

## Anthony Duprat Dinsmore

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### **Education**

UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA.  
•Ph.D. in Physics, July, 1997. Advisor: Professor Arjun G. Yodh  
Thesis: Entropic Forces & Phase Transitions in Binary Nearly Hard-Sphere Colloids.  
YALE UNIVERSITY, New Haven, CT.  
•BS in Physics, June, 1992.

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### **Employment**

UNIVERSITY OF MASSACHUSETTS AMHERST, Department of Physics, 9/01-present.  
•Professor of Physics (2013 -)  
•Associate Professor of Physics (2007 - 2013)  
•Assistant Professor of Physics (2001 - 2007)  
•Adjunct Professor of Chemistry (2017 -)  
HARVARD UNIVERSITY, Division of Engineering and Applied Sciences, 9/99-9/01.  
•Postdoctoral fellow. Advisor: Professor David A. Weitz.  
NAVAL RESEARCH LABORATORY, Center for Bio/Molecular Science and Engineering  
•National Research Council Postdoctoral Fellow, 9/97-9/99.  
Supervisor: B.R. Ratna, Ph.D.

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### **Awards**

OUTSTANDING ADVISING AWARD, UMASS COLLEGE OF NATURAL SCIENCES, 2019  
•For academic advising; single award winner, college-wide.  
COTTRELL SCHOLAR AWARD, Research Corporation, 2004.  
•Competitive scholarship and grant recognizing excellence in teaching and research.  
ALAN BERMAN RESEARCH PUBLICATIONS AWARD, Naval Research Laboratory, 1999.  
•For authorship of outstanding publication.  
ELIAS BURSTEIN AWARD, University of Pennsylvania, 1998.  
•For outstanding thesis in condensed-matter physics.  
MATERIALS RESEARCH SOCIETY GRADUATE STUDENT AWARD (FINALIST), 1997.  
NATIONAL RESEARCH COUNCIL POSTDOCTORAL FELLOWSHIP, 1997-1999.

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### **Major Service, National and Regional**

MEMBER OF COMMITTEE OF VISITORS (COV) FOR THE NSF, DIVISION OF MATERIALS RESEARCH (DMR). Invited member; August-November 2019. Committee is charged by NSF to maintain high standards of management, performance, and openness to the research and education community served by NSF. The COV wrote a public report.  
WORKSHOP ON “CURRENT CHALLENGES AND EMERGING AREAS IN SOFT MATTER: OPPORTUNITIES WITH NEUTRONS,” participant in invitation-only panel held at the Oak Ridge National Lab. July, 2011.  
INVITED PARTICIPANT, NSF-SPONSORED WORKSHOP on “Science and Technology of Dispersants Relevant to Deep Sea Floor Oil Releases,” Sept. 2010.  
EXECUTIVE BOARD OF THE NEW ENGLAND SECTION OF THE AMERICAN PHYSICAL SOCIETY (NES-APS). Elected Member, 2006-2009.

CONFERENCE/SYMPOSIUM/WORKSHOP CO-ORGANIZER:

- “Soft Matter Day,” co-organizer in 2016, 2017, and 2018, with Jennifer Ross and Kerstin Nordstrom. (Cancelled in 2020.) A one-day event in mid July featuring invited presentations, contributed posters, and hands-on demonstrations. For outreach to general public and undergraduate students, as well as for furthering research.
- Workshop on “Work From Noise: Harnessing Fluctuations to Manipulate Matter,” a 3-day workshop held at UMass Amherst in Oct, 2017 to help set the vision of this field. Co-organizer, with Machta, Menon, Ross and Thayumanavan.
- 90<sup>th</sup> ACS Colloid and Surface Science Symposium, 2016. Organizer, general papers session).
- New England Complex Fluids Workshops (six), co-organized in June 2002, 2004, 2011, 2013, 2015, and 2020. Each was a one-day conference with 4 invited speakers, ~20 contributed “sound-bites” and ~70 attendees. For June 5, 2020 Shuang Zhou and I developed an on-line format to keep this event going.
- 88<sup>th</sup> ACS Colloid and Surface Science Symposium, 2014. Co-organizer, session on interfacial particles.
- American Physical Society meeting, March 2014, special session on “Interplay between geometry, organization and function of fluid membranes.” Co-organizer with Martin Forstner.
- Symposium on Frontiers of Soft Interfaces, sponsored by UMass MRSEC. May, 2013. A day-long event with invited speakers and posters. Co-organizer with Maria Kilfoil.
- 86<sup>th</sup> ACS Colloids & Surface Science Symposium June 2012, special symposium on “Particles at Liquid Interfaces.” Co-organizer, with Kathleen Stebe.
- American Physical Society meeting, March 2010, special focus session on “Polymer Colloids.” Co-organizer, with Ken Schweizer.
- Joint meeting of the International Association of Colloid and Interface Scientists (IACIS) and the American Chemical Society (ACS) , June 2009. Special session on “Clustering.” Co-organizer, with Paul Dubin.

CO-ORGANIZER, UMASS SUMMER SCHOOL ON SOFT SOLIDS AND COMPLEX FLUIDS, nine times: June of 2009, 2010, 2011, 2012, 2013, 2015, 2016, 2017, 2019, 2020, 2021. (5 days each, typically ~40-45 attendees annually; 2-3× more in ’20-’21.).

CO-ORGANIZER, BOULDER SCHOOL IN CONDENSED MATTER AND MATERIALS PHYSICS, JUNE-JULY 2006. Co-organized the 2006 School on “Soft Matter: Complex Fluids and Biological Materials.” (with C. O’Hern, E. Dufresne and T. Powers).

LECTURER (INVITED), UMASS SUMMER SCHOOL ON SOFT SOLIDS AND COMPLEX FLUIDS, JUNE 2008 AND 2018. (4 days, ~35 attendees.) Lecturer on “Physics of Colloids.”

REVIEWER OF GRANT PROPOSALS AND MANUSCRIPTS. Routinely review manuscripts for *Phys. Rev. Lett.* and *Phys. Rev B & E*, *Science*, *Nature*, *Nature Materials*, *Macromolecules*, *Langmuir*, *J. Amer. Chem. Soc.*, *J. Chem. Phys.*, *Nanotechnology*, *JSTAT*, and others on a regular basis. Also review grant proposals submitted to the NSF, the Research Corporation, the Dept of Energy, NASA, and the ACS-PRF. Also regularly serve on review panels, especially for NSF.

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**Major Service,  
Local and  
Campus (last 5  
years only)**

UNDERGRADUATE PROGRAM DIRECTOR AND CHIEF UNDERGRADUATE ADVISOR, DEPARTMENT OF PHYSICS (2013 – present). Managing the system of advising ~250 physics majors. Includes individually advising about 35 physics majors who are on a non-standard track, meeting with every incoming physics major, and responding to queries from other departments and institutions. Includes summer and January advising of transfer students and running Open-house/Destination day recruiting

events. I also manage the advising program of 9 faculty and approx. 260 majors. I organize student-group meetings for advising and I developed and posted explicit advising documents for careers and internships. Developed GRE prep workshop and career-guidance venues such as the “Physicists-in-Industry” series. Also includes Member of the Undergraduate Curriculum Committee.

MASSACHUSETTS CENTER FOR AUTONOMOUS MATERIALS (MASSCAM), CO-DIRECTOR with Jennifer Ross (2016-2019). MassCAM is based in the Physics Dept at UMass Amherst and has >20 affiliated faculty across campus. The Center’s goals are to enhance our research in soft matter by developing new collaborative projects and to reach out to industry partners via weekly meetings, occasional workshops, and visits to industry labs. Owing to major changes in personnel (including unexpected departure of co-Director Ross) and strategic direction in F19, MassCAM is on hiatus until F20. (The Physicists-in-Industry series continues, however.)

COLLEGE OF NATURAL SCIENCES: “BIG IDEAS” GROUP (2017), MATERIALS VISIONING GROUP (2019-), AND RESEARCH COUNCIL (2018 -). Invited member of each. The ‘Big Ideas’ group put together plans for major donation solicitations. Research Council promotes CNS-wide funding for research in various ways. I regularly review Bridge and Seed Fund applications. Starting in Oct 2019, I worked with Mark Tuominen (Assoc. Dean) and DV (Chem) to initiate a working group on materials. This work continues in 2020, following on input at the October meeting.

COLLEGE OF NATURAL SCIENCES: LEE-SIP REU LEADERSHIP TEAM, member (2018-). In 2018 and 2019, my contributions were mostly advisory. In 2020, the whole committee’s activities expanded to adapt the program for remote format to meet the program’s mission despite COVID-19. I organized and taught a 3-week remote-format module on scientific computing in July 2020.

COLLEGE OF NATURAL SCIENCES: CURRICULUM AND AWARD COMMITTEES, member. (2009, 2013-2018, 2021-). I also review applications for CNS awards submitted by physics majors.

ADMISSIONS COMMITTEE FOR *iCONS* PROGRAM, reviewing applications by first-year undergraduates at UMass. Review ~150 applicants; decisions based on essays and standardized test scores. (2011-2018). *iCons* is the Integrated Concentration in Science, a unique 4-year undergrad program at UMass ([icons.cns.umass.edu/](http://icons.cns.umass.edu/)).

FACULTY AND STAFF SEARCH COMMITTEES. Served on and Chaired several search committees of the Physics Dept., Chemistry Dept., Polymer Science and Eng. Dept. and one college-wide search. Most recently, I chaired an experimental soft-matter physics search in 2017-2018 (resulting in two hired faculty) and again in 2019-2020 (resulting in one hire). I was also on search committees for two physics staff committees (2017) and two Assistant Dean positions in CNS (2020).

DISSERTATION COMMITTEES, Departments of Physics, Chemistry, Chemical Engineering, and Polymer Science and Engineering. Currently, I typically serve on approximately 20 active committees at PhD level and 2-4 Capstones. Students that I advise and serve as Committee Chair are listed below. I have so far supervised 13 students to completion of their PhDs.

SEMINAR COMMITTEES. Served as co-organizer of the Condensed Matter Seminar Series (with one other faculty member) in the F02, S04, S06, F10, S14, S18, and S20 semesters. Includes supervising the 860s course credit for graduate students.

CENTER FOR BIOLOGICAL PHYSICS, member of Steering Committee (2009-2020). (Lori Goldner is Chair.) The CBP works to inspire and support new collaborations for research and training in the area of biological physics. A highlight of recent activities has been the annual or twice-annual Biophysics Slam.

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***Outreach and  
Other Service  
(Last 5 years  
only)***

AMHERST REGIONAL MIDDLE SCHOOL PHYSICAL SCIENCES DAY (2016-2019). Co-organizer of annual visit of all 250 8<sup>th</sup> graders at ARMS to research labs at UMass

Amherst in the physical sciences and engineering. Involves organization as well as leading demonstrations on the physics of colloids and emulsions. (Cancelled in 2020.)

STEM SCIENCE AND ENGINEERING SATURDAY SEMINAR, 2003, 2006, 2011, 2019, AND 2020. Presented 1-hr seminars and 4-hour workshops to K-12 science teachers (part of a regular series organized by Morton Sternheim and later Shubha Tewari of UMass Physics). Most recent topic, Jan 2020: a 4-hour workshop on “Arduino microcontrollers in the classroom: teaching how to phrase effective science questions and how to answer them with original data.”

OTHER outreach through local schools, *ad-hoc*. About 1-2 times per year.

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## Teaching

### UNDERGRADUATE LEVEL:

PHYSICS 192M: Introduction to Measurement using the Arduino (S18-21). A new course that I designed. The course teaches first-year undergraduate students how to frame a science question and collect data to answer it.

PHYSICS 181: Mechanics I for physics and astronomy majors. Taught in the team-based learning (TBL) format. (F19-F20)

PHYSICS 185/186: Freshman Colloquium, a 1-credit introduction to research & professional development. F and S, 2018-2019, co-taught with 2 other faculty.

PHYSICS 498G: A 1-credit workshop to help physics majors prepare for the Physics GRE exam. I initiated this class in F15 to help students avoid major stress and overcome systematic biases in this standardized test. The course is offered every spring semester, rotating among 2 colleagues and myself. I have co-taught it every spring since 2016.

PHYSICS 100: Conceptual Physics (F15-F19; 120 students).

PHYSICS 152: Introductory Electricity and Magnetism and Thermodynamics (F09, S10, F10; 200-300 students)

PHYSICS 261/284: Intermediate Physics (Introductory Quantum mechanics, wave mechanics, and special relativity (S03-06; 35-80 students)

PHYSICS 282: Techniques in Theoretical Physics. (S14-17; approx. 70 students)

PHYSICS 286: Modern Physics Laboratory Class. (S07-09; approx. 60 students)

PHYSICS 289: Intermediate Physics Laboratory Class. (F11: approx. 40 students; F12: 56 students; F13-F14: 70 students)

PHYSICS 440: Intermediate (junior/senior) Lab (F01-03, F07; 12 students)

PHYSICS 558: Solid State Physics (S11 - S13, 10-15 students each time.)

NAT SCI 191P: Residential Academic Program course – a 1-credit seminar on “Science Connections” designed to introduce 1<sup>st</sup>-year students to research. (F08, S09, F10, F11, 24 students)

INDEPENDENT STUDY COURSES – Usually 1-4 per semester related to research. Also started offering an a one-credit course for Physics-GRE test prep to help graduate-school bound juniors and seniors (now called PHYSICS 498G). In F20, I taught a 1-credit course on fluid mechanics to physics majors, 10 students.

### GRADUATE LEVEL:

PHYSICS 850: SOFT CONDENSED MATTER PHYSICS. A course of my own design (F04, F05, 11-30 students each year)

PHYSICS 890B: GLUCKSTERN LECTURES IN BIOLOGICAL PHYSICS. Co-taught with Adrian Parsegian. (F10, S11; 12-30 students)

AD HOC CONTRIBUTIONS to professional development courses, typically a 1-h module. I also co-organized components of the introduction to research for new graduate students.

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## Publications in Journals (Refereed)

OVERVIEW: These articles were cited about 8,000 times. *H*-index is 36 (Web of Science, May, 2021)

65. Rui Cao, Jingjing Gao, S. Thai Thayumanavan, and Anthony D. Dinsmore, "Triggered Interactions between Nanoparticles and Lipid Membranes: Design Principles for Gel Formation or Disruption-and-Release," (submitted 2021).
64. Sarah E. Zuraw-Weston, Mahsa Siavashpouri, Maria E. Moustaka, Thomas Gerling, Hendrik Dietz, Seth Fraden, Alexander Ribbe and Anthony D. Dinsmore, "Membrane remodeling by DNA origami nanorods: Experiments exploring the parameter space for vesicle remodeling," *Langmuir* **37**, 6219-6231 (2021).
63. Rui Cao, Deepak Kumar, and Anthony D. Dinsmore, "Vesicle-based Gel via Polyelectrolyte-Induced Adhesion: Structure, Rheology, and Response," *Langmuir* **37**, 1714-1724 (2021).
62. Wei He, Yiwei Sun, and Anthony D. Dinsmore, "Response of a Raft of Particles to a Local Indentation," *Soft Matter* **16**, 2497-2505 (2020) DOI: 10.1039/C9SM01251F
61. Sarah Zuraw-Weston, Derek A. Wood, Ian K. Torres, YiWei Lee, Li-Sheng Wang, Ziwen Jiang, Guillermo R. Lazaro, ShiYu Wang, Avital A. Rodal, Michael F. Hagan, Vincent M. Rotello, and A. D. Dinsmore, "Nanoparticles Binding to Lipid Membranes: from Vesicle-Based Gels to Vesicle Inversion and Destruction," *Nanoscale* **10**, 18464-18474 (2019).
60. Geoffray Leriche, Arash Manafirad, Steven Nguyen, Nia Bell, Joseph P. Patterson, Sankaran Thayumanavan, Jerry Yang, A. D. Dinsmore and Nathan C. Gianneschi, "Water Permeability and Elastic Properties of an Archaea Inspired Lipid Synthesized by Click Chemistry," *Chem. Mater.* **30**, 3618-3622 (2018). DOI: 10.1021/acs.chemmater.8b00992
59. Paul Y. Kim, A. D. Dinsmore, David A. Hoagland, and Thomas P. Russell, "Wetting, Meniscus Structure, and Capillary Interactions of Microspheres Bound to a Cylindrical Liquid Interface", *Soft Matter* **14**, 2131-2141 (2018). DOI: 10.1039/C7SM02454A
58. Wei Hong, Jing Zhou, Mandakini Kanungo, Nancy Jia, A. D. Dinsmore, "Wax Spreading in Paper under Controlled Pressure and Temperature," *Langmuir* **34**, 432-441 (2018). DOI: 10.1021/acs.langmuir.7b03313.
57. Gaoxiang Wu, Hyesung Cho, Derek A. Wood, A. D. Dinsmore, and Shu Yang, "Confined Assemblies of Colloidal Particles with Soft Repulsive Interactions," *J. Am. Chem. Soc.* **139**, 5095-5101 (2017). DOI: 10.1021/jacs.6b12975
56. Nesrin Senbil and A. D. Dinsmore, "Deformation of the contact line around spherical particles bound at anisotropic fluid interfaces," *Soft Matter* **13**, 8234-8239 (2017). DOI: 10.1039/c7sm01548h
55. J. B. Hutchison, A. P.K. K. Karunanayake Mudiyansele, R. M. Weis, A. D. Dinsmore, "The Role of Osmotically-induced Tension in Binding of N-BAR to Lipid Vesicles," *Soft Matter* **12**, 2465-2472 (2016). DOI: 10.1039/C5SM02496J
54. A. M. Barnes, A. D. Dinsmore, "Heterogeneity of Surface Potential in Contact Electrification under Ambient Conditions: a comparison of pre- and post-contact states," *J. Electrostatics* **80**, 76-81 (2016). DOI:10.1016/j.elstat.2016.04.002
53. W. He, N. Senbil, A. D. Dinsmore, "Measured Capillary Forces on Spheres at Particle-Laden Interfaces," *Soft Matter* **11**, 5087-5094 (2015). DOI: 10.1039/C5SM00245A.
52. N. Senbil, W. He, V. Demery, A. D. Dinsmore, "Effect of Interface Shape on Advancing and Receding Fluid-Contact Angles around Spherical Particles," *Soft Matter (Communication)* **11**, 4999-5003 (2015). DOI: 10.1039/C5SM00466G.
51. K. McEnnis, A. D. Dinsmore, and T. P. Russell, "Solid Particles Adsorbed on Capillary-Bridge-Shaped Fluid Polystyrene Surfaces," *Langmuir* **31**, 5299-5305 (2015). DOI: 10.1021/acs.langmuir.5b00372.
50. M. Baghgar, A. Barnes, E. Pentzer, A. Wise, B. Hammer, T. Emrick, A. D. Dinsmore, M. Barnes, "Morphology-Dependent Electronic Properties in Cross-Linked (P3HT-b-P3MT) Block Copolymer Nanostructures," *ACS Nano* **8**, 8344-8349 (2014). DOI: 10.1021/nn502806d
49. K. Du, E. Glogowski, M. T. Tuominen, T. Emrick, T. P. Russell, A. D. Dinsmore, "Self-assembly of Gold Nanoparticles on Gallium Droplets: Controlling Charge Transport through Microscopic Devices," *Langmuir* **29**(44), 13640-13646 (2013). DOI: 10.1021/la403263z.

48. D. A. Wood, C. D. Santangelo, A. D. Dinsmore, "Self-Assembly on a Cylinder: A Model System for Understanding the Constraint of Commensurability," *Soft Matter* **9**, 10016-10024 (2013). DOI: 10.1039/C3SM51735G.
47. E. Kizilay, A. D. Dinsmore, D. Hoagland, L. Sun, P. Dubin, "Hierarchical Structure Development in Polyelectrolyte-Micelle Coacervates," *Soft Matter* **9**, 7320-7332 (2013). DOI: 10.1039/C3SM50591J.
46. C. Zeng, F. Brau, B. Davidovitch, A. D. Dinsmore, "Capillary Interactions among Spherical Particles at Curved Liquid Interfaces," *Soft Matter* **8**, 8582 (2012).
45. J. B. Hutchison, R. M. Weis, A. D. Dinsmore, "Change of Line Tension in Phase-Separated Vesicles upon Protein Binding," *Langmuir* **28**, 5176 (2012).
44. X. Peng and A. D. Dinsmore, "High Refractive-index Tin Sulfide Core-shell Spheres for Photonic Applications," *J. Mater. Res.* **27**, 1251 (2012).
43. J. R. Savage, L. Pei, A. D. Dinsmore, "Experimental Studies of Two-Step Nucleation during Two-Dimensional Crystallization of Colloidal Particles with Short-Range Attraction," *Advances in Chemical Physics* **151**, 111 (2012).
42. J. A. Labastide, M. Baghgar, I. Dujovne, Y. Yang, A. D. Dinsmore, B. Sumpster, D. Venkataraman, M. D. Barnes, "Polymer Nanoparticle Superlattices for Organic Photovoltaic Applications," *J. Phys. Chem. Lett.* **2**, 3085 (2011). (Featured in cover art.)
41. E. Kizilay, S. Maccarrone, E. Foun, A. D. Dinsmore, P.L. Dubin, "Clustering in Polyelectrolyte-Micelle Complex Coacervation," *J. Chem. Phys. B* **115**, 7256 (2011).
40. K. Du, E. Glogowski, T. Emrick, T. P. Russell, and A. D. Dinsmore, "Adsorption Energy of Nano- and Microparticles at Liquid-liquid Interfaces," *Langmuir* **26**, 12518 (2010).
39. J. R. Savage and A. D. Dinsmore, "Experimental Evidence for Two-Step Nucleation in Colloidal Crystallization," *Phys. Rev. Lett.* **102**, 198302 (2009).
38. K. Du, C. R. Knutson, E. Glogowski, K. D. McCarthy, R. Shenhar, V. M. Rotello, M. T. Tuominen, T. Emrick, T. P. Russell, and A. D. Dinsmore, "Self-Assembled Electrical Contact to Nanoparticles Using Metallic Droplets," *Small* **5**, 1974 (2009). Reviewed in "News and Views" article in Nature Nanotechnology, by D. Vanmaekelbergh [Nature Nano 4, 475 (2009)]. Also listed in the "Research Highlights" section of Nature Nano in July, 2009.
37. J. Zhou and A. D. Dinsmore, "Statistical model of contacts and forces in random granular media," *JSTAT* **5**, L05001 (2009).
36. M. L. Henle, R. McGorty, A. B. Schofield, A. D. Dinsmore and A. J. Levine, "The Effect of Curvature and Topology on Membrane Hydrodynamics," *Europhys. Lett.* **84**, 48001 (2008).
35. X. T. Peng and A. D. Dinsmore, "Light Propagation in Strongly Scattering, Random Colloidal Films: The Role of the Packing Geometry," *Phys. Rev. Lett.* **99**, 143902 (2007).
34. D. B. Lawrence, Tong Cai, Zhibing Hu, Manuel Marquez, A. D. Dinsmore, "Temperature-Responsive, Semi-Permeable Capsules Composed of Colloidal Microgel Spheres," *Langmuir* **23**, 395 (2007).
33. C. R. Knutson, K. V. Edmond, M. T. Tuominen, A. D. Dinsmore, "Shuttling of Charge by a Metallic Sphere in Viscous Oil," *J. Appl. Phys.* **101**, 013706 (2007).
32. J. R. Savage, D. W. Blair, A. J. Levine, R. A. Guyer, A. D. Dinsmore, "Imaging the Sublimation Dynamics of Colloidal Crystallites," *Science* **314**, 795 (2006).
31. K. V. Edmond, A. B. Schofield, M. Marquez, J. P. Rothstein, A. D. Dinsmore, "Stable Jets of Viscoelastic Fluids and Self-Assembled Cylindrical Capsules by Hydrodynamic Focusing," *Langmuir* **22**, 9052 (2006).
30. J. Zhou, S. Long, Q. Wang, A. D. Dinsmore, "Measurement of Forces inside a Three-Dimensional Pile of Frictionless Droplets," *Science* **312**, 1631 (2006).
29. C. Zeng, H. Bissig, A. D. Dinsmore, "Particles on Droplets: from Fundamental Physics to Novel Materials," *Solid State Comm.* **139**, 547 (2006).
28. A. D. Dinsmore, V. Prasad, I. Y. Wong, D. A. Weitz, "Microscopic Structure and Elasticity of Weakly Aggregated Colloidal Gels," *Phys. Rev. Lett.* **96**, 185502 (2006).

27. M. F. Hsu, M. G. Nikolaides, A. D. Dinsmore, A. R. Bausch, V. D. Gordon, X. Chen, J. W. Hutchinson, D. A. Weitz, "Self-Assembled Shells Composed of Colloidal Particles: Fabrication and Characterization," *Langmuir* **21**, 2963 (2005).
26. Y. Lin, A. Boeker, H. Skaff, D. Cookson, A. D. Dinsmore, T. Emrick, T. P. Russell, "Nanoparticle Assembly at Fluid Interfaces: Structure and Dynamics," *Langmuir* **21**, 191 (2005). (9 citations)
25. A. Boeker, Y. Lin, K. Chiapperini, R. Horowitz, M. Thompson, V. Carreon, T. Xu, C. Abetz, H. Skaff, A. D. Dinsmore, T. Emrick, and T. P. Russell, "Hierarchical Nanoparticle Assemblies formed by Decorating Breath Figures," *Nature Materials* **3**, 302 (2004).
24. E. R. Dufresne, E. I. Corwin, N. A. Greenblatt, J. Ashmore, D. Y. Wang, A. D. Dinsmore, J. X. Cheng, X. S. Xie, J. W. Hutchinson, D. A. Weitz, "Flow and Fracture in Drying Nanoparticle Suspensions," *Phys. Rev. Lett.* **91**, 224501 (2003).
23. M.G. Nikolaides, A.R. Bausch, M.F. Hsu, A.D. Dinsmore, M.P. Brenner, C. Gay, and D.A. Weitz, "Reply to 'Communications Arising from Like-Charged Particles at Liquid Interfaces'," *Nature* **424**, 1014 (2003).
22. Y. Lin, H. Skaff, A. Böker, A. D. Dinsmore, T. S. Emrick, T. P. Russell, "Ultrathin Crosslinked Nanoparticle Membranes," *J. Amer. Chem. Soc. Comm.* **125**, 12690 (2003).
21. Y. Lin, H. Skaff, T. S. Emrick, A. D. Dinsmore, T. P. Russell, "Nanoparticle Assembly and Transport at Liquid-Liquid Interfaces," *Science* **299**, 226-229 (2003).
20. A. R. Bausch, M. J. Bowick, A. Cacciuto, A. D. Dinsmore, M. F. Hsu, D. R. Nelson, M. G. Nikolaides, A. Travasset, D. A. Weitz, "Grain Boundary Scars and Spherical Crystallography," *Science* **299**, 1716-1718, (2003).
19. A. D. Dinsmore, M. F. Hsu, M. G. Nikolaides, Manuel Marquez, A. R. Bausch, D. A. Weitz, "Colloidosomes: Self-Assembled, Selectively-Permeable Capsules Composed of Colloidal Particles," *Science* **298**, 1006-1008 (2002).
18. M.G. Nikolaides, A.R. Bausch, M.F. Hsu, A.D. Dinsmore, M.P. Brenner, C. Gay, and D.A. Weitz, "Electric-Field-Induced Capillary Attractions between Like-Charged Particles at Liquid Interfaces," *Nature* **420**, 299-301 (2002).
17. V. Prasad, V. Trappe, A.D. Dinsmore, P.N. Segre, L. Cipelletti, D.A. Weitz, "Universal Features of the Fluid to Solid Transition for Attractive Colloidal Particles," *Faraday Discussions* **123**, 1-12 (2003).
16. A. D. Dinsmore and D. A. Weitz, "Direct Imaging of Three-Dimensional Structure and Topology of Colloidal Gels," *J. Phys.- Condens. Matt.* **14**, 7581-7597 (2002).
15. A. D. Dinsmore, E. R. Weeks, V. Prasad, A. C. Levitt, D. A. Weitz, "Three-Dimensional Confocal Microscopy of Colloids," *Applied Optics* **40**, 4152-4159 (2001).
14. A. G. Yodh, K.-H. Lin, J. C. Crocker, A. D. Dinsmore, R. Verma, P. D. Kaplan, "Entropically Driven Self-Assembly and Interaction in Suspension," *Phil. Trans. R. Soc. London* **359**, 921-937 (2001).
13. S. B. Qadri, E. F. Skelton, A. D. Dinsmore, J. Z. Hu, W. J. Kim, C. Nelson, B. R. Ratna, "The Effect of Particle Size on the Structural Transitions in Zinc Sulfide," *J. Appl. Phys.* **89**, 115-119 (2001).
12. A. D. Dinsmore, D. S. Hsu, S. B. Qadri, J. O. Cross, T. A. Kennedy, H. F. Gray, B. R. Ratna, "Structure and Luminescence of Annealed Nanoparticles of ZnS:Mn," *J. Appl. Phys.* **88**, 4985-4993 (2000).
11. M. L. Breen, A. D. Dinsmore, R. H. Pink, S. B. Qadri, B. R. Ratna, "Sonochemically Produced ZnS-Coated Polystyrene Core-Shell Particles for Use in Photonic Crystals," *Langmuir* **17**, 903-907 (2000).
10. A. D. Dinsmore, D. S. Hsu, H. F. Gray, Y. Tian, S. B. Qadri, B. R. Ratna, "Mn-Doped ZnS Nanoparticles as Efficient Low-Voltage Cathodoluminescent Phosphors," *Appl. Phys. Lett.* **75**, 802-804 (1999).
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5. A. D. Dinsmore, D. T. Wong, P. Nelson, A. G. Yodh, "Hard Spheres in Vesicles: Curvature-Induced Forces and Particle-Induced Curvature," *Phys. Rev. Lett.* **80**, 409-412 (1998).
4. A. D. Dinsmore, P. B. Warren, W. C. K. Poon, A. G. Yodh, "Fluid-Solid Transitions on Walls in Binary Hard-Sphere Mixtures," *Europhys. Lett.* **40**, 337-342 (1997).
3. A. D. Dinsmore, A. G. Yodh, D. J. Pine, "Entropic Control of Particle Motion Using Passive Surface Microstructures," *Nature* **383**, 239-242 (1996).
2. A. D. Dinsmore, A. G. Yodh, D. J. Pine, "Phase Diagrams of Nearly Hard-Sphere Binary Colloids," *Phys. Rev. E* **52**, 4045-4057 (1995).
1. P. D. Kaplan, A. D. Dinsmore, A. G. Yodh, D. J. Pine, "Diffuse Transmission Spectroscopy -- A Structural Probe of Opaque Materials," *Phys. Rev. E* **50**, 4827-4835 (1994).

### **Perspective articles (editorial material):**

- A. D. Dinsmore, P. L. Dubin, G. M. Grason, "Clustering in Complex Fluids," Cover; Front matter for the Special Issue on "Clusters in Complex Fluids," for *J. Phys. Chem. B* **115**, 7173 (2011).
- A. D. Dinsmore, "Colloids: a Useful Boundary," *Nature Materials* **6**, 921 (2007).
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### **Patents**

1. T.S. Emrick, T. P. Russell, A. D. Dinsmore, H. Skaff, and Y. Lin, "Liquid-liquid Interfacial Nanoparticle Assemblies," US Patent No. 7,470,840 (Dec. 30, 2008).
  2. A. D. Dinsmore, M. Nikolaides, M. Hsu, A. R. Bausch, M. Marquez, D. A. Weitz, "International Patent Application No. PCT/US01/46181: "Methods and Compositions for Encapsulating Active Agents."
  3. Y. Tian, A. D. Dinsmore, S. B. Qadri, B. R. Ratna, "Method of Preparing Nanocrystalline Orthosilicate-Based Phosphors," (Provisional Patent filed August 31, 1998).
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### **Reviews of Research by Journalists or others**

- "Nanoelectronics: From droplets to devices," by Prof. Daniel Vanmaekelbergh, *Nature Materials* **4**, 475 (2009).
- "Colloidal Encounters: A Matter of Attraction," by Prof. Daan Frenkel, *Science* **314**, 768 (2006).
- "Nano World: Edible Nanotech on the Horizon," by C. Q. Choi (*UPI* article), Feb., 2005
- "Topology from the Bottom up," by R. D. Kamien, Perspective in *Science* magazine, March, 2003:
- "Crystals on a Ball," *National Science Foundation Highlights* page, March, 2003:
- *Scientific American* News of the Day (3/14/2003), and *Scientific American* magazine, May 2003, p. 33 (News Scan)
- "Nanoparticles Encapsulate Water Droplets," by L. Kalaugher, NanotechWeb.org, Jan, 2003.
- "UMass Team Develops Novel Self-assembly Processes for Nanotech Applications," Innovations Reports, Jan, 2003.
- "Designer Coatings," by A. Dove, A. Marshall, P. Mitchell, *Nature Biotechnology* **20**, 1213 (2003).
- "Designer Capsules," by Charlotte Schubert and Ushma Savla, *Nature Medicine* **8**, 1362 (2003).
- "Nanoparticles encapsulate water droplets," by Liz Kalaugher, *NanotechWeb*, Jan., 2003.
- "Gentle Force of Entropy Bridges Disciplines," by D. Kestenbaum, *Science* **279**, 1849 (1998).
- "Entropy Keeps Small Particles on Edge," by D. Vergano, *Science News* **150**, 182, (1996).
- "Order out of Disorder," by V. Houlder, *Financial Times (London)*, Sept. 19, p. 21 (1996).
- "Use Entropy to Put Particles Where You Want," by C. Joslin, *Inside R&D* **25**(39), 2 (1996).

•“Getting Order out of a Mixture,” by I. Peterson, *Science News* **145**, 223 (1994).

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***Selected Invited Seminars and Invited Conference Presentations (last 8 years only)***

- *New York University, Center for Soft Matter Research*, invited seminar Sept. 30, 2020: “Adhering, wrapping, and bursting of lipid bilayer membranes: understanding effects of membrane-binding particles and polymers.”
- *University of Pennsylvania, Department of Physics*, invited condensed matter seminar, Oct. 31 2018: “Adhering, wrapping, and bursting of fluid membranes: understanding effects of membrane-binding particles and polymers.”
- *Brown University, Department of Physics*, invited department colloquium, Sept 2018: “Adhering, wrapping, and bursting of fluid membranes: understanding effects of membrane-binding particles and polymers.”
- *New England Granular Workshop*, June 2017. Invited presentation, “Measuring the yield stress of charged granular media.”
- *Harvard University, “Squishy Physics” seminar*, May, 2017: “Lipid Membranes: Morphologies to Materials.”
- Invited Plenary speaker at *RSC/SCI conference on “Particle at Interfaces,”* Sept. 7-9, 2016 at the Royal Armouries in Leeds, UK.
- *NORA Advanced Materials Retreat*, June, 2016. Invited presentation: “Fluid Interfaces and Solid particles: Tuning Geometry and Interactions for New Materials.”
- *Harvard University, Widely Applied Math seminar, invited presentation*, April 2016: “Particles on a Cylindrical Surface: The effects of commensurability and bending.”
- *Sukant Tripathy Annual Memorial Symposium* at UMass Lowell, Dec., 2015. invited presentation: “Liquid Interfaces and Solid Particles: Using Interface Geometry to Direct Assembly”
- *Greater Boston Area Statistical Mechanics Meeting*, Oct, 2015. Invited presentation: “Self Assembly of Particles on a Cylinder: Commensurability constraint, structure, and elasticity.”
- *University of Illinois Chicago, Department of Physics Colloquium*, Nov, 2014. Invited presentation: “Liquid Interfaces and Solid particles: geometry, physics and new materials.”
- *Weselyan University, Department of Physics Colloquium*, Nov, 2014. Invited presentation: “Fluid membranes and proteins: binding and bending under tension.”
- *Process Systems Engineering Consortium (PSEC) Meeting, University of Massachusetts Amherst*, July, 2014. Invited presentation: “Liquid Interfaces, Solid Particles, and New Materials by Self Assembly.”
- *Brandeis University, Materials Research Science and Engineering Center (MRSEC) Symposium*, May, 2014. Invited presentation: “Liquid Interfaces and Solid particles: geometry, physics and new materials.”
- *Brandeis University, Department of Physics Colloquium*, Nov., 2013. Invited presentation: “Liquid Interfaces and Solid particles: geometry, physics and new materials.”
- Workshop on “Targeting and Triggering from Molecules to Materials,” Sponsored by the Army Research Office at UMass Amherst, Oct., 2013. Invited presentation: “Particles and Macromolecules at Fluid Interfaces or Membranes: bending, binding and directing assembly.”
- *Gordon Conference on Soft Condensed Matter Physics*, Aug., 2013. Invited presentation: “Fluid Membranes and Proteins: Binding and Bending under Tension.”
- *MIT Conference on Computational Fluid and Solid Mechanics*. Invited presentation: “Measuring Nucleation Rates and Free Energy Landscapes Using Colloidal Particles with Tunable Potentials,” June, 2013.
- *Georgia Tech. School of Physics Seminar*: “Membranes, Interfaces, and the Intriguing Role of Curvature” April, 2013.
- *University of Massachusetts Amherst, Department of Physics, Condensed Matter Seminar*: “Membranes, Interfaces and the Intriguing Role of Curvature,” Feb., 2013.

ARMY RESEARCH OFFICE MURI PROGRAM: “Specifically Triggerable Multi-Scale Responses in Organized Assemblies.” Sept. 2015-Aug. 2020. PI: S. Thayumanavan (UMass Chem); co-I with J. Ross, N. Abbott, J. de Pablo, and N. Gianneschi.  
NATIONAL SCIENCE FOUNDATION, CBET-1803797. “Contact Angle Hysteresis on Curved Surfaces.” Sole PI. Dates: 11/1/2018 – 6/30/2022. Total: \$336,000.  
PRESIDENT’S SCIENCE AND TECHNOLOGY (S&T) INITIATIVES FUND — “SOFT QUANTUM BIO INTERFACE CENTER.” Co-PI with Jennifer Ross. Dates: June, 2016 -. Total: \$125,000. This grant supported the start-up of a Center, later renamed “Massachusetts Center for Autonomous Materials” (MassCAM).  
XEROX INC. “Granular Physics of Electrically Charged Particles.” Single-PI. Dates: 1/2008 -. Total: \$60,000.

**Research  
Grants, Expired**

NATIONAL SCIENCE FOUNDATION, “MRSEC on Bioinspired SoftMaterials” PI: Fraden (Brandeis Univ.) Dates: 11/1/2014 – 10/31/2019.  
NATIONAL SCIENCE FOUNDATION, MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER (MRSEC) ON POLYMERS, DMR-0820506. co-PI, with T. S. Emrick (PI) and ~20 other co-PIs. Dates: 4/2003-8/2014. Approx \$35,000/yr for A.D.D.)  
XEROX INC. “Controlling Capillary Flow for Paper-Based Diagnostic Materials.” Single-PI. Dates: 1/1/13 – 12/31/15. Total: \$90,000.  
NATIONAL SCIENCE FOUNDATION, “REU: Biological and Soft Matter Research Traineeship (B-SMaRT).” PIs: Ross, Santangelo.  
GULF OF MEXICO RESEARCH INITIATIVE. “The Science and Technology of Dispersants as Relevant to Deep-Sea Hydrocarbon Releases.” co-PI (Sole UMass participant in large consortium of ~40 PIs). Dates: 10/1/2011 – 12/31/2014. Total: \$10.3M. Dinsmore total: \$222,000.  
DEPARTMENT OF ENERGY, “Energy Frontier Research Center.” co-PI, with T. P. Russell and P. Lahti (as PIs) and ~20 other co-PIs. 9/1/2009 – 8/31/2014.  
NATIONAL SCIENCE FOUNDATION, CBET-1438425. “Mechanics of Interfacial Assemblies.” Lead PI, with B. Davidovitch and G. Grason. Dates: 11/1/14 – 10/31/17. Total: \$328,000.  
NATIONAL SCIENCE FOUNDATION, DMR-0907195. “Imaging the Dynamics of Melting and Freezing with Colloids.” Single-PI. Dates: 11/1/09 – 3/31/14 (including a no-cost extension). Total: \$400,000.  
NATIONAL SCIENCE FOUNDATION, CBET-0967620. “Particles on Curved Liquid Interfaces: Geometry Mechanics and Self-Assembly.” Lead PI (with B. Davidovotch). Dates: 5/1/10 – 3/31/14 (including a no-cost extension). Total: \$300,000.  
XEROX INC. “Granular Physics of Electrically Charged Particles.” Single-PI. Dates: 1/1/2008-12/31/2009. Total: \$60,000.  
AMERICAN CHEMICAL SOCIETY PETROLEUM RESEARCH FUND (TYPE ND), “Phase transitions in mixtures of micelles and polyelectrolytes: electrostatic assembly of soft colloids” PI, with Paul Dubin of UMass Chemistry. Dates: 1/1/2008-8/31/2011. Total: \$100,000  
BIOMEDICAL INNOVATION INITIATIVE AWARD, UMASS COLLEGE OF NATURAL SCIENCES AND MATHEMATICS. “Measurement of Curvature-Induced Forces on Membrane Proteins.” PI, with Robert M. Weis of UMass Chemistry (co-PI). Dates: 6/15/06-8/31/08. Total: \$75,000 (no indirect costs); ~\$37,000 for A.D.D.  
NATIONAL SCIENCE FOUNDATION, DMR-0605839. “Force Maps, Aging and Elasticity in Random, Non-equilibrium Solids.” Single-PI. Dates: 8/1/06 – 7/31/09. Total: \$345,000.

- RESEARCH CORPORATION COTTRELL SCHOLARSHIP PROGRAM. “Photonic Glasses: Effects of the Topology of Random Media on Light Propagation.” Single-PI. Dates: 6/1/2004 -. Total: \$75,000 (no indirect costs).
- NATIONAL SCIENCE FOUNDATION, NANOSCALE INTERDISCIPLINARY RESEARCH TEAM , CTS-0609107. “NIRT: Controlling Interfacial Activity of Nanoparticles: Robust Routes to Nanoparticle-based Capsules, Membranes, and Electronic Materials.” Co-PI with Emrick (PI), Russell, Menon and Freeman (of U. Texas Austin). Dates: 9/1/06 – 8/31/2010. Total: \$1,199,999; ~\$240,000 for A.D.D.
- NATIONAL SCIENCE FOUNDATION, IGERT: “Research and Innovation in Nanoscale Device Development.” Co-PI, with J. Watkins and M. Tuominen (PIs) and ~20 other co-PIs. Funding for one student awarded, 9/1/2008 - 8/31/2010.
- NATIONAL AERONAUTIC AND SPACE ADMINISTRATION (NASA), 02-OBPR-03-C-0188-0122. “Gelation of Particles on Droplets.” PI, with A. J. Levine (subcontractor). Dates: 6/1/05 – 9/30/06. Total: \$260,590; ~\$140,000 for A.D.D.
- NATIONAL SCIENCE FOUNDATION, MAJOR RESEARCH INSTRUMENTATION (MRI), CTS-0421043. “Development of a Filament Stretching Rheometer and Shear Micro-Rheometer with Optical Access for Measurements of Complex Fluids.” co-PI, with H. Winter (PI), J. Rothstein, and S. Bhatia. Dates: 8/1/04 – 7/31/06. Total: \$406,999.
- NATIONAL SCIENCE FOUNDATION, DMR-0305395. “Mapping Forces and Elasticity in Random Solids.” Single-PI. Dates: 8/1/03 – 7/31/06. Total: \$300,000.
- NATIONAL SCIENCE FOUNDATION, INSTRUMENTATION FOR MATERIALS RESEARCH PROGRAM (IMR) DMR-0216719. “Acquisition of Instrumentation for Research and Student Training in Imaging Fast Dynamics in Macroscopic Disordered Media.” co-PI, with N. Menon (PI), D. Candela and N. Easwar (Smith College). Dates: 8/1/03 – 7/31/06. Total: \$111,736.
- RESEARCH CORPORATION RESEARCH INNOVATION AWARD. “Direct Measurements of Defects and Melting in Colloidal Crystals.” Single-PI. Dates: 5/1/2003 – 4/30/05. Total: \$35,000 (no indirect costs).
- KRAFT FOODS, INC. GIFT. “Self-Assembly of Smart Materials.” Single-PI. Dates: 5/1/2003 – 4/30/05. Total: \$43,000 (no indirect costs).
- AMERICAN CHEMICAL SOCIETY PETROLEUM RESEARCH FUND (TYPE G). “Three-Dimensional Imaging of Structure, Topology, and Viscoelasticity of Gels.” Single-PI. Dates: 9/1/2002 – 8/31/04. Total: \$35,000 (no indirect costs).
- FACULTY RESEARCH GRANT, UNIVERSITY OF MASSACHUSETTS. “Novel Nano-Scale Self Assembly” Single-PI. Dates: 5/1/2002 – 4/30-2003. Total: \$13,970.
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***Mentored  
Students,  
Current***

**Graduate:**

- Rui Cao (PhD, defended Aug 2020)
- Arash Manafirad (PhD, will defend summer or fall, 2020)
- Mingzhu Cui (PhD, started 2019)
- Chris Oville (PhD, starting in summer 2020)

**Undergraduate:**

- Ash Abraham
- Zachary Curtis
- Eric Lyons
- Samantha Maragioglio
- Sumner Gubisch
- Rishabh Jain

**Postdoctoral Fellows:**

- Simona Maccarrone (2009-2011).

**Mentored  
Students,  
Graduated**

- Hugo Bissig (8/2004-8/2005), funded by the Swiss NSF.
- Undergraduate:** (UMass only, not counting visiting REU students)
- Rob Keane (BS 2020 (Capstone), going to Brandeis Univ Physics PhD)
  - Anwasha Saha (BS 2019 (Capstone), at Univ Michigan Materials Science PhD program)
  - Jeremy Laprade (BS 2019, now at Brandeis Physics PhD program)
  - Ian Murphy (BS 2019 (Capstone), now at Newgrange Designs)
  - Abdoul Ayouba (BS anticipated in 2020; Math)
  - Ian Torres (BS Computer Sci 2018; Mass Mutual)
  - Mark Lewis (UMass BS '17; now at University of Chicago)
  - Robbie Bancroft (visiting student from Manchester Univ.)
  - Sam Teale (visiting student from Manchester Univ.)
  - Madeline Sauleda (BS 2016 (Capstone), CMU Physics PhD)
  - Philip Rebrovic (BS 2016 (Capstone), CityYear)
  - Richard Kenyon (UMass)
  - Amanda LaFauci (BS 2015 (Capstone), BC Physics MS)
  - Austin Barnes (BS 2014 (Capstone), UC Santa Barbara Chem Ph.D.)
  - Sebastian Russell (BS ChemEng 2014, Columbia ChemEng Ph.D.)
  - Brandon Hoover (BS 2011; went to NIH, now at U Wisc-Madison PhD program in biophysics)
  - Benjamin Bromberg (BS 2012; went to BBN Technologies)
  - Matthew Gratale (BS 2008, Univ. of Pennsylvania, Physics Ph.D. program.)
  - Timothy Prisk (BS, 2007), Univ. of Indiana Bloomington Physics Ph.D. program.
  - Nathan Lindzen (BS Chem 2007). *Co-advisor: R. M. Weis of UMass Chemistry Dept.*
  - David Lawrence (B.S. in Physics 2006), New York University Law School.
  - Ryan McGorty (BS 2005(Capstone) Harvard University Physics Dept., Ph.D. program; now faculty at UCSF (Ryan was also a winner of the nationally competitive Goldwater Scholarship while at UMass)
  - Yutaka Maki (B.S. in Physics 2005), Teach for America.
  - Kazem Edmond (B.S. in Physics 2004), Emory Physics, Ph.D. program, now Senior Researcher at ExxonMobil.
  - Randal Leiter (B.S. in Physics 2004), MIT Plasma Science & Fusion Center.
  - Melissa Motew (B.S. in Physics 2002). Research staff, Lincoln Lab.
- Graduate:**
- Sarah Zuraw-Weston (PhD, 2020). Now at *Ab Initio*.
  - Wei He (Ph.D., 2018). Now at Chewy.com Corporate Office.
  - Oscar Said Hernandez-Daguer (visting scholar from UPRM, now a lab instructor at Mt. Holyoke College. Oscar was not part of our degree program but he worked part-time with my group for a few months.)
  - Wei Hong (Ph.D., 2017). Moved to Facebook
  - Derek Wood (Ph.D. 2017). Moved to Block Engineering.
  - Yipeng Yang (Ph.D. 2016). Moved to Google.
  - Nesrin Senbil (Ph.D. 2015). Now at Solvay Rhodia.
  - Jaime Hutchison (Ph.D., 2013). Now at Solvay Rhodia.
  - Chuan Zeng (Ph.D. 2011). Now medical physics staff , Memorial Sloan Kettering Cancer Center.
  - Kan Du (Ph.D. 2010). Co-advisor: T. P. Russell of UMass Polymer Sci. Eng. Dept.. Now optics engineer at ASML.
  - Xiaotao Peng (Ph.D. in Physics, 9/2007). Now optical engineer with AFOP, Sunnyvale, CA

- Jing Zhou (Ph.D. in Physics, 8/2007). Moved to research physicist with Xerox Innovation Group, Rochester NY. Now VP, Head of Data Science and Data Engineering at eHealth
- John Savage (Ph.D. in Physics, 8/2007). Postdoc at Cornell, then staff scientist, Liquidia. Now Director at Lindy Biosciences, Inc.
- Rui Kong (M.S. in Physics 2006). Now at Univ. Houston, Master of Finance Program.
- Christopher Knutson (M.S. in Physics 2004). Research scientist, Arryx, Inc. Chicago, IL, now a Beckman Coulter.
- Versa (Elizabeth) Clark (M.S. in Physics 2004). Teacher, Holyoke, MA.
- Christian Guertin (M.S. in Physics 2003). Research scientist, Vermont Photonics, Bellows Falls, VT.