

## Curriculum Vitae

### **MARK E. LOSTROM**

#### **Education:**

- 1969 A.S. Chemistry, West Valley College, Saratoga, CA  
1971 B.S. Bacteriology/Biochemistry, UCLA, Los Angeles, CA.  
1973 M.S. Microbiology/Immunology, Washington State University, Pullman, WA

#### **Professional Experience:**

- 2003–present President , Lostrom & Co., Biotechnology Consulting
- 1998–2002 President, CEO, Chairman of Confirma, Inc., Kirkland, WA
- 1992–1998 President, CancerVax, Inc., Santa Monica, CA
- 1990–1991 Vice President Corporate Development, Vice President Product Development and Interim President Viagene Inc., San Diego, CA
- 1986–1990 President , Lostrom & Co., Biotechnology Consulting
- 1984–1986 Director, Therapeutics Division, Genetic Systems/Oncogen Bristol-Myers-Squibb, Seattle, WA
- 1980–1984. Co-Founder & Senior Scientist, Genetic Systems Corporation, Seattle, WA

#### **Background**

##### **Management**

- ❖ Co-Founder of Confirma, Inc. A medical device/medical imaging company in Kirkland, WA.
  - Established operations, funding and set R&D strategy
  - Raised \$21 million
  - Product approved by FDA and now on sale.
- ❖ Co-founder of Genetic Systems Corporation/ Bristol-Myers Squibb.
  - Established and built the Therapeutics Division in Seattle.
  - Chairman of the Research Directors.
  - Directed multiple fully integrated (research, development, regulatory and manufacturing) therapeutic and diagnostic projects.
  - Raised \$5 million in R&D support from other major pharmaceutical companies.

- ❖ Viagene, Inc., VP Product Development, VP Corporate Development and Interim President for gene therapy company.
  - Directed the internal and external efforts for corporate development.
  - Secured financing and corporate partners(\$45M)
  - First commercial FDA IND for direct vector-injection gene therapy.
  - Formed and directed the product development team.
- ❖ CancerVax, Inc. Cancer vaccine company now located in Carlsbad, CA
  - Acting President during formation of company
  - Managed intellectual property, FDA IND, and corporate development
  - Brought company into pivotal phase III trials and transitioned to new management. Company now filed S1 (2003).
- ❖ Extensive travel, speaking and negotiating experience on behalf of contractual, scientific and business objectives.

### **Financial and Planning**

- Short, and long term strategic planning for technology, products and markets.
- Establishment of corporate priorities and implementation and full financial accountability.
- Raised over \$60 million.

### **Patents and Publications**

- Comprehensive international biotechnology and pharmaceutical patent experience including: drafting, searches, prosecution strategy, reviews, licensing and comparisons of technologies with respect to strength and competitiveness.
- Extensive writing experience including scientific articles published in peer-reviewed journals and books.
- Particular emphasis on presentation of complex technical concepts and data to audiences with diverse backgrounds.

### **Licensing**

- Former member of a multidisciplinary team (Bristol-Myers Commercial Development and Licensing) responsible for evaluation of the scientific feasibility and likelihood of commercial success of new therapeutic business opportunities in biotechnology and other health care areas.
- Extensive experience with academic and industrial in/out licensing programs and agreements.
- Evaluation and restructuring of corporate, university and non-profit technology management and licensing programs.
- International corporate partnering (Europe and Asia), deal structures, strategy, and closing.

### **Clinical and Regulatory**

- Extensive FDA experience with BLA, IND, 510(k) and PLA products, strategic considerations, Orphan Drug and manufacturing issues.

**Broad Scientific Experience**

- Monoclonal antibody technology
- Recombinant technology
- Manufacturing of biological products.
- Genetic therapy
- Immunotherapy (Vaccines) for Cancers and Infectious Diseases
- Medical devices

**Diagnostic and Therapeutic R&D Project Organization**

All facets including: experimental design, establishment of priorities and milestones; recruiting and training of technical and managerial staff; facilities acquisition, design and outfitting; contracting, collaborative and OEM services. Heavy emphasis on maintaining project focus and cost control.

**Volunteer Activities**

- Mentor for Jr. High students, Bellevue School District VIBES Program
- Planning Commissioner, City of Medina, 14 years, 8 years as Chairman

## Scientific Publications

1. Nowinski, R.C., Lostrom, M.E., Tam, M.R., Stone, M.R., and Burnette, W.N.. The Isolation of Hybrid Cell Lines Producing Monoclonal Antibodies Against the p15(E) Protein of Ecotropic Murine Leukemia Viruses. *Virology* 93:111-126, 1979.
2. Stone, M.R., Lostrom, M.E., Tam, M.R., and Nowinski, R.C. Monoclonal Antibodies as Probes for Antigenic Polymorphism in Murine Leukemia Viruses. *Virology* 96:286-290, 1979.
3. Lostrom, M.E., Stone, M.R., Tam, M.R., Burnette, W.N., Pinter, A., and Nowinski, R.C.. Monoclonal Antibodies Against Murine Leukemia Viruses: Identification of Six Antigenic Determinants on the P15(E) and gp70 Envelope Proteins. *Virology* 98:336-350, 1979.
4. Nowinski, R.C., Stone, M.R., Tam, M.R., Lostrom, M.E., Burnette, W.N. and O'Donnell, P.V. Mapping of Viral Proteins with Monoclonal Antibodies. Analysis of the Envelope Proteins of Murine Leukemia Viruses, in *Monoclonal Antibodies*, Kennett, R.H., McKearn, T.J. and Bechtol, K.B., eds. Plenum Press, pp. 295-316, 1980.
5. Nowinski, R.C., Berglund, C., Lane, J., Lostrom, M.E., Bernstein, I., Young, W, and Hakomori, S. Human Monoclonal Antibody Against the Forssman Antigen, *Science* 210:537-539, 1980.
6. Cianciolo, G.J., Lostrom, M.E., Tam, M.R. and Snyderman, R., Murine Malignant Cells Synthesize a 19,000 Dalton Protein that is Physiochemically and Antigenically Related to the Immunosuppressive Retroviral Protein p15(E). *Journal of Experimental Medicine* 158:(3) 885, 1983.
7. Siadak, A.W. and Lostrom, M.E., Cell-Driven Viral Transformation, in *Human Hybridomas and Monoclonal Antibodies*, Engleman, E.G., Foug, S.K.H., Larrick, J. and Raubitschek, A., eds., Plenum Publishing, 1985.
8. United States Patent 4,464,465, Cell Driven Viral Transfer in Eucaryotes, Issued June 4, 1984.
9. Pennington, J.E., Small, G.J., Lostrom, M.E. and Pier, G.B. Polyclonal and Monoclonal antibody Therapy for Experimental Pseudomonas aeruginosa Pneumonia. *Infection and Immunity* 54:239-244, 1986.
10. Tsang, H., Pinkert, C., Hagman, J., Lostrom, M., Brinster, R. and Storb, U. Cloning of a  $\gamma$ 2b Gene Encoding Anti-Pseudomonas aeruginosa H chains and its Introduction into the Germ Line of Mice. *J. Immunology* 141:308-314, 1988.
11. United States Patent 4,834,975. Human Monoclonal Antibodies to Serotypic Lipopolysaccharide Determinants on Gram Negative Bacteria and their Production. Issued: May 30, 1989.
12. United States Patent 4,834,976. Monoclonal Antibodies to Pseudomonas aeruginosa Flagella. Issued May 30, 1989.
13. Rosok M., Stebbins, M., Connelly, K., Lostrom, M., and Siadak, A., Generation and Characterization of Murine Antiflagellum Monoclonal Antibodies That Are Protective Against Lethal Challenge with Pseudomonas Aeruginosa. *Infection and Immunity* 58: 3819-3828, 1990.