QUALIFICATION SUMMARY

- PhD level biologist with background in bioinformatics, web programming and web-based database development. Expertise in developing computational tools to analyze a wide range of research data.
 - o Languages include Java, Perl, "list names of all other languages here"
 - o Computer platforms and applications include Unix, Linux, "list name of all other platforms and applications here"
 - o Bioinformatics tools (implemented locally) include Blast, "list names of all other bioinformatics tools here"
- Bioinformatics accomplishments:
 - o Developed programs to extract novel genes from a sequenced genome.
 - Developed and/or implemented numerous applications for large-scale analysis and manipulation of highthroughput experimental results.
 - Annotated, curated, and managed genomic, microarray, and proteomic data. Designed, built, and administered a
 genomic web database.
- Wet laboratory experience in molecular biology, microbiology, genetics, and biochemistry.
- Strong communication and collaboration skills. Led a team to annotate a sequenced genome. Managed technicians and teaching assistants. Instructed students. Collaborated with colleagues to produce peer-reviewed publications, conference presentations, and successful competitive grant proposals.

EDUCATION

Cell Biology, PhD, Stanford University, Year

• *Dissertation:* "You will place the title of your dissertation topic in this space".

Biology, MS, New York University, Year

• *Thesis:* "You will place the title of your thesis topic in this space".

Biochemistry, BS, Universidade de Brasília, Year

BIOINFORMATICS EXPERIENCE

University of California at San Francisco, Department of Biochemistry, with David Beckham *Principle Investigator*: David Beckham

Year-present

- Computational discovery of novel proteins in a "type of pathogen here" pathogen. Wrote Perl scripts to extract previously un-described pheromones and virulence factors, including morphogens and secretory hydrolases, from the sequenced genome of "list name of genus species here". Identified and characterized these proteins using local implementations of "list names of other bioinformatics tools here". Wrote Perl scripts to parse the sequence analysis output.
- Annotation of a sequenced "type of genome here" genome. Led a 10-person team to manually annotate the "name genus species here" genome. Constructed a computational pipeline to annotate the genome by developing procedures to 1) analyze the genome, 2) parse the analysis output, and 3) convert the results into tables for entry into a local relational database. Installed Blast, "list other program here" and used them to comprehensively compare the genomic sequence to the complete GenBank, Pfam, and SGD/Gene Ontology data sets. Routinely used Perl to facilitate curation of the genome.
- Analysis of microarray data and regulatory sequences. Wrote Perl scripts to extract potential regulatory DNA sequences flanking each gene in the "list species genus here" genome. Applied clustering algorithms in "list bioinformatics tool used here" and motif-detection algorithms in "list other programs here" to these sequences in combination with Affymetrix data.

 OCPD
 Office of Career & Professional Development

Mia Hamm CV Page #2

■ Design, construction, and administration of a web database server. Installed, configured, and ran the server software: Linux operating system, Apache web server, ABC database server, EFG and HIJ servers. Built relational databases, web pages, and server-side scripts in both Perl and ABC. Published annotation tables and other results of automated sequence analysis on the web database. Currently expanding the web database to generally manage, query, and internally distribute the Beckham lab's PCR array and Affymetrix gene expression data. The web database is publicly accessible at http://ucsf.edu.

Computational discovery of gene families. Developed a procedure to scan whole fungal genomes for gene
families using "list names of scripts here" scripts. Currently using a diverse tool set to characterize these families.

LABORATORY RESEARCH EXPERIENCE

Department of Biochemistry, University of California, San Francisco

Year-Year

Principal Investigator: David Beckham

Employed genetic and biochemical approaches to: 1) document communication between pathogen cells. 2) discuss second goal here, 3) discuss third goal here. Managed and instructed a technician. Won as Principal Investigator, \$00,000 in competitive grants.

Department of Marine Biology, Monterrey Institute

Year-Year

Principal Investigator: Brigit Prinz

You will discuss the nature of your research here for 2-3 lines, focusing on what you accomplished, and if you managed any staff. You will discuss the nature of your research here for 2-3 lines, focusing on what you accomplished, and if you managed any staff.

Department of Biology, New York University

Year-Year

Principal Investigator: Zinedine Zidane

Used cell genetics to study viral oncogenes in a rat cell line...discuss nature of research here for 2-3 lines, focusing on what you accomplished, and if you managed any staff. You will discuss the nature of your research here for 2-3 lines, focusing on what you accomplished, and if you managed any staff.

RELEVANT TRAINING

Advanced Object Oriented Application Development in Java, University of San Francisco. Year Project manager, architect, and lead coder for group project.

Introduction to Business Computer Programming with Java, University of San Francisco. Year

A Life Scientist's Guide to Intellectual Property, the Center for BioEntrepreneurship, UCSF. Year

Idea to IPO...and Beyond, the Center for BioEntrepreneurship, UCSF. Year Group project included creation of written business plan and live slide presentation to venture capital panel.

Bioinformatics, Functional Genomics and Proteomics Workshop, University of California, Irvine. Year

TEACHING EXPERIENCE

New York University, Dept. of Biology. Year

- Laboratory instructor for "Introduction to Experimental Biology"
- Teaching assistant for "General Biology"



Mia Hamm CV Page #3

CONSULTING EXPERIENCE

West Coast Films, San Francisco, Year. Freelance research on XXXXXXXXX PBS documentary, "Name of Documentary Here", premiered Year.

SELECTED GRANTS and AWARDS

- Name of Program Grant Here, Year-Year, \$XXX,000.
- Name of Program Grant Here, Year-Year, "Topic of Research Here". Principal Investigator, \$XX,000.
- Name of Program Grant Here, Year-Year, "Topic of Research Here". Principal Investigator, \$XX,000.
- Name of Award Here, Year-Year, "Topic of Research Here", \$XX,000.

SELECTED PRESENTATIONS

Hamm, M, and Beckham, D, "Name of Research Here", and Hamm, M, and Beckham, D, "Name of Research Here". UCSF School of Dentistry Research Day, Year.

Hamm, M, and Beckham, D. Year. "Name of Research Here". Oral presentation at the Name of conference here.

Hamm, M, and Beckham, D. Year. "Name of Research Here". Oral presentation at the Name of conference here.

Hamm, M, and Beckham, D, Year."Name of Research Here". Or<mark>al</mark> presentation at the Name of Investigators' Meeting Here.

Hamm, M, and Beckham, D. Year. "Name of Research Here". Name of Conference here.

Hamm, M, and Zidane, Z. Year. "Name of Research Here". Oral presentation at the Name of conference here.

Hamm, M. Year. "Name of Research Here". Oral presentation at the Name of Meeting Here at Special Place Laboratory.

SELECTED PUBLICATIONS

Zidane, Z*, Hamm, M*, and Beckham, D. Year. "Name of Research Here". Name of Journal Here 111(22):3456-7890. *Coequal authorship.

Hamm, M, and Zidane, Z. Year. "Name of Research Here". Name of Journal Here 111(22):3456-7890.

Hamm, M, and Zidane, Z. Year. "Name of Research Here". Name of Journal Here 111(22):3456-7890.

Hamm, M, and Zidane, Z. Year. "Name of Research Here". Name of Journal Here 111(22):3456-7890.

Hamm, M, and Zidane, Z. Year. "Name of Research Here". Name of Journal Here 111(22):3456-7890.

