resume\_119@gmail.com  
(710)-727-5751  
 | Bioinformatics Analyst  
Burlington VT - Email me on Indeed: indeed.com/r/f71006b4afa46565 Authorized to work in the US for any employer  
WORK EXPERIENCE  
Bioinformatics Scientist / Research Assistant Professor  
Vermont Genetics Network University of Vermont - Burlington VT - September 2016 to Present  
Responsibilities  
Perform wide variety of bioinformatics analyses in collaboration with investigators from Vermont colleges and regional partners.  
Accomplishments  
Completed 72 bioinformatics projects with faculty from 18 Vermont colleges.  
Skills Used  
bioinformatics analysis metagenomics  
RNA-Seq  
UNIX programming database management  
high performance computing  
Adjunct Faculty  
Champlain College - Burlington VT - January 2016 to Present  
Responsibilities  
Developed and taught introductory course in cloud computing Internet of Things and realtime HTML5 web applications.  
Accomplishments  
Designed course developed all materials led students in practical hands on exercises in use of cloud computing.  
Bioinformatics Core Director  
Vermont Genetics Network University of Vermont - Burlington VT - June 2007 to September 2016  
Directed a small bioinformatics core facility (until September 2016) as Research Assistant Professor in the Department of Biology.  
Collaborate with a wide variety of researchers in life sciences on projects ranging from serum proteome analysis to de novo genome assembly.  
Design implement administer all infrastructure including compute/storage shared data center LIMS systems project management and others.  
Bioinformatics Scientist  
The National Cancer Institute National Institutes of Health - Bethesda MD - December 1999 to June 2007  
   
Developed techniques and tools for gene expression analysis leading to discovery of several new genes.  
Granted two patents on genes for cancer therapy.  
Computationally engineered immunotoxins as cancer therapies to reduce non-specific toxicity.  
EDUCATION  
PhD in Computational Chemistry  
The Pennsylvania State University - State College PA 1992 to 1999  
BS in Computer Science  
University of Vermont 1987 to 1992  
BS in Chemistry  
University of Vermont 1986 to 1991  
SKILLS  
- Burlington VT  
- Burlington VT  
Database Administration High Performance Computing Unix Administration Metagenomics Genomics Proteomics Bioinformatics Data Analysis (10+ years) Data Mining (10+ years) Databases (10+ years)  
AWARDS  
Dean's Recognition Award University of Vermont  
May 1991  
Award for service to the College of Engineering  
American Chemical Society Undergraduate Award in Analytical Chemistry  
May 1990  
Recognition of outstanding scholarship in analytical chemistry.  
National Science Foundation Traineeship in High Performance Computing  
September 1994  
National Science Foundation Traineeship in high performance computing.  
Roberts Graduate Student Award Pennsylvania State University  
May 1998  
Award for outstanding graduate student service to the department and university.  
Cancer Research Training Award National Cancer Institute National Institutes of Health  
January 1999  
National Cancer Institute cancer research training fellowship to enhance public health efforts to prevent diagnose or treat cancer.  
Technology Transfer Award National Cancer Institute National Institutes of Health  
January 2001  
National Cancer Center award for outstanding scientific or technological contributions.  
Technology Transfer Award National Cancer Institute National Institutes of Health  
January 2002  
National Cancer Center award for outstanding scientific or technological contributions.  
Technology Transfer Award National Cancer Institute National Institutes of Health  
January 2003  
National Cancer Center award for outstanding scientific or technological contributions.  
PATENTS  
Gene expressed in prostate cancer and methods of use (#7816087)  
http://goo.gl/QW5XBq  
October 2010  
Discovered and developed Novel Gene Expressed in Prostate (NGEP) gene as target for prostate cancer therapies.  
Reduction of the nonspecific animal toxicity of immunotoxins by mutating the framework regions of the Fv to lower the isoelectric point (#7521054) http://goo.gl/hywywU  
April 2009  
Developed recombinant immunotoxins that were modified from a parental immunotoxin to lower liver toxicity as cancer therapeutics.  
PUBLICATIONS  
Full publication list available upon request  
SkateBase an elasmobranch genome project and collection of molecular resources for chondrichthyan fishes  
http://f1000research.com/articles/3-191/v1  
August 2014  
SkateBase (http://skatebase.org) serves as the skate genome project portal linking data research tools and teaching resources for one of the largest projects to characterize Leucoraja erinacea the little skate.  
Quantitative Comparison of CrkL-SH3 Binding Proteins from Embryonic Murine Brain and Liver: Implications for Developmental Signaling and the Quantification of Protein Species Variants in Bottom-Up Proteomics  
http://www.ncbi.nlm.nih.gov/pubmed/25982384  
July 2015  
Comparison of the identification and quantification of CrkL-SH3 binding partners between embryonic murine brain and liver.  
Thermal reactionomes reveal divergent responses to thermal extremes in warm and cool-climate ant species  
https://bmcgenomics.biomedcentral.com/articles/10.1186/s12864-016-2466-z  
March 2016  
Characteriztion of thermal reactionomes of two common ant species in the eastern U.S the northern cool-climate Aphaenogaster picea and the southern warm-climate Aphaenogaster carolinensis across 12 temperatures that spanned their entire thermal breadth.