



Harrison Anthony Besser

- MD Student, expected graduation Spring 2026
- Ph.D. Student in Chemistry, admitted Autumn 2020
- MSTP Student

Publications

PUBLICATIONS

- **A dendritic cell population responsible for transglutaminase 2-mediated gluten antigen presentation in celiac disease.** *JCI insight*
Yang, F. C., Besser, H. A., Chun, H. R., Albertelli, M., Fernandez-Becker, N. Q., Jabri, B., Khosla, C.
2025
- **Peyer's patch B cells sample transglutaminase-gluten complexes and drive celiac disease autoimmunity.** *Gastroenterology*
Fleur du Pré, M., Kleppa, L., Dewan, A. E., Meling, M. T., Høydahl, L. S., Besser, H. A., Khosla, C., Sollid, L. M.
2025
- **Structural and mechanistic analysis of Ca²⁺-dependent regulation of transglutaminase 2 activity using a Ca²⁺-bound intermediate state.** *Proceedings of the National Academy of Sciences of the United States of America*
Sewa, A. S., Besser, H. A., Mathews, I. I., Khosla, C.
2024; 121 (28): e2407066121
- **Enterocyte-derived and catalytically active transglutaminase 2 in the gut lumen of mice: Implications for celiac disease.** *Gastroenterology*
Meling, M. T., Kleppa, L., Besser, H. A., Khosla, C., du Pré, M. F., Sollid, L. M.
2024
- **Structural and Mechanistic Analysis of Ca²⁺Dependent Regulation of Transglutaminase 2 Activity**
Sewa, A., Besser, H., Mathews, I., Khosla, C.
ELSEVIER.2024: S747
- **Celiac disease: mechanisms and emerging therapeutics.** *Trends in pharmacological sciences*
Besser, H. A., Khosla, C.
2023
- **Targeted Lysosomal Degradation of Secreted and Cell Surface Proteins through the LRP-1 Pathway.** *Journal of the American Chemical Society*
Loppinet, E., Besser, H. A., Lee, C. E., Zhang, W., Cui, B., Khosla, C.
2023
- **LRP-1 links post-translational modifications to efficient presentation of celiac disease-specific Tcell antigens.** *Cell chemical biology*
Loppinet, E., Besser, H. A., Sewa, A. S., Yang, F., Jabri, B., Khosla, C.
2022