Stanford



Jae Seung Moon

Instructor, Medicine - Immunology & Rheumatology

Bio

ACADEMIC APPOINTMENTS

- Instructor, Medicine - Immunology & Rheumatology

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Yonsei University (2018)
- Bachelor of Science, Yonsei University (2011)

Publications

PUBLICATIONS

- **Senescent-like activated naive B cells contribute to progression to clinical rheumatoid arthritis.** *Nature aging*

  Wu, X., Zhang, M., Moon, J. S., Song, E. K., Abrams, J. C., van Dam, L. S., Sharpe, O., Wang, Z., Feser, M. L., Moss, L., Ho, P. P., Smith, M. H., Donlin, et al

  2026; 6 (10): 2143-2163

- **Cross-presentation of citrullinated antigens drives cytotoxic CD8+ T cell responses in rheumatoid arthritis.** *bioRxiv : the preprint server for biology*

  Moon, J. S., Zhang, M., van Dam, L. S., Song, E. K., Sharpe, O., Carman, J. A., Ramirez, D. C., Smith, M. H., Donlin, L. T., Howard, M. C., Davis, M. M., Robinson, W. H.

  2026

- **Cytotoxic T cell recognition of α-synuclein drives pathogenic immune responses in multiple system atrophy.** *Proceedings of the National Academy of Sciences of the United States of America*

  Moon, J. S., Moutusy, S. I., Zhang, M., Ndayisaba, A., Rodriguez, D., El Kodsi, D. N., Kuzkina, A., Younis, S., Jahanbani, S., Dam, L. S., Courtney, Y., Netanel, A., Sharpe, et al

  2026; 123 (14): e2537271123

- **Antigen-specific B cells cross-present citrullinated proteins to activate CD8 T cells in rheumatoid arthritis**

  Moon, J., Van Dam, L., Smith, M., Donlin, L. T., Sharpe, O., Robinson, W. H.

  OXFORD UNIV PRESS.2025

- **Identification of Autoreactive Cytotoxic T Cells in ANCA-Associated Vasculitis**

  van Dam, L., Younis, S., Moon, J., Zhang, M., Parfasar, S., Horomanski, A., Sharpe, O., van Leeuwen, J., Lanz, T., van Kooten, C., Teng, O., Robinson, W.

  WILEY.2024: 3781-3785

- **Lrig1-expression confers suppressive function to CD4+ cells and is essential for averting autoimmunity via the Smad2/3/Foxp3 axis.** *Nature communications*

  Moon, J. S., Ho, C. C., Park, J. H., Park, K., Shin, B. Y., Lee, S. H., Sequeira, I., Mun, C. H., Shin, J. S., Kim, J. H., Kim, B. S., Noh, J. W., Lee, et al

  2023; 14 (1): 5382

- **Anti-citrullinated protein antibodies with multiple specificities ameliorate collagen antibody-induced arthritis in a time-dependent manner.** *Arthritis & rheumatology (Hoboken, N.J.)*
  Gomez, A. M., Brewer, R. C., Moon, J. S., Acharya, S., Kongpachith, S., Wang, Q., Jahanbani, S., Wong, H. H., Lanz, T. V., Love, Z. Z., Min-Oo, G., Niedziela-Majka, A., Robinson, et al
  2023

- **Clonally Expanded Cytotoxic CD8⁺ T cells Target Citrullinated Antigens In ACPA⁺ Rheumatoid Arthritis**
  Moon, J., Younis, S., Sharpe, O., Rao, N. L., Carman, J. A., James, E. A., Buckner, J. H., Deane, K. D., Holers, V., Donlin, L. T., Davis, M. M., Robinson, W. H.
  AMER ASSOC IMMUNOLOGISTS.2023

- **Cytotoxic CD8+ T cells target citrullinated antigens in rheumatoid arthritis.** *Nature communications*
  Moon, J. S., Younis, S., Ramadoss, N. S., Iyer, R., Sheth, K., Sharpe, O., Rao, N. L., Becart, S., Carman, J. A., James, E. A., Buckner, J. H., Deane, K. D., Holers, et al
  2023; 14 (1): 319

- **Intranasal administration of nucleus-deliverable GATA3-TMD alleviates the symptoms of allergic asthma** *BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS*
  Lee, S., Kim, J., Seong, Y., Moon, J., Kim, Y., Shin, B., Shin, J., Park, J., Park, C., Lee, S.
  2023; 640: 32-39

- **Rheumatoid Arthritis Patient-derived Anti-citrullinated Protein Antibodies (ACPAs) Ameliorate Joint Inflammation in Early Collagen-antibody Induced Arthritis (CAIA)**
  Gomez, A., Brewer, C., Moon, J., Acharya, S., Lanz, T. V., Wang, Q., Min-Oo, G., Niedziela-Majka, A., Robinson, W.
  WILEY.2022: 69-70

- **High dose of bile acid enables the cellular entry and replication of hepatitis C virus in vitro (Apr, 10.1007/s13273-022-00232-2, 2022)** *MOLECULAR & CELLULAR TOXICOLOGY*
  Lee, H., Shin, B., Moon, J., Antonio, J., Fadriquela, A., Ho, C., Shin, J., Yoon, J., Lee, S., Kim, S.
  2022; 18 (4): 649

- **High dose of bile acid enables the cellular entry and replication of hepatitis C virus in vitro** *MOLECULAR & CELLULAR TOXICOLOGY*
  Lee, H., Shin, B., Moon, J., Antonio, J., Fadriquela, A., Ho, C., Shin, J., Yoon, J., Lee, S., Kim, S.
  2022; 18 (4): 589-598

- **Clonally Expanded B Cells in Multiple Sclerosis Bind EBV EBNA1 and GlialCAM.** *Nature*
  Lanz, T. V., Brewer, R. C., Ho, P. P., Moon, J. S., Jude, K. M., Fernandez, D., Fernandes, R. A., Gomez, A. M., Nadj, G. S., Bartley, C. M., Schubert, R. D., Hawes, I. A., Vazquez, et al
  2022

- **Intranuclear Delivery of HIF-1α-TMD Alleviates EAE via Functional Conversion of TH17 Cells** *FRONTIERS IN IMMUNOLOGY*
  Shin, J., Kim, I., Moon, J., Ho, C., Choi, M., Ghosh, S., Lee, S.
  2021; 12: 741938

- **Critical role of bile acid (BA) in the cellular entry and permissiveness of Hepatitis B virus in vitro** *MOLECULAR & CELLULAR TOXICOLOGY*
  Lee, H., Shin, B., Moon, J., Fadriquela, A., Nuwormegbe, S., Ho, C., Shin, J., Yoon, J., Lee, S., Kim, S.
  2020; 16 (3): 221-231

- **Decremental effect of non-host humoral milieu interfacing viral envelope on the RNA level and surface antigenicity of hepatitis C virus (HCV) in vitro** *MOLECULAR & CELLULAR TOXICOLOGY*
  Lee, H., Shin, B., Moon, J., Ho, C., Shin, J., Kim, S., Lee, S.
  2019; 15 (3): 239-244

- **Regulatory effect of humoral milieu on the viral DNA and surface antigen expression of hepatitis B virus (HBV) in vitro** *MOLECULAR & CELLULAR TOXICOLOGY*
  Lee, H., Shin, B., Moon, J., Ho, C., Shin, J., Yoon, J., Yang, J., Kim, S., Lee, S.
  2019; 15 (2): 123-128

- **Therapeutic Effects of HIF-1 on Bone Formation around Implants in Diabetic Mice Using Cell-Penetrating DNA-Binding Protein** *MOLECULES*
  Oh, S., Shin, J., Kim, I., Kim, J., Moon, J., Lee, S., Lee, J.

2019; 24 (4)

- **Rheumatoid factor false positivity in patients with ANCA-associated vasculitis not having medical conditions producing rheumatoid factor** *CLINICAL RHEUMATOLOGY*
  Moon, J., Lee, D., Park, Y., Lee, S.
  2018; 37 (10): 2771-2779

- **Immuno-suppressive function of nucleus-transducible BAF57-PH in T cell activation via degradation of endogenous BAF57** *INTERNATIONAL JOURNAL OF HEMATOLOGY*
  Moon, J., Lee, H., Ho, C., Shin, J., Ghosh, S., Kim, J., Lee, S.
  2018; 108 (4): 375-383

- **C-Reactive Protein to Serum Albumin Ratio Is an Independent Predictor of All-Cause Mortality in Patients with ANCA-Associated Vasculitis** *YONSEI MEDICAL JOURNAL*
  Moon, J., Ahn, S., Park, Y., Lee, S., Lee, S.
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- **Intranuclear delivery of the transcription modulation domain of Tbet-improved lupus nephritis in (NZB/NZW) F1 lupus-prone mice** *KIDNEY INTERNATIONAL*
  Moon, J., Mun, C., Kim, J., Cho, J., Park, S., Park, T., Shin, J., Ho, C., Park, Y., Ghosh, S., Bothwell, A. L. M., Lee, S., Lee, et al
  2018; 93 (5): 1118-1130

- **HIF1A overexpression using cell-penetrating DNA-binding protein induces angiogenesis in vitro and in vivo** *MOLECULAR AND CELLULAR BIOCHEMISTRY*
  Jeon, M., Shin, Y., Jung, J., Jung, U., Lee, J., Moon, J., Kim, I., Shin, J., Lee, S., Song, J.
  2018; 437 (1-2): 99-107