

Research Experience Biochemistry

EDUCATION:

Bachelor of Science, Biochemistry and Molecular Biology
University of New Mexico, Albuquerque, NM.

12/2009
GPA: 3.4

- Related coursework
 - Genetics, Microbiology, and Immunology.
 - Physical Biochemistry: Acquired skills in electrophoretic and hydrodynamic methods, mass spectrometry, optical and vibrational spectroscopic methods, NMR, diffraction methods, and computational techniques with primary emphasis upon biological and biochemical applications.
 - Biochemical Methods and Quantitative Analysis: Techniques including separations, thin-layer chromatography, electrophoretic purification of enzymes, PCR, determination of enzyme parameters (V_m , K_m), GC-MS, and set up of apparatus for organic synthesis.

Monash University, Melbourne, Australia

03/2005 - 11/2005

- Studied International Business.

PROFESSIONAL QUALIFICATIONS:

- Biochemical techniques including chromatographic and electrophoretic purification of enzymes, PCR, fractionation of subcellular organelles, isolation of chromatin, and biosynthesis of protein.
- Quantitative analysis, titrations, microscopy, spectroscopy, chromatography.
- Training in SOP of analytical lab equipment.
- Preparing and presenting technical data both written and oral.

PROFESSIONAL EXPERIENCE:

Project Manager

12/2011 – 2012

Inter-Mountain Labs, Sheridan, WY

- Preparing final reports in a timely manner of analytical results for clients.
- Review of project and sample information, data review, and detailed checks for accuracy using LIMS.
- Working closely with lab technicians to ensure project specific needs are met.
- Current SOP training for various analytical methods including IC, auto-titrator, O&G, and other EPA methods.

Research Associate

02/2006 – 10/2008

Bio-Tec Environmental, LLC, Albuquerque, NM.

- Worked with a team to develop a chemical formulation for a biodegradable plastic additive. Product now patented and trademarked EcoPure©.
- Formulation of various chemical additives and outlining the technology for a company patent.
- Focused on the biomolecular and microbial interactions with the new formulations.
- Performed sourcing and scale-up of materials for manufacturing.
- Developed methods for experimental analyses along with critical interpretation of data from testing biodegradable plastics via microscopy, spectroscopy, chromatography, and various ASTM testing methods used for the biodegradable plastics industry.
- From here, I developed and organized ZiaLabs, a subsidiary testing laboratory for Bio-Tec Environmental.
- Data preparation, including presenting technical materials in both written and verbal form.

Junior Engineering Tech

07/2005 – 11/2005

Jamison & Craig Civil Engineering Consultants P/L, Melbourne, Australia.

- Drew plans for residential and commercial developments in the Melbourne region.
- Used CAD/CAM as an application for planning blue prints.
- Prepared bids for contractors.

Information Technology (IT) Support

03/2005 – 11/2005

Monash University IT Client Services, Melbourne, Australia.

- Technical support for both students and faculty members over telephone and on site.
- Configured VPN and other wireless connections, as well as supervising and maintaining all hardware and software components for two on-campus computer rooms.

ADDITIONAL WORK EXPERIENCE

Town and Country Polo Club, Sydney, Australia.

01/2011 – 06/2011

Horse Trainer

International Summer Camp Montana, Crans-Montana, Switzerland.

Summer '09, '10, '11

Riding Instructor

UNM, Department of Athletics, Albuquerque, NM

09/2008 – 12/2009

Tutor