

RYAN T. MCCARTHY

401 9th St. SE Apt 307 • Minneapolis, Minnesota 55414 • PHONE (651) 353-2466 • E-MAIL rmccarthy@eta.org

OBJECTIVE

- Seeking to teach conversational English in China.

EDUCATION

- University of Minnesota-Twin Cities, Minnesota (2000-2002)
Bachelor of Science in Biochemistry: 3.45gpa
- University of Wisconsin-River Falls, Wisconsin (1994 -1999)
Biotechnology major, Spanish minor.
Student Senate Association Member, Spring, 1999; introduced an online voting system for campus elections.

RELEVANT EXPERIENCE

- *Technical Support Scientist*: Upstate USA (March 1,2004 – October 1,2004)
Providing customer support via email and phone for an array of cell signaling products. Responsibilities also include bench work for trouble shooting purposes.
- *Assistant Scientist*: Department of Pharmacology, University of Minnesota (January 2003 – February 20,2004)
Conducted experiments to discover and typify RNA complexes with catalytic functions. Lab techniques include: eukaryotic cell culture, ultracentrifugation, chemical modification of RNA's, gradient prep and fractionation, prokaryotic mitochondrial extract production., ribonuclease protection assay, northern blot.
Authorship: J. Biol. Chem., Oct 2003; 10.1074/jbc.M307997200
- *Research Assistant*: Plant Molecular Cell Biology Lab, University of Minnesota (August 2001 - May 2002)
Under the direction of M. David Marks, PhD, researched transcriptional factors involved in trichome development in Arabidopsis.
Molecular: cell cracking prep, PCR, RT-PCR, Two Hybrid Assay, DNA/RNA purification, cesium chloride gradient, DNA cloning, electrophoresis, DNA purification from agarose.
Microscopy: differential, UV, scanning electron, mutant screening, DAPI staining, digital imaging.
Transformation: Agrobacterium transformation, electroporation.
Microbiological: sterile technique, differential plating, general microbial techniques.
- *Tech-Aide*: 3M Corporation (February 2001 – January 2002)
Responsible for experimental polymer synthesis, inversions, and analysis of products. Maintained a legal experimental notebook. Worked in an analytical lab facilitating the Carl Fisher test. Rebuilt the laboratory inventory database using Microsoft Access.
Analysis Techniques: Percent solids, Brookfield and relative viscosity, peel and adhesion forces, Carl Fisher.
- *Web designer*: University of Wisconsin - River Falls, Biology Department (Summer 2000)
Converted the Bio-Greek and Latin course to an online format using WebCT.
Software/Programming: HTML, Microsoft Front Page, and Netscape Composer.
- *Independent Study*: Cell Biology Laboratory, University of Wisconsin River Falls (Fall Semester 1999)
Performed laboratory work, funded by a NIH grant, to investigate the transcriptional expression of heat shock protein 70 in mouse lung following a physiologically relevant hypothermia.
Techniques: Northern blot, staining, dissection/handling, mounting, and microtome operation.
- *Video production technician / Camera operator*: Televue, Inc. (June 1998 – May 2001)
Responsibilities: Video editing, camera operation, and satellite uplink maintenance.

SKILLS/ACTIVITIES

- **Additional Techniques**: Size-Exclusion, Affinity Chromatography, Ion exchange, HPLC, Elisa, GFP
- Languages: three semesters Spanish, one semester Chinese (Mandarin).
- Extensive experience using Microsoft Excel/Access/PowerPoint/Word.
- Gymnastics Instruction: Hudson School of Gymnastics (June 2000 – January 2001),
University of Wisconsin - River Falls (October 1997- January 1998)