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**Education:**

2005 Ph.D. in Genetics, University of Iowa.  
 1999 B.S. in Biology, University of Wisconsin-Milwaukee.

**Academic and Professional Positions:**

2005-present	Cooperative Institute for Climate and Ocean Research Postdoctoral Scholar, Woods Hole Oceanographic Institution.
2004-2005	Predoctoral Fellow, NIH Institutional NRSA, University of Iowa.
2002-2004	Graduate Research/Teaching Assistant, University of Iowa.
2001-2002	Predoctoral Fellow, NIH Institutional NRSA University of Iowa.
1999-2000	Research Assistant, University of Wisconsin-Madison.
1998	NSF REU Summer Student.

**Academic and Professional Honors:**

2005 Woods Hole Oceanographic Institution Postdoctoral Fellowship.  
 2005 Robert T. Wilce Award for meritorious oral presentation, 44<sup>th</sup> Northeast Algal Symposium.  
 2004 Fellow, National Institutes of Health Institutional Training Grant (T32 GM98629).  
 2003 Best Student Presentation, Annual Genetics Retreat, University of Iowa.  
 2002 Honorable Mention, National Science Foundation Graduate Research Fellowship.  
 2001 Fellow, National Institutes of Health Institutional Training Grant (T32 GM98629).  
 1999 Member, Golden Key National Honor Society.

**Teaching Experience:**

Teaching Assistant, University of Iowa, Introduction to Bioinformatics 002:170. Fall 2003.  
 Teaching Assistant, University of Iowa, Principles in Molecular and Cell Biology 156:201. Fall 2001.  
 Undergraduate Tutor, University of Wisconsin-Milwaukee, 1997-1999.

**Professional activities:**

Member, Society for Molecular Biology and Evolution and the Northeast Algal Society.  
 Manuscript reviewer for the Journal of Molecular Evolution, Molecular Biology and Evolution.  
 Grant proposal reviewer for the NSF and Biotechnology and Biological Research Council of the UK.  
 Genetics student representative to the Genetics executive committee 2003-2005.  
 Organizer of the Genetics Student Seminar Series 2003-2005.

### **Publications:**

#### *Algal Genomics and Plastid Evolution:*

Li, S., Nosenko, T., **Hackett, J. D.**, Bhattacharya D. 2006. Phylogenomic analysis identifies red algal genes of endosymbiotic origin in the chromalveolates. *Molecular Biology and Evolution* 23: 663-674.

**Hackett, J. D.**, Scheetz, T. E., Yoon H. S., Soares M. B. , Bonaldo M. F., Casavant T. L., Bhattacharya, D. 2005. Insights into a dinoflagellate genome through expressed sequence tag analysis. *BMC Genomics* 6: 80.

Yoon, H. S., **Hackett, J. D.**, Van Dolah, F. M., Nosenko, T., Lidie, K. L., Bhattacharya D. 2005. Tertiary Endosymbiosis Driven Genome Evolution in Dinoflagellate Algae. *Molecular Biology and Evolution* 22: 1299-1308.

**Hackett, J. D.**, Anderson, D., Erdner, D., Bhattacharya D. 2004. Dinoflagellates: A remarkable evolutionary experiment. *American Journal of Botany* 91: 1523-1534.

Yoon, H. S., **Hackett, J. D.**, Cingula, C., Pinto, G., Bhattacharya, D. 2004. A timeline for the origin of photosynthetic eukaryotes. *Molecular Biology and Evolution* 21: 809-818.

**Hackett J. D.**, Yoon H. S., Soares M. B., Bonaldo M. F, Casavant T. L., Scheetz T. E., Nosenko, T., Bhattacharya D. 2004. Migration of a plastid genome to the nucleus in a peridinin dinoflagellate. *Current Biology* 14: 213-218.

Bhattacharya, D., Yoon, H. S., **Hackett J. D.** 2004. Photosynthetic eukaryotes unite: photosynthesis connects the dots. *Bioessays* 26: 50-60.

**Hackett, J. D.**, Maranda L., Yoon H. S., Bhattacharya D. 2003. Phylogenetic evidence for the cryptophyte origin of the plastid of *Dinophysis* (Dinophysiales, Dinophyceae). *Journal of Phycology* 39: 440-448.

Yoon H. S., **Hackett J. D.**, Pinto G., Bhattacharya D. 2002. The single, ancient origin of chromist plastids. *Proceedings of the National Academy of Sciences USA*. 99: 15507-15512.

Yoon H. S., **Hackett J. D.**, Bhattacharya D. 2002. A single origin of the peridinin- and fucoxanthin-containing plastids in dinoflagellates through tertiary endosymbiosis. *Proceedings of the National Academy of Sciences USA*. 99: 11724-11729.

#### *E. coli genomics:*

Welch R. A., Burland V., Plunkett G. 3<sup>rd</sup>, Redford P., Roesch P., Rasko D., Buckles E. L., Liou S. R., Boutin A., **Hackett J.**, Stroud D., Mayhew G. F., Rose D. J., Zhou S., Schwartz D. C., Perna N. T., Mobley H. L., Donnenberg M. S., Blattner F. R. 2002. Extensive mosaic structure revealed by the complete genome sequence of uropathogenic *Escherichia coli*. *Proceedings of the National Academy of Sciences USA*. 99: 17020-17024

Lim, A., Dimalamta, E. T., Potamousis, K. D., Yen, G., Apodaca, J., Tao, C., Lin, J., Qi, R., Skiadas, J., Ramanathan, A., Perna, N. T., Plunkett, G., Burland, V., Mau, B., **Hackett, J.**, Blattner, F. R., Anantharaman, T. S., Mishra, B., Schwartz, D. C. 2001. Shotgun Optical Maps of the Whole *Escherichia coli* O157:H7 Genome. *Genome Research* 11(9): 1584-1593.

Perna, N. T., Plunkett, G., Burland, V., Mau, B., Glasner, J. D., Rose, D. J., Mayhew, G. F., Evans, P. S., Gregor, J., Kirkpatrick, H. A., Posfai, G., **Hackett, J.**, Klink, S., Boutin, A., Shao, Y., Miller, L., Grotbeck, E. J., Davis, N. W., Lim, A., Dimalanta, E. T., Potamousis, K. D., Apodaca, J., Anantharaman, T. S., Lin, J., Ten, G., Schwartz, D. C., Welch, R. A., Blattner, F. R., 2001. Genome sequence of enterohaemorrhagic *Escherichia coli* O157:H7. *Nature* 409: 529-533.

*Salmonid genetics:*

Reed, K. M., **Hackett, J. D.**, Phillips R. B., 2000. Comparative analysis of intra-individual and inter-species DNA sequence variation in salmonid ribosomal DNA cistrons. *Gene* 249: 115-125.

*Publications in progress:*

Yoon, H. S., **Hackett, J. D.**, Bhattacharya, D. In Press. A genomic and phylogenetic perspective on endosymbiosis and algal origin. *Journal of Applied Phycology*.

**Hackett, J. D.**, Yoon, H. S., Bhattacharya, D. Genome Evolution in Dinoflagellates. Accepted. *In: Genome Evolution in the Algae*. Bhattacharya, D. and Katz, L. eds. Oxford University Press.

**Hackett, J. D.**, Yoon, H. S., Butterfield, N. J., Sanderson, M. J., Bhattacharya, D. Accepted. Plastid endosymbiosis: Sources and timing of the major events. *In: Evolution of Aquatic Photoautotrophs*, Eds. Falkowski, P., and A. Knoll. Academic Press.

**Public Presentations and Posters:**

- Hackett J.D., Bhattacharya D. 2005. Histones and histone-like proteins in dinoflagellates. Northeast Algal Symposium, Rockport, ME.
- Hackett J.D., Yoon H.S., Bhattacharya D. 2005. Constructing the tree of life: Dating the origin of plastids in eukaryotes. Carver Center for Comparative Genomics Seminar Series, Iowa City, IA.
- Hackett, J.D., Soares, M.B., Casavant, T.L., Bhattacharya D. 2005. EST genomics of the dinoflagellate *Alexandrium tamarensense*. Plant and Animal Genomes XIV, San Diego, CA. Poster.
- Hackett, J.D., Yoon, H.S., Bhattacharya D. 2004. Migration of the plastid genome to the nucleus in a peridinin dinoflagellate and insights into a dinoflagellate genome. Genomes and Evolution, State College, PA. Poster.
- Hackett, J.D., Bhattacharya, D. 2004. Evolution of DNA packaging proteins in dinoflagellates. Carver Center for Comparative Genomics Seminar Series, Iowa City, IA.
- Hackett, J.D., Bhattacharya D. 2004. Histone proteins in dinoflagellates. NOAA Seminar Series, Charleston, S.C.
- Hackett, J.D., Bhattacharya D. 2004. An EST approach to understanding endosymbiotic gene transfer. NSF Microbial Genome Sequencing Program Meeting, Washington, DC. Poster.
- Hackett, J. D., Bhattacharya D. 2003. Endosymbiosis and eukaryotic gene transfer. Joint ISU-UI Bioinformatics Conference, Iowa City, IA.
- Hackett J.D., Yoon, H.S., Bhattacharya D. 2003. Endosymbiosis and the evolution of the dinoflagellate genome. Evolution 2003, Chico, CA.
- Hackett, J.D., Maranda, L., Yoon, H.S., Bhattacharya, D. 2002. Phylogenetic evidence for the cryptophyte origin of the plastid of Dinophysis (Dinophysiales, Dinophyceae) Botany 2002, Madison, WI.
- Hackett, J.D., Maranda, L., Yoon, H.S., Bhattacharya, D. 2002. Phylogenetic evidence for the cryptophyte origin of the plastid of Dinophysis (Dinophysiales, Dinophyceae). ISEP XIV, Vancouver, BC.
- Hackett, J.D., Reed K.M., Phillips, R.B., 1999. Comparative analysis of intra-individual and inter-species sequence variation in Salmonid rDNA cistrons. Evolution 99, Madison, WI. Posteer.