

# Stanford

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## Heather Selby

Postdoctoral Scholar, General and Vascular Surgery

### Bio

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#### BIO

Heather Selby is a postdoctoral scholar at the S-SPIRE Center in the Stanford Department of Surgery. She is advised by Dr. Arden Morris, Dr. Todd Wagner, Dr. Sandy Napel, and Dr. Vipul Sheth. Her research focus is building MRI-based AI models to identify patients with locally advanced cancer patients who achieve a clinical complete response to neoadjuvant chemoradiotherapy to spare them from surgery and its associated risks.

#### STANFORD ADVISORS

- Todd Wagner, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **Performance of alternative manual and automated deep learning segmentation techniques for the prediction of benign and malignant lung nodules.** *Journal of medical imaging (Bellingham, Wash.)*  
Selby, H. M., Mukherjee, P., Parham, C., Malik, S. B., Gevaert, O., Napel, S., Shah, R. P.  
2023; 10 (4): 044006
- **Topological data analysis of thoracic radiographic images shows improved radiomics-based lung tumor histology prediction.** *Patterns (New York, N.Y.)*  
Vandaele, R., Mukherjee, P., Selby, H. M., Shah, R. P., Gevaert, O.  
2023; 4 (1): 100657
- **RADIOMICS-BASED MULTI-MODAL PREDICTION OF TREATMENT RESPONSE TO PD-1/PD-L1 IMMUNE CHECKPOINT INHIBITOR (ICI) THERAPY IN STAGE IV NON-SMALL CELL LUNG CARCINOMA (MNSCLC)**  
Parikh, R., Jordan, P., Ciaravino, R., Beasley, R., Patel, A., Owen, D., Amini, A., Curti, B., Page, R., Swalduz, A., Beregi, J., Chrusciel, J., Snyder, et al  
BMJ PUBLISHING GROUP.2022: A1346
- **Machine Learning Radiomics Model for Early Identification of Small-Cell Lung Cancer on Computed Tomography Scans.** *JCO clinical cancer informatics*  
Shah, R. P., Selby, H. M., Mukherjee, P., Verma, S., Xie, P., Xu, Q., Das, M., Malik, S., Gevaert, O., Napel, S.  
2021; 5: 746-757
- **A meta-learning approach for genomic survival analysis.** *Nature communications*  
Qiu, Y. L., Zheng, H. n., Devos, A. n., Selby, H. n., Gevaert, O. n.  
2020; 11 (1): 6350