

Stanford



Bali Pulendran

Violetta L. Horton Professor and Professor of Microbiology and Immunology
Pathology

CONTACT INFORMATION

- **Administrative Contact**

Karina Patricia Gomez - Administrative Associate

Email karina71@stanford.edu

Tel 650.725.1792

Bio

ACADEMIC APPOINTMENTS

- Professor, Pathology
- Professor, Microbiology & Immunology
- Member, Bio-X
- Faculty Fellow, Sarafan ChEM-H

Teaching

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Candace Liu, Azam Mohsin, Katherine Nico

Postdoctoral Faculty Sponsor

Gurpreet Bharj, Haleigh Eppler, Zuoqing Fang, Mengyun Hu, Lucie Rodriguez, Xia Xie, Haibo Zhang

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (Phd Program)
- Microbiology and Immunology (Phd Program)

Publications

PUBLICATIONS

- **AS03 adjuvant enhances the magnitude, persistence, and clonal breadth of memory B cell responses to a plant-based COVID-19 vaccine in humans.** *Science immunology*
Grigoryan, L., Feng, Y., Bellusci, L., Lai, L., Wali, B., Ellis, M., Yuan, M., Arunachalam, P. S., Hu, M., Kowli, S., Gupta, S., Maysel-Auslender, S., Maecker, et al 2024; 9 (94): eadi8039
- **Impaired innate and adaptive immune responses to BNT162b2 SARS-CoV-2 vaccination in systemic lupus erythematosus.** *JCI insight*

Sarin, K. Y., Zheng, H., Chaichian, Y., Arunachalam, P. S., Swaminathan, G., Eschholz, A., Gao, F., Wirz, O. F., Lam, B., Yang, E., Lee, L. W., Feng, A., Lewis, et al
2024; 9 (5)

● **Vaccine design via antigen reorientation.** *Nature chemical biology*

Xu, D., Carter, J. J., Li, C., Utz, A., Weidenbacher, P. A., Tang, S., Sanyal, M., Pulendran, B., Barnes, C. O., Kim, P. S.
2024

● **Integrated organ immunity: a path to a universal vaccine.** *Nature reviews. Immunology*

Pulendran, B.
2024

● **IgM N-glycosylation correlates with COVID-19 severity and rate of complement deposition.** *Nature communications*

Haslund-Gourley, B. S., Woloszczuk, K., Hou, J., Connors, J., Cusimano, G., Bell, M., Taramangalam, B., Fourati, S., Mege, N., Bernui, M., Altman, M. C., Krammer, F., van Bakel, et al
2024; 15 (1): 404

● **Features of acute COVID-19 associated with post-acute sequelae of SARS-CoV-2 phenotypes: results from the IMPACC study.** *Nature communications*

Ozonoff, A., Jayavelu, N. D., Liu, S., Melamed, E., Milliren, C. E., Qi, J., Geng, L. N., McComsey, G. A., Cairns, C. B., Baden, L. R., Schaezman, J., Shaw, A. C., Samaha, et al
2024; 15 (1): 216

● **BCG vaccination stimulates integrated organ immunity by feedback of the adaptive immune response to imprint prolonged innate antiviral resistance.** *Nature immunology*

Lee, A., Floyd, K., Wu, S., Fang, Z., Tan, T. K., Froggatt, H. M., Powers, J. M., Leist, S. R., Gully, K. L., Hubbard, M. L., Li, C., Hui, H., Scoville, et al
2023

● **Corrigendum to "Phenotypes of disease severity in a cohort of hospitalized COVID-19 patients: results from the IMPACC study" [eBioMedicine 83 (2022) 104208].** *EBioMedicine*

Ozonoff, A., Schaezman, J., Jayavelu, N. D., Milliren, C. E., Calfee, C. S., Cairns, C. B., Kraft, M., Baden, L. R., Shaw, A. C., Krammer, F., van Bakel, H., Esserman, D. A., Liu, et al
2023; 98: 104860

● **Author Correction: A ferritin-based COVID-19 nanoparticle vaccine that elicits robust, durable, broad-spectrum neutralizing antisera in non-human primates.** *Nature communications*

Weidenbacher, P. A., Sanyal, M., Friedland, N., Tang, S., Arunachalam, P. S., Hu, M., Kumru, O. S., Morris, M. K., Fontenot, J., Shirreff, L., Do, J., Cheng, Y. C., Vasudevan, et al
2023; 14 (1): 6211

● **Autologous tier 2 serum IgA neutralizing antibodies in macaques vaccinated with BG505.664 SOSIP**

Smith, J. C., Hunter, E., Amara, R. R., Pulendran, B., Kozlowski, P. A.
WILEY.2023: 327

● **Multi-omics analysis of mucosal and systemic immunity to SARS-CoV-2 after birth.** *Cell*

Wimmers, F., Burrell, A. R., Feng, Y., Zheng, H., Arunachalam, P. S., Hu, M., Spranger, S., Nyhoff, L. E., Joshi, D., Trisal, M., Awasthi, M., Bellusci, L., Ashraf, et al
2023

● **Intradermal but not intramuscular modified vaccinia Ankara immunizations protect against intravaginal tier2 simian-human immunodeficiency virus challenges in female macaques.** *Nature communications*

Bollimpelli, V. S., Reddy, P. B., Gangadhara, S., Charles, T. P., Burton, S. L., Tharp, G. K., Styles, T. M., Labranche, C. C., Smith, J. C., Upadhyay, A. A., Sahoo, A., Legere, T., Shiferaw, et al
2023; 14 (1): 4789

● **Memory-like innate response to booster vaccination with MF-59 adjuvanted influenza vaccine in children.** *NPJ vaccines*

Kazmin, D., Clutterbuck, E. A., Napolitani, G., Wilkins, A. L., Tarlton, A., Thompson, A. J., Montomoli, E., Lapini, G., Bihari, S., White, R., Jones, C., Snape, M. D., Galal, et al
2023; 8 (1): 100

● **Addendum: Systems vaccinology of the BNT162b2 mRNA vaccine in humans.** *Nature*

Arunachalam, P. S., Scott, M. K., Hagan, T., Li, C., Feng, Y., Wimmers, F., Grigoryan, L., Trisal, M., Edara, V. V., Lai, L., Chang, S. E., Feng, A., Dhingra, et al

2023

- **Multi-omic longitudinal study reveals immune correlates of clinical course among hospitalized COVID-19 patients.** *Cell reports. Medicine*
Diray-Arce, J., Fourati, S., Doni Jayavelu, N., Patel, R., Maguire, C., Chang, A. C., Dandekar, R., Qi, J., Lee, B. H., van Zalm, P., Schroeder, A., Chen, E., Konstorum, et al
2023; 101079
- **Circular RNA vaccine induces potent T cell responses.** *Proceedings of the National Academy of Sciences of the United States of America*
Amaya, L., Grigoryan, L., Li, Z., Lee, A., Wender, P. A., Pulendran, B., Chang, H. Y.
2023; 120 (20): e2302191120
- **Broadly neutralizing antibodies against sarbecoviruses generated by immunization of macaques with an AS03-adjuvanted COVID-19 vaccine.** *Science translational medicine*
Feng, Y., Yuan, M., Powers, J. M., Hu, M., Munt, J. E., Arunachalam, P. S., Leist, S. R., Bellusci, L., Kim, J., Sprouse, K. R., Adams, L. E., Sundaramurthy, S., Zhu, et al
2023; 15 (695): eadg7404
- **Robust T cell responses to the Pfizer/BioNTech vaccine compared to infection and evidence of attenuated CD8+T cell responses due to COVID-19**
Gao, F., Mallajoysula, V., Altman, J. D., Wang, T. T., Nadeau, K. C., Boyd, S. D., Pulendran, B., Davis, M. M.
AMER ASSOC IMMUNOLOGISTS.2023
- **A ferritin-based COVID-19 nanoparticle vaccine that elicits robust, durable, broad-spectrum neutralizing antisera in non-human primates.** *Nature communications*
Weidenbacher, P. A., Sanyal, M., Friedland, N., Tang, S., Arunachalam, P. S., Hu, M., Kumru, O. S., Morris, M. K., Fontenot, J., Shirreff, L., Do, J., Cheng, Y. C., Vasudevan, et al
2023; 14 (1): 2149
- **Progress in vaccine development for infectious diseases-a Keystone Symposia report.** *Annals of the New York Academy of Sciences*
Cable, J., Graham, B. S., Koup, R. A., Seder, R. A., Kariko, K., Pardi, N., Barouch, D. H., Sharma, B., Rauch, S., Nachbagauer, R., Forsell, M. N., Schotsaert, M., Ellebedy, et al
2023
- **Durability of immune responses to the booster mRNA vaccination against COVID-19.** *The Journal of clinical investigation*
Arunachalam, P. S., Lai, L., Samaha, H., Feng, Y., Hu, M., Hui, H. S., Wali, B., Ellis, M. L., Davis-Gardner, M. E., Huerta, C. M., Bechnak, K., Bechnak, S., Lee, et al
2023
- **Spheromers reveal robust T cell responses to the Pfizer/BioNTech vaccine and attenuated peripheral CD8+ T cell responses post SARS-CoV-2 infection.** *Immunity*
Gao, F., Mallajoysula, V., Arunachalam, P. S., van der Ploeg, K., Manohar, M., Röltgen, K., Yang, F., Wirz, O., Hoh, R., Haraguchi, E., Lee, J. Y., Willis, R., Ramachandiran, et al
2023
- **Ablation of Adar1 in myeloid cells imprints a global antiviral state in the lung and heightens early immunity against SARS-CoV-2.** *Cell reports*
Adamska, J. Z., Verma, R., Gupta, S., Hagan, T., Wimmers, F., Floyd, K., Li, Q., Valore, E. V., Wang, Y., Trisal, M., Vilches-Moure, J. G., Subramaniam, S., Walkley, et al
2023; 42 (1): 112038
- **Systems biological assessment of the temporal dynamics of immunity to a viral infection in the first weeks and months of life.** *medRxiv : the preprint server for health sciences*
Wimmers, F., Burrell, A. R., Feng, Y., Zheng, H., Arunachalam, P. S., Hu, M., Spranger, S., Nyhoff, L., Joshi, D., Trisal, M., Awasthi, M., Bellusci, L., Ashraf, et al
2023
- **A TLR7-nanoparticle adjuvant promotes a broad immune response against heterologous strains of influenza and SARS-CoV-2.** *Nature materials*
Yin, Q., Luo, W., Mallajoysula, V., Bo, Y., Guo, J., Xie, J., Sun, M., Verma, R., Li, C., Constantz, C. M., Wagar, L. E., Li, J., Sola, et al
2023
- **Lipid homeostasis mediated by cholesterol synthesis supports B cell responses to vaccination** *NATURE IMMUNOLOGY*
Pulendran, B., Luo, W.
2023: 216-217

- **SREBP signaling is essential for effective B cell responses.** *Nature immunology*
Luo, W., Adamska, J. Z., Li, C., Verma, R., Liu, Q., Hagan, T., Wimmers, F., Gupta, S., Feng, Y., Jiang, W., Zhou, J., Valore, E., Wang, et al
2022
- **A ferritin-based COVID-19 nanoparticle vaccine that elicits robust, durable, broad-spectrum neutralizing antisera in non-human primates.** *bioRxiv : the preprint server for biology*
Weidenbacher, P. A., Sanyal, M., Friedland, N., Tang, S., Arunachalam, P. S., Hu, M., Kumru, O. S., Morris, M. K., Fontenot, J., Shirreff, L., Do, J., Cheng, Y. C., Vasudevan, et al
2022
- **Author Correction: The persistence of memory: defining, engineering, and measuring vaccine durability.** *Nature immunology*
Palin, A. C., Alter, G., Crotty, S., Ellebedy, A. H., Lane, M. C., Lee, F. E., Locci, M., Malaspina, A., Mallia, C., McElrath, M. J., Pulendran, B., Singh, A., D'Souza, et al
2022
- **Designing epitope-focused vaccines via antigen reorientation.** *bioRxiv : the preprint server for biology*
Xu, D., Li, C., Utz, A., Weidenbacher, P. A., Tang, S., Sanyal, M., Pulendran, B., Kim, P. S.
2022
- **The persistence of memory: defining, engineering, and measuring vaccine durability.** *Nature immunology*
Palin, A. C., Alter, G., Crotty, S., Ellebedy, A. H., Lane, M. C., Lee, F. E., Locci, M., Malaspina, A., Mallia, C., McElrath, M. J., Pulendran, B., Singh, A., D'Souza, et al
2022
- **Transcriptional atlas of the human immune response to 13 vaccines reveals a common predictor of vaccine-induced antibody responses.** *Nature immunology*
Hagan, T., Gerritsen, B., Tomalin, L. E., Fourati, S., Mule, M. P., Chawla, D. G., Rychkov, D., Henrich, E., Miller, H. E., Diray-Arce, J., Dunn, P., Lee, A., Human Immunology Project Consortium (HIPC), et al
2022
- **Pan-vaccine analysis reveals innate immune endotypes predictive of antibody responses to vaccination.** *Nature immunology*
Fourati, S., Tomalin, L. E., Mule, M. P., Chawla, D. G., Gerritsen, B., Rychkov, D., Henrich, E., Miller, H. E., Hagan, T., Diray-Arce, J., Dunn, P., Human Immunology Project Consortium (HIPC), Levy, O., et al
2022
- **The Immune Signatures data resource, a compendium of systems vaccinology datasets.** *Scientific data*
Diray-Arce, J., Miller, H. E., Henrich, E., Gerritsen, B., Mule, M. P., Fourati, S., Gygi, J., Hagan, T., Tomalin, L., Rychkov, D., Kazmin, D., Chawla, D. G., Meng, et al
2022; 9 (1): 635
- **Early immune markers of clinical, virological, and immunological outcomes in patients with COVID-19: a multi-omics study.** *eLife*
Hu, Z., van der Ploeg, K., Chakraborty, S., Arunachalam, P. S., Mori, D. A., Jacobson, K. B., Bonilla, H., Parsonnet, J., Andrews, J. R., Holubar, M., Subramanian, A., Khosla, C., Maldonado, et al
2022; 11
- **Durable protection against the SARS-CoV-2 Omicron variant is induced by an adjuvanted subunit vaccine.** *Science translational medicine*
Arunachalam, P. S., Feng, Y., Ashraf, U., Hu, M., Walls, A. C., Edara, V. V., Zarnitsyna, V. I., Aye, P. P., Golden, N., Miranda, M. C., Green, K. W., Threeton, B. M., Maness, et al
2022; 14 (658): eabq4130
- **Distinct sensitivities to SARS-CoV-2 variants in vaccinated humans and mice.** *Cell reports*
Walls, A. C., VanBlargan, L. A., Wu, K., Choi, A., Navarro, M. J., Lee, D., Avena, L., Berrueta, D. M., Pham, M. N., Elbashir, S., Kraft, J. C., Miranda, M. C., Kepl, et al
2022; 111299
- **Phenotypes of disease severity in a cohort of hospitalized COVID-19 patients: Results from the IMPACC study.** *EBioMedicine*
Ozonoff, A., Schaenman, J., Jayavelu, N. D., Milliren, C. E., Calfee, C. S., Cairns, C. B., Kraft, M., Baden, L. R., Shaw, A. C., Krammer, F., van Bakel, H., Esserman, D. A., Liu, et al
2022; 83: 104208
- **Adjuvanting a subunit SARS-CoV-2 vaccine with clinically relevant adjuvants induces durable protection in mice.** *NPJ vaccines*

- Grigoryan, L., Lee, A., Walls, A. C., Lai, L., Franco, B., Arunachalam, P. S., Feng, Y., Luo, W., Vanderheiden, A., Floyd, K., Wrenn, S., Pettie, D., Miranda, et al 2022; 7 (1): 55
- **Epigenetic adjuvants: durable reprogramming of the innate immune system by adjuvants.** *Current opinion in immunology*
Lee, A., Wimmers, F., Pulendran, B.
2022; 77: 102189
 - **Mechanisms of innate and adaptive immunity to the Pfizer-BioNTech BNT162b2 vaccine.** *Nature immunology*
Li, C., Lee, A., Grigoryan, L., Arunachalam, P. S., Scott, M. K., Trisal, M., Wimmers, F., Sanyal, M., Weidenbacher, P. A., Feng, Y., Adamska, J. Z., Valore, E., Wang, et al
2022
 - **Early immune responses have long-term associations with clinical, virologic, and immunologic outcomes in patients with COVID-19.** *Research square*
Hu, Z., van der Ploeg, K., Chakraborty, S., Arunachalam, P., Mori, D., Jacobson, K., Bonilla, H., Parsonnet, J., Andrews, J., Hedlin, H., de la Parte, L., Dantzler, K., Ty, et al
2022
 - **The Single Cell Transcriptomic and Epigenomic Map of the Innate Immune Response to Vaccination in Lymph Nodes**
Scott, M., Lee, A., Wimmers, F., Arunachalam, P., Fox, C., Tomai, M., Khatri, P., Pulendran, B.
MOSBY-ELSEVIER.2022: AB316
 - **A molecular atlas of innate immunity to adjuvanted and live attenuated vaccines, in mice.** *Nature communications*
Lee, A., Scott, M. K., Wimmers, F., Arunachalam, P. S., Luo, W., Fox, C. B., Tomai, M., Khatri, P., Pulendran, B.
1800; 13 (1): 549
 - **Early non-neutralizing, afucosylated antibody responses are associated with COVID-19 severity.** *Science translational medicine*
Chakraborty, S., Gonzalez, J. C., Sievers, B. L., Mallajosyula, V., Chakraborty, S., Dubey, M., Ashraf, U., Cheng, B. Y., Kathale, N., Tran, K. Q., Scallan, C., Sinnott, A., Cassidy, et al
1800: eabm7853
 - **Durability of immune responses to the BNT162b2 mRNA vaccine MED**
Suthar, M. S., Arunachalam, P. S., Hu, M., Reis, N., Trisal, M., Raeber, O., Chinthurajah, S., Davis-Gardner, M. E., Manning, K., Mudvari, P., Boritz, E., Godbole, S., Henry, et al
2022; 3 (1): 25-27
 - **Durability of immune responses to the BNT162b2 mRNA vaccine.** *Med (New York, N.Y.)*
Suthar, M. S., Arunachalam, P. S., Hu, M., Reis, N., Trisal, M., Raeber, O., Chinthurajah, S., Davis-Gardner, M. E., Manning, K., Mudvari, P., Boritz, E., Godbole, S., Henry, et al
2022; 3 (1): 25-27
 - **Antibodies elicited by SARS-CoV-2 infection or mRNA vaccines have reduced neutralizing activity against Beta and Omicron pseudoviruses.** *Science translational medicine*
Sievers, B. L., Chakraborty, S., Xue, Y., Gelbart, T., Gonzalez, J. C., Cassidy, A. G., Golan, Y., Prahl, M., Gaw, S. L., Arunachalam, P. S., Blish, C. A., Boyd, S. D., Davis, et al
1800: eabn7842
 - **Safety, immunogenicity, and protection provided by unadjuvanted and adjuvanted formulations of a recombinant plant-derived virus-like particle vaccine candidate for COVID-19 in nonhuman primates.** *Cellular & molecular immunology*
Pillet, S., Arunachalam, P. S., Andreani, G., Golden, N., Fontenot, J., Aye, P. P., Röltgen, K., Lehmicke, G., Gobeil, P., Dube, C., Trepanier, S., Charland, N., D'Aoust, et al
1800
 - **Disease characteristics and serological responses in patients with differing severity of COVID-19 infection: A longitudinal cohort study in Dhaka, Bangladesh.** *PLoS neglected tropical diseases*
Akter, A., Ahmed, T., Tauheed, I., Akhtar, M., Rahman, S. I., Khaton, F., Ahmmmed, F., Ferdous, J., Afrad, M. H., Kawser, Z., Hossain, M., Khondaker, R., Hasnat, et al
2022; 16 (1): e0010102
 - **Immune imprinting, breadth of variant recognition, and germinal center response in human SARS-CoV-2 infection and vaccination.** *Cell*
Röltgen, K., Nielsen, S. C., Silva, O., Younes, S. F., Zaslavsky, M., Costales, C., Yang, F., Wirz, O. F., Solis, D., Hoh, R. A., Wang, A., Arunachalam, P. S., Colburg, et al

2022

● **Natural resistance against infections: focus on COVID-19.** *Trends in immunology*

Netea, M. G., Dominguez-Andres, J., van de Veerdonk, F. L., van Crevel, R., Pulendran, B., van der Meer, J. W.
1800

● **Direct comparison of antibody responses to four SARS-CoV-2 vaccines in Mongolia.** *Cell host & microbe*

Dashdorj, N. J., Wirz, O. F., Roltgen, K., Haraguchi, E., Buzzanco, A. S., Sibai, M., Wang, H., Miller, J. A., Solis, D., Sahoo, M. K., Arunachalam, P. S., Lee, A. S., Shah, et al
2021

● **Hydrogel-Based Slow Release of a Receptor-Binding Domain Subunit Vaccine Elicits Neutralizing Antibody Responses Against SARS-CoV-2.** *Advanced materials (Deerfield Beach, Fla.)*

Gale, E. C., Powell, A. E., Roth, G. A., Meany, E. L., Yan, J., Ou, B. S., Grosskopf, A. K., Adamska, J., Picece, V. C., d'Aquino, A. I., Pulendran, B., Kim, P. S., Appel, et al
2021: e2104362

● **Designing spatial and temporal control of vaccine responses.** *Nature reviews. Materials*

Roth, G. A., Picece, V. C., Ou, B. S., Luo, W., Pulendran, B., Appel, E. A.
2021: 1-22

● **Elicitation of broadly protective sarbecovirus immunity by receptor-binding domain nanoparticle vaccines.** *Cell*

Walls, A. C., Miranda, M. C., Schafer, A., Pham, M. N., Greaney, A., Arunachalam, P. S., Navarro, M., Tortorici, M. A., Rogers, K., O'Connor, M. A., Shirreff, L., Ferrell, D. E., Bowen, et al
2021

● **Immunophenotyping assessment in a COVID-19 cohort (IMPACC): A prospective longitudinal study** *SCIENCE IMMUNOLOGY*

Rouphael, N., Maecker, H., Montgomery, R. R., Diray-Arce, J., Kleinsteiner, S. H., Altman, M. C., Bosinger, S. E., Eckalbar, W., Guan, L., Hough, C. L., Krammer, F., Langelier, C., Levy, et al
2021; 6 (62)

● **The single-cell epigenomic and transcriptional landscape of immunity to influenza vaccination in humans**

Wimmers, F., Donato, M., Kuo, A., Ashuach, T., Gupta, S., Li, C., Dvorak, M., Foecke, M., Chang, S. E., Hagan, T., De Jong, S. E., Maecker, H. T., Van der Most, et al
WILEY.2021: 31

● **The single-cell epigenomic and transcriptional landscape of immunity to influenza vaccination.** *Cell*

Wimmers, F., Donato, M., Kuo, A., Ashuach, T., Gupta, S., Li, C., Dvorak, M., Foecke, M. H., Chang, S. E., Hagan, T., De Jong, S. E., Maecker, H. T., van der Most, et al
2021

● **Modulation of immune responses to vaccination by the microbiota: implications and potential mechanisms.** *Nature reviews. Immunology*

Lynn, D. J., Benson, S. C., Lynn, M. A., Pulendran, B.
2021

● **Systems biological assessment of human immunity to BNT162b2 mRNA vaccination.** *Research square*

Arunachalam, P. S., Scott, M. K., Hagan, T., Li, C., Feng, Y., Wimmers, F., Grigoryan, L., Trisal, M., Edara, V. V., Lai, L., Chang, S. E., Feng, A., Dhingra, et al
2021

● **Adjuvanting a subunit COVID-19 vaccine to induce protective immunity.** *Nature*

Arunachalam, P. S., Walls, A. C., Golden, N., Atyeo, C., Fischinger, S., Li, C., Aye, P., Navarro, M. J., Lai, L., Edara, V. V., Roltgen, K., Rogers, K., Shirreff, et al
2021

● **mRNA vaccination compared to infection elicits an IgG-predominant response with greater SARS-CoV-2 specificity and similar decrease in variant spike recognition.** *medRxiv : the preprint server for health sciences*

Röltgen, K., Nielsen, S. C., Arunachalam, P. S., Yang, F., Hoh, R. A., Wirz, O. F., Lee, A. S., Gao, F., Mallajosyula, V., Li, C., Haraguchi, E., Shoura, M. J., Wilbur, et al
2021

2021

● **Emerging concepts in the science of vaccine adjuvants.** *Nature reviews. Drug discovery*

Pulendran, B., S Arunachalam, P., O'Hagan, D. T.

2021

- **Auto-antibodies to type I IFNs can underlie adverse reactions to yellow fever live attenuated vaccine.** *The Journal of experimental medicine*
Bastard, P., Michailidis, E., Hoffmann, H., Chbihi, M., Le Voyer, T., Rosain, J., Philippot, Q., Seeleuthner, Y., Gervais, A., Materna, M., de Oliveira, P. M., Maia, M. d., Dinis Ano Bom, et al
2021; 218 (4)
- **Elicitation of broadly protective sarbecovirus immunity by receptor-binding domain nanoparticle vaccines.** *bioRxiv : the preprint server for biology*
Walls, A. C., Miranda, M. C., Pham, M. N., Schafer, A., Greaney, A., Arunachalam, P. S., Navarro, M., Tortorici, M. A., Rogers, K., O'Connor, M. A., Shireff, L., Ferrell, D. E., Brunette, et al
2021
- **Systems view of Bordetella pertussis booster vaccination in adults primed with whole-cell vs. acellular vaccine.** *JCI insight*
da Silva Antunes, R., Soldevila, F., Pomaznay, M., Babor, M., Bennett, J., Tian, Y., Khalil, N. N., Qian, Y., Mandava, A., Scheuermann, R. H., Cortese, M., Pulendran, B., Petro, et al
2021
- **The C3/465 glycan hole cluster in BG505 HIV-1 envelope is the major neutralizing target involved in preventing mucosal SHIV infection.** *PLoS pathogens*
Charles, T. P., Burton, S. L., Arunachalam, P. S., Cottrell, C. A., Sewall, L. M., Bollimpelli, V. S., Gangadhara, S. n., Dey, A. K., Ward, A. B., Shaw, G. M., Hunter, E. n., Amara, R. R., Pulendran, et al
2021; 17 (2): e1009257
- **Systems vaccinology of the BNT162b2 mRNA vaccine in humans.** *Nature*
Arunachalam, P. S., Scott, M. K., Hagan, T., Li, C., Feng, Y., Wimmers, F., Grigoryan, L., Trisal, M., Edara, V. V., Lai, L., Chang, S. E., Feng, A., Dhingra, et al
2021
- **The immunology of SARS-CoV-2 infections and vaccines.** *Seminars in immunology*
Grigoryan, L., Pulendran, B.
2020: 101422
- **High titer, multi-target serum neutralizing antibody responses are associated with protection against autologous challenge in BG505 SOSIP immunized rhesus macaques**
Charles, T. P., Burton, S. L., Legere, T., Arunachalam, P. S., van Gils, M. J., Cottrell, C., Bollimpelli, V. S., Ward, A., Hunter, E., Amara, R. R., Pulendran, B., Derdeyn, C. A.
WILEY.2020: 249
- **The science and medicine of human immunology.** *Science (New York, N.Y.)*
Pulendran, B., Davis, M. M.
2020; 369 (6511)
- **The Impact of the Microbiome on Immunity to Vaccination in Humans.** *Cell host & microbe*
de Jong, S. E., Olin, A., Pulendran, B.
2020; 28 (2): 169–79
- **Systems biological assessment of immunity to mild versus severe COVID-19 infection in humans.** *Science (New York, N.Y.)*
Arunachalam, P. S., Wimmers, F., Mok, C. K., Perera, R. A., Scott, M., Hagan, T., Sigal, N., Feng, Y., Bristow, L., Tak-Yin Tsang, O., Wagh, D., Coller, J., Pellegrini, et al
2020
- **Editorial overview: Vaccines 2020** *CURRENT OPINION IN IMMUNOLOGY*
Pulendran, B., Rappuoli, R.
2020; 65: III-+
- **Adjuvanted H5N1 influenza vaccine enhances both cross-reactive memory B cell and strain-specific naive B cell responses in humans.** *Proceedings of the National Academy of Sciences of the United States of America*
Ellebedy, A. H., Nachbagauer, R., Jackson, K. J., Dai, Y., Han, J., Alsoussi, W. B., Davis, C. W., Stadlbauer, D., Roushabel, N., Chromikova, V., McCausland, M., Chang, C. Y., Cortese, et al
2020
- **Squalene-based adjuvants stimulate CD8 T cell, but not antibody responses, through a RIPK3-dependent pathway.** *eLife*
Kim, E. H., Woodruff, M. C., Grigoryan, L., Maier, B., Lee, S. H., Mandal, P., Cortese, M., Natrajan, M. S., Ravindran, R., Ma, H., Merad, M., Gitlin, A. D., Mocarski, et al

2020; 9

- **Emerging technologies for systems vaccinology - multi-omics integration and single-cell (epi)genomic profiling.** *Current opinion in immunology*
Wimmers, F., Pulendran, B.
2020; 65: 57–64
- **Persistence of varicella zoster virus specific plasma cells in adult human bone marrow following childhood vaccination.** *Journal of virology*
Eberhardt, C. S., Wieland, A., Nasti, T. H., Grifoni, A., Wilson, E., Schmid, D. S., Pulendran, B., Sette, A., Waller, E. K., Roush, N., Ahmed, R.
2020
- **Systems Biological Analysis of Immune Response to Influenza Vaccination.** *Cold Spring Harbor perspectives in medicine*
Cortese, M., Sherman, A. C., Roush, N. G., Pulendran, B.
2020
- **3M-052, a synthetic TLR-7/8 agonist, induces durable HIV-1 envelope-specific plasma cells and humoral immunity in nonhuman primates.** *Science immunology*
Kasturi, S. P., Rasheed, M. A., Havenar-Daughton, C. n., Pham, M. n., Legere, T. n., Sher, Z. J., Kovalenkov, Y. n., Gumber, S. n., Huang, J. Y., Gottardo, R. n., Fulp, W. n., Sato, A. n., Sawant, et al
2020; 5 (48)
- **T cell-inducing vaccine durably prevents mucosal SHIV infection even with lower neutralizing antibody titers.** *Nature medicine*
Arunachalam, P. S., Charles, T. P., Joag, V. n., Bollimpelli, V. S., Scott, M. K., Wimmers, F. n., Burton, S. L., Labranche, C. C., Petitdemange, C. n., Gangadharan, S. n., Styles, T. M., Quarnstrom, C. F., Walter, et al
2020
- **Systems Biological Approaches for Mucosal Vaccine Development** *MUCOSAL VACCINES: INNOVATION FOR PREVENTING INFECTIOUS DISEASES, 2ND EDITION*
Pulendran, B., Kiyono, H., Pascual, D. W.
2020: 753–72
- **Injectable Hydrogels for Sustained Codelivery of Subunit Vaccines Enhance Humoral Immunity.** *ACS central science*
Roth, G. A., Gale, E. C., Alcántara-Hernández, M. n., Luo, W. n., Axpe, E. n., Verma, R. n., Yin, Q. n., Yu, A. C., Lopez Hernandez, H. n., Maikawa, C. L., Smith, A. A., Davis, M. M., Pulendran, et al
2020; 6 (10): 1800–1812
- **Vaccine innovations for emerging infectious diseases-a symposium report.** *Annals of the New York Academy of Sciences*
Cable, J., Srikanthiah, P., Crowe, J. E., Pulendran, B., Hill, A., Ginsberg, A., Koff, W., Mathew, A., Ng, T., Jansen, K., Glenn, G., Permar, S., Wilson, et al
2019
- **West Nile Virus Infection Blocks Inflammatory Response and T Cell Costimulatory Capacity of Human Monocyte-Derived Dendritic Cells.** *Journal of virology*
Zimmerman, M. G., Bowen, J. R., McDonald, C. E., Pulendran, B., Suthar, M. S.
2019
- **STAT5: A Target of Antagonism by Neurotropic Flaviviruses.** *Journal of virology*
Zimmerman, M. G., Bowen, J. R., McDonald, C. E., Young, E., Baric, R. S., Pulendran, B., Suthar, M. S.
2019
- **N6-Methyladenosine Modification Controls Circular RNA Immunity.** *Molecular cell*
Chen, Y. G., Chen, R., Ahmad, S., Verma, R., Kasturi, S. P., Amaya, L., Broughton, J. P., Kim, J., Cadena, C., Pulendran, B., Hur, S., Chang, H. Y.
2019
- **Understanding the immunology of the Zostavax shingles vaccine** *CURRENT OPINION IN IMMUNOLOGY*
Sullivan, N. L., Eberhardt, C. S., Wieland, A., Vora, K. A., Pulendran, B., Ahmed, R.
2019; 59: 25–30
- **ImmuneRegulation: a web-based tool for identifying human immune regulatory elements** *NUCLEIC ACIDS RESEARCH*
Kalayci, S., Selvan, M., Ramos, I., Cotsapas, C., Harris, E., Kim, E., Montgomery, R. R., Poland, G., Pulendran, B., Tsang, J. S., Klein, R. J., Gumus, Z. H.
2019; 47 (W1): W142–W150
- **Understanding the immunology of the Zostavax shingles vaccine.** *Current opinion in immunology*

Sullivan, N. L., Eberhardt, C. S., Wieland, A., Vora, K. A., Pulendran, B., Ahmed, R.
2019; 59: 25–30

- **Vaccine induction of antibodies and tissue-resident CD8+ T cells enhances protection against mucosal SHIV-infection in young macaques.** *JCI insight*
Petitdemange, C., Kasturi, S. P., Kozlowski, P. A., Nabi, R., Quarnstrom, C. F., Reddy, P. B., Derdeyn, C. A., Spicer, L. M., Patel, P., Legere, T., Kovalenkov, Y. O., Labranche, C. C., Villinger, et al
2019; 4 (4)
- **Vaccine induction of antibodies and tissue-resident CD8(+) T cells enhances protection against mucosal SHIV-infection in young macaques** *JCI INSIGHT*
Petitdemange, C., Kasturi, S., Kozlowski, P. A., Nabi, R., Quarnstrom, C. F., Reddy, P., Derdeyn, C. A., Spicer, L. M., Patel, P., Legere, T., Kovalenkov, Y. O., Labranche, C. C., Villinger, et al
2019; 4 (4)
- **Antibiotics-Driven Gut Microbiome Perturbation Alters Immunity to Vaccines in Humans.** *Cell*
Hagan, T. n., Cortese, M. n., Roushanel, N. n., Boudreau, C. n., Linde, C. n., Maddur, M. S., Das, J. n., Wang, H. n., Guthmiller, J. n., Zheng, N. Y., Huang, M. n., Upadhyay, A. A., Gardinassi, et al
2019; 178 (6): 1313–28.e13
- **Systems Vaccinology for a Live Attenuated Tularemia Vaccine Reveals Unique Transcriptional Signatures That Predict Humoral and Cellular Immune Responses.** *Vaccines*
Natrajan, M. S., Roushanel, N. n., Lai, L. n., Kazmin, D. n., Jensen, T. L., Weiss, D. S., Ibegbu, C. n., Sztein, M. B., Hooper, W. F., Hill, H. n., Anderson, E. J., Johnson, R. n., Sanz, et al
2019; 8 (1)
- **Immunology taught by vaccines.** *Science (New York, N.Y.)*
Pulendran, B. n.
2019; 366 (6469): 1074–75
- **B Cell Competition for Restricted T Cell Help Suppresses Rare-Epitope Responses** *CELL REPORTS*
Woodruff, M., Kim, E., Luo, W., Pulendran, B.
2018; 25 (2): 321-+
- **Th1/Th17 polarization persists following whole-cell pertussis vaccination despite repeated acellular boosters** *JOURNAL OF CLINICAL INVESTIGATION*
Antunes, R., Babor, M., Carpenter, C., Khalil, N., Cortese, M., Mentzer, A. J., Seumois, G., Petro, C. D., Purcell, L. A., Vijayanand, P., Crotty, S., Pulendran, B., Peters, et al
2018; 128 (9): 3853–65
- **Will Systems Biology Deliver Its Promise and Contribute to the Development of New or Improved Vaccines? From Data to Understanding through Systems Biology** *COLD SPRING HARBOR PERSPECTIVES IN BIOLOGY*
Hagan, T., Pulendran, B.
2018; 10 (8)
- **Will Systems Biology Deliver Its Promise and Contribute to the Development of New or Improved Vaccines? From Data to Understanding through Systems Biology.** *Cold Spring Harbor perspectives in biology*
Hagan, T., Pulendran, B.
2018; 10 (8)
- **BALDR: a computational pipeline for paired heavy and light chain immunoglobulin reconstruction in single-cell RNA-seq data** *GENOME MEDICINE*
Upadhyay, A. A., Kauffman, R. C., Wolabaugh, A. N., Cho, A., Patel, N. B., Reiss, S. M., Havenar-Daughton, C., Dawoud, R. A., Tharp, G. K., Sanz, I., Pulendran, B., Crotty, S., Lee, et al
2018; 10: 20
- **The potential of the microbiota to influence vaccine responses** *JOURNAL OF LEUKOCYTE BIOLOGY*
Lynn, D. J., Pulendran, B.
2018; 103 (2): 225–31
- **Epitopes for neutralizing antibodies induced by HIV-1 envelope glycoprotein BG505 SOSIP trimers in rabbits and macaques** *PLOS PATHOGENS*
Klasse, P. J., Ketas, T. J., Cottrell, C. A., Ozorowski, G., Debnath, G., Camara, D., Francomano, E., Pugach, P., Ringe, R. P., LaBranche, C. C., van Gils, M. J., Bricault, C. A., Barouch, et al
2018; 14 (2): e1006913

- **AS03-and MF59-Adjuvanted influenza vaccines in Children** *FRONTIERS IN IMMUNOLOGY*
Wilkins, A. L., Kazmin, D., Napolitani, G., Clutterbuck, E. A., Pulendran, B., Siegrist, C., Pollard, A. J.
2017; 8: 1760
- **Multicohort analysis reveals baseline transcriptional predictors of influenza vaccination responses** *SCIENCE IMMUNOLOGY*
Avey, S., Cheung, F., Fermin, D., Frelinger, J., Gaujoux, R., Gottardo, R., Khatri, P., Kleinstein, S. H., Kotliarov, Y., Meng, H., Sauteraud, R., Shen-Orr, S. S., Tsang, et al
2017; 2 (14)
- **Metabolic Phenotypes of Response to Vaccination in Humans** *CELL*
Li, S., Sullivan, N. L., Roush, N., Yu, T., Banton, S., Maddur, M. S., McCausland, M., Chiu, C., Canniff, J., Dubey, S., Liu, K., ViLinh Tran, V., Hagan, et al
2017; 169 (5): 862-?
- **Systems analysis of protective immune responses to RTS, S malaria vaccination in humans** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Kazmin, D., Nakaya, H. I., Lee, E. K., Johnson, M. J., van der Most, R., van den Berg, R. A., Ballou, W. R., Jongert, E., Wille-Reece, U., Ockenhouse, C., Aderem, A., Zak, D. E., Sadoff, et al
2017; 114 (9): 2425-2430
- **Adjuvanting a Simian Immunodeficiency Virus Vaccine with Toll-Like Receptor Ligands Encapsulated in Nanoparticles Induces Persistent Antibody Responses and Enhanced Protection in TRIM5 alpha Restrictive Macaques** *JOURNAL OF VIROLOGY*
Kasturi, S. P., Kozlowski, P. A., Nakaya, H. I., Burger, M. C., Russo, P., Pham, M., Kovalenkov, Y., Silveira, E. L., Havenar-Daughton, C., Burton, S. L., Kilgore, K. M., Johnson, M. J., Nabi, et al
2017; 91 (4)
- **mTOR regulates metabolic adaptation of APCs in the lung and controls the outcome of allergic inflammation.** *Science (New York, N.Y.)*
Sinclair, C. n., Bommakanti, G. n., Gardinassi, L. n., Loebbermann, J. n., Johnson, M. J., Hakimpour, P. n., Hagan, T. n., Benitez, L. n., Todor, A. n., Machiah, D. n., Oriss, T. n., Ray, A. n., Bosinger, et al
2017; 357 (6355): 1014-21
- **Sequential Infection with Common Pathogens Promotes Human-like Immune Gene Expression and Altered Vaccine Response** *CELL HOST & MICROBE*
Reese, T. A., Bi, K., Kambal, A., Filali-Mouhim, A., Beura, L. K., Burger, M. C., Pulendran, B., Sekaly, R., Jameson, S. C., Masopust, D., Haining, W. N., Virgin, H. W.
2016; 19 (5): 713-719
- **The amino acid sensor GCN2 controls gut inflammation by inhibiting inflammasome activation** *NATURE*
Ravindran, R., Loebbermann, J., Nakaya, H. I., Khan, N., Ma, H., Gama, L., Machiah, D. K., Lawson, B., Hakimpour, P., Wang, Y., Li, S., Sharma, P., Kaufman, et al
2016; 531 (7595): 523-?
- **CXCL13 is a plasma biomarker of germinal center activity** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Havenar-Daughton, C., Lindqvist, M., Heit, A., Wu, J. E., Reiss, S. M., Kendric, K., Belanger, S., Kasturi, S. P., Landais, E., Akondy, R. S., McGuire, H. M., Bothwell, M., Vagefi, et al
2016; 113 (10): 2702-2707
- **Systems biology of immunity to MF59-adjuvanted versus nonadjuvanted trivalent seasonal influenza vaccines in early childhood** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Nakaya, H. I., Clutterbuck, E., Kazmin, D., Wang, L., Cortese, M., Bosinger, S. E., Patel, N. B., Zak, D. E., Aderem, A., Dong, T., Del Giudice, G., Rappuoli, R., Cerundolo, et al
2016; 113 (7): 1853-1858
- **Systems Analysis of Immunity to Influenza Vaccination across Multiple Years and in Diverse Populations Reveals Shared Molecular Signatures** *IMMUNITY*
Nakaya, H. I., Hagan, T., Duraisingam, S. S., Lee, E. K., Kwissa, M., Roush, N., Frasca, D., Gersten, M., Mehta, A. K., Gaujoux, R., Li, G., Gupta, S., Ahmed, et al
2015; 43 (6): 1186-1198
- **Vaccinology in the era of high-throughput biology** *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*
Nakaya, H. I., Pulendran, B.
2015; 370 (1671)

- **The Varieties of Immunological Experience; Of Pathogens, Stress, and Dendritic Cells** ANNUAL REVIEW OF IMMUNOLOGY VOL 33
Pulendran, B.
2015; 33: 563-606
- **Activation of Toll-like Receptor-2 by Endogenous Matrix Metalloproteinase-2 Modulates Dendritic-Cell-Mediated Inflammatory Responses** CELL REPORTS
Godefroy, E., Gallois, A., Idoyaga, J., Merad, M., Tung, N., Monu, N., Saenger, Y., Fu, Y., Ravindran, R., Pulendran, B., Jotereau, F., Trombetta, S., Bhardwaj, et al
2014; 9 (5): 1856-1870
- **Emerging functions of the unfolded protein response in immunity** NATURE IMMUNOLOGY
Janssens, S., Pulendran, B., Lambrecht, B. N.
2014; 15 (10): 910-919
- **TLR5-Mediated Sensing of Gut Microbiota Is Necessary for Antibody Responses to Seasonal Influenza Vaccination** IMMUNITY
Oh, J. Z., Ravindran, R., Chassaing, B., Carvalho, F. A., Maddur, M. S., Bower, M., Hakimpour, P., Gill, K. P., Nakaya, H. I., Yarovinsky, F., Sartor, R. b., Gewirtz, A. T., Pulendran, et al
2014; 41 (3): 478-492
- **Systems vaccinology: Probing humanity's diverse immune systems with vaccines** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA
Pulendran, B.
2014; 111 (34): 12300-12306
- **Dengue Virus Infection Induces Expansion of a CD14(+)CD16(+) Monocyte Population that Stimulates Plasmablast Differentiation** CELL HOST & MICROBE
Kwissa, M., Nakaya, H. I., Onlamoon, N., Wrammert, J., Villinger, F., Perng, G. C., Yoksan, S., Pattanapanyasat, K., Chokephaibulkit, K., Ahmed, R., Pulendran, B.
2014; 16 (1): 115-127
- **Molecular signatures of antibody responses derived from a systems biology study of five human vaccines** NATURE IMMUNOLOGY
Li, S., Rouphael, N., Duraisingham, S., Romero-Steiner, S., Presnell, S., Davis, C., Schmidt, D. S., Johnson, S. E., Milton, A., Rajam, G., Kasturi, S., Carlone, G. M., Quinn, et al
2014; 15 (2): 195-204
- **Computational resources for high-dimensional immune analysis from the Human Immunology Project Consortium** NATURE BIOTECHNOLOGY
Brusic, V., Gottardo, R., Kleinsteine, S. H., Davis, M. M., HIPC Steering Comm
2014; 32 (2): 146-48
- **Vaccine Activation of the Nutrient Sensor GCN2 in Dendritic Cells Enhances Antigen Presentation** SCIENCE
Ravindran, R., Khan, N., Nakaya, H. I., Li, S., Loebbermann, J., Maddur, M. S., Park, Y., Jones, D. P., Chappert, P., Davoust, J., Weiss, D. S., Virgin, H. W., Ron, et al
2014; 343 (6168): 313-317
- **Chronic but Not Acute Virus Infection Induces Sustained Expansion of Myeloid Suppressor Cell Numbers that Inhibit Viral-Specific T Cell Immunity** IMMUNITY
Norris, B. A., Uebelhoer, L. S., Nakaya, H. I., Price, A. A., Grakoui, A., Pulendran, B.
2013; 38 (2): 309-321
- **Systems Biology of Vaccination in the Elderly** SYSTEMS BIOLOGY
Duraisingham, S. S., Rouphael, N., Cavanagh, M. M., Nakaya, H. I., Goronzy, J. J., Pulendran, B.
2013; 363: 117-142
- **A Blueprint for HIV Vaccine Discovery** CELL HOST & MICROBE
Burton, D. R., Ahmed, R., Barouch, D. H., Butera, S. T., Crotty, S., Godzik, A., Kaufmann, D. E., McElrath, M. J., Nussenzweig, M. C., Pulendran, B., Scanlan, C. N., Schief, W. R., Silvestri, et al
2012; 12 (4): 396-407
- **New Paradigms in Type 2 Immunity** SCIENCE
Pulendran, B., Artis, D.
2012; 337 (6093): 431-435

- **Distinct TLR adjuvants differentially stimulate systemic and local innate immune responses in nonhuman primates** *BLOOD*
Kwissa, M., Nakaya, H. I., Oluoch, H., Pulendran, B.
2012; 119 (9): 2044-2055
- **Learning vaccinology from viral infections** *JOURNAL OF EXPERIMENTAL MEDICINE*
Ahmed, R., Pulendran, B.
2011; 208 (12): 2347-2349
- **Systems biology of vaccination for seasonal influenza in humans** *NATURE IMMUNOLOGY*
Nakaya, H. I., Wrammert, J., Lee, E. K., Racioppi, L., Marie-Kunze, S., Haining, W. N., Means, A. R., Kasturi, S. P., Khan, N., Li, G., McCausland, M., Kanchan, V., Kokko, et al
2011; 12 (8): 786-U149
- **Functional Specializations of Intestinal Dendritic Cell and Macrophage Subsets That Control Th17 and Regulatory T Cell Responses Are Dependent on the T Cell/APC Ratio, Source of Mouse Strain, and Regional Localization** *JOURNAL OF IMMUNOLOGY*
Denning, T. L., Norris, B. A., Medina-Contreras, O., Manicassamy, S., Geem, D., Madan, R., Karp, C. L., Pulendran, B.
2011; 187 (2): 733-747
- **Immunological mechanisms of vaccination** *NATURE IMMUNOLOGY*
Pulendran, B., Ahmed, R.
2011; 12 (6): 509-517
- **Dendritic cell control of tolerogenic responses** *IMMUNOLOGICAL REVIEWS*
Manicassamy, S., Pulendran, B.
2011; 241: 206-227
- **Programming the magnitude and persistence of antibody responses with innate immunity** *NATURE*
Kasturi, S. P., Skountzou, I., Albrecht, R. A., Koutsonanos, D., Hua, T., Nakaya, H. I., Ravindran, R., Stewart, S., Alam, M., Kwissa, M., Villinger, F., Murthy, N., Steel, et al
2011; 470 (7335): 543-U136
- **Systems Vaccinology** *IMMUNITY*
Pulendran, B., Li, S., Nakaya, H. I.
2010; 33 (4): 516-529
- **Activation of beta-Catenin in Dendritic Cells Regulates Immunity Versus Tolerance in the Intestine** *SCIENCE*
Manicassamy, S., Reizis, B., Ravindran, R., Nakaya, H., Salazar-Gonzalez, R. M., Wang, Y., Pulendran, B.
2010; 329 (5993): 849-853
- **Programming dendritic cells to induce T(H)2 and tolerogenic responses** *NATURE IMMUNOLOGY*
Pulendran, B., Tang, H., Manicassamy, S.
2010; 11 (8): 647-655
- **The T helper type 2 response to cysteine proteases requires dendritic cell-basophil cooperation via ROS-mediated signaling** *NATURE IMMUNOLOGY*
Tang, H., Cao, W., Kasturi, S. P., Ravindran, R., Nakaya, H. I., Kundu, K., Murthy, N., Kepler, T. B., Malissen, B., Pulendran, B.
2010; 11 (7): 608-U80
- **Learning immunology from the yellow fever vaccine: innate immunity to systems vaccinology** *NATURE REVIEWS IMMUNOLOGY*
Pulendran, B.
2009; 9 (10): 741-747
- **Toll-like receptor 2-dependent induction of vitamin A-metabolizing enzymes in dendritic cells promotes T regulatory responses and inhibits autoimmunity** *NATURE MEDICINE*
Manicassamy, S., Ravindran, R., Deng, J., Oluoch, H., Denning, T. L., Kasturi, S. P., Rosenthal, K. M., Evavold, B. D., Pulendran, B.
2009; 15 (4): 401-409
- **Systems biology approach predicts immunogenicity of the yellow fever vaccine in humans** *NATURE IMMUNOLOGY*
Querec, T. D., Akondy, R. S., Lee, E. K., Cao, W., Nakaya, H. I., Teuwen, D., Pirani, A., Gernert, K., Deng, J., Marzolf, B., Kennedy, K., Wu, H., Bennouna, et al
2009; 10 (1): 116-125

- **Lamina propria macrophages and dendritic cells differentially induce regulatory and interleukin 17-producing T cell responses** *NATURE IMMUNOLOGY*
Denning, T. L., Wang, Y., Patel, S. R., Williams, I. R., Pulendran, B.
2007; 8 (10): 1086-1094
- **Translating innate immunity into immunological memory: Implications for vaccine development** *CELL*
Pulendran, B., Ahmed, R.
2006; 124 (4): 849-863
- **Yellow fever vaccine YF-17D activates multiple dendritic cell subsets via TLR2, 7, 8, and 9 to stimulate polyvalent immunity** *JOURNAL OF EXPERIMENTAL MEDICINE*
Querec, T., Bennouna, S., Alkan, S. K., Laouar, Y., Gorden, K., Flavell, R., Akira, S., Ahmed, R., Pulendran, B.
2006; 203 (2): 413-424
- **Cutting edge: Different toll-like receptor agonists instruct dendritic cells to induce distinct th responses via differential modulation of extracellular signal-regulated kinase-mitogen-activated protein kinase and c-fos** *JOURNAL OF IMMUNOLOGY*
Agrawal, S., Agrawal, A., Doughty, B., Gerwitz, A., Blenis, J., Van Dyke, T., Pulendran, B.
2003; 171 (10): 4984-4989
- **Impairment of dendritic cells and adaptive immunity by anthrax lethal toxin** *NATURE*
Agrawal, A., Lingappa, J., Leppla, S. H., Agrawal, S., Jabbar, A., Quinn, C., Pulendran, B.
2003; 424 (6946): 329-334
- **Cutting edge: impairment of dendritic cells and adaptive immunity by Ebola and Lassa viruses.** *Journal of immunology*
Mahanty, S., Hutchinson, K., Agarwal, S., McRae, M., Rollin, P. E., Pulendran, B.
2003; 170 (6): 2797-2801
- **Lipopolysaccharides from distinct pathogens induce different classes of immune responses in vivo** *JOURNAL OF IMMUNOLOGY*
Pulendran, B., Kumar, P., Cutler, C. W., Mohamadzadeh, M., Van Dyke, T., Banchereau, J.
2001; 167 (9): 5067-5076
- **Sensing pathogens and tuning immune responses** *SCIENCE*
Pulendran, B., Palucka, K., Banchereau, J.
2001; 293 (5528): 253-256
- **Flt3-ligand and granulocyte colony-stimulating factor mobilize distinct human dendritic cell subsets in vivo** *JOURNAL OF IMMUNOLOGY*
Pulendran, B., Banchereau, J., Burkholder, S., Kraus, E., Guinet, E., Chalouni, C., Caron, D., Maliszewski, C., DAVOUST, J., Fay, J., Palucka, K.
2000; 165 (1): 566-572
- **Polyethylene glycol-modified GM-CSF expands CD11b(high)CD11c(high) but not CD11b(low)CD11c(high) murine dendritic cells in vivo: A comparative analysis with Flt3 ligand** *JOURNAL OF IMMUNOLOGY*
Daro, E., Pulendran, N., Brasel, K., Teepe, M., Pettit, D., Lynch, D. H., Vremec, D., Robb, L., Shortman, K., McKenna, H. J., Maliszewski, C. R., Maraskovsky, E.
2000; 165 (1): 49-58
- **Mice lacking flt3 ligand have deficient hematopoiesis affecting hematopoietic progenitor cells, dendritic cells, and natural killer cells** *BLOOD*
McKenna, H. J., Stocking, K. L., MILLER, R. E., Brasel, K., De Smedt, T., Maraskovsky, E., Maliszewski, C. R., Lynch, D. H., Smith, J., Pulendran, B., Roux, E. R., Teepe, M., Lyman, et al
2000; 95 (11): 3489-3497
- **Distinct dendritic cell subsets differentially regulate the class of immune response in vivo** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Pulendran, B., Smith, J. L., Caspary, G., Brasel, K., Pettit, D., Maraskovsky, E., Maliszewski, C. R.
1999; 96 (3): 1036-1041
- **Developmental pathways of dendritic cells in vivo - Distinct function, phenotype, and localization of dendritic cell subsets in FLT3 ligand-treated mice** *JOURNAL OF IMMUNOLOGY*
Pulendran, B., Lingappa, J., Kennedy, M. K., Smith, J., Teepe, M., Rudensky, A., Maliszewski, C. R., Maraskovsky, E.
1997; 159 (5): 2222-2231
- **SOLUBLE-ANTIGEN CAN CAUSE ENHANCED APOPTOSIS OF GERMINAL-CENTER B-CELLS** *NATURE*
Pulendran, B., Kannourakis, G., Nouri, S., Smith, K. G., Nossal, G. J.

1995; 375 (6529): 331-334