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**AREA(S) OF FOCUS:**

**Detecting biomolecules to identify disease & engineering precision therapeutics**

The Kelley lab is developing new therapeutics and diagnostics at the interface of engineering, biology, and chemistry.

**KEY RESEARCH AREAS:**

**Biomolecular sensors**

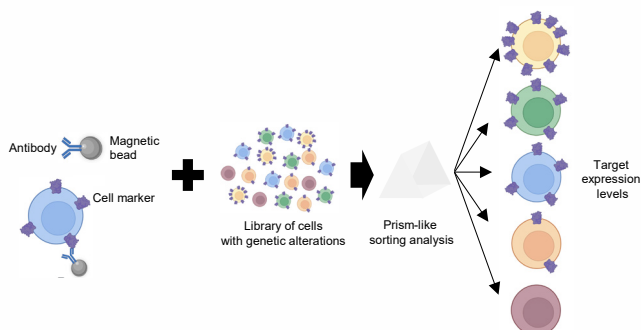
Engineering nanomaterials to identify DNA/ RNA and protein biomarkers for disease diagnosis & treatment.

**High-throughput single-cell analysis**

Developing fast, high volume sorting systems to identify cells for disease screening, cell therapy design, and drug target identification.

**Intracellular molecular delivery**

Using small protein fragments (peptides) to deliver drugs with high specificity to targeted cell compartments (i.e., mitochondria, nucleus, etc.).



**ENTREPRENEURIAL SUCCESS:**



CTRL Therapeutics is using cell-therapy based approaches for the treatment of solid tumors.

The focus of the Chicago location is to:

- Develop a therapeutic platform for rapid, specific selection of immune cells (T-cell)
- Use patient's own blood to find the strongest anti-tumor T-cells within their body
- Generate collections of the strongest immune cells to give back to patients and attack solid tumors

Series A (2022) - \$10M

Chicago location established at Portal Innovations

*Additional companies include:*

GeneOhm

