

Carolyn Huang

PATENT AGENT

Patents and
Innovations
Boston

chuang@wsgr.com
617-598-7807



FOCUS AREAS

Biotech
Intellectual Property
Life Sciences
Patents and Innovations

HIGHLIGHTS

■ Technical Expertise

Carolyn is a patent agent with deep technical expertise in CRISPR, molecular biology, protein and nucleic acid chemistry, and mRNA process development.

EXPERIENCE

Dr. Carolyn Huang is a patent agent in the Boston office of Wilson Sonsini Goodrich & Rosati, where her practice focuses on supporting clients in the life sciences sector, particularly in molecular biology, bioprocess development, and emerging therapeutic technologies.

Prior to joining the firm, Carolyn was a senior scientist at Pfizer, where she led upstream process development for mRNA vaccines, including technology transfer to GMP manufacturing and IND preparation. She also developed novel strategies to improve IVT mRNA product quality.

Carolyn earned her Ph.D. in molecular and cell biology from the University of California, Berkeley, in the lab of Professor Jennifer Doudna. Her research focused on characterizing novel CRISPR-Cas systems and elucidating mechanisms of gene editing and gene silencing. Carolyn has published in high-impact journals such as *Molecular Cell*, *Cell*, and *Science Advances*.

CREDENTIALS

Education

- Ph.D., Molecular and Cell Biology, University of California, Berkeley, 2022
Recipient, NIH Genetics Training Grant and Outstanding Graduate Student Instructor Award
- B.S., Biochemistry and Molecular Biology, University of Massachusetts Amherst, 2018
Summa Cum Laude, Commonwealth Honors College Scholar with Greatest Distinction, Phi Beta Kappa

Admissions

- U.S. Patent and Trademark Office

INSIGHTS

Select Publications

- Co-author, “NET formation is a default epigenetic program controlled by PAD4 in apoptotic neutrophils,” 9(51) *Science Advances* eadj1397, 2023
- Lead Author, “A naturally DNase-free CRISPR-Cas12c enzyme silences gene expression,” 82(11) *Molecular Cell* 2148–2160, 2022
- Co-author, “Diverse virus-encoded CRISPR-Cas systems include streamlined genome editors,” 185(24) *Cell* 4574–4586, 2022
- Co-author, “CRISPR-Cas12a exploits R-loop asymmetry to form double-strand breaks,” 9 *eLife* e55143, 2020
- Co-author, “Conserved Cxnc motifs in Kaposi’s sarcoma-associated herpesvirus ORF66 are required for viral late gene expression and are essential for its interaction with ORF34,” 94(2) *Journal of Virology* e01299-19, 2020

TECHNICAL FLUENCY

Biological Sciences and Biotechnology

- Biochemical assays
- Biochemistry
- Biologics
- Cellular biology
- Molecular biology
- PCR

Therapeutics and Drug Discovery

- CRISPR
- Gene editing
- Vaccines

Diagnostics and Medical Devices

- Diagnostics