

ASSOCIATE

Susan W. Graf, Ph.D.

susan.graf@klarquist.com



EDUCATION

- J.D., *summa cum laude*, Lewis & Clark College of Law, 2007
- Ph.D., Cell Biology, Duke University, 1996
- B.A., Biology, College of Wooster, 1991

BAR ADMISSIONS

- Oregon, 2007
- U.S. Patent and Trademark Office (Reg. No. 60,432)

YEAR JOINED FIRM

2007

PRACTICE AREAS

Intellectual Property Counseling
Patents: International and Utility
Trademarks

TECHNOLOGIES

Chemical
Green Technology & Renewable Energy
Life Sciences

PRACTICE AREA OVERVIEW

Dr. Graf's practice focuses on preparation and prosecution of U.S., international, and foreign patent applications. She also prepares legal opinions, including patentability, invalidity, infringement/non-infringement, and freedom-to-operate opinions. Additionally, Dr. Graf prepares and prosecutes trademark applications.

TECHNICAL EXPERTISE

Dr. Graf specializes in biotechnical and medical patent applications. She has extensive research experience in the fields of cell and molecular biology, biochemistry, and genetics, including clinical diagnostics.

PRIOR PROFESSIONAL EXPERIENCE

Oregon Health and Science University

Senior Research Assistant, Department of Molecular and Medical Genetics | 2003 - 2005

Developed and implemented clinical diagnostic tests for human genetic diseases utilizing technologies such as denaturing high performance liquid chromatography, real-time PCR, and direct sequencing.

Research Assistant, Department of Endocrinology | 2000 - 2003

Participated in basic research studies in genetics of congenital heart disease, including human genetic analysis, biochemical studies of heart protein CRELD1, and analysis of CRELD1 knockout mouse line.

University of Texas Southwestern Medical Center

Research Associate, Howard Hughes Medical Institute (post-doctoral fellow) | 1996 - 1999

Involved in basic research on genetics of retinal degeneration, including creation and analysis of knockout mouse lines, mutation screening in human subjects with retinal degeneration, and biochemical studies of retinal guanylyl cyclase activity.

Duke University, Durham, North Carolina

Graduate Research Assistant, Department of Cell Biology | 1991 - 1996

Participated in basic research on biochemical function of dopamine receptors, focused on signal transduction activity of the dopamine D2 and D3 receptors. Extensive experience in biochemical assays of second messenger signaling in cultured cell lines.

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PROFESSIONAL ACTIVITIES

- Member, Legal Employer Engagement Committee, Convocation on Equality, Oregon State Bar, 2010 - 2013
- Member, Association of University Technology Managers
- Mentor, Lewis & Clark Northwestern School of Law

PRESENTATIONS AND PUBLICATIONS

- Graf, Susan Walmsley, "Improving Patent Quality Through Identification of Relevant Prior Art: Approaches to Increase Information Flow to the Patent Office", 11 Lewis & Clark Law Review 495 (2007).
- Robinson, S.W., Morris, C.D., Goldmuntz, E., Reller, M.D., Jones, M.A., Steiner, R.D., and Maslen, C.L. Missense mutations in CRELD1 are associated with cardiac atrioventricular septal defects. *Am. J. Hum. Genet.* 72:1047-1052 (2003).
- Robinson, S. W., Dinulescu, D. M., and Cone, R. D. Genetic models of obesity and energy balance in the mouse. *Ann. Rev. Genet.* 34:687-745 (2000).
- Robinson, S. W. and Garbers, D. L. Genetic models to study guanylyl cyclase function. *Meth. Enzymol.* 316:558-564 (2000).
- Yang, R.-B., Robinson, S. W., Xiong, W.-H., Yau, K.-W., Birch, D. G., and Garbers, D. L. Disruption of a retinal guanylyl cyclase gene leads to cone-specific dystrophy and paradoxical rod behavior. *J. Neurosci.* 19:5889-5897 (1999).
- Robinson, S. W. and Caron, M. G. Selective inhibition of adenylyl cyclase type V by the dopamine D3 receptor. *Mol. Pharmacol.* 52:508-514 (1997).
- Robinson, S. W. and Caron, M. G. Chimeric D2/D3 dopamine receptors efficiently inhibit adenylyl cyclase in HEK 293 cells. *J. Neurochem.* 67:212-219 (1996).
- Robinson, S. W., Jarvie, K. R., and Caron, M. G. High affinity agonist binding to the dopamine D3 receptor: chimeric receptors delineate a role for intracellular domains. *Mol. Pharmacol.* 46:352-356 (1994).

REPRESENTATIVE PATENTS

- Monomeric recombinant MHC molecules useful for manipulation of antigen-specific t-cells (8,377,447)
- Complexes of 4-hydroperoxy ifosfamide as anti-tumor agents (8,715,689)
- Chimeric west nile/dengue viruses (8,628,962)
- Differentiation of stem cells into dopaminergic cells (8,628,962)
- Glyphosate-tolerant wheat genotypes (8,637,738)
- Pressure-assisted molecular recovery (PAMR) of biomolecules, pressure-assisted antigen retrieval (PAAR), and pressure-assisted tissue histology (PATH) (8,288,122)
- Methods of prognosing a rheumatoid arthritis remission phenotype (8,712,696)
- Aquaculture raceway integrated design (8,245,440)
- Accordion bioreactor (8,709,808)