

## Henry Wisniewski

Dr. Fei Zhang Lab

<https://www.feizhang-lab.com>

[henry.wisniewski@rutgers.edu](mailto:henry.wisniewski@rutgers.edu)

[www.linkedin.com/in/henry-wisniewski](https://www.linkedin.com/in/henry-wisniewski)

(415)350-7490

49 Marrow Street  
Newark, NJ 07103

### ACADEMIC POSITIONS AND EDUCATION

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<b>Laboratory Teaching Assistant – Chemistry</b> Rutgers University, Newark NJ	2021 - Current
▪ General Chemistry	
<b>Ph.D. in Chemistry</b> Rutgers University, Newark NJ	2021 - Current (Expected 2026)
<b>Laboratory Teaching Assistant – Chemistry</b> St. Olaf College	2018 - 2021
▪ General Chemistry, Organic I and Organic II, Analytical, Physical, and Forensic lab	
<b>B.A. in Chemistry</b> St. Olaf College, Northfield MN	2017 - 2021
<b>B.A. in Mathematics</b> St. Olaf College, Northfield MN	2017 - 2021

### AWARDS AND HONORS

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Nominated for the “Norman Samuels Award” (Rutgers University Newark)	2021
ACS Undergraduate Award in Analytical Chemistry (American Chemical Society)	2021
Distinction in Chemistry (St. Olaf College)	2021

### PUBLICATIONS

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2. Yeon Lee, J.; Yang, Q.; Chang, X.; [Wisniewski, H.](#); R. Olivera, T.; Saji, M.; Kim, S.; Perumal, D.; Zhang, F. **Nucleic Acid Paranemic Structures: A Promising Building Block for Functional Nanomaterials in Biomedical and Bionanotechnological Applications.** *J. Mater. Chem. B.* (2022)
1. Yang, Q.; Chang, X.; Lee, J. Y.; Olivera, T. R.; Saji, M.; [Wisniewski, H.](#); Kim, S.; Zhang, F. **Recent Advances in Self-Assembled DNA Nanostructures for Bioimaging.** *ACS Appl. Bio Mater.* (2022)

## RESEARCH EXPERIENCE

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**Ph.D Student; Rutgers University Newark**

2021 - Current

**Research Supervisor:** Dr. Fei Zhang

**Researcher; St. Olaf College**

2019 - 2021

**Research Supervisor:** Dr. Douglas Beussman

**Project 1:** Tetrahymena Proteomics: Identifying Tetrahymena Proteins Using MALDI-TOFTOF

- Extracted, digested, and purified gel bound Tetrahymena proteins using trypsin.
- Characterized proteins with MALDI-TOFTOF
- Identified proteins with data mining using GPMW and Proteomic databases
- Contact for copy of Distinction paper

**Project 2:** Analysis of Human Scent Compounds Using GCMS

- Collected demographic information and scent samples
- Processed and analyzed scent compounds using GCMS
- Identified compounds using datamining and databases

## LABORATORY SKILLS

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**Experimental:** SDS-PAGE, Titration, Agarose gel electrophoresis, Protein digestion.

**Instrumentation:** MALDI-TOF, Thermocycler, GCMS, NMR spectroscopy, IR spectroscopy, UV-Vis spectroscopy, HPLC, AAS, ICP-AES, x-ray diffractometer.

**Computational:** Latex, CaDNAano, Tiamat, Microsoft Office, R, LabView, Python, Mathematica, Java, VMD & NAMD for MD simulations.

## GRADUATE COURSEWORK

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**Completed:** Biochemistry and Crystal & Molecular Structures I, Hybrid Nanomaterials, and Biophysical Chemistry

**In Progress:** Heterocyclic Compounds & Special Topics in Physical Chemistry (Computational)

## UNDERGRADUATE COURSEWORK

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**Chemistry:** General Chemistry, Atomic and Molecular Structure, Chemical Reactions, Organic I, Organic II, Organometallic Chemistry, Analytical Chemistry, Physical Chemistry, Instrumental Analysis, Advanced Inorganic Chemistry, and Bioanalytical Chemistry.

**Mathematics:** Honors Calculus II, Linear Algebra, Multivariable Calculus, Number Theory, Modern Computational Mathematics, Abstract Algebra I, Graph Theory, Algorithms for Decision Making, and Statistics for Science.

**Other:** Principles of Physics I and Principles of Physics I