Anna S. Kropornicka

402 Grand Ave, Apt 2, Madison, WI 53705
Phone: (630) 947-5614
kropornicka@wisc.edu

EDUCATION

University of Wisconsin at Madison
September 2012 to Present
Genetics, PhD
Current GPA: 4.0

University of Illinois at Urbana-Champaign
August 2007 to May 2012
Completed BS in Integrative Biology Honors
Minor in Chemistry
Honors: Dean's List Fall 2009, Graduate with Distinction
Current GPA: 3.41/4.00

RESEARCH EXPERIENCE

Dr. Aseem Ansari **January 2013-Present**
Graduate Research Assistant

- Work with ATFs to control Valine Biosynthesis Pathway
- Work with Keck Genome Foundries Group
- Analyzed RNA-Seq results for ATFs in Human Embryonic Stem Cells
- Bioinformatics of various forms, most scripts written in Python

Dr. John Cheeseman/Dr. Hans Bohnert Lab **October 2009-July 2012**
Undergraduate Research Assistant
Bioinformatics

- Objective: the understand the adaptation of plants to extreme environments using comparative genomics and transcriptomics primarily between *Arabidopsis thaliana, Arabidopsis lyrata, Thellungiella salsuginea* and *Thellungiella parvula*
- Helped assemble and analyze the genome and transcriptome of *Thellungiella parvula*
- Used molecular genetics and system biology tools to study plant environmental stress response
- Required ability to write Python code
- Involvement in this project led to co-authorship in two papers (see **Publications**)

University of Illinois at Urbana-Champaign Software Team **Summer 2010**
Technical Director
International Genetically Engineered Machine Competition 2010

- Worked with a group of four individuals on a software program called BioMORTAR: 3-Part Design Suite (http://2010.igem.org/Team:UIUC-Illinois-Software), which generates a metabolic pathway based on user defined metabolites, constructs a plasmid and then models cellular behavior as a result of the inserted plasmid

- Primary contributor for cellular modeling, which required MATLAB coding and some Python coding. The core of this portion using the Constraint-based reconstruction and analysis (COBRA) program

WORK EXPERIENCE

Dr. Xiaobin Wang, Chicago Children's Memorial Hospital **May 2011 – August 2011**
Student Research Assistant
- Data Entry and organization of files for allergy research surveys

University of Illinois Netmath **July 2010 – October 2010**
Netmath Mentor for Calculus III
- Mentored five students in Calculus III using the *Mathematica* software
- Held chat room hours online for students to ask questions about homework as well as general Calculus III concepts
- Graded Students' homework assignments and provided feedback

Dr. John Cheeseman **October 2009 – May 2010**
Lab Assistant
- Assisted in maintaining the laboratory, involved making fertilizers and cleaning the lab area
- Oversaw the mangroves at the University of Illinois greenhouse, this included watering and fertilizing the trees and other plants

OurEarth **May 2009 – August 2009**
Student Intern
- Created a University Database using Excel
- Researched school websites to find academic programs as well as student organizations that deal with environmental protection issues

Heritage Family YMCA **January 2007 – December 2009**
Lifeguard and Swim Instructor
- Taught swim lessons, primarily to children aged six and under but also to ages ranging to adulthood
- Guarded the YMCA pool (outdoor and indoor) at various hours
- Participated in Guard Games, Summer 2007

PUBLICATIONS

1. TsHKT1;2, a HKT1 Homolog from the Extremeophile Arabidopsis Relative *Thellungiella salsuginea*, Shows K^+ Specificity in the Presence of NaCl (2012). Ali Z ; Park HC ; Ali A ; Oh DH ; Aman R ; **Kropornicka A** ; et al. *PLANT PHYSIOLOGY* Volume: 158 Pages: 1463-1474 DOI: 10.1104/pp.111.193110

2. Genome Structures and Halophyte-Specific Gene Expression of the Extremophile Thellungiella parvula in Comparison with Thellungiella salsuginea (Thellungiella halophila) and Arabidopsis (2010). Oh DH ; Dassanayake M ; Haas JS. ; **Kropornicka A** ; et al. *PLANT PHYSIOLOGY* Volume: 154 Issue: 3 Pages: 1040-1052 DOI: 10.1104/pp.110.163923

PRESENTATIONS

1. Kropornicka A, Oh D-H, Dassanayake M, Bohnert H, Cheeseman J, "Bioinformatics Analysis on the Salt Tolerance Trait Done in *Thellungiella parvula*." School of Integrative Biology Undergraduate Symposium. April 6, 2012 (Oral Presentation).

2. Kropornicka A, Oh D-H, Dassanayake M, Bohnert H, Cheeseman J, "Analysis of Salt Mechanisms with the Use of Bioinformatics Tools." Undergraduate Research Symposium. April 11, 2012 (Oral Presentation and manuscript).

3. Oh D-H, Dassanayake M, Hong H, **Kropornicka A**, Cheeseman JM, Bohnert HJ. "Neofunctionalization among tandem duplicated stress-relevant genes in *Thellungiella* species." Plant and Animal Genomes XX Conference. January 15, 2012 (Oral Presentation).

4. Hadidi B, Hoffman C, Kemball J, **Kropornicka A**, Price N, Bhalerao K, "BioMORTAR: 3-Part Plasmid Design Suite." International Genetically Engineered Machines Competition Jamboree. November 7, 2010 (Poster and Oral Presentation).

VOLUNTEER EXPERIENCE

Alternative Spring Break **January 2011**

Navajo Community Site Facilitator (Kayenta, AZ)

- Helped tutor students and work with other classroom activities at Monument Valley School
- Volunteered at the Kayenta Animal Care Center
- Planned group meetings, the trip's activities and fundraised $200 to donate to the Kayenta Animal Care Center

Alternative Spring Break **March 2010**

Wildlife Rescue and Rehabilitation Center Site Facilitator

- Ran group meetings, planned the trip's activities, helped to organize the trip and fundraised $200 to donate to the Center
- Volunteered at the Wildlife Rescue and Rehabilitation Center which involved helping clean cages, walk dogs, and general site maintenance

Alternative Spring Break **January 2009**

Coalition of Immokalee Workers Participant

- Volunteered at various organizations that worked with migrant farm workers such as, Harvest for Humanity, the Coalition of Immokalee workers and the Guadalupe Center
- Volunteered at the Friendship House which provides shelter and food for homeless migrant farm workers

SKILLS

Computer: *Microsoft Office (Word, Excel, PowerPoint) ● Python ● Matlab ● Mathematica*

Language: *Polish (basic)*

REFERENCES

Professor Aseem Ansari, PhD
ansari@biochem.wisc.edu
Department of Biochemistry
University of Wisconsin at Madison
315C Biochemistry Addition
433 Babcock Drive
Madison, WI 53706

Professor John Cheeseman, PhD
j-cheese@life.illinois.edu
Department of Plant Biology
University of Illinois at Urbana-Champaign
1201 W. Gregory Drive
Urbana, IL 61801

Professor Jim Dalling, PhD
dallingj@life.illinois.edu
Department of Plant Biology
University of Illinois at Urbana-Champaign
149 Morrill MC-116
505 S. Goodwin Avenue
Urbana, IL 61801

Dong-Ha Oh, PhD
ohdongha@life.illinois.edu
Department of Plant Biology
1201 W. Gregory Drive
Urbana, IL 61801