

Stephen C Twomey, MS

8353 Celina Hills Street
Las Vegas, NV 89131
(702) 501-3209
Email: sctwomey@gmail.com

EDUCATION

MS in Environmental Science, June 2002
University of Nevada, Las Vegas, Las Vegas, NV

BS in Molecular Biology and Biochemistry, August 2000
Marquette University, Milwaukee, WI

AA in Liberal Arts, June 1996
Hillsborough Community College, Tampa, FL

TEACHING/ACADEMIC EXPERIENCE

College of Southern Nevada (CSN) – Department of Biological Sciences & Physical Sciences Las Vegas, NV
August 2020 – December 2020

- **Adjunct Instructor**
 - BIOL 101 – (Biology for Non-Majors) An introduction to biology with emphasis on human concerns. Topics include aspects of organism structure, function, ecology, and evolution which provide a biological perspective for issues facing modern society.

College of Southern Nevada (CSN) – Department of Biological Sciences & Physical Sciences Las Vegas, NV
August 2017 – August 2020

- **Full-Time Instructor (Temporary Emergency Hire)**
 - BIOL 101 – (Biology for Non-Majors) An introduction to biology with emphasis on human concerns. Topics include aspects of organism structure, function, ecology, and evolution which provide a biological perspective for issues facing modern society.
 - BIOL 189 & Lab - (Fundamentals of Life Science) A comprehensive course which serves to build a cornerstone of biological knowledge for students in health science majors, and fulfills the prerequisite for anatomy and physiology, and microbiology courses. The topics include biochemistry, cell structure and function, cellular metabolism, physiology, genetics, and gene expression.
 - ENV 201 – (Environmental Toxicology and Risk Assessment) Study of the basic principles of toxicology, including routes of exposure, dose response, and target

organ effects using environmental toxicants as primary examples. Toxicology concepts applied to risk assessment and the development of acceptable exposure limits for toxic substances regulated by EPA and OSHA.

- ENV 101 – (Introduction to Environmental Science) A survey of basic ecological principles and an examination of selected environmental issues including overpopulation, pollution and energy alternatives.

College of Southern Nevada (CSN) – Department of Biological Sciences & Physical Sciences Las Vegas, NV
June 2017 – June 2017

Adjunct Instructor

- ENV 101 – (Introduction to Environmental Science) A survey of basic ecological principles and an examination of selected environmental issues including overpopulation, pollution and energy alternatives.

Clark County School District (CCSD) – Bonanza High School Las Vegas, NV
March 2015 – May 2017

- **Guest Teacher**

- Teaching students in subjects such as Mathematics, Science, Technology, History, and English.
- Assisting colleagues and staff with school activities and student behavior.
- Assist school administrators as needed with school activities and student behavior.

Marquette University (MU) – Chemistry Department Milwaukee, WI
July 1997 – December 1997

- **Undergraduate Teaching Assistant**

- Taught organic chemistry laboratory for two semesters.
- Lectured on the fundamentals of organic chemistry.
- Instructed in the use and care of chemicals and equipment and safe laboratory procedures.
- Developed tests and quizzes, graded papers, and gave students' laboratory course grades.

RESEARCH/INDUSTRIAL EXPERIENCE

Herndon Solutions Group
Las Vegas, NV

December 2012 – October 2013

- **Project Coordinator**
 - Project management.
 - Technical writing.
 - IT technical support.
 - Emergency management.
 - Health and safety consultation and education.

Diamond Resorts International
Las Vegas, NV

July 2009 – April 2011

- **Corporate OSHA Compliance Officer**
 - Develop, implement, and manage the Corporation's Injury/Illness Prevention Program, and direct and coordinate the participation of resorts in North America and the Caribbean.
 - Create and revise safety policies and develop, implement, and updated the Corporate Health and Safety Manual for each state in which a resort was located.
 - Conduct regular safety and security audits of corporate resorts including the inspection of facilities, worksites, equipment, work practices, and safety devices to ensure compliance with required workplace safety standards, regulations, and corporate policies and procedures.
 - Write reports detailing findings to resort management and recommend changes to establish safe work conditions.
 - Monitor changes at the resorts and conduct follow-up inspections
 - Serve as a safety resource to all resorts and assist resorts in complying with federal, state, local, and corporate safety and health standards.
 - Provide consultation, guidance, and technical assistance on matters related to workplace safety and security, including assisting in the development of resort-specific safety manuals and forms, and advising of proper recordkeeping requirements.
 - Assist resorts in establishing standards and developing controls or work processes specific to resort operations in order to minimize or eliminate hazards and maintain consistency with corporate safety policies and procedures.
 - Develop and provide individual counseling and on-site and classroom training to staff on safety topics.
 - Provide training to resort safety coordinators on safety practices and policies, as well as all safety topics taught at the resorts and the corporate office.
 - Work closely with the Corporate Fire/Life Safety chief to ensure proper coordination and implementation of policies and procedures.

Polo Towers/Desert Paradise Resort – Diamond Resorts International
Las Vegas, NV

March 2008 – July 2009

- **Security Manager**

- Create and establish plans for effective implementation of security policies and procedures.
- Supervise the job performance of 22 employees.
- Direct and supervise fire command and control activities during emergency events
- Develop, implement, supervise, and enforce policies and procedures for daily activities and incidents.
- Establish and maintain ongoing training programs, implementing effective action plans and curricula.
- Assess training needs of staff, and recommend and provide appropriate training
- Assess needs and availability of personnel to provide adequate security staffing
- Provide orientation and on-the-job training to new employees relative to security and operational procedures.
- Recommend disciplinary actions and counsel employees in work-related activities, professional growth, and career development.
- Investigate reports of misconduct and special incidents, investigate accidents and criminal acts, and gather information and write reports to ensure appropriate action is taken.
- Develop and manage budgets with corresponding budget reports
- Ensure compliance with all company and governmental safety and environmental health regulations by directing all safety functions.
- Directly plan, develop, implement, and administer safety policies, programs, and training.
- Develop and maintain all OSHA activity, and injury and illness logs
- Prevent accidents and other safety exposures by investigating, identifying causes, and developing preventative measures and practices.
- Act as a technical resource on interpretation of safety reports, policies, and procedures.

Nevada Cancer Institute
Las Vegas, NV

August 2005 – June 2007

- **Associate Research Scientist**

- Manage a Clinical Pharmacology Core Analytical Laboratory, which included the use, maintenance, and troubleshooting of SCIEX API 3200 liquid chromatography/tandem mass spectrometer (LC/MS-MS), and high performance liquid chromatography (HPLC) instruments with photodiode array, ultraviolet visible spectrum (UV-vis), fluorescence, and beta-gamma radiometric detectors and Liquid Scintillation.
- Conduct research and development of bioanalytical assays for drug development and drug therapy monitoring.
- Assist with the initiation and monitoring of Phase I clinical trials

- Assist in the evaluation of pharmacokinetic (PK), pharmacodynamic (PD), and pharmacogenetic (PG) parameters.
- Develop protocols and assays for adsorption, distribution, metabolism, and excretion (ADME) studies.
- Perform testing, inventory control, and infrastructure management for the analytical laboratory under current good laboratory practices (cGLP) conditions.

Desert Research Institute
Reno, NV

July 2003 – April 2005

- **Carbon Laboratory Technician**

- Conduct analyses of carbon samples obtained from various locations around the U.S. and Mexico, including all U.S. National Parks.
- Maintain inventory and control of supplies and samples.
- Aid in various research projects conducted in the Division of Atmospheric Sciences at Desert Research Institute.

University of Nevada, Reno
Reno, NV

August 2002 – July 2003

- **Graduate Research Assistant**

- Research the chemistry and microbiology of acid mine drainage (AMD), and the chemistry and microbiology of bioreactors for their use in the subsequent remediation of AMD; the focus of the project was the identification and characterization of the sulfate-reducing bacteria (SRB), and the characterization of the behavior of SRB under various environmental conditions (i.e., pH and temperature), as well as a study of their nutritional requirements under various environmental conditions.
- Employ a number of techniques for these tasks, including atomic absorption spectrometry, gas chromatography, ion chromatographic analysis, and genomic sequencing and analysis.
- Research the biogeochemical cycling of elemental and organic mercury in terrestrial, aquatic, and atmospheric environments.
- Utilize various laboratory and field instruments, such as the Tekran Mercury Analyzer; the focus of the project was the identification and quantification of elemental and organic mercury cycles between soil, plants, and the atmosphere, and identification of possible anthropogenic and natural sources of contamination.

U.S. Centers for Disease Control and Prevention (CDC)
Atlanta, GA

June 2002 – August 2002

- **Research Assistant (Summer Intern)**

- Study and develop screening assays for the detection of polycyclic aromatic hydrocarbon, organochlorine, and organophosphate compounds in human neonatal and adult blood.
- Develop analytical solid-phase microextraction techniques designed to be used with high resolution Gas Chromatography/Mass Spectroscopy analysis; the assays utilized 100 μm polysilicone fullerene fibers for the analysis of polycyclic aromatic hydrocarbon compounds by direct immersion solid-phase microextraction and 100 μm polydimethylsiloxane fibers for the analysis of organochlorine and organophosphate compounds by head-space solid-phase microextraction.

U.S. Environmental Protection Agency (USEPA)
Las Vegas, NV

September 1999 – June 2002

- **Graduate Research Assistant**

- Study and develop a biosensor for the detection of organophosphate and carbamate pesticides through the use of analytical, biochemical, and immunochemical techniques; the biosensor studies included the measurement of acetylcholinesterase activity via a spectrochemical assay, with an Enzyme-Linked Immunosorbent Assay (ELISA) plating system, and using various reagents such as Ellman's reagent and acetylthiocholine iodide in the presence of the pesticides parathion, dichlorvos, carbaryl, and diazinon.
- Conduct oxidation studies of various organophosphate and carbamate compounds such as parathion, diazinon, chlorpyrifos and carbaryl using Gas Chromatography/Mass Spectroscopy and accompanying techniques.

Marquette University – Chemistry Department
Milwaukee, WI

January 1997 – December 1997

- **Undergraduate Research Assistant**

- Study of acetylcholine receptors of BC_3H_1 muscle cells utilizing patch-clamp techniques with pre-incubation of Carbamoylcholine/Galanthamine neurotransmitter/toxin.
- Studied BC_3H_1 cells utilizing similar caged compounds with laser-pulse photolysis. Studied GABA receptors of Hippocampus cells with various anti-convulsive compounds such as Diazepam and Lorzapam; care and maintenance of various laboratory equipment, handling of live animals, contacting vendors, ordering supplies, inventory, and cell culturing.

SCHOLARSHIPS/SERVICE

- Marquette University Honors Scholarship
- Phi Theta Kappa Honors Scholarship
- Honorable Discharge, U.S. Army National Guard, Florida
- Honorable Discharge, U.S. Navy