Deep Pixel-to-pixel Learning for Single-stage Nucleus Recognition

Fuyong Xing, PhD

Department of Biostatistics and Informatics
Colorado School of Public Health
University of Colorado Anschutz Medical Campus
**Problem**

- **Problem:** Ki67 labeling index assessment in immunohistochemical (IHC) Ki67 stained images for pancreatic neuroendocrine tumors
- **Goal:** Want to build an end-to-end learning system for single-stage nucleus identification

Color coding of arrows: immunopositive tumor nuclei, immunonegative tumor nuclei and non-tumor nuclei.
Single-stage Nucleus Recognition
Team

**Fuyong Xing**, PhD
Department of Biostatistics and Informatics
Colorado School of Public Health
University of Colorado Anschutz Medical Campus
Email: fuyong.xing@ucdenver.edu
Web: https://fuyongxing.github.io

**Toby C. Cornish**, MD, PhD
Department of Pathology
University of Colorado Anschutz Medical Campus

**Debashis Ghosh**, PhD
Department of Biostatistics and Informatics
Colorado School of Public Health
University of Colorado Anschutz Medical Campus