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Professional Preparation:

Ph.D., Purdue University, West Lafayette, IN. in Engineering Education, August, 2009.
M. S., Ed. Purdue University, West Lafayette, IN. in Educational Technology, December, 2007.
M.S., ITESM, Mexico City, in Electronic Commerce, September, 2003.
B.S., ITESM, Mexico City, in Information Systems Engineering, May 2000.

Appointments:

Purdue University, Postdoctoral Researcher, Network for Computational Nanotechnology and
School of Engineering Education August 2009 to present.
Purdue University, Research Assistant and Instructional Designer, Network for Computational
Nanotechnology 2007 to 2009.
ITESM Mexico City, Continuous Lecturer, Computer Science 2002 to 2005.

Professional Memberships:

American Educational Research Association
American Society for Engineering Education

Referred Conferences:

1. Magana, A.J., Brophy, S. and Bodner T. (2009) Are Simulation Tools Developed and Used by Experts Appropriate Experimentation Tools for Educational Contexts? *Proceedings of the 116th Annual ASEE Conference and Exposition. June 14-17. Austin TX.*
2. Magana, A.J., Brophy, S. and Newby T. (2009) Pre-service teachers perceptions of web-based instructional media: Three different tools one learning goal. *Proceedings of the 20th Annual SITE International Conference. March 2 - 6, 2009. Charleston, South Carolina. **Best-Paper Award Winner***
3. Magana, A.J., Brophy, S. and Bodner, G.M. (2008). Professors' instructional approaches and students' perceptions of nanoHUB simulations as learning tools. *Proceedings of the 115th Annual ASEE Conference and Exposition. June 22-25. Pittsburgh, PA*
4. Magana, A.J., Brophy, S. and Newby T. (2008), Scaffolding student's conceptions of proportional size and scale cognition with analogies and metaphors. *Proceedings of the 115th Annual ASEE Conference and Exposition. June 22-25. Pittsburgh, PA*

Invited Talks:

1. Magana, A.J. (2009). Characterizing and Scaffolding Students' Conceptions of Size and Scale. ENE Seminar Series.
2. Magana A. and Klimeck G. (2007). nano-based education through generation-nano.org Tutorial presented at Supercomputing 2007. Education Program. Reno, Nv.

Poster Presentations:

1. Magana, A.J., and Brophy S. and Bodner G.M. (2009). Engineering Graduate Students' Perceptions of Computational Simulations as Learning. *Poster presented at the NSF-NCN Site Review at Purdue University June 16-18*
2. Magana, A.J., and Brophy S. and Bodner G.M. (2009). Engineering Instructors Perceptions of Computational Simulations as Learning Tools. *Poster presented at the Annual Graduate Student Educational Research Symposium (AGSERS) Purdue University.*

3. Magana, A.J., Brophy, S. and Schaffer, S. (2008), Taxonomy for conceptions of Size and scale. *Poster presented at the Annual Graduate Student Educational Research Symposium (AGSERS) Purdue University. **Best-Poster Award Winner***
4. Magana, A.J., Brophy, S. and Bodner, G.M. (2008), Professors' Instructional Approaches and Students' Perceptions of nanoHUB Simulation Tools. *Poster presented at the Annual Graduate Student Educational Research Symposium (AGSERS) Purdue University.*
5. Magana, A.J., and Brophy S. and Bodner G.M., (2007). Analogies and metaphors for scaffolding middle school students' scale cognition. Poster presented for the Engineering Education Advisory Council April 27 and NSF- NCN Review and Site Visit at Purdue University June 18-20
6. Magana, A.J. and Madhavan, K. (2006). Pedagogical foundation for nanoHUB for Kids. Poster presentation at NSF Review and Site Visit at Purdue University June 20-22.

Synergistic activities:

University Courses Co-Taught

ENE 69500 005 Pedagogy Content and Assessment. Spring 2009.

ENE 69500 006 Cognitive Devices in STEM Education. Spring 2009.