Fred Whipple

714-616-2669

Web site: NewBioRes.com

New Biology Resources, LLC, Orange, CA 92868

fwhipple@NewBioRes.com

Professional Summary

Versatile Ph.D. molecular biology sales and marketing expert with outstanding technical credentials. Expertise in genomics, DNA/RNA-based diagnostics, molecular pathology, and DNA sequencing. Thorough knowledge of biotech research environments based on over fifteen years hands-on experience. Special emphasis on working effectively with Ph.D. and M.D. level clients.

Education

Ph.D., Molecular Biology, Tufts University Medical School, Boston, MA, 1991

Professional History

New Biology Resources, LLC; Principal 2008 to present

Provide contract services in sales, marketing, sales training, technical writing, and executive support to biotechnology companies. Recent contracts include: AMS Biotechnology, PathCentral Diagnostics, Ascend Genomics, Hematogenix Laboratory Services, and others.

- Sell specialized reagents to commercial and academic biotechnology facilities. Special focus on magnetic nanoparticles for DNA sequencing, proteomics, and related uses.
- Develop sales and marketing documents in molecular pathology. Topics include: companion diagnostic tests (EGFR, KRAS, ALK, ...), lab methods (PCR, FISH, aCGH, ...), etc.
- Provide technical and strategic science advising to client companies. Provide sales training to sales teams. Develop sales and technical customer support materials.
- Sell clinical biospecimens to research groups in pharmaceutical and biotech companies, focusing mainly on development of cancer drugs and diagnostics.
- Provide continuing education on next-generation genomics, DNA-based diagnostics, and personalized medicine to hospital CME programs, genetic counselors, and the public.

US Centers for Disease Control and US Census Bureau; Field Representative 2012 to 2014

- Collect data for the National Ambulatory Medical Care Survey (NAMCS) on patient use of ambulatory services: diagnoses, medications, lab tests, procedures, billing codes, etc.

California State University, Mount Holyoke College; Assistant Professor 1999 to 2008

- Directed a laboratory focused on a cancer-related DNA repair protein. Won competitive research grants from American Cancer Society, National Institutes of Health, and others.
- Taught Genetics, Medical Genetics, DNA Damage and Repair, and Microbiology.

Harvard Medical School; Postdoctoral Research Fellow 1992 to 1999

Tufts University Medical School; Ph.D.student 1985 to 1991

- Investigated the role of DNA accumulation in cellular aging of eukaryotic cells.
- Characterized ability of immunogloblulins to neutralize Toxic Shock Syndrome toxin.
- Identified protein-protein and protein-DNA interactions involved in gene regulation.
- Developed a novel bioassay system and sold it to a biotechnology company.

Wang Laboratories, Inc.; Sales Rep and Assistant Director of Marketing 1980 to 1985

- Developed one of the company's most productive sales territories in the United States.
- Developed and produced sales and marketing materials. Provided technical training and sales training to members of a field sales force of over one hundred representatives.

Fellowships and Awards

National Institutes of Health, Academic Research Enhancement Award	2004-2007
American Cancer Society, Senior Postdoctoral Research Fellowship	1995-1997
National Institutes of Health, National Research Service Award Fellowship	1991-1994
California State University Fullerton, Competitive faculty research awards:	2001, 2002, 2003

Sample Presentations

"Mammograms and SNPS: A practical application of a genome-based risk test." National Coalition for Health Professional Education in Genetics (NCHPEG) annual meeting, Bethesda, MD

"Personalized medicine from the public health perspective." Personalized Medicine Panel Workshop, Keck Graduate Institute, Claremont, CA

"Second generation genetic tests for risk of heart disease, cancers, and diabetes." Continuing medical education (CME) lecture presented at hospitals in Riverside County, CA

"Genome-based risk assessments for common diseases." Continuing medical education (CME) lecture presented at hospitals in Orange County and Los Angeles County, CA

"SNPs and Risks: Clinical Applications of Genomic Risk Assessments for Common Diseases." Continuing education lecture presented to genetic counseling groups in Orange County, CA

"Understanding the Human Genome and How it Impacts our Health." Osher Lifelong Learning Institute of California State University, Fullerton, CA

Peer Reviewed Publications

Samwald, M., Coulet, A., Huerga, I., Powers, R.I., Luciano, J.S., Freimuth, R.R., Whipple, F., Pichler, E., and Marshall, M.S. (2012). "Semantically enabling pharmacogenomic data for the realization of personalized medicine"', *Future Medicine,* 13(2), 201-212.

Whipple, F.W. (1998). "Genetic analysis of prokaryotic and eukaryotic DNA-binding proteins in *E. coli*", *Nucleic Acids Research*, 26, 3700-3706.

Whipple, F.W., Hou, E.F., and Hochschild, A. (1998). "Amino acid-amino acid contacts at the cooperativity interface of the bacteriophage lambda and P22 repressors", *Genes and Development*, 12, 2791-2802.

Whipple, F.W., Ptashne, M., and Hochschild, A. (1997). "The activation defect of a lambda cI positive control mutant", *Journal* of *Molecular Biology*, 265, 261-265.

Whipple, F.W., Kuldell, N.H., Cheatham, L.A., and Hochschild, A. (1994). "Specificity determinants for the interaction of lambda repressor dimers", *Genes and Development*, 8, 1212-1223.

Whipple, F.W., and Sonenshein, A.L. (1992). "Mechanism of initiation of transcription by *Bacillus subtilis* RNA polymerase at several promoters", *Journal of Molecular Biology*, 223, 399-414.

Whipple, F.W. and Sonenshein, A.L. (1990). "Initial interaction of *Bacillus subtilis* RNA polymerase with promoter sites", in Ganesan, A.T. and Hoch, J.A. (eds.) *Genetics and Biotechnology of Bacilli*, Volume 3, Academic Press, pp. 109-114.

LeGrice, S.F.J., Shih, C.C., Whipple, F., and Sonenshein, A.L. (1986). "Separation and analysis of the RNA polymerase binding sites of a complex *Bacillus subtilis* promoter", *Molecular and General Genetics*, 204, 229-236.

Hirose-Kumagai, A., Whipple, F.W., Ikejima, T., Dinarello, C.A., Gill, D.M., Ritz, H. L., and Bond, G.G. (1984). "A comparison of neutralizing and antigen-binding assays for human antibodies against Toxic-Shock Syndrome toxin 1", *Journal of Infectious Diseases*, 150, 788.