

**Postdoctoral Researcher – Tumor Biology, Machine Learning, Next Generation Sequencing in the Department of Surgery, Section of Urology**

Dr. Agarwal’s lab is aiming to identify novel therapeutic targets and prediction tools to benefit bladder cancer patients through organoids and mouse modeling and through machine learning of pathologic data and incorporation of clinical outcomes into resulting algorithms. The lab seeks a candidate interested in performing bench research and computational science. Some relevant publications include:

Railkar R, Krane LS, Li QQ, Sanford T, Siddiqui MR, Haines D, Vourganti S, Brancato SJ, Choyke PL, Kobayashi H, Agarwal PK. Epidermal Growth Factor Receptor (EGFR)-targeted Photoimmunotherapy (PIT) for the Treatment of EGFR-expressing Bladder Cancer. Mol Cancer Ther. 2017 Oct;16(10):2201-2214. doi: 10.1158/1535-7163.MCT-16-0924. Epub 2017 Jun 15. PMID: 28619755; PMCID: PMC5628127.

Harmon SA, Sanford TH, Brown GT, Yang C, Mehralivand S, Jacob JM, Valera VA, Shih JH, Agarwal PK, Choyke PL, Turkbey B. Multiresolution Application of Artificial Intelligence in Digital Pathology for Prediction of Positive Lymph Nodes From Primary Tumors in Bladder Cancer. JCO Clin Cancer Inform. 2020 Apr;4:367-382. doi: 10.1200/CCI.19.00155. PMID: 32330067; PMCID: PMC7259877.

Located in the Biological Sciences Division at the University of Chicago and affiliated with the Department of Surgery, Section of Urology and the Comprehensive Cancer Center. The Agarwal lab is seeking highly motivated PhD students with expertise or interests in areas such as:

* Molecular biology, cancer genomics, tumor sequencing, molecular subtyping
* Mammalian cell culture, three-dimensional tumor organoids, animal models (including patient derived xenografts)
* Machine learning, deep learning

Motivated candidates should submit a curriculum vitae and a statement of research goals to Faya Beker at [fbeker@bsd.uchicago.edu](mailto:fbeker@bsd.uchicago.edu) or Rayna Boyd at [rboyd@bsd.uchicago.edu](mailto:rboyd@bsd.uchicago.edu). Compensation in the Biological Sciences Division follows the NIH NRSA Stipend scale. Additional information on benefits and being a postdoc in the University of Chicago Biological Sciences Division can be found at [bsdpostdoc.uchicago.edu](https://bsdpostdoc.uchicago.edu/).