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EDUCATION

- 2006 Ph.D. Marine Biology, Scripps Institution of Oceanography, University of California, San Diego, Thesis: *Functional characterization of diatom silicon transporters*, Advisors: Michael Latz and Mark Hildebrand
- 2000 M.S. Biological Science, Stanford University, Advisor: George Somero
- 1997 B.S. Biochemistry and Cell Biology, Minor in Philosophy, University of California, San Diego

RESEARCH EXPERIENCE

- 2006-present Postdoctoral Research Fellow, Institute of Marine and Coastal Sciences, Rutgers University, New Brunswick, NJ
Advisor: Kay D. Bidle
Programmed cell death in phytoplankton
- 2000-2006 Graduate Student Researcher, Scripps Institution of Oceanography, La Jolla, CA
Advisors: Michael Latz and Mark Hildebrand, Marine Biology Research Division
Molecular and biochemical characterization of diatom silicon transporters
- 2003 Physiology course, Marine Biological Laboratory, Woods Hole, MA
Introduction to the use of microarrays and cDNA expression cloning
- 1998-2000 Research Associate, Stanford University, Palo Alto, CA
Supervisor: Alan Krensky, Department of Immunology
Independent research on structural and functional analysis of the novel transcription factor, RFLAT-1
- 1997 Molecular Biologist, Hyseq, Inc, Sunnyvale, CA
Supervisor: Geeta Kadambi, Automated Hybridization Department
Gene-discovery and robotics division of high-throughput DNA sequencing company
- 1997 Tropical Marine Ecology, AustraLearn, Queensland, Australia
Introduction to field work techniques in marine ecology
- 1995-1997 Lab Technician, Salk Institute of Biological Science, La Jolla, CA
Supervisor: Martyn Goulding, Molecular Neurobiology
Assisted on project studying the PAX family of transcriptions factors through mammalian development

AWARDS

- 2006 Rutgers Institute for Marine and Coastal Sciences Postdoctoral Fellowship
- 2006 Bold Award, 60th Meeting of the Phycological Society of America
- 2006 Hoshaw Travel Award, 60th Meeting of the Phycological Society of America
- 2004 Gordon Research Conference Travel Award
- 2003 NADS Student Travel Award
- 2003 Art Proceeds Fellowship
- 2003 David Freeman Memorial Fund Fellowship

CONFERENCE PROCEEDINGS

- 2006 60th Meeting of the Phycological Society of America (Juneau, Alaska). Thamtrakoln K, AJ Alverson, and M. Hildebrand. Comparative sequence analysis of diatom silicon transporters: towards a mechanistic model of silicon transport.
- 2004 Membrane Transport Proteins, Gordon Research Conference (Les Diablerets, Switzerland). Thamtrakoln K and M Hildebrand, Characterization of diatom silicon transporters, a novel class of membrane transport proteins.
- 2004 ASLO/TOS Ocean Research Meeting (Honolulu, Hawaii). Thamtrakoln K and M Hildebrand, Isolating new silicic acid transporters from diatoms for comparative sequence analysis.
- 2003 17th Annual North American Diatom Symposium (Islamorada, Florida). Thamtrakoln K, D Shoemaker, and M Hildebrand, Comparative sequence analysis of newly isolated diatom silicon transporters.

TEACHING EXPERIENCE

- Fall 2003 Teaching Assistant, Molecular Biology, UC San Diego
- Summer 2003 Mentor, Dorinda Shoemaker, Undergraduate Summer Intern
- Winter 2003 Teaching Assistant, Biochemical Techniques Laboratory, UC San Diego
- Fall 2002 Teaching Assistant, Biochemical Techniques Laboratory, UC San Diego
- Summer 2002 Mentor, Robyn Perkins, UC San Diego, Summer Undergraduate Research Program

PUBLICATIONS

- Thamtrakoln K** and M Hildebrand (in preparation). Silicon uptake in diatoms revisited: a model for saturable and nonsaturable uptake kinetics.
- Montsant A, AE Allen, S Coesel, A DeMartino, A Falciatore, M Mangogna, M Siaut, M Heijde, K Jabbari, U Maheswari, E Rayko, A Vardi, KE Apt, JA Berges, A Chiovitti, AK Davis, **K Thamtrakoln**, MZ Hadi, TW Lane, JC Lippmeier, D Martinez, MS Parker, GJ Pazour, MA Saito, DS Rokhsar, EV Armbrust, and C Bowler (2007). Identification and comparative genomic analysis of signaling and regulatory components in the diatom *Thalassiosira pseudonana*. *Journal of Phycology* 43(3): 585-604
- Thamtrakoln K** and M Hildebrand (2007). Analysis of *Thalassiosira pseudonana* silicon transporters indicates distinct regulatory levels and transport activity through the cell cycle. *Eukaryotic Cell* 6(2): 271-279.
- Thamtrakoln K** and M Hildebrand (2006). Building of silica. *Science First Hand* 5:56-60.
- Thamtrakoln K**, AJ Alverson, and M Hildebrand (2006). Comparative sequence analysis of diatom silicon transporters: towards a mechanistic model of silicon transport. *Journal of Phycology* 42:822-834.
- Thamtrakoln K** and M Hildebrand (2005). Approaches for functional characterization of diatom silicic acid transporters. *Journal of Nanoscience and Nanotechnology* 5(1): 158-166.
- Armbrust EV, JA Berges, C Bowler, BR Green, D Martinez, NH Putnam, S Zhou, AE Allen, KE Apt, M Bechner, MA Brzezinski, BK Chaal, A Chiovitti, AK Davis, MS Demarest, JC Detter, T Glavina, D Goodstein, MZ Hadi, U Hellsten, M Hildebrand, BD Jenkins, J Jurka, VV Kapitonov, N Kröger, WWY Lau, TW Lane, FW Larimer, JC Lippmeier, S Lucas, M Medina, A Montsant, M Obornik, MS Parker, B Palenik, GJ Pazour, PM Richardson, TA Rynearson, MA Saito, DC Schwartz, **K Thamtrakoln**, K Valentin, A Vardi, FP Wilkerson and DS Rokhsar (2004). The genome of the diatom *Thalassiosira pseudonana*: ecology, evolution, and metabolism. *Science* 306: 79-86.
- Song A, A Patel, **K Thamtrakoln**, C Liu, D Feng, C Clayberger, and AM Krensky (2002). Functional domains and DNA-binding sequences of RFLAT-1/KLF13, a Kruppel-like transcription factor of activated T-Lymphocytes. *The Journal of Biological Chemistry* 277(33): 30055-30065.
- Song A, YF Chen, **K Thamtrakoln**, TA Storm, and AM Krensky (1999) RFLAT-1, A new zinc finger transcription factor that activates RANTES gene expression in T-Lymphocytes. *Immunity* 10: 93-103.