



Nathan Reticker-Flynn

Instructor, Pathology

Bio

BIO

Nathan is a tumor immunologist working in the laboratory of Dr. Edgar Engleman. He works at the interfaces of Systems Biology, mouse models, and cancer immunology where he investigates interactions between tumors and the immune system during cancer metastasis. He performed his PhD work in Biomedical Engineering with Dr. Sangeeta Bhatia at MIT where he studied glycobiology and ECM interactions during cancer metastasis.

ACADEMIC APPOINTMENTS

- Instructor, Pathology

PROFESSIONAL EDUCATION

- Ph.D., Massachusetts Institute of Technology , Biomedical Engineering (2013)
- M.S., Massachusetts Institute of Technology , Mechanical Engineering (2008)
- B.S., Tufts University , Mechanical Engineering (2006)

Publications

PUBLICATIONS

- **Lymph node colonization induces tumor-immune tolerance to promote distant metastasis.** *Cell*
Reticker-Flynn, N. E., Zhang, W., Belk, J. A., Basto, P. A., Escalante, N. K., Pilarowski, G. O., Bejnood, A., Martins, M. M., Kenkel, J. A., Linde, I. L., Bagchi, S., Yuan, R., Chang, et al
2022
- **Cancer systems immunology.** *eLife*
Reticker-Flynn, N. E., Engleman, E. G.
2020; 9
- **Systemic Immunity Is Required for Effective Cancer Immunotherapy.** *Cell*
Spitzer, M. H., Carmi, Y., Reticker-Flynn, N. E., Kwek, S. S., Madhireddy, D., Martins, M. M., Gherardini, P. F., Prestwood, T. R., Chabon, J., Bendall, S. C., Fong, L., Nolan, G. P., Engleman, et al
2017; 168 (3): 487-502 e15
- **Aberrant Glycosylation Promotes Lung Cancer Metastasis through Adhesion to Galectins in the Metastatic Niche** *CANCER DISCOVERY*
Reticker-Flynn, N. E., Bhatia, S. N.
2015; 5 (2): 168-181
- **A combinatorial extracellular matrix platform identifies cell-extracellular matrix interactions that correlate with metastasis** *NATURE COMMUNICATIONS*
Reticker-Flynn, N. E., Malta, D. F., Winslow, M. M., Lamar, J. M., Xu, M. J., Underhill, G. H., Hynes, R. O., Jacks, T. E., Bhatia, S. N.
2012; 3

- **Skip metastasis in mediastinal lymph node is a favorable prognostic factor in N2 lung cancer patients: a meta-analysis** *ANNALS OF TRANSLATIONAL MEDICINE*
Wang, Z., Cheng, J., Huang, W., Cheng, D., Liu, Y., Pu, Q., Reticker-Flynn, N. E., Liu, L.
2021; 9 (3): 218
- **Lymph node colonization promotes distant tumor metastasis through the induction of tumor-specific immunosuppression**
Reticker-Flynn, N. E., Basto, P. A., Zhang, W., Martins, M. M., Chang, S., Gentles, A. J., Sunwoo, J. B., Plevritis, S. K., Engleman, E. G.
AMER ASSOC CANCER RESEARCH.2020
- **Lymph node colonization promotes distant tumor metastasis through the induction of tumor-specific immunosuppression.**
Reticker-Flynn, N. E., Basto, P. A., Zhang, W., Bejnood, A., Kenkel, J. A., Martins, M. M., Chang, S., Gentles, A. J., Sunwoo, J. B., Plevritis, S. K., Engleman, E. G.
AMER ASSOC CANCER RESEARCH.2020: 25–26
- **Melanoma-secreted lysosomes trigger monocyte-derived dendritic cell apoptosis and limit cancer immunotherapy.** *Cancer research*
Santana-Magal, N. n., Farhat-Younis, L. n., Gutwillig, A. n., Gleiberman, A. n., Rasoulouniriana, D. n., Tal, L. n., Netanel, D. n., Shamir, R. n., Blau, R. n., Feinmesser, M. n., Zlotnik, O. n., Gutman, H. n., Linde, et al
2020
- **A distinct subset of FcγRIIb-expressing Th1 cells exert antibody-mediated cytotoxic activity.** *The Journal of clinical investigation*
Rasoulouniriana, D., Santana-Magal, N., Gutwillig, A., Farhat-Younis, L., Wine, Y., Saperia, C., Tal, L., Gutman, H., Tsivian, A., Brenner, R., Bandora, E. A., Reticker-Flynn, N. E., Rider, et al
2019
- **Lymph node colonization promotes distant tumor metastasis through the induction of systemic immune tolerance**
Reticker-Flynn, N. E., Martins, M. M., Basto, P. A., Zhang, W., Bejnood, A., Gentles, A. J., Sunwoo, J. B., Plevritis, S. K., Engleman, E. G.
AMER ASSOC CANCER RESEARCH.2019
- **A gut punch fights cancer and infection** *NATURE*
Reticker-Flynn, N. E., Engleman, E. G.
2019; 565 (7741): 573–74
- **An Immunosuppressive Dendritic Cell Subset Accumulates at Secondary Sites and Promotes Metastasis in Pancreatic Cancer.** *Cancer research*
Kenkel, J. A., Tseng, W. W., Davidson, M. G., Tolentino, L. L., Choi, O., Bhattacharya, N., Seeley, E. S., Winer, D. A., Reticker-Flynn, N. E., Engleman, E. G.
2017; 77 (15): 4158-4170
- **Akt and SHP-1 are DC-intrinsic checkpoints for tumor immunity.** *JCI insight*
Carmi, Y., Prestwood, T. R., Spitzer, M. H., Linde, I. L., Chabon, J., Reticker-Flynn, N. E., Bhattacharya, N., Zhang, H., Zhang, X., Basto, P. A., Burt, B. M., Alonso, M. N., Engleman, et al
2016; 1 (18)
- **Normalizing Microbiota-Induced Retinoic Acid Deficiency Stimulates Protective CD8(+) T Cell-Mediated Immunity in Colorectal Cancer.** *Immunity*
Bhattacharya, N., Yuan, R., Prestwood, T. R., Penny, H. L., DiMaio, M. A., Reticker-Flynn, N. E., Krois, C. R., Kenkel, J. A., Pham, T. D., Carmi, Y., Tolentino, L., Choi, O., Hulett, et al
2016; 45 (3): 641-655
- **Extracellular matrix microarrays to study inductive signaling for endoderm specification.** *Acta biomaterialia*
Malta, D. F., Reticker-Flynn, N. E., da Silva, C. L., Cabral, J. M., Fleming, H. E., Zaret, K. S., Bhatia, S. N., Underhill, G. H.
2016; 34: 30-40
- **Akt and SHP-1 are DC-intrinsic checkpoints for tumor immunity.** *JCI insight*
Carmi, Y. n., Prestwood, T. R., Spitzer, M. H., Linde, I. L., Chabon, J. n., Reticker-Flynn, N. E., Bhattacharya, N. n., Zhang, H. n., Zhang, X. n., Basto, P. A., Burt, B. M., Alonso, M. N., Engleman, et al
2016; 1 (18): e89020