

# Abby Jones

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## SUMMARY

- Master's degree holder with experience in microbiology, immunology and biotechnology
- Nine years research experience in industry, government and academia
- Extensive biosafety experience
- Can rapidly adapt to new projects, techniques and objectives
- Productive independent and collaborative researcher
- Strong writing and presentation skills including procedures and SOP's
- Lab manager including project coordination, regulatory compliance and employee supervision

## TECHNICAL SKILLS

bacteriology, immunology, microbiology, mammalian primary and cell line cell culture, in vitro, in vivo, ELISA, Western Blot, PCR, animal handling, necropsy, flow cytometry, colony quantification, antibody manipulation, immunohistochemistry, select agent clearance, BSL-3, cloning, luminescent/ colorimetric immunoassay development

## MANAGEMENT/ADMINISTRATIVE/VOLUNTEER SKILLS

SOPs, ordering, supervision, Microsoft Office, Graph Pad, project coordination, regulatory compliance, select agents, hazardous waste, committee chair, marketing

## EDUCATION

### **Master of Science, Biotechnology September, 2003**

University at Buffalo, The State University of New York GPA: 3.89/4.0

Thesis: "Development of a polysaccharide-based enzyme immunoassay to detect Group B Streptococcus"

Course work and laboratories including advanced immunology, instrumentation, research statistics, technical communication, research ethics, laboratory education and management

### **Bachelor of Science, Microbiology May, 2001**

Colorado State University, Fort Collins, Colorado

Course work and laboratories including microbiology, immunology biotechnology, graduate biosafety

## EMPLOYMENT

### **ASDx Biosystems- Research Associate/ Compliance Officer**

**Boulder, Colorado**

**February 2010- July 2010**

Research associate and compliance officer in a start-up company developing luminescent immunoassays for biothreat and foodborne illnesses.

- Responsible for initial development of immunoassays for two bacterial agents including antibody preparation and labeling, assay combination screening and down-selection of combinations
- Involved in preparations for extensive multi-center evaluation and validation of toxin immunoassay for Centers for Disease Control and Department of Homeland Security use
- Developed plan and reagents for growth and preparation of microorganisms
- Developed laboratory training plan for all lab workers including quizzes and power point training presentations
- Wrote and revised numerous Standard Operating Procedures (SOPs) for lab use regarding laboratory equipment and specific procedures
- Responsible for lab safety inspections and hazardous agent inventories

**Colorado State University- Research Associate**  
**Department of Microbiology, Immunology, Pathology**  
**Fort Collins, Colorado**  
**September 2005-August 2009**

Research Associate/ Lab manager in the immunology laboratory of Drs. Steven Dow and Catharine Bosio.

- Research investigating *Yersinia pestis*, *Burkholderia*, *Francisella tularensis* species including pathogenesis, antibiotic research, innate immunology and vaccine development.
- Skills obtained include Federal Select Agent program security clearance, biosafety level-3 containment, extensive mouse handling, flow cytometry, immunohistochemistry, descriptive and functional immunology. Lab manager supporting lab of six researchers and five grants directing ordering, project coordination and regulatory compliance for controlled substances, hazardous waste and select agents, SOP writing, supervised undergraduate students.

**National Institutes of Health, NIAID, Vaccine Research Center- IRTA**  
**Bethesda, Maryland**  
**September 2003-September 2005**

Intramural Research Training Award trainee in ImmunoTechnology laboratory of Dr. Mario Roederer.

- Research investigating HIV quasispecies and infection in the context of immunologic memory utilizing multiparameter flow cytometry and cell sorting in addition to virology and molecular biology.
- Skills obtained include BSL-3 virology, molecular cloning, flow cytometry, cell sorting.

**University at Buffalo, The State University of New York- Research Assistant**  
**Buffalo, New York**  
**Fall 2001- Summer 2003**

Research assistant in the immunology laboratory of Dr. Kate Rittenhouse-Olson.

- Thesis research included carbohydrate immunology and the development of a rapid detection test for Group B Streptococcus.
- Skills obtained include enzyme immunoassay, antibody production and purification, clinical collaboration.

**University at Buffalo, The State University of New York- Teaching Assistant**  
**Buffalo, New York**  
**Fall 2001- Summer 2003**

-Teaching assistant for Laboratory Immunology and Clinical Microbiology for Department of Clinical Laboratory Science included grading, student mentoring and classroom instruction.

**Colorado State University- Summer Student**  
**Department of Microbiology**  
**Fort Collins, Colorado**  
**Summer 2001**

- Laboratory preparation supporting researchers in Tuberculosis laboratory of Dr. Ian Orme.
- Skills obtained include sterile technique, media preparation, experiment scheduling and organization.

## **Cargill Oilseed Research- Literature Assistant**

**Fort Collins, Colorado**

**September 1998-May 2001**

-Obtained scientific literature for research staff, managed monthly correspondence, database entry, library and internet research. Self contained and independent position.

## **Ecolab Research and Development- Intern**

**St. Paul, Minnesota**

**Summer 2000**

-Performed independent research project as summer intern in conjunction with ongoing project for the FDA on foodborne pathogens. Included daily microbiology laboratory work, clerical and ordering duties, project hour billing, technical project reports and presentations.

## **PROFESSIONAL ACTIVITIES**

### **PUBLICATIONS**

“Protection against pneumonic plague following oral immunization with a non-replicating vaccine”,

**Abby Jones**, Catharine Bosio, Angela Duffy, Andrew Goodyear, Martin Schriefer and Steven Dow, *Vaccine*, In Press, June 2010; doi:10.1016/j.vaccine.2010.06.020.

“Critical Protective Role for MCP-1 In Pneumonic *Burkholderia mallei* Infection”, Andrew Goodyear, **Abby Jones**, Ryan Troyer, Helle Beilefeldt-Ohmann, Steven Dow, *The Journal of Immunology*, Feb 2010; 184: 1445 - 1454.

“Group B Streptococcus: *Streptococcus agalactiae*”, **Abigail Jones**, Jamie Heimburg, Kate Rittenhouse-Olson, Tech Sample, *The American Society for Clinical Pathology, Microbiology* No. MB-4 2003. February 2003.

### **ORAL PRESENTATIONS**

“Efficacy of a Non-Replicating Subunit Vaccine Against Pulmonary Challenge with Virulent *Yersinia pestis*” C. Bosio, A. Jones, A. Goodyear, S. Warner, S. Dow, *The American Society for Microbiology Biodefense and Emerging Infectious Diseases Conference*, February 2007

Department Working Group Seminar, Colorado State University

Presented periodic half hour seminar for immunology faculty and laboratory members  
Fall 2005-Spring 2009

Departmental Seminar, University at Buffalo

Presented periodic half hour seminar for department faculty and students each semester  
Fall 2001- Spring 2003

### **POSTER PRESENTATIONS**

Poster Presenter, “Protection from Pneumonic *Burkholderia* Infection by Inhaled Antibiotic Nanoparticles”, College of Veterinary Medicine and Biomedical Science (CVMBBS) Research Day, Colorado State University, February 2009

Poster Presenter, “Efficacy of a Mucosally Delivered Non-Replicating Subunit Vaccine Against Pulmonary Challenge with Virulent *Yersinia pestis*”, Denver Translational Immunology Symposium, November 2008

Poster Presenter, “Early Innate Immune Response to *Burkholderia mallei* Infection”, CVMBBS Research Day, Colorado State University, February 2008

Poster Presenter, “Mucosal Immunization with *Yersinia pestis* F1 Capsular Antigen Elicits Long-Lasting T Cell Dependent and Independent Immunity”, Rocky Mountain Regional Center of Excellence for Biodefense Annual Meeting, October 2007

Poster Presenter, “Efficacy of a Non-Replicating Subunit Vaccine Against Pulmonary Challenge with Virulent *Yersinia Pestis*”, CVMBS Science Research Day, Colorado State University, February 2007

Poster Presenter, “Characterization of *Yersinia pestis* Culture Filtrate Proteins”, CVMBS Research Day, Colorado State University, February 2006

Poster Presenter, “Analysis of HIV Fusion with CD4 T Cell Subsets” Postbaccalaureate Poster Day, National Institutes of Health, May 2005

Poster Presenter, “Development of a polysaccharide-based enzyme immunoassay to detect Group B Streptococcus”, Sigma Xi Scientific Research Society, University at Buffalo, April 2003

Poster Presenter, “Progress Towards Rapid Detection of Group B Streptococcus Infection in Newborns”, Sigma Xi Scientific Research Society, University at Buffalo, April 2002

Poster Presenter, “Development of a Polysaccharide-Based Enzyme Immunoassay to Detect Group B Streptococcus”, College of Health Related Professions, University at Buffalo, October 2002

### **CONTINUING EDUCATION**

“Short Course in Preclinical Aspects of Product Translation”, Topics included preclinical trial design, animal modeling, toxicology, translation to human clinical trials and related FDA regulations. BioMARC Regional Training Center for Product Translation, Fort Collins, CO March 25, 2009

“Navigating Clinical Trials”, Topics included regulation, design and implementation of clinical trials. BioMARC Regional Training Center for Product Translation, Fort Collins, CO October 7, 2009

### **EDITORIAL REVIEW**

Review of external research manuscript for mentor’s editorial duties, AIDS Research and Human Retroviruses. August 2004

### **GRANTS**

Grant Recipient, University at Buffalo Mark Diamond Research Fund  
Received \$740 for laboratory funding and thesis research  
Fall 2002-Spring 2003

Grant Recipient, Professional Development Award N.Y. Graduate Student Employees Union  
Received \$700 request to attend the American Society for Microbiology General Meeting  
April 2003

Grant Recipient, Graduate Student Association, University at Buffalo  
Received \$250 to attend the American Society for Microbiology General Meeting May 2003

Grant Reviewer, University at Buffalo Mark Diamond Research Fund  
Member of committee to review 16 grants  
March 2003

## **MEETINGS ATTENDED**

Rocky Mountain Regional Center of Excellence for Biodefense Bioterrorism and Emerging Infections Conference, March 2008, Fort Collins, CO

Rocky Mountain Regional Center of Excellence for Biodefense Bioterrorism and Emerging Infections Conference, March 2008, Fort Collins, CO

The American Society for Microbiology Biodefense and Emerging Infectious Diseases Conference, February 2007, Washington, D.C.

103rd General Meeting of the American Society for Microbiology  
May, 2003, Washington, D.C.

AIDS Vaccine 2003, Sponsor Foundation for AIDS Vaccine Research and Development  
September, 2003, New York, New York

2nd Annual Vaccine Research Center Scientific Training Retreat  
November, 2003, Annapolis, Maryland

3rd Annual Vaccine Research Center Scientific Training Retreat  
October, 2004, Richmond, Virginia

Keystone Symposia- HIV Vaccines: Current Challenges and Future Prospects  
April, 2004, Whistler, British Columbia, Canada

## **SPECIAL TRAINING**

- Protocol and SOP writing
- Federal Select Agent Handling Security Clearance
- Advanced flow cytometry including BD FACS Diva, Aria, LSR and Calibur and Beckman Coulter Cyan and companion software including FlowJo
- Hazardous Chemical Waste Handling Training, University at Buffalo and Colorado State University (CSU)
- National Institutes of Health (NIH) and CSU Biosafety Level 3 practices training
- NIH Bloodborne Pathogen Training
- NIH, CSU and UB Laboratory Animal Practices Training
- Completed NIH "Human Participants Protection Education for Research Teams" online training