

# Rebecca Epp (née Russell)

## Curriculum Vitae

email: rebecca.epp@case.edu  
email: eppr@ccf.org

phone: (214) 558-6133

## EDUCATION

---

<b>Case Western Reserve University, Doctor of Philosophy (anticipated)</b> Department of Biochemistry; GPA: 4.000 (4.0 scale, 13 GPA hours completed)	<i>July 2024 - present</i>
<b>Hillsdale College, Bachelor of Science, Summa Cum Laude</b> Biochemistry; GPA: 3.934 (4.0 scale, 111 GPA hours completed)	<i>January 2020 - December 2023</i>
<b>Cornell University, Summer study program</b> GPA: 4.150 (4.3 scale, 6 GPA hours completed)	<i>June 2019 - August 2019</i>
<b>Dallas College Richland Campus</b> GPA: 4.000 (4.0 scale, 13 GPA hours completed)	<i>August 2018 - December 2019</i>

## RESEARCH EXPERIENCE

---

<b>PhD Student, Ruth Keri Lab, Cleveland Clinic Lerner Research Institute</b> Current research focuses on cyclin dependent kinase 10 (CDK10) as a driver of breast cancer aggressiveness that contributes to disease disparities. Research centers on epigenetic and post-translational regulation of CDK10, with an emphasis on the DNA damage response pathway and chromosomal instability.	<i>January 2025 – present</i>
<b>Rotation Student, Biomedical Scientist Training Program, CWRU</b> Conducted three 8-week rotations in separate labs throughout the School of Medicine working on various projects including NIMA-related kinase 2's (NEK2) role in potentiating tamoxifen response in luminal breast cancer, characterizing the role of Myosin-18A in determining Golgi morphology, and interrogating the role of anti-androgen therapy in radiation-resistant breast cancer.	<i>July 2024 - December 2024</i>
<b>Summer Undergraduate Research Fellowship, Mayo Clinic</b> Worked under the guidance of Dr. John Hawse to screen Triple Negative breast cancer cell lines for preferentially essential genes in TNBC and identified CTPS1 as a candidate for targeted therapy.	<i>June 2022 - August 2022</i>
<b>CHM 590: Independent Research, Hillsdale College</b> Continued research project from summer research program under the supervision of Dr. Lee Baron. Formalized and validated DPPH assay protocol for use by future students.	<i>January 2022 – May 2022</i>
<b>Summer Research Program, Hillsdale College</b> Developed and executed an independent research project using the DPPH assay to measure antioxidant capacity and determined the impact of alkalization level and cocoa origin on antioxidant levels.	<i>May 2021 - June 2021</i>

## TEACHING EXPERIENCE

---

### **Analytical Chemistry Teaching Assistant, Hillsdale College**

*August 2023 - December 2023*

Prepared laboratory materials prior to lab, assisted students through weekly 4-hour lab sessions, graded assignments, and maintained a safe lab environment.

### **Organic Chemistry Teaching Assistant, Hillsdale College**

*August 2021 - December 2023*

Assisted students through weekly 4-hour lab sessions, graded assignments, proctored examinations, and tutored small groups during weekly 1-hour recitation sessions.

### **Summer Science Camp Counselor, Hillsdale College**

*June 2023*

Prepared laboratory exercises and taught high school students introductory chemistry.

### **Science Olympiad Organizer and Test Writer**

*April 2022*

Wrote, proctored, and graded cell biology examination.

### **General Chemistry Teaching Assistant, Hillsdale College**

*January 2021 - May 2021*

Assisted students in 1-hour weekly lab sessions, graded assignments, and maintained a safe lab environment.

## PUBLICATIONS

---

Ingles, N., **Epp, R.**, Weber-Bonk, K., Roundtree, E., Keri, R. CDK10 promotes the DNA damage response, chromosome stability, and is associated with breast cancer disparities. *In preparation.*

Wang, X., Emch, M.J., Voll, L.A., **Epp, R.**, Rodman, E.P., Odell, N., Pearson, N.A., Hou, X., Goetz, M.P., Kaufman, S.H., Weroha, J., Beer, P., Hawse, J.R. Exploiting CTPS1 Dependency for the Treatment of Breast and Ovarian Cancer. *In preparation.*

## PRESENTATIONS

---

### **Hillsdale College Biochemistry Department, Senior Honors Thesis**

*April 2023*

**Russell, R.**, Wang, X., Emch, M., Kazmier, K., Hawse, J.R. Essential Genes in Triple Negative Breast Cancer: An Identification of New Therapeutic Targets.

### **Hillsdale College Research Symposium, Poster Presentation**

*March 2023*

**Russell, R.**, Wang, X., Emch, M., Kazmier, K., Hawse, J.R. Essential Genes in Triple Negative Breast Cancer: An Identification of New Therapeutic Targets.

### **Mayo Clinic Summer Student Symposium, Poster Presentation**

*August 2022*

**Russell, R.**, Wang, X., Emch, M., Kazmier, K., Hawse, J.R. Essential Genes in Triple Negative Breast Cancer: An Identification of New Therapeutic Targets.

### **Hillsdale College Research Symposium, Poster Presentation**

*March 2022*

**Russell, R.**, Baron, L. Characterization of total antioxidant capacity (TAC) in brewed cocoa using the 2,2-diphenyl-1-picrylhydrazyl (DPPH) assay.

## AWARDS, HONORS, AND GRANTS

---

### **Junior Marsden Award for Outstanding Research, Hillsdale College**

*March 2023*

Awarded for research on triple negative breast cancer during summer internship at the Mayo Clinic.

**Award for Achievement in Biochemistry, Hillsdale College**

*March 2023*

**Summer Undergraduate Research Fellowship, Mayo Clinic**

*June 2022*

Awarded to support undergraduate research in Mayo Clinic Graduate School of Biomedical Sciences' fellowship program.

**Summer Research Student Stipend, Hillsdale College**

*May 2021*

Awarded to support students participating in the Hillsdale College Summer Research Program.

**Hillsdale Merit Scholarship, Hillsdale College**

*Jan. 2020 - Dec. 2023*

Awarded to exceptional applicants based on test scores, essays, and letters of recommendation.

**Deans' List, Hillsdale College**

*Aug. 2020 - Dec. 2023*

Awarded for each semester with a GPA  $\geq 3.5$

## **LEADERSHIP**

---

**Secretary, American Chemical Society, Hillsdale College**

*April 2022 – December 2023*

Kept meeting records for officer and general meetings. Recruited new members and maintained member records. Planned and advertised for chapter events to rejuvenate student engagement after a decrease during the previous years due to COVID-19.

## **PROFESSIONAL SOCIETY MEMBERSHIPS**

---

**Phi Kappa Phi, National Member**

*March 2023 – present*

**American Chemical Society, National Member**

*November 2022 – present*

**Iota Sigma Pi, National Member**

*March 2022 - May 2024*

**Sigma Zeta, National Member**

*March 2022 - May 2024*