

Richard M. Fronko

Career Target

Organized with the ability to multi-task and create effective solutions for information storage and improvement of laboratory workflow processes. Seeking a technical management opportunity with an industry leader.

Professional Skills

- ***Adaptability to New Technology and Information:*** Skilled at integrating new and existing software packages for compound screening libraries, protein synthesis and purification, compound registration and biological activity (*in vitro* and *in vivo*) that improved information and process flow. This involved being a self-motivated team player with excellent communication skills. Talented at working with cross functional areas to define their requirements and to create new processes, software development, report creation and analysis, testing and employee training. Skilled in MDL ISIS/Base and Isentris, MDL Report Manager, MDL Assay Explorer, MDL ISIS for Excel, MDL Plate Manager, MS Excel, MS Word, MS PowerPoint.
- ***Skilled in Developing and Enhancing Processes:*** Proficient at learning and understanding current work processes and devising new and more efficient ways to accomplish the same or improved outcome, with fewer errors and at a cost savings. These talents have been used in research institutions and start-up companies (analytical laboratories, compound collections, and information systems).
- ***Ability to Manage Multiple Tasks and Motivate Personnel:*** Skilled in focusing on long and short term priorities to produce desired results while maintaining order within an ever evolving and changing environment. Able to motivate employees and inspire others to deliver their highest potential. Experienced at installation planning, employee evaluations, establishing individual and company goals.

Technical Skills

INSTRUMENTATION: NMR-1-D and 2-D NMR spectroscopy (COSY, NOESY, ROESY, HMBC), HPLC, MS

SOFTWARE: MDL's ISIS/Base (including ChemBioAE, Assay Explorer, ISIS for Excel, Report Manager, SMART and ISIS/Host) and Isentris (MDL Base, MDL Draw, MDL Logistics, Plate Manager); SQLPlus; Oracle DBA Studio and Enterprise Manager Console; TOAD; Style Reports; FileMaker Pro; UNIX; Microsoft Office Suite.

TRAINING: ISIS/Host, HViews 1/99; ISIS/Host DBA Course 9/00; Oracle Portal-Developing Corporate Portals 7/01; Software Product Management and Marketing, 2-5/02

Employment

SAN JOSE BIOCENTER, SAN JOSE, CA (2007 to present)

Operations Director

OHLONE COLLEGE, FREMONT MILPITAS, CA (2007 to present)

Instructor, Chemistry

- Interned for Chemistry 106A as lab instructor.
- Taught 8-week Summer Session of Chemistry 101B
- Member of LAB committee, an outreach program for high-school students that promotes career paths in biotechnology.

PLEXIKON INC., BERKELEY, CA (2002 to 2006)

Senior Scientist, Informatics

- Designed and created custom Oracle tables to store and archive biological experiments including biochemical assays and stability tests. Enhancements improved data reporting and decreased data entry times.
- Developed and wrote a series of Filemaker Pro databases for capturing and reporting protein purification data and protein co-crystallization results. The integrated database increased laboratory throughput by 25% and led to improvements in the design of crystallization conditions.
- Implemented MDL's ChemBioAE for managing compound registration and assay data reporting. Collaborated with Chemists to devise operational rules for entering chemical structure and batch information in the database.
- Created reporting tools for company scientists using MDL's Report Manager and ISIS for Excel. Composed SQL scripts to extract activity data from Oracle for processing and presentation in a browser environment.
- Devised a local ISIS/Base database containing $>1 \times 10^6$ compounds from vendor inventories. Managed the purchase of two diverse compound subsets for the Plexikon research program. Negotiated and ordered screening plates for 20,000 compounds at a savings of over \$50,000.
- Responsible for installation of plate inventory application and integration of a bar code system into experimental workflow, improving inventory management and increasing data throughput by 50%.

MICROCIDE PHARMACEUTICALS, MOUNTAIN VIEW, CA (1993 to 2002)

Manager, Informatics, Diversity Library and NMR Labs

Senior Analytical Chemist

- Managed ISIS and Oracle databases for lead identification and optimization. Collaborated with project teams to create tables and views in Oracle for report presentation and data mining. Balanced corporate reporting requests with end-user requirements.
- Successfully administered synthetic compound collection ($>160,000$) for rapid follow-up of screen hits. Maintained data integrity in ISIS/Host database of corporate screening compounds and ran quality control checks with NMR spectroscopy.

- Worked closely with chemists to design a system that satisfied scientific requirements. Built and maintained ISIS/Base registration system for systematically cataloguing compounds from in-house chemical synthesis.
- Designed production timeline for delivering 80,000 compounds (each at 5 mg) and 625 screening plates for sale to a corporate partner. Coordinated the preparation of compounds for export and shipped all compounds and plates within 5-month deadline.
- Responsible for evaluating and testing statistical programs such as JMP and Statistica for purchase and where necessary developed cross platform integration strategies for these programs.

UNIVERSITY OF WISCONSIN-MADISON, MADISON, WI (1989 to 1993)

Manager, NMR Labs Department of Chemistry

- Successfully managed 8 NMR spectrometers. Supervised installation of new ESR spectrometer. Scheduled yearly training for 200+ graduate students. Prepared successful NSF and NIH proposals for ESR and NMR instrument purchases.
- Supervised successful upgrade of in-house NMR processing software (PCNMR+) for off-line data processing, permitting greater throughput on routine NMR spectrometers.

Education

- University of Michigan, Ann Arbor, MI: Postdoctoral Fellow
- Naval Research Laboratory Washington, D. C.: NRC Post-Doctoral Fellow
- University of Wisconsin-Madison Madison, WI: Ph.D., Inorganic Chemistry
- College of William and Mary Williamsburg, VA: B.S., Chemistry

References – available upon request

Publications

1. "MECHANISMS OF RESISTANCE - IDENTIFICATION AND CHARACTERIZATION OF INHIBITORS OF MULTIDRUG RESISTANCE EFFLUX PUMPS IN PSEUDOMONAS AERUGINOSA: NOVEL AGENTS FOR COMBINATION THERAPY." O. LOMOVSKAYA, M. S. WARREN, A. LEE, J. GALAZZO, R. M. FRONKO, M. LEE, J. BLAIS, D. CHO, S. CHAMBERLAND, T. RENU, R. LEGER, S. HECKER, W. WATKINS, K. HOSHINO, H. ISHIDA, V. J. LEE; J. OF ANTIMICROBIAL AGENTS AND CHEMOTHERAPIES VOL. 45 (2001) PP. 105 – 116.
2. PATENT NO. US 6,228,842 B1. "PACIDAMYCINS PRODUCED BY *STREPTOMYCES COERULEORUBIDUS*" R. FRONKO, MAY LEE, V. J. LEE, R. LEGER. MICROCID PHARMACEUTICALS, INC. GRANTED MAY 8, 2001.
3. "NEW PACIDAMYCINS PRODUCED BY *STREPTOMYCES COERULEORUBIDUS*, NRRL 18370." R. M. FRONKO, J. C. LEE, J. G. GALAZZO, S. CHAMBERLAND, F. MALOUIN AND M. D. LEE; J. ANTIBIOTICS VOL. 53 (2000) 1405.
4. "INACTIVATION AND REACTIVATION OF MANGANESE CATALASE: OXIDATION-STATE ASSIGNMENTS USING X-RAY ABSORPTION-SPECTROSCOPY." G. S. WALDO, R. M. FRONKO, J. E. PENNER-HAHN; BIOCHEMISTRY-US 30: (43) (1991) 10486-10490.
5. "EVIDENCE FOR A Mn(II)-Mn(II) REVERSIBLE Mn(III)-Mn(III) CATALYTIC CYCLE IN *L. PLANTARUM* MN-CATALASE." WALDO GS, FRONKO R, DO K, ET AL.; ABSTR PAP AM. CHEM. S 201: (1991) 283-INOR PART 1.
6. "POLARIZED XANES OF IRON PORPHYRINS", S. WANG, G. S. WALDO, R. M. FRONKO, ET AL.; PHYSICA B 158: (1-3) (1989) 119-120.