

J. Richard Sportsman, Ph.D.
Sportsman Consulting LLC / Vinmetrica
1945 Camino Vida Roble – Ste I
Carlsbad, CA 92008
408-887-9230
rich@richsportsman.com



Sportsman Consulting LLC / Vinmetrica 2010-present
President

- Consulting for life science research
- Reagents manufacturing and wine analysis services
- Developed and launched the Vinmetrica series of wine analysis systems

Ascent Biosciences Corp. 2009
Principal

- Contributed expertise to a start-up focusing on reagents for life science research
- Three SBIR grants submitted
- Four products in beta testing

Molecular Devices Corp. 2002 – 2008
Vice President, Reagent and Assay Research and Development.

- Responsible for 17 scientists, including cell and molecular biologists, chemists, and assay biochemists, developing and validating assay kits and biological products to be sold into life science, pharmaceutical, and genomics research markets. This segment of the company's business comprised over \$18M in sales in 2006
- Developed and managed a budget of ~\$2.4M annually
- Conceived or approved new research projects
- Corporate officer and member of Leadership Team; reported to the CEO
- Directed preparation of publications and presentations for scientific community.
- Specified prosecution of patents and IP matters related to reagents.
- Selected accomplishments:
 - ➔ Oversaw completion of projects resulting in the release of over 100 new products. Reagent revenues more than doubled in this period.
 - ➔ Recruited and developed a strong team of scientists that function in a diverse multidisciplinary environment.
 - ➔ Received two patents as an inventor; filed 10 provisional or pending patents.

Director, Biochemistry 2000-2002

- Responsible for 2 senior scientists and 2 associate scientists focused on biochemical assays.
- Invented and championed the development of 2 new product lines in reagents that now comprise \$5M dollars in revenue annually

LJL Biosystems 1998-2000
Senior Director, Assay Systems.

- Responsible for R&D and production of Company's reagent products
- Directed 5 Ph.D. scientists and 5 research and production associates
- Managed research team developing immunoassays and novel fluorophores for high throughput screening and detection; SBIR phase I principal investigator

Telik, Inc. 1993-1998
Staff Scientist and Director of Molecular Recognition

- Developed biochemistry, robotics and data management of the company's core drug discovery technology, including the first implementation of fluorescence polarization in high throughput mode
- Initiated and advanced a program aimed at discovery of novel compounds for treatment of diabetes. This program resulted in \$20M funding from a pharmaceutical partner

Eli Lilly and Company 1984 -1992
Research scientist, biochemical research

- Responsible for drug discovery, assay development, and bioanalysis
- Directed bioanalytical functions: radioiodination, amino acid analysis and sequencing, immunoassay labs, peptide synthesis, protein preps labs
- Managed a group comprising up to 20 technical staff

Analytical Research Laboratories, Inc. 1976 -1977
Analytical chemist

Truesdail Laboratories, Inc. 1974 -1976
Analytical chemist

Education

Post-doctoral Fellow in Clinical Immunology Scripps Clinic and Research Foundation, La Jolla, California 1982 - 1984

Ph.D. in Analytical Chemistry
 Department of Chemistry
 University of Arizona, Tucson, Arizona 1977 - 1982.

A.B. in Chemistry
 Occidental College, Los Angeles, California 1971 - 1975

Personal

Fluent in Spanish and German; technical French

Professional affiliations:

AAAS

Society for Biomolecular Sciences

Publications:

1. Sportsman JR, Wilson GS (1980) "Chromatographic properties of silica-immobilized antibodies" *Anal Chem* 52:2013-2018.
2. Sportsman JR, Liddil JD, Wilson GS, (1983) "Kinetic and equilibrium studies of insulin immunoaffinity chromatography" *Anal Chem* 55:771-775
3. Johnson DA, Gautsch JW, Sportsman JR, Elder JH (1984) "Improved technique utilizing nonfat dry milk for analysis of proteins and nucleic acids transferred to nitrocellulose" *Gene Anal Techn* 1:3-7.
4. Sportsman JR, Elder JH (1983) "A microanalytical protein assay using laser densitometry" *Anal Biochem* 139:298-302
5. Sportsman JR, Park MM, Cheresh DA, Fukuda M, Elder JH, Fox RI (1985) "Characterization of a membrane surface glycoprotein associated with T-cell activation" *J Immunol* 135:138-142
6. Fox RI, Sportsman JR, Rhodes G, Luka J, Pearson G, Vaughan JH (1986) "Rheumatoid arthritis synovial membrane contains a 62 kD protein that shares an antigenic epitope with the Epstein-Barr virus-encoded EBNA-1 antigen" *J Clin Invest* 77:1539-1543.
7. Taber LD, Apathy J, DeLong A, Sportsman JR (1987) "Enzyme-linked immunosorbent assay for LY163502, a potent dopamine agonist" *J Pharm Sci* 76:492-495
8. Sportsman JR, Taber LD, Slisz M, Apelgren L, Bumol TF (1988) "Isolation and characterization of the human adenocarcinoma-associated glycoprotein gp40" *Biotechnol Appl Biochem* 10:536-544
9. Strnad J, Hamilton AE, Beavers LS, Gamboa GD, Apelgren LD, Taber LD, Sportsman JR, Bumol TF, Sharp JD, Gadski RA (1989) "Molecular cloning and characterization of a human adenocarcinoma/epithelial cell surface antigen complementary DNA" *Cancer Res* 49:314-317
10. Sportsman JR, Smith WC, Winely CL (1989) "Practical automation and interpretation of quantitative assays of antibodies to therapeutic proteins, illustrated with human growth hormone" *Clin Chem* 35:1623-30
11. Taber LD, O'Brien P, Bowsher RR, Sportsman JR (1991) "Competitive particle concentration fluorescence immunoassay of lometrexol (5,10-dideaza-5,6,7,8-tetrahydrofolic acid), an antifolate with broad-spectrum antitumor activity" *Clin Chem* 37:254-60
12. Riggan AR, Regnier FE, Sportsman JR (1991) "Quantification of antibodies to human growth hormone by high performance protein G affinity chromatography with fluorescence detection" *Anal Chem* 63:468-74.
13. Riggan AR, Regnier FE, Sportsman JR (1991) "Quantification of antibodies to human growth hormone in serum by protein G affinity-reversed phase tandem column chromatography with fluorescence detection" *Analyt Chim Acta* 249:185-93
14. Sharp JD, White DL, Chiou XG, Goodson T, Gamboa GC, McClure D, Burgett S, Hoskins J, Skatrud PL, Sportsman JR, Becker GW, Kang LH, Roberts EF, Kramer RM (1991) "Cloning, primary structure and expression of human calcium-sensitive phospholipase A₂" *J Biol Chem* 266:14850-3.

15. Bodkin NL, Sportsman JR, DiMarchi RD, Hansen BC (1991) "Insulin-like growth factor-I in non-insulin dependent diabetic monkeys: basal plasma concentrations and metabolic effects of exogenously administered biosynthetic hormone" *Metabolism* 40:1131-7.
16. Manetta JV, Lai M-HT, Osborne HE, Dee A, Margolin N, Sportsman JR, Vlahos CJ, Yan SB, Heath WF (1992) "Design and implementation of a particle concentration fluorescence method for the detection of HIV-1 protease inhibitors" *Anal Bioch* 202:10-15
17. Inoguchi T, Battan R, Handler H, Sportsman JR, Heath W, King GL (1992) "Preferential elevation of protein kinase C isoform beta II and diacylglycerol levels in the aorta and heart of diabetic rats: differential reversibility to glycemic control by islet cell transplantation" *Proc Natl Acad Sci USA* 89:11059-63.
18. Slieker LJ, Sundell KL, Heath WF, Osborne HE, Bue J, Manetta JV, Sportsman JR (1992) "Glucose transporter levels in tissues of spontaneously diabetic Zucker *fa/fa* rat (ZDF/drt) and viable yellow mouse (*A^{VY}/a*)" *Diabetes* 41:187-93.
19. Fernando SA, Sportsman JR, Wilson GS (1992) "Studies of the low-dose 'hook' effect in a competitive homogeneous immunoassay" *J Immunol Meth* 151:27-46.
20. Riggan A, Sportsman JR, Regnier FE (1993) "Immunochromatographic analysis of proteins Identification, characterization and purity determination" *J Chromatog* 632:37-44.
21. Kramer RM, Roberts EF, Manetta JV, Sportsman JR, Jakubowski JA (1993) "Ca²⁺-sensitive cytosolic phospholipase A₂ (cPLA₂) in human platelets" *J Lipid Mediators* 6:209-16.
22. Shiba T, Inoguchi T, Sportsman JR, Heath WF, Bursell S, King GL (1993) "Correlation of diacylglycerol level and protein kinase C activity in rat retina to retinal circulation" *Am J Physiol* 265:E783-93.
23. Quattrin T, Albin CH, Sportsman JR, Shine BJ, MacGillivray MH (1993) "Urinary insulin-like growth factor-II excretion in healthy infants and children with normal and abnormal growth" *Pediatr Res* 34:435-8.
24. Dantzig AH, Hoskins J, Tabas LB, Bright S, Shepard RL, Jenkins IL, Duckworth DC, Sportsman JR, Mackensen D, Rosteck Jr PR, Skatrud PL (1994) "Association of intestinal peptide transport with a protein related to the cadherin superfamily" *Science* 264:430-2.
25. Poulos JE, Leggett-Frazier N, Khazanie P, Long S, Sportsman JR, MacDonald K, and Caro JF (1994) "Circulating insulin-like growth factor I concentrations in clinically severe obese patients with and without NIDDM in response to weight loss" *Horm Metab Res* 26:478-80.
26. Kauvar LM, Higgins DL, Villar HO, Sportsman JR, Engqvist-Goldstein Å, Bukar R, Bauer KE, Dilley H, Rocke DM, (1995) "Predicting ligand binding to proteins by affinity fingerprinting" *Chemistry & Biology* 2:107-18
27. Ashikaga T, Robertson DW, Sportsman JR, Strada SJ, Thompson WJ (1996) "Comparison of indolidan analog binding sites of drug antibody and sarcoplasmic reticulum with inhibition of cyclic AMP phosphodiesterase". *J Recept Signal Transduct Res* 16:315-337
28. Sportsman JR, Lee SL, Dilley H, Bukar R "Fluorescence polarization" in High Throughput Screening: the Discovery of Bioactive Substances, JP Devlin, ed, Marcel Dekker, New York (1997), pp 389-99.

29. Bright SW, Gold G, Sage SW, Sportsman JR, Tinsley FC, Dominianni SJ, Schmiegel KK, Kellam ML, Fitch LL, Yen TT (1997) "Monoclonal antibodies as surrogate receptors in a high throughput screen for compounds that enhance insulin sensitivity". *Life Sci* 61:2305-2315
30. Hentz, NG, Richardson JM, Daijo JE, and Sittampalam GS, (1997) "Synthesis and characterization of insulin-fluorescein derivatives for bioanalytical applications" *Anal Chem* 69:4994-5000.
31. Kauvar LM, Villar HO, Sportsman JR, Higgins DL, Schmidt, Jr. DE, (1998) "A protein affinity map of chemical space" *J Chromatogr B Biomed Sci Appl.* 715:93-102.
32. Daijo JE, Sportsman JR (1999) "A time-resolved fluorescence immunoassay for insulin in rodent plasma" *J Pharm Biomed Anal* 19:335-42.
33. Sportsman JR, Leytes G. (2000) "Miniaturization of Homogeneous Assays Using Fluorescence Polarization" *Drug Disc. Today* 5 (suppl) 24-9
34. Huang W, Zhang Y, Sportsman JR. (2002) "A fluorescence polarization assay for cyclic nucleotide phosphodiesterases." *J Biomol Screen* 7:215-22
35. Gaudet EA, Huang K-S, Zhang Y, Huang W, Mark D, Sportsman JR (2003) "A Homogeneous Fluorescence Polarization Assay Adaptable for a Range of Protein Serine/Threonine and Tyrosine Kinases" *J Biomol Screen* 8: 165-75
36. Sportsman JR "Fluorescence Anisotropy in Pharmacologic Screening" in *Methods in Enzymology* vol 361, Marriot G, Parker I, eds., Academic Press (San Diego, CA) pp 505-29. (2003)
37. Sportsman JR, Daijo J, Gaudet EA (2003) "Fluorescence polarization assays in signal transduction discovery." *Comb Chem High Throughput Screen* 6:195-200.
38. Sportsman JR, Gaudet EA, Boge A (2004) "Immobilized metal ion affinity-based fluorescence polarization (IMAP): advances in kinase screening." *Assay Drug Dev Technol.* 2(2):205-14
39. Liao J, Sportsman JR, Harris J, Stahl A (2005) "Real-time quantification of fatty acid uptake using a novel fluorescence assay" *J Lipid Res* 46(3):597-602

Patents:

1. Sportsman JR, Strnad J, Hamilton AE, Gadski RA, Bumol TF "Vectors and DNAs for expression of a human adenocarcinoma antigen" US patent 5,348,887 (1988)
2. Heath, Jr WF, Lai M-HT, Manetta JV, Sportsman JR, Yan S-CB "Substrates for HIV protease" US patent 5,235,039 (1993)
3. Sportsman JR, Bright SW, Dantzig A, Tabas L "Monoclonal Antibodies to human influx peptide transporter" US patent 5,500,346 (1996)
4. Bright SW, Gold G, Sage SW, Sportsman JR "Immunoassays for insulin sensitivity enhancers, insulin sensitivity enhancer antibodies, and non-thiazolidinedione insulin sensitivity enhancer compositions" US Patent 5,466,610 (1993)
5. McCormack RT, Liu R, Manetta JV, Sportsman JR "Stable rabbit-mouse fusion partner" US patent 5,472,868 (1995)

6. Sportsman JR "Antigen detection with affinity chromatography and parallel processing a control" US patent 5,491,096 (1996)
7. Sportsman JR, Kauvar LM, Villar HO "Nonpeptide insulin receptor agonists" US patent 5,830,918 (1998)
8. Sportsman JR, Villar HO, Kauvar LM, Satyam A "Nonpeptide insulin receptor agonists" US patent 5,851,988 (1998)
9. Sportsman JR, Kauvar LM, Villar HO, Spevak WR "Nonpeptide insulin receptor agonists" US patent 6,329,431 (2001)
10. Bright SW, Dantzig A, Tabas L, Sportsman JR "Monoclonal antibodies to human influx peptide transporter" US patent 5,500,346 (1996)
11. Sportsman JR, Bright SW, Dantzig A, Tabas L "Monoclonal antibodies to human influx peptide transporter" US patent 5,824,510 (1998)
12. Bright SW, Dantzig A, Tabas L, Sportsman JR, "Diagnosis of colon carcinoma using monoclonal antibodies to human influx peptide transporter" US Patent 6,001,359 (1999)
13. Bright SW, Dantzig A, Tabas L, Sportsman JR, "Immunomethods for isolating and indentifying human influx peptide transporter" US Patent 6,270,978 (2001)
14. Sportsman JR, Kauvar LM "Cell-signaling Assays" US Patent 6,806,053 (2004)
15. Sportsman JR, Huang W, Terpetschnig E, Hoekstra M "Molecular modification assays" US Patent 7,070,921 (2006)
16. Parker D, Atkinson P, Kielar F, Boge A, Sportsman JR, Gaudet E, Yi GG "Luminescent lanthanide complexes" US Patent 7,517,701 (2009)
17. Sportsman, JR, Ewing WR, "Analytical Method and Titration Device" US Patent Pending 2011
18. Sportsman JR, Sportsman RW, "Device and Method for Malic Acid" US Patent Pending 2013