

Inga Hwang
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EDUCATION

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| 2022-2030 | Case Western Reserve University School of Medicine <ul style="list-style-type: none">• Doctor of Medicine (expected)• Doctor of Philosophy in Biomedical Engineering (expected) |
| 2015-2020 | University of California: Los Angeles
Bachelor of Science <ul style="list-style-type: none">• Major in Bioengineering• Senior Design Capstone Title: “AutoAeroAssay: Automated Device for Collection and Detection of Airborne Pathogens”• GPA: 3.895 |

HONORS AND AWARDS

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| 2020 | University of California: Los Angeles Graduated <i>magna cum laude</i> |
| 2016-2020 | University of California: Los Angeles School of Engineering Dean’s Honors List |

WORK EXPERIENCE

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| 2020-2022 | Advanced Orthopedics and Sports Medicine, San Francisco, CA <ul style="list-style-type: none">• Worked as the lead medical assistant and scribe for Dr. James Chen, interviewing patients, writing clinical note, responding to patient inquiries, and performing administrative tasks relating to patient referrals, prescriptions, and insurance• Trained and mentored new medical assistant hires• Managed clinic inventory |
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RESEARCH EXPERIENCE

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| 2023-Present | Case Western Reserve University, Department of Biomedical Engineering
PI: Efsthathios Karathanasis, PhD; Agata Exner, PhD <ul style="list-style-type: none">• Researching combination of lipid shell nanobubbles and therapeutic ultrasound for immunotherapy targeting breast cancer |
| 2020-2022 | Advanced Orthopedics and Sports Medicine
PI: James L. Chen, MD, MPH <ul style="list-style-type: none">• Researched novel techniques for ankle and shoulder surgical procedures• Designed a device for use during ACL reconstruction surgeries to prolong graft longevity, provisional patent obtained• Co-authored two manuscripts, including one as first author |

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| 2018-2020 | University of California: Los Angeles, Department of Bioengineering
PI: Daniel T. Kamei, PhD <ul style="list-style-type: none"> ● Designed DNA-based diagnostics for infectious diseases, with the goal of combining isothermal DNA amplification and lateral-flow detection at the point of care ● Completed Senior Capstone Design Project to design and build a point-of-care device for airborne pathogen detection ● Co-authored two manuscripts, both as first author |
| Summer 2019 | Genentech, Department of Antibody Engineering
PI: Avinash Gill, PhD <ul style="list-style-type: none"> ● Designed workflows for high-throughput preparation of plasmid samples for DNA sequencing, used bioinformatics to verify accuracy of sequencing results ● Studied efficacy of clinical antibody expression across different cellular platforms |
| 2016-2018 | University of California: Los Angeles David Geffen School of Medicine
PI: Rajan Kulkarni, PhD <ul style="list-style-type: none"> ● Researched the AIM2 inflammasome found in human melanoma with the goal of elucidating its role in tumorigenesis |

TEACHING EXPERIENCE

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| Summer 2023 | Teaching Assistant, Block 1 Anatomy
Case Western Reserve School of Medicine
Course Director: Dr. Susanne Wish-Baratz <ul style="list-style-type: none"> ● Facilitated weekly discussion sections consisting of eight first year medical students ● Graded the block 1 anatomy final examination ● Assisted first year medical students with the first day of cadaver dissection |
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INSTITUTIONAL SERVICE

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| 2022-Present | Case Western Reserve School of Medicine, Cleveland, OH <ul style="list-style-type: none"> ● Conducting prospective student interviews on behalf of the admissions committee ● Participating in question-and-answer sessions with prospective students on interview days |
| 2018-2020 | UCLA Daily Bruin, Los Angeles, CA <ul style="list-style-type: none"> ● Served as a news reporter covering UCLA campus news related to student government, university administration, and political events on campus |

COMMUNITY SERVICE

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| 2023 | Case Western Reserve School of Medicine Anatomy Camp <ul style="list-style-type: none"> ● Participated in healthcare focused workshops for students attending underserved middle schools in Cleveland ● Led students through activities focused on anatomy and physical diagnosis |
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	<ul style="list-style-type: none"> Participated in a question and answer session about the field of medicine and the path to becoming a medical student
2023	<p>Case Western Reserve School of Medicine John Hay Writing Workshop</p> <ul style="list-style-type: none"> Mentored seniors at John Hay High School through the process of writing personal statements for their college applications Met with students on a weekly basis
2022-Present	<p>Case Western Reserve School of Medicine Horizons Program, Cleveland, OH</p> <ul style="list-style-type: none"> Mentoring undergraduate students and high school students interested in healthcare careers
2021-2022	<p>Clinic by the Bay, San Francisco, CA</p> <ul style="list-style-type: none"> Interviewed patients, measured vital signs, performed point-of-care diagnostic testing, prepared referrals Assisted with operations of the Clinic's food pharmacy program. Prepared and delivered packages of healthy food options and educational materials about nutrition for patients with chronic, diet-related conditions Wrote educational articles pertaining to health and wellness for Clinic by the Bay's patient website
2020-2022	<p>Rock Medicine, San Francisco, CA</p> <ul style="list-style-type: none"> Administered COVID-19 vaccinations and COVID-19 tests at the San Francisco Field Care Clinic
2020-2022	<p>Second Harvest of Silicon Valley, San Jose, CA</p> <ul style="list-style-type: none"> Volunteered on-site at Second Harvest Food Bank and at affiliated distribution sites Assembled and distributed food packages
2020-2021	<p>All Students Matter, Redwood City, CA</p> <ul style="list-style-type: none"> Tutored third grade students in reading comprehension, spelling, and vocabulary

LEADERSHIP

2023-2024	<p>Case Western Reserve Medical Scientist Training Program Recruitment Coordinator</p> <ul style="list-style-type: none"> Organized and facilitated panel discussions and informational events for prospective students on interview days
2019-2020	<p>Genentech, South San Francisco, CA Campus Ambassador</p> <ul style="list-style-type: none"> Promoted engagement between UCLA students and Genentech through information sessions, coffee chats, and workshops Provided top candidate referrals to Genentech and supported Genentech's University Talent Acquisition and Strategy Team's recruiting efforts

- 2019-2020 Tau Beta Pi California Epsilon Chapter, Los Angeles, CA
Tutoring Chair
- Managed and coordinated Tau Beta Pi's volunteer tutoring program for UCLA engineering students
 - Provided one-on-one weekly tutoring to undergraduate students in math, science, and engineering courses

BIBLIOGRAPHY

Peer Reviewed Articles

1. **Hwang IM**, Rayos del Sol S, Jenkins SM, Bryant SA, Gardner BB, McGahan P, Chen J. "Open Peroneal Tendon Stabilization With Fibular Groove Deepening" *Arthrosc Tech*. March 2022; 11(3): e347-e351. PMID: 35256974
2. Jenkins SM, **Hwang IM**, Rayos Del Sol S, Guzman AJ, Dela Rueda T, McGahan P, Chen J. "Subpectoral Biceps Tenodesis Using an All-Suture Anchor" *Arthrosc Tech*. April 2022; 11(4): e555-e562. PMID: 32489840

Oral Abstract Presentations

1. Cheung SF, Yang EJ, **Hwang IM**, Carson M, Wu BM, Kamei DT. "Single step isothermal DNA sample preparation with paper-based amplification" The Biomedical Engineering Society Annual Meeting, Atlanta, Georgia (2018) (Presented by Cheung, SF)

Poster Presentations

1. Bhalotia A, Nittayacharn P, Cheplyansky A, Nidhiry A, Mehta M, Iyer A, Hariharan S, **Hwang IM**, Exner AA, Karathanasis E. "Ultrasound-Mediated Gene Therapy: Pre-Sensitization to Cure", BMES Annual Meeting, Baltimore, MD (2024). (Poster presented by Bhalotia, A).
2. **Hwang IM**, Lee E, Azimi M, Emmel G, Falktoft C, Kamei DT. "AutoAeroAssay: Automated Device for Collection and Detection of Airborne Pathogens", Los Angeles, CA (2019). (Poster presented by Hwang, IM)

Book Chapters

1. **Hwang IM**, Lou XA, Toubian AA, Kamei DT. BioSensing, Theranostics, and Medical Devices. Singapore: Springer; 2022. Chapter 4, Biosensor-Based Point-of-Care Devices: Metabolites and Pulse Oximetry; p. 83-104.
2. **Hwang IM**, Cantu CM, Chawla R, Kamei DT. BioSensing, Theranostics, and Medical Devices. Singapore: Springer; 2022. Chapter 5, Biosensor-Based Point-of-Care Devices: Detection of Infectious Diseases and Cancer; p. 105-132.

MEMBERSHIPS

Phi Beta Kappa Society

Tau Beta Pi Engineering Honor Society

Languages: fluent in French

Interests: cello, journalism, running, rock climbing