

WILSON SONSINI

Bu Yin

SENIOR COUNSEL

Patents and
Innovations
San Diego

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FOCUS AREAS

Biotech
Intellectual Property
Life Sciences
Medical Devices
Patents and Innovations

EXPERIENCE

Bu Yin is senior counsel in the San Diego office of Wilson Sonsini Goodrich & Rosati, where his practice focuses on developing patent portfolios and providing strategic counseling in pharmaceuticals (particularly biologics), biotech tools (e.g., genomics, transcriptomics, and proteomics), agriculture and food (e.g., genetically modified insects as biopesticides), and other life sciences sectors.

Building on his immunology and molecular biology background, Bu works closely with companies developing vaccines, antibodies, RNA therapeutics (e.g., mRNAs, trans-splicing RNAs, and siRNAs), gene therapies (e.g., HSV, AAV, and non-viral vectors), cell therapies (e.g., CAR-T and stem cells), and antibiotics, among other therapeutic modalities. Bu is knowledgeable in immunoassays, PCRs, nucleic acid sample preparation and sequencing, analyte encoding/decoding, and multi-omics data analytics, particularly those for high-throughput, single-cell, spatial, and/or *in situ* analysis.

Bu has significant experience supporting patent litigation and Patent Office proceedings, including in connection with enzyme replacement therapy, transgenic plant as host for producing human proteins, chromatography, nucleic acid sequencing, cancer diagnostics, and antibody engineering. He also regularly supports transactions, including conducting IP due diligence in connection with venture capital and private and public financing. Drawing from these experiences, Bu practices patent preparation and prosecution with the goal to maximize value in IP for companies at different stages, and always with future enforcement and litigation in mind.

Prior to entering the IP field, Bu did his postdoctoral fellowship at Novartis using high-throughput siRNA-based genetic screening to identify novel therapeutic targets for ovarian cancers. His Ph.D. research at the Children's Hospital of Philadelphia focused on mechanisms of generating antigen receptor diversity and the immune repertoire (particularly V(D)J recombination), DNA damage response, and genetics and epigenetics of B cell and T cell development and malignant transformation.

CREDENTIALS

Education

- J.D., University of San Diego School of Law
Cum Laude, San Diego International Law Journal
- Ph.D., Cell and Molecular Biology, University of Pennsylvania School of Medicine
Recipient, Saul Winegrad Award for Outstanding Dissertation
- B.S., Biological Science, Tsinghua University
- Diploma, Advanced Level Course in Molecular Biotechnology and Bioinformatics, Uppsala University

Honors

- Recognized in Ones to Watch, Intellectual Property Law, by *Best Lawyers in America* (Sixth Edition)
- Recognized in Ones to Watch, Patent Law, by *Best Lawyers in America* (Sixth Edition)
- Recognized in Ones to Watch, Life Sciences Practice, by *Best Lawyers in America* (Sixth Edition)
- Awarded the Emphasis Pathway in Tumor Immunology Grant from the Cancer Research Institute (2008-2010)

Admissions

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

MATTERS

Select Matters

- Portfolio development for a start-up company developing therapeutics to reverse the underlying drivers of aging and chronic diseases
- Patent application drafting and prosecution for a company mapping brain circuits and connectomics at the scale of whole mammalian brains*
- Portfolio management, company-side IP due diligence, and patent term extension for a clinical-stage company developing gene therapies for oncology, dermatology, and pulmonology indications*
- IPO due diligence, cross-border R&D collaboration, and patent application drafting and prosecution for a multinational biopharmaceutical company developing immuno-oncology and vaccine products*
- Patent prosecution for global biopharma companies relating to kinase inhibitors, checkpoint inhibitors, cytokines, small peptide therapeutics, TCR-like antibodies, diagnostic and prognostic biomarkers, glyco-engineered therapeutics, personalized medicine, and various combination therapies*
- All aspects of patent counseling for a company developing soft robotic endoscopy products*
- All aspects of patent counseling for a company developing ophthalmic surgical devices, drug formulations, and companion diagnostics*
- Strategies for interference proceeding, European opposition, and *inter partes* review involving nucleic acid sequencing chemistry, library preparation, and assay formats*
- Litigation support for a case involving non-competitive immunoassays for small analytes*
- Litigation support for a case involving antibody recycling and sweeping platform technologies*
- Litigation support for a case involving recombinant production and chromatographic purification of therapeutic proteins from rice*

*Denotes matters handled prior to joining Wilson Sonsini in 2025

INSIGHTS

Select Publications

- First author, “Redundant and nonredundant functions of ATM and H2AX in $\alpha\beta$ T-lineage lymphocytes,” *Journal of Immunology*, 189:1372-9, 2012
- First author, “Cellular context dependent effects of H2ax and p53 deletion upon the development of thymic lymphoma,” *Blood*, 117:75-85, 2011
- Co-author with X. Liu, J.L. Karnell, et al., “Distinct roles for PTEN in prevention of lymphoma and autoimmunity,” *Journal of Clinical Investigation*, 120:2497-507, 2010
- First author, “H2AX suppresses chromosome end separation and subsequent break/translocation formation in V(D)J recombination,” *Journal of Experimental Medicine*, 206:2625-39, 2009
- Co-author with V. Savic, et al., “Formation of dynamic gamma-H2AX structures along broken DNA strands is distinctly regulated by ATM and MDC1 and dependent upon H2AX densities in chromatin,” *Molecular Cell*, 34:298-310, 2009
- Co-first author, “RAG1 and ATM co-ordinate mono-allelic recombination and nuclear positioning of Ig loci,” *Nature Immunology*, 10:655-64, 2009
- First author, “V(D)J Recombination causes dangerous chromosome liaisons in developing thymocytes,” *Cell Cycle*, 8:2486-7, 2009
- First author, “The sticky business of H2AX in V(D)J recombination, maintenance of genomic stability, and suppression of lymphoma,” *Immunologic Research*, 42:29-40, 2008
- First author, “ATM prevents unattended DNA double strand breaks on site and in generations to come,” *Cancer Biology & Therapy*, 6:1837-9, 2007

Select Speaking Engagements

- Panelist, "Roundtable: Rethinking Biotech-Pharma Deals in a Shifting Landscape," Global Forum on Innovation and Investment in Advanced Medical Technologies, 2025
- Speaker, "Creating Value in and Through IP Portfolios in Challenging Times," Sino-American Pharmaceutical Professionals Association - New England/Boston (SAPA-NE) 25th Annual Conference: Poised to Pivot - Build Resilience in a Challenging Market, 2023

TECHNICAL FLUENCY

Biological Sciences and Biotechnology

- Antibody
- Antigen presentation
- Biochemical assays
- Biochemistry
- Biologics
- Cancer biology
- Cancer therapeutics
- CAR-T cells
- Cell biology
- Cell culture products
- Cell therapy
- Cellular biology
- Cellular immunology
- Epigenetics
- Genetics
- Genomics
- Host-pathogen interactions
- Immuno-oncology
- Immunobiology
- Immunology
- MicroRNA (miRNA) research
- Neurobiology
- PCR
- Proteomics
- T and B cell biology
- T cell biology
- T cell immunology

Therapeutics and Drug Discovery

- Biosimilars
- CRISPR
- Drug delivery
- Gene editing
- Gene therapy
- Immunotherapy targets
- Peptide therapeutics
- RNA interference (RNAi)
- Vaccines

Diagnostics and Medical Devices

- Bioinformatic
- Biosensors
- Diagnostics
- Digital pathology
- Point-of-care testing (POCT)
- Wearable analyte sensors

Chemistry and Material Science

- Peptidomimetics
- Protein engineering
- Protein folding

Engineering and Technology

- AI
- Microfluidics

Genomics and Data Analysis

- Bioinformatics algorithms
- Functional genomics
- Next-generation sequencing
- rDNA
- Sequencing
- shRNA
- Single-cell sequencing

Miscellaneous

- Litigation/PTAB/Oppositions
- Ophthalmology
- Plant patents