  | 11        |
| 29 | A Single Immunization with Nucleoside-Modified mRNA Vaccines Elicits Strong Cellular and Humoral Immune Responses against SARS-CoV-2 in Mice. <i>Immunity</i> , 2020, 53, 724-732.e7.   | 14.3 | 267       |
| 30 | Antigenicity and Immunogenicity of HIV-1 Envelope Trimers Complexed to a Small-Molecule Viral Entry Inhibitor. <i>Journal of Virology</i> , 2020, 94, .   | 3.4  | 5         |
| 31 | Therapeutic vaccination with IDLV-SIV-Gag results in durable viremia control in chronically SHIV-infected macaques. <i>Npj Vaccines</i> , 2020, 5, 36.  | 6.0  | 12        |
| 32 | Co-immunization of DNA and Protein in the Same Anatomical Sites Induces Superior Protective Immune Responses against SHIV Challenge. <i>Cell Reports</i> , 2020, 31, 107624.  | 6.4  | 43        |
| 33 | Maternal Broadly Neutralizing Antibodies Can Select for Neutralization-Resistant, Infant-Transmitted/Founder HIV Variants. <i>MBio</i> , 2020, 11, .  | 4.1  | 25        |
| 34 | Pandemic Preparedness: Developing Vaccines and Therapeutic Antibodies For COVID-19. <i>Cell</i> , 2020, 181, 1458-1463.   | 28.9 | 92        |
| 35 | Exploiting Pre-Existing CD4+ T Cell Help from Bacille Calmette-â€“GuÃ©rin Vaccination to Improve Antiviral Antibody Responses. <i>Journal of Immunology</i> , 2020, 205, 425-437.   | 0.8  | 3         |
| 36 | Safety and immune responses after a 12-month booster in healthy HIV-uninfected adults in HVTN 100 in South Africa: A randomized double-blind placebo-controlled trial of ALVAC-HIV (vCP2438) and bivalent subtype C gp120/MF59 vaccines. <i>PLoS Medicine</i> , 2020, 17, e1003038. | 8.4  | 27        |

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|----|---|------|-----------|
| 37 | Immune checkpoint modulation enhances HIV-1 antibody induction. <i>Nature Communications</i> , 2020, 11, 948.   | 12.8 | 27        |
| 38 | Neonatal Rhesus Macaques Have Distinct Immune Cell Transcriptional Profiles following HIV Envelope Immunization. <i>Cell Reports</i> , 2020, 30, 1553-1569.e6.  | 6.4  | 21        |
| 39 | Disruption of the HIV-1 Envelope allosteric network blocks CD4-induced rearrangements. <i>Nature Communications</i> , 2020, 11, 520.  | 12.8 | 42        |
| 40 | HIV vaccine delayed boosting increases Env variable region 2â€™specific antibody effector functions. <i>JCI Insight</i> , 2020, 5, .  | 5.0  | 18        |
| 41 | -Deficient Mice Exhibit Cytokine-Related Transcriptomic Signatures. <i>ImmunoHorizons</i> , 2020, 4, 713-728.   | 1.8  | 0         |
| 42 | RAB11FIP5-Deficient Mice Exhibit Cytokine-Related Transcriptomic Signatures. <i>ImmunoHorizons</i> , 2020, 4, 713-728.  | 1.8  | 0         |
| 43 | Conceptual Approaches to Modulating Antibody Effector Functions and Circulation Half-Life. <i>Frontiers in Immunology</i> , 2019, 10, 1296.   | 4.8  | 211       |
| 44 | Parallel Induction of CH505 B Cell Ontogeny-Guided Neutralizing Antibodies and tHIVconsvX Conserved Mosaic-Specific T Cells against HIV-1. <i>Molecular Therapy - Methods and Clinical Development</i> , 2019, 14, 148-160. | 4.1  | 4         |
| 45 | Difficult-to-neutralize global HIV-1 isolates are neutralized by antibodies targeting open envelope conformations. <i>Nature Communications</i> , 2019, 10, 2898.   | 12.8 | 35        |
| 46 | Antibody responses to the HIV-1 envelope high mannose patch. <i>Advances in Immunology</i> , 2019, 143, 11-73.  | 2.2  | 22        |
| 47 | Neutralization-guided design of HIV-1 envelope trimers with high affinity for the unmutated common ancestor of CH235 lineage CD4bs broadly neutralizing antibodies. <i>PLoS Pathogens</i> , 2019, 15, e1008026.             | 4.7  | 56        |
| 48 | Star nanoparticles delivering HIV-1 peptide minimal immunogens elicit near-native envelope antibody responses in nonhuman primates. <i>PLoS Biology</i> , 2019, 17, e3000328.   | 5.6  | 33        |
| 49 | Consistent elicitation of cross-clade HIV-neutralizing responses achieved in guinea pigs after fusion peptide priming by repetitive envelope trimer boosting. <i>PLoS ONE</i> , 2019, 14, e0215163.                         | 2.5  | 41        |
| 50 | Selection of immunoglobulin elbow region mutations impacts interdomain conformational flexibility in HIV-1 broadly neutralizing antibodies. <i>Nature Communications</i> , 2019, 10, 654.                                   | 12.8 | 34        |
| 51 | Cooperation between somatic mutation and germline-encoded residues enables antibody recognition of HIV-1 envelope glycans. <i>PLoS Pathogens</i> , 2019, 15, e1008165.  | 4.7  | 5         |
| 52 | Targeted selection of HIV-specific antibody mutations by engineering B cell maturation. <i>Science</i> , 2019, 366, .   | 12.6 | 118       |
| 53 | Immunogenicity of NYVAC Prime-Protein Boost Human Immunodeficiency Virus Type 1 Envelope Vaccination and Simian-Human Immunodeficiency Virus Challenge of Nonhuman Primates. <i>Journal of Virology</i> , 2018, 92, .       | 3.4  | 10        |
| 54 | HIV-1 envelope glycan modifications that permit neutralization by germline-reverted VRC01-class broadly neutralizing antibodies. <i>PLoS Pathogens</i> , 2018, 14, e1007431.  | 4.7  | 36        |

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|----|---|------|-----------|
| 55 | Inference of the HIV-1 VRC01 Antibody Lineage Unmutated Common Ancestor Reveals Alternative Pathways to Overcome a Key Glycan Barrier. <i>Immunity</i> , 2018, 49, 1162-1174.e8.  | 14.3 | 61        |
| 56 | Glycoengineering HIV-1 Env creates "supercharged" and "hybrid" glycans to increase neutralizing antibody potency, breadth and saturation. <i>PLoS Pathogens</i> , 2018, 14, e1007024.   | 4.7  | 22        |
| 57 | Nucleoside-modified mRNA vaccines induce potent T follicular helper and germinal center B cell responses. <i>Journal of Experimental Medicine</i> , 2018, 215, 1571-1588.   | 8.5  | 366       |
| 58 | Functional Relevance of Improbable Antibody Mutations for HIV Broadly Neutralizing Antibody Development. <i>Cell Host and Microbe</i> , 2018, 23, 759-765.e6.   | 11.0 | 98        |
| 59 | Potent and broad HIV-neutralizing antibodies in memory B cells and plasma. <i>Science Immunology</i> , 2017, 2, .   | 11.9 | 119       |
| 60 | Vaccine Elicitation of High Mannose-Dependent Neutralizing Antibodies against the V3-Glycan Broadly Neutralizing Epitope in Nonhuman Primates. <i>Cell Reports</i> , 2017, 18, 2175-2188.   | 6.4  | 69        |
| 61 | Pentavalent HIV-1 vaccine protects against simian-human immunodeficiency virus challenge. <i>Nature Communications</i> , 2017, 8, 15711.  | 12.8 | 137       |
| 62 | Staged induction of HIV-1 glycan-dependent broadly neutralizing antibodies. <i>Science Translational Medicine</i> , 2017, 9, .  | 12.4 | 212       |
| 63 | Mimicry of an HIV broadly neutralizing antibody epitope with a synthetic glycopeptide. <i>Science Translational Medicine</i> , 2017, 9, .   | 12.4 | 81        |
| 64 | HIV DNA-Adenovirus Multiclade Envelope Vaccine Induces gp41 Antibody Immunodominance in Rhesus Macaques. <i>Journal of Virology</i> , 2017, 91, .   | 3.4  | 20        |
| 65 | Vaccine Induction of Heterologous Tier 2 HIV-1 Neutralizing Antibodies in Animal Models. <i>Cell Reports</i> , 2017, 21, 3681-3690.   | 6.4  | 97        |
| 66 | Initiation of HIV neutralizing B cell lineages with sequential envelope immunizations. <i>Nature Communications</i> , 2017, 8, 1732.  | 12.8 | 76        |
| 67 | Boosting of HIV envelope CD4 binding site antibodies with long variable heavy third complementarity determining region in the randomized double blind RV305 HIV-1 vaccine trial. <i>PLoS Pathogens</i> , 2017, 13, e1006182.                            | 4.7  | 38        |
| 68 | Comparison of Immunogenicity in Rhesus Macaques of Transmitted-Founder, HIV-1 Group M Consensus, and Trivalent Mosaic Envelope Vaccines Formulated as a DNA Prime, NYVAC, and Envelope Protein Boost. <i>Journal of Virology</i> , 2015, 89, 6462-6480. | 3.4  | 40        |
| 69 | Maturation and Diversity of the VRC01-Antibody Lineage over 15 Years of Chronic HIV-1 Infection. <i>Cell</i> , 2015, 161, 470-485.  | 28.9 | 226       |
| 70 | Sustained Delivery of a Broadly Neutralizing Antibody in Nonhuman Primates Confers Long-Term Protection against Simian/Human Immunodeficiency Virus Infection. <i>Journal of Virology</i> , 2015, 89, 5895-5903.  | 3.4  | 92        |
| 71 | Broadly Neutralizing Human Immunodeficiency Virus Type 1 Antibody Gene Transfer Protects Nonhuman Primates from Mucosal Simian-Human Immunodeficiency Virus Infection. <i>Journal of Virology</i> , 2015, 89, 8334-8345.                                | 3.4  | 100       |
| 72 | Antibodies VRC01 and 10E8 Neutralize HIV-1 with High Breadth and Potency Even with Ig-Framework Regions Substantially Reverted to Germline. <i>Journal of Immunology</i> , 2014, 192, 1100-1106.  | 0.8  | 86        |

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|----|--|-----|-----------|
| 73 | Secretion of MIP-1 $\beta$ and MIP-1 $\alpha$ by CD8+ T-lymphocytes correlates with HIV-1 inhibition independent of coreceptor usage. Cellular Immunology, 2011, 266, 154-164. | 3.0 | 28        |
| 74 | Epigenetic regulation of CD8+ T-lymphocyte mediated suppression of HIV-1 replication. Virology, 2010, 405, 234-242.  | 2.4 | 15        |
| 75 | ^Rapid Selection of HIV Envelopes that Bind to Neutralizing Antibody B Cell Lineage Members with Functional Improbable Mutations. SSRN Electronic Journal, 0, , .              | 0.4 | 1         |