

## WALTER E. REIHER III, PH.D.

P.O. Box 2098  
Sunnyvale, CA 94087-0098  
[Wally@CompChem.com](mailto:Wally@CompChem.com)

408-720-0240  
fax: 408-720-0378  
<http://www.CompChem.com>

---

<b>CAREER OBJECTIVE</b>	Apply innovative computational techniques to significant problems in pharmaceutical, biological, and chemical research. Provide technical leadership in a solid, progressive company that best utilizes my skills, creativity, and experience and that provides opportunities for personal and professional development.
-------------------------	--

---

<b>PROFESSIONAL SUMMARY</b>	Computational scientist with a broad range of skills, research experiences, and interests. Thirteen years of industrial experience in computational chemistry and biology; overall, twenty-three years of experience with computers in chemistry. Innovative, productive researcher, both in a company setting and as an independent contractor. Widely known for effectiveness, responsiveness, and integrity in various support and consulting roles at software companies. Gained business experience in building and running small, entrepreneurial companies; excels in strategic planning.
-----------------------------	--

---

<b>STRENGTHS</b>	<ul style="list-style-type: none"><li>• Creative and innovative: an "ideas" person.</li><li>• Resourceful: excellent problem solver and troubleshooter.</li><li>• Very effective in a team-oriented setting. Excels at working with colleagues trained in different disciplines, adapting ideas and concepts drawn from one field to another.</li><li>• Excellent presentation skills. Effective teacher and trainer.</li><li>• Highly motivated: dedicated, diligent, and tenacious.</li><li>• Adaptable: learns quickly; seeks new challenges and growth.</li><li>• A strategic and critical thinker.</li><li>• Perceptive and observant.</li><li>• Dedicated to excellence.</li></ul>
------------------	--

---

<b>EDUCATION, HONORS</b>	<p>Ph.D., 1985, A.M., 1979; Harvard University. Concentration: Chemistry, specializing in Theoretical Chemistry. Thesis title: "Theoretical Studies of Hydrogen Bonding". Thesis adviser: Martin Karplus.</p> <p>B.A., <i>cum laude</i>, 1977; University of California, San Diego (Revelle College). Major: Chemistry, specializing in Physical Chemistry.</p> <p>Phi Beta Kappa, University of California, San Diego, 1977. Regents' Scholar, University of California, San Diego, 1973-1977.</p> <p>Continuing education at University of California, Santa Cruz Extension.</p>
--------------------------	--

---

<b>PROFESSIONAL EXPERIENCE</b>	<p><b>Chiron Corporation, Emeryville, CA, 1997-present</b> <b>Associate Director, Research; Senior Scientist</b> Director of the Informatics &amp; Sample Management Group in Small Molecule Drug Discovery (SMDD). Project Director for two major initiatives: implementation of a new chemical database and a sample management system. Led these projects from specification, research, and consensus building through corporate approval and funding in my first 7 months at Chiron. Supporting lead discovery teams by leading development of integrated structure-activity reports. Improving informatics support for high-throughput screening and assays by leading development of more comprehensive, useful reports of activity results. Planning a new sample management lab with a repository to house SMDD's rapidly growing Sample Collection. Promoted from Senior Scientist to Associate Director after 6 months of service.</p> <hr/> <p><b>CompChem Innovations, Sunnyvale, CA, 1993-present</b> <b>Principal</b> Consulting in computational chemistry, primarily contract research in QSAR and molecular modeling. Chemistry software development, much of it on PC's. Helped specify and develop a database to archive experimental results. Primary client: Eastman Kodak/Sterling Winthrop.</p>
--------------------------------	--

---

PROFESSIONAL  
EXPERIENCE,  
continued**Molecular Applications Group, Palo Alto, CA, 1996–1997****Principal Scientist; Scientific Applications Manager**

Led an initiative to gather essential bioinformatics software and databases in-house for methods development and for packaging as “information servers” to work in conjunction with MAG’s GeneMine search agents. A primary presenter of the company’s technology, technical strategy, and direction. Played a central role in strategic product planning, product specification, and business development. Some product and applications development. As a member of the management team, helped to re-start the company following a major restructuring that included a change in focus to place a greater emphasis on bioinformatics. Served as Acting Director of Development. As Scientific Applications Manager, technical sales support and customer support.

**Tripos Associates, Inc., Belmont, CA/St. Louis, MO, 1990–1993****Senior Scientist**

Senior member of the technical staff, working independently on the west coast. Technical sales support, including product demonstrations, preparation and presentation of product overview seminars, and working on “problem sets” posed by evaluators. Developed a peptide QSAR application. Designed numerous enhancements to products, especially the user interface. Led in specifying and winning approval for the development of three new products. Developed training materials and presented training courses.

**Molecular Simulations/BioDesign, Inc., Pasadena, CA, 1986–1990****Director of Customer Services; BIOGRAF Product Manager; Senior Scientist**

Various management, technical, and marketing responsibilities. Senior member of the technical staff of a small company that developed and marketed molecular modeling software and related services. Consulting and training at customer sites; coordination of and work on a sponsored research project in peptide modeling; technical sales support; force field development and verification; and developed a DNA modeling application. Helped design a next-generation modeling product.

**Triton Biosciences Inc., Alameda, CA, 1985–1986****Research Scientist**

Sequence analysis and molecular modeling. Assumed a key role in a research team, stimulating a number of experimental projects. Two publications, including Triton’s first scientific publication of in-house research; one patent applied for.

**Harvard University Chemistry Department, 1977–1985****Graduate Student**

Performed *ab initio* quantum mechanical calculations of biologically important hydrogen bonded systems. Examined the basis set dependence of *ab initio* hydrogen bond potentials and the effect of electron correlation corrections. Developed a novel method for obtaining realistic quantum mechanically-derived intermolecular potential energy surfaces. Applied this technique to improve the model for hydrogen bonding in the molecular modeling program CHARMM.

COMPUTER-  
RELATED SKILLS  
AND EXPERIENCE**Applications:**

- *Chemical and Biological Informatics*: MDL ISIS/Host, ISIS/Base, ISIS for Excel, Chemscape, Chime Pro; Oracle; Daylight Thor, Merlin; managing IDBS ActivityBase.
- *Computational chemistry*: Tripos Sybyl, Concord, QSAR/PLS, Biopolymer, Composer, Match-Maker, Systematic Search/Active Analog Approach/Receptor, Unity; MSI/BioDesign Biograf, Polygraf, NMRgraf, Xtalgraf; Gaussian; MOPAC, AMPAC; MSI Cerius<sup>2</sup>; CHARMM.
- *Bioinformatics, computational biology*: MAG Look, SegMod/Cara/Encad, MacLook, GeneMine Pro; FASTA; Prosite; SCOP; BLAST; GCG (“Wisconsin package”).
- Other personally-developed and proprietary applications.

**COMPUTER-RELATED  
SKILLS AND  
EXPERIENCE,  
continued****Development:**

- *Languages, APIs:* learning SQL; C, FORTRAN; HTML and CGI; some Win32.
- *Scripting:* learning Perl; Sybyl SPL; csh, sh, DCL.
- Porting applications between OSes: UNIX, Windows NT, and VMS.

**Systems:**

- Over 20 years experience with UNIX/Linux on a large number of platforms; over 5 years with Windows NT, Windows for Workgroups; over 10 years with Macintosh; other, legacy systems.

Setting up heterogeneous networks. Site planning and facilities management. Web site configuration and management with Netscape Enterprise Server and Apache.

---

**Harvard University Chemistry Department, 1981–1985****Consultant; System Manager**

Managed the Chemistry VAX-11/780 computer system, running VMS, supporting 100 users in Chemistry and Biochemistry. Directed the day-to-day operation of the facility, supervised a Programmer/Operator, managed the \$13,000 monthly budget, and provided training and support. Performed systems and graphics programming. Acquired, installed, and maintained a wide range of peripherals. As an internal consultant, assisted in the modernization of this facility, the acquisition of a second 780, and hiring subsequent System Managers. Supported microcomputer users, networking personal computers to the VAX.

---

**Harvard University Chemistry Department, 1980–1981****System Manager**

Managed the Chemistry PDP-11/45 computer system, running UNIX, which served as a text processing and data reduction system.

---

**TEACHING  
EXPERIENCE****Amity Testing Institute, 1980–1981****Physics and Chemistry Lecturer**

Taught physics and chemistry in MCAT review courses.

---

**Harvard University Chemistry Department, 1977–1978****Special Tutor; Teaching Fellow**

Served in a 350-student introductory chemistry class. As a Teaching Fellow, taught combined recitation/laboratory sections. Named an outstanding teacher in student evaluations. As a Special Tutor, presented weekly review lectures (many attended by 200 students), shared office hours with the professor, wrote solutions to problem sets and examinations, and prepared additional practice problems for the examinations. Wrote and used a package of computer programs to maintain student grade records.

---

**PROFESSIONAL  
ACTIVITIES**

Treasurer, American Chemical Society Division of Computers in Chemistry.

Society membership: American Chemical Society.

---

**REFERENCES**

Excellent personal and professional references available on request.

---