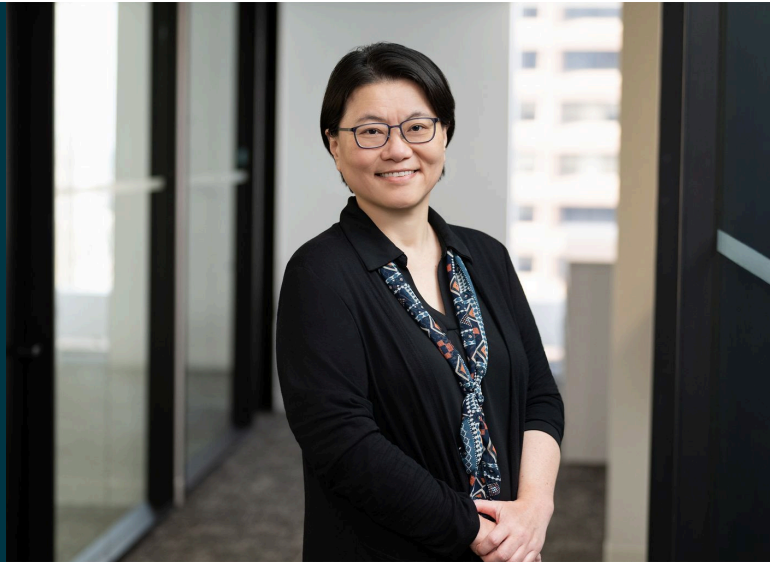


## Moonkyoung Um

ASSOCIATE

Patents and  
Innovations  
*Boston*

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### FOCUS AREAS

Intellectual Property  
Life Sciences  
Patents and Innovations

### EXPERIENCE

Dr. Moonkyoung Um is an associate in the Boston office of Wilson Sonsini Goodrich & Rosati, where she is a member of the firm's patents and innovations practice. Her practice focuses on patent prosecution, due diligence matters, and patent portfolio management for clients in the fields of life sciences, biotechnologies, small molecules, pharmaceuticals, diagnostics, health information technologies, and medical devices.

Moonkyoung obtained her Ph.D. degree from the Department of Biological Sciences at Columbia University and received her postdoctoral training at the Whitehead Institute for Biomedical Research under the guidance of Dr. Harvey F. Lodish. After her postdoctoral training, she continued her scientific career at the Boston Biomedical Research Institute as a principal investigator and at Boston Children's Hospital as a research scientist. Through her decades-long career in science, Moonkyoung acquired broad-based experience in the fields of life sciences, including biochemistry, cell biology, molecular biology, mouse genetics, yeast genetics, cancer biology, immunology, neurobiology, metabolic disorders, cardiovascular diseases, and neurological diseases, as well as chemistry and pharmaceutical sciences.

### CREDENTIALS

#### Education

- J.D., Suffolk University Law School  
*Concentration in Intellectual Property Law*
- Postdoctoral Associate/Fellow, Whitehead Institute for Biomedical Research  
*Recipient, American Heart Association Postdoctoral Fellowship*
- Ph.D., Biological Sciences, Columbia University  
*Recipient, James Howard McGregor Prize*
- M.S., Biochemistry, College of Pharmacy, Seoul National University
- B.S., Manufacturing Pharmacy, College of Pharmacy, Seoul National University  
*Recipient, KeumKang Foundation Scholarship*

#### Admissions

- State Bar of Massachusetts
- U.S. Patent and Trademark Office

### INSIGHTS

#### Select Publications

- Co-author with K. Zarringhalam, M. Ka, Y.-H. Kook, J. I. Terranova, Y. Suh, and O. D. King, "An open system for automatic home-cage behavioral analysis and its application to male and female mouse models of Huntington's disease," 229(1) *Behavioural Brain Research* 216-225, 2012

- Co-author with A. W. Gross and H.F. Lodish, “A “classical” homodimeric erythropoietin receptor is essential for the antiapoptotic effects of erythropoietin on differentiated neuroblastoma SH-SY5Y and pheochromocytoma PC-12 cells,” 19(3) *Cellular Signalling* 634-645, 2007
- Co-author with H. F. Lodish, “Antiapoptotic effects of erythropoietin in differentiated neuroblastoma SH-SY5Y cells require activation of both the STAT5 and AKT signaling pathways,” 281(9) *Journal of Biological Chemistry* 5648-5656, 2006
- Co-author with J. Yamauchi, S. Kato, and J. L. Manley, “Heterozygous disruption of the TATA-binding protein gene in DT40 cells causes reduced cdc25B phosphatase expression and delayed mitosis,” 21(7) *Molecular and Cellular Biology* 2435-2448, 2001

## TECHNICAL FLUENCY

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### Biological Sciences and Biotechnology

- Antibody
- Antigen presentation
- Biochemical assays
- Biochemistry
- Bioconjugation
- Biologics
- Cancer biology
- Cancer therapeutics
- CAR-T cells
- Cell biology
- Cell therapy
- Cellular biology
- Cellular immunology
- Epigenetics
- Genetics
- Immuno-oncology
- Immunobiology
- Immunology
- MicroRNA (miRNA) research
- Molecular biology
- Molecular genetics
- Neurobiology
- PCR
- T and B cell biology
- T cell biology
- T cell immunology

### Therapeutics and Drug Discovery

- CRISPR
- Drug conjugates
- Drug delivery
- Gene editing
- Gene therapy
- Immunotherapy targets
- Neuropharmacology
- Peptide therapeutics
- Pharmacology
- RNA interference (RNAi)

### Diagnostics and Medical Devices

- Diagnostics

### Genomics and Data Analysis

- shRNA

### Miscellaneous

- Cancer