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Academic Background

2008	Ph.D.	Curriculum and Instruction	University of Maryland
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Dissertation: *What secondary science teachers pay attention to in the classroom: Situating teaching in institutional and social systems.* Advisor: Janet E. Coffey

1997	M.A.T.	Secondary Science Education	Towson University
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1989	B.A. <i>cum laude</i>	Biology and Anthropology	Brandeis University
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Professional Work Experience

2009-	<i>Assistant Professor</i> , School of Education, Teaching, and Health, American University
2006-2009	<i>Lecturer</i> , Department of Curriculum and Instruction, University of Maryland, College Park
2005-2006	<i>Lead Teacher</i> , Science, Mathematics, and Technology Academy, Montgomery Blair High School, Montgomery County Public Schools
2004-2005	<i>Professional Development Schools Coordinator</i> , Secondary Science Education, Department of Curriculum and Instruction, University of Maryland, College Park
2001-2004	<i>Science Teacher</i> , Montgomery Blair High School, Montgomery County Public Schools; Courses Taught: Biology, Chemistry, Environmental Science, Research Methods
2000-2001	<i>Science Teacher</i> , Walter Johnson High School, Montgomery County Public Schools; Courses Taught: Chemistry, Earth Science
1998-2000	<i>Interdisciplinary Resource Teacher</i> ; Science Department Chair, Takoma Park Middle School, Montgomery County Public Schools
1997-1998	<i>Science Teacher</i> , Takoma Park Middle School, Montgomery County Public Schools
1992-1997	<i>Biologist</i> , Laboratory of Cellular and Developmental Biology, National Institute of Diabetes, Digestive, and Kidney Diseases, National Institutes of Health
1989-1991	<i>Research Assistant</i> , Department of Organismal and Evolutionary Biology, Harvard University

Consulting

- 2010-present National Library of Medicine, Bethesda, MD. Consulting with NLM staff members to develop curriculum, in collaboration with teachers, for using the NLM's electronic resources in secondary classrooms.
- 2010 Washington Math, Science, and Technology Public Charter School, Washington, DC. Organized and co-taught a summer science institute for incoming 9th graders in the school's "STEP" program.
- 2007 National Academy of Sciences. Wrote dissemination materials for *Taking Science to School*, Report of the Committee on Science Learning, K-8
- 2004 University of Maryland. Wrote NCATE rejoinder
- 1994-1995 Alteon, Inc., Laboratory consulting

Grants

What influences teachers' modifications of curriculum? National Science Foundation (ESI 0455711). Senior Staff Member. PIs Drs. David Hammer, Andrew Elby, and Janet Coffey, University of Maryland. 2005-2008.

Supplemental Sub-award: What influences teachers' modifications of curriculum? Principal Investigator. 2009-2010

Honors and Recognition

- 2010-2011 Faculty Mellon Award
- 2003-2006 Master Science Teacher, Montgomery County Public Schools
- 1996 Maryland State Senatorial Scholarship for Graduate Study
- 1989 *Cum laude* graduate, Brandeis University

Public Service

- 2010- District of Columbia Board of Examiners. (Evaluating current and prospective teacher education programs). Board Member
- 2004-2007 National Academy of Sciences, Committee on Science Learning, K-8. Committee Member

Teacher Education Activities

- 2005-2006 University of Maryland PDS Network, *PDS Site Coordinator*
- 2004 Johns Hopkins University, *Cooperating Teacher*
- 1999, 2002 UMCP College of Education, *Cooperating Teacher*

Curriculum Development

- 2002-2003 Montgomery County Public Schools Biology Curriculum, *Curriculum Writer*

Fellowships

1998 National Institute of Diabetes, Digestive and Kidney Diseases, National Institutes of Health, *Summer Teacher Fellowship*

Courses Taught at University of Maryland

Conducting Research on Teaching (EDCI 696)

Knowledge and Reasoning in Science (EDCI 411/680)

Learning to Teach and Learn Science (EDCI 470/675)

Practices of Secondary Science Teaching (EDCI 480/676)

Learning and Teaching in the Life Sciences (EDCI 606)

Courses Taught at American University

Methods, Materials, and Management in Secondary Education I: Science (EDU 540)

Methods, Materials, and Management in Secondary Education II: Science (EDU 542)

Teaching Science in Elementary Education (EDU 556/605)

Action Research (EDU 696)

Manuscript Reviewing Activities

American Biology Teacher

Journal of the Learning Sciences

Journal of Research in Science Teaching

Grant Reviewing Activities

2011 Panelist. Review panel for the National Science Foundation's Division of Research on Learning in Formal and Informal Settings (DRL), Discovery Research K-12 (DRK-12) program.

Invited Talks

Learning from our students: How research on our teaching informs practice and policy.

With Dr. Sarah Irvine-Belson. Scholarship on Teaching and Learning Panel Session. Center for Teaching, Research, and Learning, American University. November 18, 2010.

Toward responsive teaching practice. "ExPERT" teacher workshop, ExPERT program learning community, University of Maryland, College Park. July 24, 2010.

Keynote Speech: Educating the responsive teacher. Regional Project on Science Education in Primary and Secondary Schools in the U.S. The Graduate School, U.S. Department of State. March 15, 2010

Integrating biology content and inquiry. Howard Hughes Medical Institute Biology Teachers Symposium, University of Maryland, College Park, November 14, 2009

Taking Science to School: Report from the National Research Council's Committee on Science Learning K-8. Mathematics and Science Education Conference. East Tennessee State University. Johnsons City, TN, May 30, 2007

Workshops

Using case studies of student science learning to develop practices of attending to student thinking. Annual Meeting of the Association for Science Teacher Education. January 2010

Teaching scientific inquiry, Seminars for Teachers, University of Maryland, College Park, October 14 and October 18, 2009

PDS partners inquiring into student learning. Maryland Professional Development School (PDS) Conference: Professional Development Schools: Understanding, Reaching and Teaching a Community of Learners. May 2, 2009

Formative assessment, Knowles Science Teaching Foundation, October 17-18, 2008 (continuing April 17-18, 2009)

Everyday assessment, Apple Tree Early Learning Center, August 18, 2008

Using videocases to support and study preservice teacher learning: Two approaches, National Association for Research in Science Teaching (NARST), March, 2008

EXPERT teacher workshops, Montgomery County Public Schools/University Maryland Biotechnology Institute "EXPERT" teachers program, Summer 2004

Dissertation Committees

2010 Committee member: Xioawei Tang, University of Maryland, College Park. *From interaction to interaction: Exploring shared resources constructed through and mediating classroom science learning.*

Service to American University

2010-present SETH Education Colloquium, Organizer and Chair

2010-present Committee on Student Learning and Academic Engagement

2010 Award for Scholarship on Teaching and Learning Selection Committee

Professional Memberships

American Educational Research Association

National Association of Research in Science Teaching

Association for Science Teacher Education

National Science Teachers Association

Certification

Advanced Professional Certificate, State of Maryland. Biology 5-12; Chemistry 7-12

Publications

Educational Research

Levin, D.M., Hammer, D., Elby, A., and Coffey, J. (book prospectus in review). *Educating the Responsive Practitioner: Case Studies of Students' Thinking in Secondary Science*

Levin, D.M. and Richards, J. (in review) Learning to attend to the substance of student thinking in science.

Coffey, J., Hammer, D., and **Levin, D.M.** (in review). The missing substance of formative assessment.

Levin, D.M. and Coffey, J. (in review). Systemic influences on what teachers attend to in secondary science classrooms.

Levin, D.M. (2010). The invented cell: Supporting students' reasoning about structure, function, and mechanism. *The Science Teacher*, 77(9), 64-65

Levin, D.M. (2010). Explaining biological phenomena. *The Science Teacher* 7(6), 66-67

Levin, D.M., Hammer, D., and Coffey, J.E. (2009). Novice teachers' attention to student thinking. *Journal of Teacher Education* 60 (2): 142-154

Tang, X., Coffey, J., Elby, A., & **Levin, D.M.** (2009). Scientific inquiry and scientific method: Tensions in teaching and learning. *Science Education* 94 (1): 29-47

Scientific Research

Brasaemle, D.L., **Levin D.M.**, Adler-Wailes, D.C., and Londos, C., (2000). The lipolytic stimulation of 3T3-L1 adipocytes promotes the translocation of cytosolic hormone-sensitive lipase to the lipid storage droplet. *Biochim. Biophys. Acta.*, 1483, 251-262

Londos, C., Brasaemle, D.L., Schultz, C.J., Adler-Wailes, D.C., **Levin, D.M.**, Kimmel, A.R., Rondinone, C.M., (1999). On the control of lipolysis in adipocytes. *Annals of the New York Academy of Sciences*, 892 (*The Metabolic Syndrome X*). 155-168

Londos, C., Brasaemle, D.L., Grui-Gray, J., Servetnick, D.A., Schultz, C.J., **Levin, D.M.**, and Kimmel, A.R., (1995). Perilipins: Unique proteins associated with intracellular neutral lipid droplets in adipocytes and steroidogenic cells. *Biochemical Society Transactions*, 23. 609-613.

Birchler, J., & **Levin, D.M.**, (1991). Directed synthesis of a segmental chromosomal transposition: An approach to the study of chromosomes lethal to the gametophyte generation in maize. *Genetics*, 127. 609-618.

Birchler, J., Chalfoun, D.J., & **Levin, D.M.**, (1990). Recombination in the B chromosome of maize to produce A-B-A chromosomes. *Genetics* 126, 723-733.

Kaufman, E., Nelson, T., Fales, H., & Levin, D.M., (1988). Isolation and characterization of a hydroxyacid-oxoacid transhydrogenase from rat kidney mitochondria. *Journal of Biological Chemistry*, 263. 116872-116879

Papers in Conference Proceedings

Levin, D.M., & Richards, J. (2010). Exploring how novice teachers learn to attend to student thinking in analyzing case studies of classroom teaching and learning. *Proceedings of the International Conference of the Learning Sciences*. 1: 41-48

Selected Conference Presentations

Levin, D.M. (2011). *Supporting scientific inquiry among students with exceptionalities*. Paper to be presented at the Annual Ethnography in Education Research Forum, University of Pennsylvania. Philadelphia, PA.

Levin, D.M., & Richards, J. (2010). *Practices of attending to student thinking can promote collaborative conversations about science*. Paper presented at the Annual Meeting of the Association of Science Teacher Education. Sacramento, CA.

Levin, D.M., Gillespie, C. & Richards, J. (2009) *Understanding how and when novice teachers attend to student thinking*. Paper presented at the Annual Conference of American Educational Research Association, San Diego, CA.

Levin, D.M., & Richards, J. (2009) *Developing a professional vision for science education reform teaching*. Paper presented at the Annual Conference of the Association for Science Teacher Education, Hartford, CT.

Levin, D.M., Hammer, D., & Bybee, M. (2007). *Novice teachers' attention to student thinking: Confronting stage-based models of teacher development*. Paper presented at the Annual Conference of the American Educational Research Association, Chicago, Ill.

Levin, D.M., Coffey, J., Hammer, D., Sanyal, A., and Hopkins, N. (2007). *Teachers' attention to student thinking in social and institutional systems*. Paper presented at the Annual Conference of the American Educational Research Association, Chicago, Ill.

Levin, D.M., Hutchison, P., & Honda, S. (2005). *Teacher thinking about student inquiry*. Paper presented at the Annual Conference of the American Educational Research Association, Montreal, Canada

Levin, D.M., Azevedo, R., Winters, F.I., & Cromley, J.G. (April, 2004). *How does a teacher scaffold students' self-regulated learning during a collaborative science inquiry investigation in GenScope?* Paper presented at the Annual Conference of the American Educational Research Association, San Diego, CA.