

# Sophie Patel

## Biomedical Engineer – Georgia Institute of Technology

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## RESEARCH

### Laboratory for Synthetic Immunity, Georgia Institute of Technology - *Undergraduate Researcher*

May 2024 - August 2024

- Developed Antigen-Presenting Nanoparticles (APNs) specific to multiple myeloma cells to combat the issue of resurgence of multiple myeloma in patients receiving APN therapy
- Produced lentiviral vectors in order to transduce T cells with antigen receptors of interest for testing APN therapy, and cultured cells and tracked receptor expression using Cytotec cell staining techniques over time
- Implemented a killing assay to test efficiency of APN therapy, and tracked progress using IVIS fluorescent imaging

## EXPERIENCE

### Stamps Health Student Ambassadors – Georgia Institute of Technology - *Volunteer; General Health and Wellness Committee*

September 2023 - current

- Proposed idea of hosting a Just Dance tournament to promote fun physical activity
- Provide logistical and other assistance at events

### Horizons Atlanta at Georgia Tech, Atlanta, GA - *Assistant Teacher*

April 2024 - August 2024

- Curated lessons to engage and educate a classroom of 15 underprivileged elementary-aged students
- Taught math, English, and social-emotional learning to support students from underrepresented minorities in their educational growth

### StudentMD Program – CareYaYa - *Volunteer Content Producer*

January 2024 - May 2024

- Researched healthy aging techniques, and drafted short, concise videos and blogs on findings for publishing on CareYaYa company website to expand general knowledge on long-term cognitive health
- Producing website to personally continue these publications

### MedShare – Steel sorting - *Volunteer*

February 2024 - March 2024

- Dedicated Sundays to organizing and learning about surgical steel, utilizing information learned to pack thousands of pieces of equipment efficiently for surgeons