



Janet M. Tse, ScD

Senior Associate

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Dr. Janet M. Tse works with venture-backed start-ups and mid-to-large companies as well as research institutions across a wide variety of technologies in the biotech and life sciences industries. Her extensive scientific experience and knowledge, combined with her keen interest in product/technology commercialization, enables her to develop strategies that effectively capture clients' innovations and align with their business goals through patent prosecution, patent portfolio development/management, and IP counseling.

Janet routinely prosecutes patent applications and develops strategies to obtain worldwide patent protection across a broad range of biotechnology areas such as biosimilars, synthetic biology, next-generation sequencing technologies, oligonucleotide-based therapeutics, gene therapies, immunotherapeutics, vaccines, microfluidic cell culture chips, tissue engineering, biomaterials, drug delivery, diagnostics and treatment methods, precision medicine, and assay platform technologies.

She also assists in counseling clients on post grant proceedings, including *inter partes* reviews, and formulating strategic positions in support of patent challenges and defenses.

PRACTICE AREAS

Life Sciences

Patent Prosecution

INDUSTRY EXPERIENCE

Janet was an associate/patent agent in the biotech groups at two different Boston law firms, where she primarily focused her practice on U.S. and foreign patent prosecution, patentability and landscape analyses, and freedom-to-operate assessments.

As a doctoral student in the laboratory of Dr. Rakesh K. Jain at Harvard Medical School/Massachusetts General Hospital, Janet combined experimental and computational methodologies to study effects of mechanical pressure on cancer cell progression for providing insights into developing novel cancer treatment strategies. During her MIT practice school program, she was an intern at General Mills, where she studied effects of manufacturing technology and cereal formulations on product appearance, and also at Novartis Pharmaceuticals, where she investigated quality-control methods for continuous manufacturing.

EDUCATION

Suffolk University Law School
JD, 2017, *cum laude*, with
distinction in Intellectual
Property

Massachusetts Institute of
Technology
ScD, 2010, *Chemical
Engineering*

Massachusetts Institute of
Technology
MS, 2006, *Chemical
Engineering Practice*

University of California,
Berkeley
BS, 2002, *Chemical
Engineering*, with high
honors

ADMISSIONS

Massachusetts

US Patent and
Trademark Office

REPRESENTATIVE ENGAGEMENTS

- *Regeneron Pharm., Inc. v. Kymab Ltd., PTAB*: Counsel for Regeneron in multiple IPR proceedings challenging patents directed to transgenic mice and methods of using transgenic mice.
- Prepared petitions and supporting materials for *inter partes* review challenging a multinational biopharmaceutical company's patents directed to methods of protein purification.
- Prepared and prosecuted patent applications for a prestigious university in Boston to protect innovations relating to microfluidic cell culture chips and pathogen-capture technologies, respectively, which became founding IP for venture backed start-up companies.
- Prosecuted and managed a complex U.S. patent portfolio relating to next-generation sequencing commercial products for a foreign-based company.
- Evaluated third-party IP portfolios and conducted freedom-to-operate analyses for a multinational biotechnology company in support of due diligence for investment purposes.
- Conducted prior art searches and prepared, for a Boston-based biotech start-up, a third party pre-issuance submission in one of its competitor's pending U.S. patent application, which successfully led the Examiner to reject the competitor's pending claims and compelled the competitor to narrow the claim scope.

PUBLICATIONS AND PRESENTATIONS

- "RhoA mediates flow-induced endothelial sprouting in a 3D tissue analogue of angiogenesis," *co-author, Lab Chip. 7;12(23):5000-6.*
- "Mechanical compression drives cancer cells toward invasive phenotype," *co-author, Proc Natl Acad Sci USA, 17;109(3):911-6.*
- "Micro-environmental mechanical stress controls tumor spheroid size and morphology by suppressing proliferation and inducing apoptosis in cancer cells," *co-author, PLoS One. 4(2):e4632.*

PROFESSIONAL AND COMMUNITY INVOLVEMENT

- Member of the Boston Patent Law Association
- Member of the Boston Bar Association