

# SOFIA WISSERT

North Caldwell, NJ | [swissert@seas.upenn.edu](mailto:swissert@seas.upenn.edu) | [www.linkedin.com/in/sofia-wissert](http://www.linkedin.com/in/sofia-wissert)

## EDUCATION

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**University of Pennsylvania** | School of Engineering and Applied Science | Philadelphia, PA  
*Candidate for Bachelor of Science in Engineering, Bioengineering*

**May 2026**

## TECHNICAL SKILLS

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**Laboratory:** Cell Culture, DNA Transfection, DNA Purification, Bacterial Transformation, Immunofluorescence Staining, Agarose Gel Electrophoresis, Polymerase Chain Reaction, HiFi Gibson Assembly, Widefield & Confocal Microscopy

**Programming/Softwares:** Java, Python, JavaScript, MATLAB, Arduino, R Studio, Onshape, Benchling, ImageJ, & CellProfiler

## EXPERIENCES

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**Penn Engineering Entrepreneurship Fellowship Program** | Philadelphia, PA  
*Student Fellow*

**January 2025 - December 2025**

- 1 in 12 students selected for Penn's 12-month internship-study program to develop entrepreneurship skills in creating, scaling, and leading principled high-growth technology ventures.

**Research Assistant** | Philadelphia, PA

**May 2023 - Present**

*Bugaj Lab, Department of Bioengineering, University of Pennsylvania*

- Analyzed the impact of fusion oncoproteins on cell signaling to identify novel therapeutic targets
- Maintained tissue culture cell lines and transfected cells to assess condensate formation via microscopy and RAS/ERK signaling with immunofluorescence
- Regularly present results to the principal investigator and senior researchers
- Received 10 weeks of funding through the Penn Undergraduate Research Mentoring Program (PURM) in summer 2023; created and presented a research poster at the PennCURF 2023 Fall Research Expo

**Weingarten Tutor** | Philadelphia, PA

**January 2023 - Present**

- Provide weekly Calculus I and II tutoring sessions for undergraduate students at the University of Pennsylvania

## HONORS

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**Rachleff Scholars Program** | Philadelphia, PA

**January 2024 - December 2024**

- Awarded 10 weeks of funding during summer 2024 in the Bugaj Lab
- Presented a 1-minute flash talk and a poster titled "Clustering and Signaling Dynamics of RTK Fusion Oncoproteins in Cancer" at the Singh Center Symposium, received an honorable mention
- Completed two seminar courses focused on scientific communication, covering techniques such as data visualization, research presentations, and scientific paper organization

## LEADERSHIP/VOLUNTEER WORK

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**Access Engineering** | Philadelphia, PA  
*President*

**September 2022 - Present**

**Expected Start Date January 2025**

*Social and Recruitment Chair*

**January - December 2024**

- Recruit and interview potential undergraduate teaching assistants for each engineering team
- Organize and host social events, including restaurant outings, bowling, and karaoke nights, to foster team bonding

*Head Teaching Assistant*

**January 2023 - December 2024**

- Teach Philadelphia high school students about potential careers in Bioengineering and Chemical Engineering
- Develop and implement weekly lesson plans including pipetting techniques and biomedical device assembly

**Kesem at Penn** | Philadelphia, PA

**September 2023 - Present**

- Fundraise throughout the year to support Kesem's mission of offering free summer camps and year-round peer support for children affected by a parent's cancer in the Philadelphia community
- Raised over \$1000 for Kesem summer 2024