

CV
Olga Gursky, PhD

9/9/2014

Department of Physiology & Biophysics, Boston University School of Medicine

Academic training

- 1983 BS/MS Physics, Moscow State University, Moscow, USSR.
1992 PhD Physics, Rosenstiel Basic Medical Sciences Research Ctr., Brandeis University, Waltham MA.
Advisor: Donald L. D. Caspar, Member of the National Academy of Sciences.

Pre-doctoral training and professional positions

- 1981-1982 Research Assistant, Department of Physics, Moscow State University, Moscow, USSR.
1983-1986 Engineer, Institute of Metrology, National Ministry of Standards, Moscow, USSR.
1986-1988 Research Associate, Institute of Crystallography, Academy of Sciences, Moscow, USSR.
1988-1991 Graduate Student, Rosenstiel Research Center, Brandeis University, Waltham MA, USA.

Postdoctoral training

- 1991-1994 Postdoctoral Research Associate (Advisor: Donald L. D. Caspar).
Rosenstiel Basic Medical Sciences Research Center, Brandeis University, Waltham MA.
1994-1996 Senior Research Associate (Advisor: David Atkinson).
Department of Biophysics, Boston University School of Medicine.

Academic appointments

- 1996-1998 Instructor, Department of Biophysics, Boston University School of Medicine.
1998-2003 Assistant Professor, Department of Physiology and Biophysics, BUSM.
2003-2013 Associate Professor, Department of Physiology and Biophysics, BUSM.
2013-current Full Professor, Department of Physiology and Biophysics, BUSM.
2014 Visiting Professor, Department of Chemistry, Indian Institute of Technology (IIT) Bombay

Honors

- 1983 – BS/MS (High honors), Department of Physics, Moscow State University, USSR.
1993 – Finalist, Life Sciences Research Foundation, Postdoctoral Award.
1993 – Finalist, American Association of Women in Science, Postdoctoral award.
1998–current Elected Fellow, American Heart Association (FAHA), Council of Atherosclerosis.
1998–current Listing in Peterson's Guide.
2002-current American Chemical Society, valuable contributor to *Biochemistry*.

Department and University Committees

- 1998-current – PhD Qualifying Exam Committee, Physiology and Biophysics, Boston University School of Medicine (BUSM) 1998, 2000, 2002, 2003, 2004, 2005 (chair), 2006 (chair); 2012.
1998-current – PhD pre-thesis and thesis exam committees for over 30 graduate students;
1st reader/major adviser on four, 2nd reader on four, chair on four thesis committees.
2000 – Department Website reorganization committee.
2004-current – Students' Admissions and Affairs Committee, Physiology and Biophysics.
2004-current – Henry J. Russek Students' Achievement Day Committee, BUSM, department representative.
2005 – Internal Advisory Committee, NIH Program Project, Amyloid Treatment & Research Program, BUSM (Dr. Martha Skinner, Program Director).
2005-2010 – MD / PhD Admissions Committee, Boston University School of Medicine.
2006 – External advisor, NIH Program Project, U. of Alabama at Birmingham, Atherosclerosis Unit.
2008-current – Faculty Recruitment and Promotions Committee, Department of Physiology and Biophysics.
2008 – Inquiry Committee for Academic Misconduct, General Medical Sciences, BUSM.
2009-current – Faculty Facilitator - Responsible Conduct of Research, General Medical Sciences, BUSM.
2002-2012 – Cell and Molecular Biology program, BUSM, faculty member.
2008-2010 – Training Research and Advisory Committee (TRAC), T32, Boston University.
2010-current – Committee on Space Reorganization, Department of Physiology and Biophysics.
2013–current – Faculty forum, BUSM.
2013-2014 – Committee for copyright infringement, BUSM.
2014-current – Graduate Medical Sciences, admissions committee.

Teaching

- 1980-1985 *Magnet High School #57 for Math & Sciences, Moscow, USSR.* Taught advanced placement courses in Calculus, Molecular Physics, Mechanics, Thermodynamics, Electromagnetism.
- 1982-1986 *Moscow State University, Moscow USSR*
Conducted National Competitions in Math and Physics for 200+ high school students
- 1988 Taught group lessons in **English as a Second Language** at a refugee camp for Jewish immigrants from the Soviet block; Rome and Ladispoli, Italy.
- 1997-current *Department of Physiology and Biophysics, Boston University School of Medicine*
Foundations of Biophysics and Structural Biology, GMS BY 760
Developed curriculum and taught a block on Protein Thermodynamics and Spectroscopy in a core graduate course in the department.
1997: *six 2h lectures + 12h laboratory sessions (6 credit course) 18 students*
2000-current: *six 2h lectures (4-credit course) 5-12 students, annual teaching.*
- 2001–current *Department of Physiology and Biophysics, Boston University School of Medicine*
Special Topics Students Seminar, GMS BY 872.
Faculty facilitator / coordinator in a 2-credit graduate course for 1st and 2nd-year students
*Teach one semester biannually, 12 * 1 - 1 ½ h seminars, 6-14 graduate students.*
- 2011-current *Division of Graduate Medical Sciences (GMS), Boston University School of Medicine*
Foundations in Biological Sciences (FIBS) core graduate course, GMS FC 701
Module 1: Protein Structure. Block on protein folding, stability and ligand binding.
Teach annually four 2h lectures, 30-45 graduate students.
- 1999-2000 **Biophysics Departmental Seminar, GMS BY 871.** Faculty coordinator
- 2008-2009 Organized ~20 1 hr seminars by invited speakers. Organized Students' Seminar Days.
- 2006–current **“Publish or Perish: Writing a Research Paper”.** 2 hr interactive lecture for PhD students and postdocs, which is a part of a Professional Development course at the Division of the Graduate Medical Sciences, Boston University School of Medicine
- 2007-current **Responsible Conduct of Research (RCR),** faculty facilitator
NIH-mandated four-unit annual course for all graduate students and postdocs at BU.
- 2005 -current **Minority students involvement:** Organized and hosted a delegation of 40 undergraduate students in Science and Engineering from Mexico City, Mexico.
Directed lab rotations and provided academic support for two URM graduate students.
- 2014 **Advanced Protein Thermodynamics** 8 hr course for advanced PhD students, Department of Chemistry, Indian Institute of Technology (IIT) Bombay; Invited visiting professor, March 1-31.

Editorial Board

- 2006-current Journal of Lipid Research, **Editorial Board member.**
- 2014-current Frontiers in Biomedical Sciences – Intrinsically Disordered Proteins, **Review Editor.**

Journal Manuscript Reviews

- Amyloid
- Analytical Biochemistry
- Biochemistry
- Biochem. J. *Advisory Panel*
- Biomacromolecules
- BioMedCentral Biochemistry
- Biomolec. Struct. Dynamics
- Biophysical Journal
- BBA – Proteins & Proteomics
- BBA – Biomembranes
- BBA – General subjects
- Bioorganic Med. Chem. Let.
- Biopolymers
- Biotechnology Progress
- Chem. Phys. Lipids
- EMBO Journal
- FEBS Letters
- FEBS Journal
- Frontiers in Bioscience
Reviewer Editor
- Intern. J. Bio. Macromol.
- Int. J. Biomacromol. (IJBM)
- J. Amer. Chem. Soc. (JACS)
- J. Biol. Chem. (JBC)
- J. Chem. Thermodynamics
- J. Liquid Chromatography
- J. Mol. Biol. (JMB)
- J. Phys. Chem.
- J. Photochem. Photobiol.
- Langmuir
- Lipids
- Nature
- Nature Structural Biology
- Nature Protocols
- Phys. Chem. Lipids
- PLoS One (*Advisory Panel*)
- Protein Science
- Proteins: Structure Function Genetics
- Structure, etc.

Professional Societies Memberships and Committee Assignments

1992-1999	American Crystallographic Association
1992-2000	Biophysical Society
1998-2003	American Association for the Advancement of Science
1998-2009	Protein Society
1998-current	American Heart Association, elected Fellow of the Atherosclerosis Council (FAHA).
1999	American Chemical Society, Focus Group on use of Internet in academia.
2003-2011	American Chemical Society.
2003-current	American Society for Biochemistry and Molecular Biology (ASBMB)

Study Sections

2002-	NIH, Biophysics and Biophysical Chemistry (BBCB) study section.	Peer reviewer, ad hoc
2008-2013	American Heart Association, Basic Cell Molec. Biology.	Peer reviewer
2011-	NSF, Molec. Cell. Biosciences, Biophysical Chemistry Program	Peer reviewer
2012	NSF, Symbiosis, Defense and Self-Recognition Program.	Peer reviewer
2012	NIH, Lipid Metabolism Special emphasis paned (SEP).	Peer reviewer, ad hoc
2013	NIH, Biophysics of Biological Membranes (BBM) study section	Peer reviewer, ad hoc
2104	NIH, ZRG1 BSMB-P IAR review panel	Peer reviewer
2014–current	NIH, Biophysics of Biological Membranes (BBM) study section	Study section member

Other Grant Reviews

2004-2008	Alzheimer's Research Foundation	Peer reviewer
2004-	American Chemical Society, Petroleum Research Grant.	Peer reviewer
2004-2005	Sealy Research Foundation, U. Texas Galveston Medical Center	Peer reviewer
2005-2006	Arizona Disease Control Research Commission	National reviewer
2007-current	Austrian Science Fund (FWF)	International reviewer
2008-current	North Carolina Biotechnology Center, Institutional Development Grant Program	Out-of-state reviewer
2011-current	Marsden Fund for Fundamental Research, New Zealand	International reviewer
2013	Material Research Council (MRC), United Kingdom	International peer reviewer
2014	Research Corporation for Science Advancement	Peer reviewer

Current Research Support

- **RO1 GM067260** Gursky O. **P. I.** NIH / NIGMS Funding dates: 9/1/ 2013 – 6/30/ 2017
Direct costs: \$231,000 per year for four years
“Structural stability and functional remodeling of high-density lipoproteins”.

- **RO1 HL116518** (Atkinson D. PI; Gursky O. **Co-PI**) 01/08/2014–06/30//2018
NHLBI “Apolipoprotein A-1 and HDL: Structure, Formation and Function”

The goals of this project are to obtain atomic crystal structures of the C-terminally extended apolipoprotein A-I and to analyze its function in HDL biogenesis and maturation.

- **Marie Curie International Outgoing Fellowship, European Union** 08/01/2014 - 07/31/2017
Proposal # 628077 STAMYEV FP7-PEOPLE-2013-IOF (Morgado I. PI; Gursky O. **Host Faculty**)
“Structural and biochemical basis of protein amyloid evolution”

This 3Y International Award provides 100% salary and supplies for Dr. Isabel Morgado to work for two

years as a postdoc in the Gursky laboratory. Dr. Morgado's research will address the misfolding of fish transthyretins (TTR) and of human apoA-I variants. During the third year (return phase), Dr. Morgado will establish her own laboratory at the Center of Marine Biology, University of Algarve, Portugal.

Collaboration of Drs. Morgado and Gursky on the mechanisms of amyloid formation will be mutually beneficial. The Gursky laboratory will not receive any funding from this award.

Pending research support

- RO1 NIGMS 11655353 (Gursky O., **P. I.**) (Pending scientific review)
NIGMS "Molecular Basis for Apolipoprotein Misfolding in Amyloid Diseases"

Recently completed support

Continuous research funding since 1996. Continuous NIH funding since 1998.

Total past research awards (posted on enGrant.com): NIH: >\$4,500,000 AHA: \$80,000

- 8/2009-6/30/2012 2RO1 GM067260 (ARRA)
"Structural stability and fusion of high and very low density lipoproteins."
O. Gursky, **P.I.** Total award: \$701,125
- 2/1/2006-1/31/2012 PO1 HL26335-30 "Structural and Cell Biology in Cardiovascular Disease" NHLBI
David Atkinson, Program Director.
O. Gursky, **Project 1 Leader, Project 3 co-PI, Core B co-director** (Biophysical Instrumentation).
Project 1: "Energetics-Structure-Function Relationship in Lipoproteins" Total Project 1: \$1,390,643
Project 1 received fundable score in A0 and A1 renewal; however, the Program was not funded.
- NSF, Molecular and Cellular Biosciences, Research Award #0950331 Roberts, Mary F., P.I.
Gursky O., Collaborator Funding dates: 12/1009- 1/2014
"High Resolution Field Cycling NMR Spectroscopy as a Probe of Phospholipid Dynamics"

Past Support

- 2012-2015 T32GM095422-01 "Molecular Biophysics and Structural Biology" Training Grant NIGMS
C. W. Akey, Program Director; O. Gursky, **Co-Director** (Not funded)
- 12/2002-11/2006 R01 GM067260 "Structural Thermodynamics of Human Apolipoprotein C-I" NIGMS
O. Gursky, **P.I.** (Bridge funding through 5/30/2008) Total award: \$1,223,591
- 2002-2003 SIG PAR-01-034 "Macromolecular Crystallography Data Collection Instrument" NIH/NCRR H-C.
Guo, P.I.; O. Gursky, **Co-P.I.** Total direct costs: \$465,000
- 7/2002-6/2007 5T32 HL07291-21 TG "Structural and Cell Biology in Cardiovascular Disease" NHLBI C.W.
Akey, Program Director; O. Gursky, **Co-P.I.** Total direct costs: ~\$800,000
- 1/2001-12/2005 5PO1 HL26335-21 "Structural and Cell Biology in Cardiovascular Disease" NHLBI
Project 3 'Lipoprotein Structure and Apolipoprotein Conformation' D.
Atkinson, Project 3 Leader; O. Gursky, **Co-P.I.** Total direct costs: ~\$7,000,000
- 12/1998-11/2002 R29 HL61429-04 NHLBI "Structural Thermodynamics of Human Apolipoprotein C-1" O.
Gursky, **P.I.** Total award: \$350,000
- 1996-1998 Grant-in-Aid #13-512-956, American Heart Association
"Structural and Thermodynamic Studies of the Exchangeable Apolipoproteins A-1 and A-2"
O. Gursky, **P.I.** Total award: \$80,000
- 1993 Yong Investigator Travel Award ASBMB / Biophysical Society
11th International Biophysics Congress, Budapest. O. Gursky, **P.I.** Total award: \$1,500.

Student and Postdoctoral Supervision and Mentoring

2001 -	Research Rotation,	<u>Xiaofeng Qian</u>	PhD student, Physiology & Biophysics
2001 – 2002	Research Advisor, Current position:	<u>Dr. Ranjana Mehta</u>	Postdoctoral research associate Research Faculty, U. Washington, Seattle
2002 -	Research Rotation,	<u>Bo Zhou</u>	PhD student, Physiology & Biophysics
2002 -	Research Director, Current position:	<u>Anya Salganik</u>	Undergraduate summer student MD from Columbia U., Pediatric residency.
2002 – 2003	Research Rotation	<u>Sangeeta Benjiwal</u>	Ph. D. student, Physiology & Biophysics Postdoctoral research associate (2007-08) Scientist, Genzyme / Sanofi, Boston MA
2003 – 2007	Research Advisor		
2007 – 2008	Research Advisor Current position:		
2003 -	Research Rotation	<u>Jennifer Chiu</u>	MD/PhD student
2003 -	Research Rotation	<u>Chenghua Shao</u>	PhD student, Physiology & Biophysics
2003 – current	Research Advisor	<u>Shobini Jayaraman, PhD</u>	Research Biophysicist
2003-2004	Research Director Current position:	<u>Shikha Verma</u>	Exchange Ph.D. student, U. Marburg, Germany Scientist, Enzon Pharmaceuticals, NJ
2003 -	Research Rotation	<u>Shujun Yuan</u>	PhD student, Physiology & Biophysics
2004 -	Research Rotation	<u>Su Xu</u>	PhD student, Physiology & Biophysics
2004 -	Research Rotation	<u>Madhumita Guha</u>	PhD student (2004-2009)
2004 – 2010	Research Advisor Current position:		Postdoctoral research associate (2009-2010) Lecturer, Quincy Community College, MA
2005 -	Research Rotation	<u>Jeremiah Farelli</u>	PhD student, CMB program
2005 -	Research Rotation	<u>Paul Shao</u>	PhD student, Physiology & Biophysics
2005 -	Research Rotation,	<u>Xuan Gao</u>	PhD student (2005-2009)
2005 - 2011	Research Advisor Current position		Postdoctoral research associate (2010-2011) Scientist, Genentech Inc., San Francisco, CA
2006 -	Research Rotation	<u>Lorenzo Finci</u>	PhD student, Physiology & Biophysics
2007 -	Research Rotation	<u>Allison Koch</u>	PhD student, CMB program
2008	Research director Current position	<u>David Plotkin</u>	Undergraduate summer student PhD student, MIT / U. Chicago
2008 -	Research Rotation	<u>Zhenke Liu</u>	PhD student, Physiology & Biophysics
2008 -	Research Rotation	<u>N. Lucian Sandor</u>	PhD student, CMB program
2009 -	Research Rotation	<u>Mengxiao Lu</u>	PhD student, Physiology & Biophysics
2009-2014	Research Advisor Current position		Scientist, Bristol Myers Squibb
2010	Research Rotation	<u>Nathan Meyers</u>	PhD student, Physiology & Biophysics
2011	Research Rotation	<u>Minjing Liu</u>	PhD student, Physiology & Biophysics
2011	UROP research	<u>Sherry Prasad</u>	Undergrad. student, accelerated MD program
2011	Research rotation	<u>Melyorise Sepulveda</u>	PhD student, Physiology & Biophysics
2012	Research rotation	<u>Madhurima Das</u>	PhD student, Physiology & Biophysics
2012-current	Research Advisor		
2013	Research so-director with Dr. Herscovitz	<u>Cyrus Colah</u>	High school summer student, RISE program Research in Science and Engineering, BU
2013-2014	Research co-director	<u>Hsiang-Wei Kevin Ma</u>	UROP undergraduate, BU Bioengineering

2014	Research rotation	<u>Ruohong Yao</u>	PhD student, PIBS program, BU GMS
2014	Research Director	<u>Dr. Anna Rull</u>	International Postdoc in Cardiovascular Biochemistry, Biomedical Research Institute Sant Pau, Barcelona, Spain.
2014	Research co-director with Dr. Herscovitz	<u>Eric Chaykovsky</u>	High school summer student, RISE program Research in Science and Engineering, BU
2014-2016	Host Faculty / Mentor	<u>Dr. Isabel Morgado</u>	International Postdoc, Univ. Algalve, Portugal Marie Curie Fellowship, European Union Fellow-to-Faculty transition award winner.

Other Professional Activities

2011 - current – International PhD Thesis Reviewer for

Indian Institute of Technology (IIT) Bombay – Departments of Chemistry and Biotechnology;
Puni University, Department of Chemistry – Biochemistry.

2014–Visiting Professor, Department of Chemistry, Indian Institute of Technology (IIT) Bombay, Mumbai, India.

Books *in preparation for publication in 2015* (double peer-reviewed and listed on PubMed)

“**Lipids in Protein Misfolding**”, *Subcellular Biochemistry*, Springer LTD.

O. Gursky, Volume editor; R. Harris, Series editor.

Additional Students Involvement

Served on PhD Thesis Advisory and Defense Committees for over 30 students

Served on nine PhD Qualifying Exam Committees for over 30 students

1. Bin Lu	1998	Ph.D. Thesis Defense Committee,	Biophysics
2. Connie Chung	1998	Qualifying Examination Committee,	Biophysics
3. Benjamin Frank	1998	Qualifying Examination Committee,	Biophysics
	1999	Dissertation Advisory Committee	
	2000	Dissertation Advisory Committee	
	2001	Ph. D. in Biophysics – Thesis Defense Committee	
4. Yang Chao	1998	Dissertation Advisory Committee	Biophysics
	2000	Dissertation Advisory Committee	
	2002	Ph. D. in Biophysics – Thesis Defense Committee	<u>(2nd reader)</u>
5. Yiling Fang	1998	Qualifying Examination Committee,	Biophysics
	2000	Dissertation Advisory Committee	
	2001	Dissertation Advisory Committee	
	2002	Ph. D. in Biophysics – Thesis Defense Committee	<u>(2nd reader)</u>
6. Zhenghui Jiang	2002	Qualifying Examination Committee,	Physiology & Biophysics
7. Jianmin Meng	2002	Qualifying Examination Committee,	Physiology & Biophysics
	2003	Dissertation Advisory Committee	
	2004	Dissertation Advisory Committee	
	2005	Dissertation Advisory Committee	
	2006	Ph.D. Thesis Defense Committee	<u>(2nd reader)</u>
8. Xiaofeng Qian	2002	Qualifying Examination Committee,	Physiology & Biophysics
	2006	Dissertation Advisory Committee	
	2006	Ph. D. Thesis Defense Committee	
9. Jeremy Wally	2002	Qualifying Examination Committee,	Physiology & Biophysics
10. Yeming Wang	2002	Qualifying Examination Committee,	Physiology & Biophysics
	2003	Dissertation Advisory Committee	
	2004	Dissertation Advisory Committee	
	2005	Ph.D. Thesis Defense Committee	
11. Meng Chiao Ho	2003	Qualifying Examination Committee,	Physiology & Biophysics
12. Xiaozheng Li	2003	Qualifying Examination Committee,	Physiology & Biophysics
	2005	Dissertation Advisory Committee	
	2006	Dissertation Advisory Committee	
	2007	Ph.D. Thesis Defense Committee	<u>(Chair)</u>
13. Ye Quiao	2003	Qualifying Examination Committee,	Physiology & Biophysics
14. Xinchao Yu	2003	Qualifying Examination Committee,	Physiology & Biophysics
	2004	Dissertation Advisory Committee	
	2005	Dissertation Advisory Committee	
	2006	Ph.D. Thesis Defense Committee	<u>(Chair)</u>
15. Madhu Sharma	2003	Dissertation Advisory Committee	Physiology & Biophysics
	2004	Dissertation Advisory Committee	
	2005	Ph.D. Thesis Defense Committee	
16. Suchismita Raychaudhury	2003	Dissertation Advisory Committee,	Physiology & Biophysics
	2004	Dissertation Advisory Committee	

	2005	Ph.D. Thesis Defense Committee	(<u>Chair</u>)
17. Hongli Zhu	2003	Dissertation Advisory Committee	Physiology & Biophysics
	2004	Dissertation Advisory Committee	
	2005	Dissertation Advisory Committee	
	2005	Ph.D. Thesis Defense Committee	
18. Dong Luo	2004	Dissertation Advisory Committee	
	2005	Dissertation Advisory Committee	
	2008	Ph.D. Thesis Defense Committee	
19. Lin Chen	2004	Qualifying Examination Committee,	Physiology & Biophysics
20. Feifei Shang	2004	Qualifying Examination Committee,	Physiology & Biophysics
21. Sangeeta Benjwal	2005	Dissertation Advisory Committee,	Physiology & Biophysics
	2006	Dissertation Advisory Committee	
	2007	Ph.D. Thesis Defense Committee	(<u>Major Advisor, 1st reader</u>)
22. Chenghua Shao	2004	Qualifying Examination Committee,	Physiology & Biophysics
	2005	Dissertation Advisory Committee	
	2006	Dissertation Advisory Committee	
	2007	Ph.D. Thesis Defense Committee	
23. Hua Wang	2004	Qualifying Examination Committee,	Physiology & Biophysics
	2006	Dissertation Advisory Committee	
	2007	Dissertation Advisory Committee	
	2008	Dissertation Advisory Committee	
	2008	PhD Thesis Defense Committee	
24. Lekai Zhang	2004	Qualifying Examination Committee,	Physiology & Biophysics
	2005	Dissertation Advisory Committee	
25. Yang Liu	2004	Qualifying Examination Committee,	Physiology & Biophysics
	2005	Dissertation Advisory Committee	
	2007	Dissertation Advisory Committee	
	2008	PhD Thesis Exam Committee	(<u>2nd reader</u>)
26. Manashi Sherwat	2004	Qualifying Examination Committee,	Physiology & Biophysics
27. Lee Tremblay	2004	Qualifying Examination Committee,	
	2006	Dissertation Advisory Committee	
	2007	Ph.D. Thesis Defense Committee	
28. Alkystis Phinikaridou	2005	Qualifying Examination Committee,	Physiology & Biophysics
29. Xiaohu Mei	2005	Qualifying Examination Committee,	Physiology & Biophysics
30. Su Xu	2005	Qualifying Examination Committee,	Physiology & Biophysics
31. Yuhang Liu	2006	Qualifying Examination Committee,	Physiology & Biophysics
32. Paul Shao	2006	Qualifying Examination Committee,	Physiology & Biophysics
33. Jeff Brown	2006	Qualifying Examination Committee,	Physiology & Biophysics
34. Henry Nguen	2006	Qualifying Examination Committee,	Physiology & Biophysics
35. Shujun Yuan	2006	Dissertation Advisory Committee	Physiology & Biophysics
	2008	Dissertation Advisory Committee	
	2009	Ph.D. Thesis Defense Committee	
36. Madhumita Guha	2007	Dissertation Advisory Committee	
	2008	Dissertation Advisory Committee	(<u>Major Advisor, 1st reader</u>)
	2009	Ph.D. Thesis Defense Committee	

37. Ming Yang Proschitsky	2007 2008 2009 2010	Dissertation Advisory Committee Dissertation Advisory Committee Dissertation Advisory Committee Ph.D. Thesis Defense Committee	(Chair)
38. Michael Greenberg	2007 2008 2009 2010	Dissertation Advisory Committee Dissertation Advisory Committee Dissertation Advisory Committee Ph. D. Thesis Defense Committee	
39. Xuan Gao	2008 2009 2010	Dissertation Advisory Committee Dissertation Advisory Committee Ph. D. Thesis Defense Committee	(<u>Major Advisor, 1st reader</u>)
40. Laura Packer	2009 2009 2010 2011	Dissertation Advisory Committee Dissertation Advisory Committee Dissertation Advisory Committee Ph D Thesis Defense Committee	(2 nd reader)
41. Meimei Wen	2010 2011 2012 2013	Dissertation Advisory Committee Dissertation Advisory Committee Dissertation Advisory Committee PhD Defense committee	(Chair)
42. Mengxiao Lu	2011 2012 2014	Dissertation Advisory Committee Dissertation Advisory Committee PhD Thesis Defense committee	(<u>Major Advisor, 1st reader</u>)
43. Anastasia Karabina	2011 2012 2013 2014	Dissertation Advisory Committee Dissertation Advisory Committee Dissertation Advisory Committee Dissertation Advisory Committee	
44. Justin Berry	2012	Qualifying Examination Committee, Physiology & Biophysics	
45. Minjing Liu	2012	Qualifying Examination Committee, Physiology & Biophysics	
46. Christna Ouch	2012	Qualifying Examination Committee, Physiology & Biophysics	
47. Nathan Meyers	2012 2012 2013	Qualifying Examination Committee, Physiology & Biophysics Dissertation Advisory Committee Dissertation Advisory Committee	
48. Yang Wei	2013	PhD Defense committee, Department of Chemistry, Boston College	External committee member
49. Erin Bove- Fenderson	2013	Dissertation Advisory Committee	Biochemistry Dept., BUSM External committee member
50. Madhurima Das	2013	Dissertation Advisory Committee	(<u>Major Advisor, 1st reader</u>)
51. Andrew Bogorad	2013 2014	Dissertation Advisory Committee Dissertation Advisory Committee	

Bibliography

(Does not include publications in Russian)

Original Peer-Reviewed Articles and Reviews

1. Das M., Gursky O. (2015) Amyloid-Forming Properties of Human Apolipoproteins: Sequence Analyses and Structural Insights. *Subcell. Biochemistry* (in press).
2. Das M., Jayaraman S., Mei X., Atkinson D., Gursky O. (2014) Amyloidogenic mutations in human apolipoprotein A-I are not necessarily destabilizing: A common mechanism of apoA-I misfolding in familial amyloidosis and atherosclerosis. *FEBS J.* 281(11):2525-2542, PMID: 24702826, PMC4047191. (Highlighted on the **front cover of FEBS Journal**).
3. Gursky O. (2014) Hot spots in protein misfolding and apolipoprotein A-II amyloidosis in mice and men. *FEBS Letters* 588(6):845-850. PMID: 24561203, PMC3979420.
4. Gursky O., Jones M., Mei X., Segrest J., Atkinson D. (2013) Structural basis for distinct functions of the naturally occurring Cys-containing mutants of human apolipoprotein A-I. *J. Lipid Res.* 54(12):3244-3257. PMID: 24038317, PMC3826673.
5. Lu M., Gursky O. (2013) Aggregation and fusion of low-density lipoproteins in vivo and in vitro. (2013) *J. BioMol. Concepts*, 4: 501–518. PMCID: PMC4154560, doi: 10.1515/bmc-2013-0016
6. Meyers, N. L., Wang, L., Gursky O., Small, D. M. (2013) Changes in helical content or net charge of apolipoprotein C-I alter its affinity for lipid/water interfaces. *J. Lipid Res.* 54(7):1927-1938. PMID: 23670531. PMC3679394.
7. Gursky O. (2013) Crystal structure of $\Delta(185-243)$ apoA-I suggests a mechanistic framework for the protein adaptation to the changing lipid load in Good Cholesterol. From Flatland to Sphereland via Double Belt, Belt-Buckle, Double Hairpin and Trefoil / Tetrafoil. *J. Mol. Biol.* 425: 1-16. PMID: 23041415, PMC3534807.
8. Lu M., Gantz D. L., Herscovitz, H., and Gursky O. (2012) Kinetic Analysis of Thermal Stability of Human Low-Density Lipoproteins: Model for LDL Fusion in Atherogenesis. *J. Lipid Res.* 53: 2175-2185. PMID: 22855737 PMC3435550 (Free PMC article).
9. Gao X., Yuan S., Jayaraman S., and Gursky O. (2012) Effect of apolipoprotein A-II on the structure and stability of human high-density lipoprotein: Implications for the role of apoA-II in HDL metabolism. *Biochemistry* 51(23), pp 4633–4641. PMID: 22631438; PMCID in process.
10. Gursky O., Mei X., Atkinson D. (2012) Crystal structure of the C-terminal truncated apolipoprotein A-I sheds new light on the amyloid formation by the N-terminal segment. *Biochemistry* 51(1):10-8. PMID: 22229410, PMCID in process.
11. Jayaraman S., Cavigliolo G., Gursky O. (2012) Folded functional lipid-poor apolipoprotein A-I obtained by heating of high-density lipoproteins: Relevance to HDL biogenesis *Biochem. J.* 15;442(3):703-12. PMID: 22150513, PMCID in process.
12. Jayaraman S., Jasuja R., Zakharov M., Gursky O. (2011) Pressure perturbation calorimetry of lipoproteins reveals an endothermic transition without detectable volume changes: Implications for apolipoprotein adsorption to phospholipid surface. *Biochemistry* 50(19):3919-3927. PMID: 21452855, PMCID in process.
13. Guha M., Gursky O. (2011) Human plasma very low-density lipoproteins are stabilized by electrostatic interactions and destabilized by acidic pH. *J. Lipids, Special Issue: Lipids and Lipoproteins in Atherosclerosis*, 2011:493720 (Open access journal) PMID: 21773050 PMCID in process
14. Jayaraman S., Gantz D.L., Gursky O. (2011) Effects of phospholipase A2 and its products on structural stability of human low-density lipoprotein: Relevance to formation of LDL-derived lipid droplets. *J Lipid Res.* 52(3):549-557. PMID: 21220788, PMCID: PMC3035691.
15. Klimtchuk E.S., Gursky O., Patel R.S., Laporte K.L., Connors L.H., Skinner M., Seldin D.C. (2010) The critical role of the constant region in thermal stability and aggregation of immunoglobulin light chain. *Biochemistry* 49(45):9848-9857. PMID: 20936823 (PMCID in process).
16. Guha M., Gursky O. (2010) Effects of oxidation on structural stability and remodeling of human plasma very low-density lipoprotein. *Biochemistry* 49 (44): 9584–9593. PMID: 20919745.

17. Benjwal S., Gursky O. (2010) Pressure perturbation calorimetry of apolipoproteins in solution and in model lipoproteins. *Proteins*. 78(5): 1175-1185. PMID: 19927327. PMCID: PMC2822151.
18. Jayaraman S., Benjwal S., Gantz D. L., Gursky O. (2010) Effects of cholesterol on thermal stability of discoidal high-density lipoproteins. *J. Lipid Res.* 51(2): 324-333. PMID: 19700415. PMCID: PMC2803234
19. Gao X, Yuan, S., Jayaraman, S., Gursky O. (2009) Differential stability of high-density lipoprotein subclasses: Effects of particle size and protein composition. *J. Mol. Biol.* 387(3): 628-638. PMID: 19236880, PMC2706704.
20. Guha M., Gao X., Jayaraman, S., Gursky O. (2008) Structural stability and functional remodeling of high-density lipoproteins: The importance of being disordered. *Biochemistry* 47(44): 11393–11397.
21. Guha M., Gantz D.L., Gursky O. (2008) Effect of fatty acyl chain length, unsaturation and pH on the stability of discoidal high-density lipoproteins. *J. Lipid Res.* 49(8): 1752-1761.
22. Jayaraman S., Gantz, D.L., Gursky O. (2008) Effects of protein oxidation on the structure and stability of model discoidal high-density lipoproteins. *Biochemistry* 47(12): 3875-3882.
23. Gao X., Jayaraman S., Gursky O. (2008) Mild oxidation promotes and advanced oxidation prevents protein dissociation and remodeling of human plasma high-density lipoprotein *in vitro*. *J. Mol. Biol.* 376(4): 997-1007.
24. Guha M., England C.O., Herscovitz H., Gursky O. (2007) Thermal transitions in human very low-density lipoprotein: Fusion, rupture and dissociation of HDL-like particles. *Biochemistry* 46(20): 6043-6049.
25. Jayaraman S., Gantz, D.L., Gursky O. (2007) Effects of oxidation on the structure and stability of human low-density lipoprotein. *Biochemistry* 46(19): 5790-5797.
26. Benjwal S., Jayaraman S., Gursky O. (2007) Role of secondary structure in protein-phospholipid surface interactions: reconstitution and denaturation of apolipoprotein C-I:DMPC complexes. *Biochemistry* 46(13): 4184-4194.
27. Gursky O. (2007) Does α -helix folding necessarily provide an energy source for the lipid binding? *Protein Peptide Letters* 14(2): 171-174.
28. Jayaraman S., Gantz D.L., Gursky O. (2006) Effects of salt on thermal stability of human plasma high-density lipoproteins. *Biochemistry* 45: 4620-4628.
29. Benjwal S., Verma S., Röhm K. H., Gursky O. (2006) Monitoring protein aggregation during thermal unfolding in circular dichroism experiments *Protein Science* 15: 635-639.
30. Benjwal S., Jayaraman S. Gursky O. (2005) Electrostatic effects on the kinetic stability of model discoidal high-density lipoproteins. *Biochemistry* 44:10218-10226.
31. Gursky O. (2005) Apolipoprotein structure and dynamics. *Curr. Opin. Lipidol.* 16(3): 287-294.
32. Chung C. M., Chiu J. D., Connors L. H., Gursky O., Lim A., Dykstra A. B., Liepnieks J., Benson M.D., Costello C. E., Skinner M., and Walsh M. T. (2005) Thermodynamic Stability of a κ_1 Immunoglobulin Light Chain: Relevance to Multiple Myeloma. *Biophys. J.* 88: 4232-4242.
33. Jayaraman S., Gantz D.L., Gursky O. (2005) Kinetic stabilization and fusion of discoidal lipoproteins containing human apoA-2 and DMPC: Comparison with apoA-1 and apoC-1. *Biophys. J.* 88: 2907-2918.
34. Jayaraman S., Gantz D.L., Gursky O. (2005) Structural basis for thermal stability of human low-density lipoprotein. *Biochemistry* 44(10): 3965-3971.
35. Jayaraman S., Gantz D.L., Gursky O. (2004) Poly(ethylene glycol)-induced fusion and destabilization of human high-density lipoproteins. *Biochemistry* 43: 5520-5531.
36. Mehta R., Gantz D. L., Gursky O. (2003) Effects of mutations on the reconstitution and kinetic stability of discoidal lipoproteins. *Biochemistry* 42: 4751-4758.
37. Fang Y., Gursky O., Atkinson D. (2003) Lipid binding studies of human apolipoprotein A-1 and its terminally truncated mutants. *Biochemistry* 42(45): 13260-13268.
38. Fang Y., Gursky O., Atkinson D. (2003) Effects of the N- and C-terminal deletions on the structure and stability of human apolipoprotein A-1. *Biochemistry* 42(22): 6881-6890.
39. Mehta R., Gantz D. L., Gursky O. (2003) Human plasma high-density lipoproteins are stabilized by kinetic factors *J. Mol. Biol.* 328(1): 183-192.

40. Gursky O., Ranjana, Gantz D. L. (2002) Complex of human apolipoprotein C-1 with phospholipid: Thermodynamic or kinetic stability? *Biochemistry* 41: 7373-7384.
41. Gursky O. 2001. Solution conformation of human apolipoprotein C-1 inferred from Pro mutagenesis: Far- and near-UV CD study. *Biochemistry* 40: 12178-12185.
42. Gorshkova I. N., Liadaki K., Gursky O., Atkinson D., Zannis V. I. (2000) Probing the solution structure of apolipoprotein A-1 by mutations, circular dichroism, and fluorescence spectroscopy, *Biochemistry* 39(51): 15910-15919.
43. Gursky O., Aleshkov S. (2000) Temperature-dependent β -sheet formation in Alzheimer's amyloid A β_{1-40} peptide: Uncoupling β -structure folding from aggregation. *Biochim. Biophys. Acta - Protein Structure & Enzymol.* 1436(1): 93-102.
44. Gursky O. (1999) Probing the conformation of human apolipoprotein C-1 by point mutations and trimethylamine-N-oxide. *Protein Science* 8(10): 2055-2064.
45. Gursky O., Atkinson D. (1998) Thermodynamic analysis of human plasma apolipoprotein C-1: High-temperature unfolding and low-temperature oligomer dissociation. *Biochemistry* 37(5): 1283-1291.
46. Gursky O., Atkinson D. (1996) High- and low-temperature unfolding of human high-density apolipoprotein A-2. *Protein Science* 5 (9): 1874-1882.
47. Gursky O., Atkinson D. (1996) Thermal unfolding of human high-density apolipoprotein A-1: Implications for a lipid-free molten globular state. *Proc. Natl. Acad. Sci. USA* 93: 2991-2995.
48. Gursky O., Fontano E., Bhyravbhatla B., Caspar D. L. D. (1994) Stereospecific dihaloalkane binding in a pH-sensitive cavity in cubic insulin crystals. *Proc. Natl. Acad. Sci. USA* 91: 12388-12392.
49. Badger J., Kapulsky A., Gursky O., Bhyravbhatla B., Caspar D. L. D. (1994) Structure and selectivity of a monovalent cation binding site in cubic insulin. *Biophys. J.* 66: 286-292.
50. Gursky O., Badger J., Li Y., Caspar D. L. D. (1992) Conformational changes in cubic insulin crystals in the pH range 7-11. *Biophys. J.* 63: 1210-1220.
51. Gursky O., Y. Li, J. Badger, D. L. D. Caspar. (1992) Monovalent cation binding to cubic insulin crystals. *Biophys. J.* 61: 604-611. (Highlighted on the **front cover of *Biophysical Journal***).
52. Lvov Yu. M., Gurskaja O. B., Berzina T. S., Troitsky V. I. (1989) Structure of Langmuir-Blodgett superlattices with alternative bilayers of barium behenate, phtalocyanine, and octadecyl ethylene phenol. *Thin Solid Films* 182: 283-296.
53. Lvov Yu. M., Gurskaya O. B. (1989) Investigation of Langmuir-Blodgett films by the methods of X-ray small-angle diffractometry and reflectometry. *Sov. Phys. Crystallography* 34(5): 749-752.

Articles submitted or in preparation

54. Rull A., Jayaraman S., Lu M., Sanchez-Quesada J-L, Gursky O. Structural stability and fusion of electronegative LDL. (*In preparation*).
55. Wilson C., Das M., Wales T., Engen J., Gursky O. Global stability and local structure and dynamics in human lipid-free apolipoprotein A-I variants: What makes a point mutation amyloidogenic? (*In prep.*)
56. Lu M., Gursky O. Methods for safe cryopreservation of human plasma lipoproteins. (*In prep.*)

Peer-Reviewed Book Chapters

1. Gao X., Jayaraman S., Guha M., Wally J., Lu M., Atkinson D., and Gursky O. 2012. Application of Circular Dichroism to Lipoproteins: Structure, Stability and Remodeling of Good and Bad Cholesterol. Chapter 4. *In: Circular Dichroism: Theory and Spectroscopy*, D.S. Rogers, Edt. Nova Publishers pp. 175-215 (open access).
2. Gursky O. 2002. Energetic-structure-function of lipoproteins and their protein components. *In: Recent research developments in proteins*, S.G. Pandalai, edt., Transworld Res. Network, Vol. 1, pp. 97-121.
3. Badger J., Gursky O., and Caspar D. L. D. 1994. Electrostatic interactions and conformational variability in cubic insulin crystals. *In: Synchrotron radiation in the Biosciences*, B. Chance et al, edt. Clarendon Press, pp. 43-51.

4. Gurskaya O. B. and Novikova S. I. 1985. Reproducibility of absolute pressure in argon sublimation. *In: Advances in Pressure Measurements, Institute of Metrology / National Ministry of Standards*, pp. 28-37.
5. Gurskaya O. B. 1985. Analytical approximation of the pressure-temperature sublimation of argon. *In: Advances in Pressure Measurements, Institute of Metrology / National Ministry of Standards*, pp. 38-42.

Ph.D. Dissertations

- Lu, Mengxiao. Molecular mechanism of aggregation and fusion of human low-density lipoproteins. Department of Physiology and Biophysics, Boston University School of Medicine. Defense date: 1/30/2014.
- Gao, Xuan. Effects of oxidation, particle size and protein composition on structure and stability of high-density lipoproteins. Department of Physiology and Biophysics, Boston University School of Medicine. Defense date: 1/29/2010.
- Guha, Madhumita. Structure, stability and morphologic transitions in very low-density and high-density lipoproteins. Department of Physiology and Biophysics, Boston University School of Medicine. Defense date: 2/3/2009.
- Benjwal, Sangeeta. Structure and kinetic stability of model discoidal high-density lipoproteins containing human apolipoprotein C-I. Department of Physiology & Biophysics, Boston University School of Medicine. Defense date: 6/29/2007.

Invited Lectures and Seminars

1. Structural stability and functional remodeling of lipoproteins: The importance of being disordered. Department of Chemistry, Indian Institute of Technology (IIT) Bombay, Mumbai India. March 2014.
2. Apolipoprotein misfolding in familial and acquired amyloidosis: When a good protein goes bad. Department of Chemistry, Indian Institute of Technology (IIT) Bombay, Mumbai India. March 2014.
3. Novel molecular mechanism of apolipoprotein A-I misfolding: Mass spectroscopic approaches. Department of Chemistry, Northeastern University, Boston MA, January 2014.
4. Proteins, lipids, and nucleic acids: Methods to study macromolecular structure and assembly. Massasoit Community College, Brockton MA. November, 2013.
5. New insights into molecular mechanism of apolipoprotein A-I misfolding in familial and acquired human amyloidosis. Amyloid Treatment and Research Center, BUSM. October, 2013.
6. Self-assembly of biological macromolecules: Spontaneous reaction or intelligent design? Massasoit Community College, Brockton MA. April, 2012.
7. Crystal structure of the C-terminal truncated apolipoprotein A-I sheds new light on the amyloid formation by the N-terminal fragment. Amyloid Treatment and Research Center, BUSM. November 2011.
8. Lipoprotein alchemy: Conversion of bad cholesterol into good cholesterol by heat denaturation. BIT 4th Annual International Protein and Peptide Conference, Beijing, China, March 2011. (**Invited Speaker and Session Chair** - Structural Biology, Protein Folding, Dynamics and Function).
9. Structural stability and functional remodeling of plasma lipoproteins: Functional role of structural disorder. BIT 3rd Annual International Protein and Peptide Conference, Beijing, China, March 2010.
10. Molecular mechanisms of lipoprotein remodeling and stabilization. Atherosclerosis Unit, Harvard Medical School, Brigham and Women's Hospital, Boston MA, June 2009.
11. Structural stability and remodeling of model and plasma HDL: The importance of being disordered. Spring Workshop on HDL structure / ATVB meeting, Washington DC, May 2009.
12. Molecular mechanism of lipoprotein stabilization. Atherosclerosis Unit, University of Alabama at Birmingham, May 2006. (**Invited seminar and site visit for a Program Project Grant**).
13. Calorimetric analysis of macromolecular stability. East Coast Symposium on Differential Scanning Calorimetry, Cambridge MA, Dec. 2005.
14. Protein Stability, Structure and Function. Transkaryotic Pharmaceuticals, Cambridge MA, May 2004.

15. Molecular origin of HDL stability. Frontiers in Cardiovascular Science Meeting, Eilat, Israel, Oct. 2003 (**Invited international speaker**).
16. Molecular mechanism of lipoprotein stabilization. Boston University Medical Center, Jan. 2003.
17. Energetic-Structure-Function of human apolipoproteins and lipoproteins UMASS Medical School, Worcester MA, 2002.
18. Folding and stability of the exchangeable apolipoproteins. Departments of Chemistry, Biochemistry and Biophysics, City College of New York, NY, 2001.
19. Structure, function and thermodynamics of the exchangeable apolipoproteins. Department of Biochemistry, University of California at Santa Cruz, CA, 2000.
20. Structural Thermodynamics of the Exchangeable Apolipoproteins. Gladstone Institute of Cardiovascular Diseases, San Francisco, CA, 2000.
21. Energetic-Structure-Function Relationship in the Exchangeable Apolipoproteins. Rowland Institute for Science, Cambridge, MA, 2000.
22. High- and low-temperature unfolding of human plasma apolipoprotein C-1. Department of Biophysics, Boston University School of Medicine, 1997.
23. Thermodynamic analysis of human plasma apolipoproteins A-1 and A-2: implications for the molten globule state. Department of Biophysics, Boston University School of Medicine, 1995.
24. High-resolution x-ray crystallographic analysis of an allosteric pH-driven structural transition in cubic insulin. Department of Biophysics, Boston University School of Medicine, 1994.
25. Anesthetic and oxyanion binding in an allosteric transition in cubic insulin crystals. Rosenstiel Basic Medical Sciences Research Center, Brandeis University, 1994.
26. Monovalent cation binding and pH-dependent conformational switching in cubic insulin crystals. Rosenstiel Basic Medical Sciences Research Center, Brandeis University, 1992.
27. Application of Bragg X-ray diffraction and total external reflection for the structural analysis of Langmuir-Blodgett films. Institute of Crystallography, Soviet Academy of Sciences, Moscow, USSR, 1987.
28. Structural analysis of Langmuir-Blodgett films by anomalous X-ray diffraction. Institute of Crystallography, Soviet Academy of Sciences, Moscow, USSR, 1987.
29. Analytical approximation of pressure-temperature sublimation curves for inert gases. Institute of Metrology, National Ministry of Standards, Moscow, USSR, 1986.

Gordon Research Conferences

1. Gursky O. (2014) Apolipoprotein folding and misfolding in health and disease. *GRC – Biopolymers*, Salve Regina University, Newport RI, June 2014 (**Invited speaker**).
2. Das M., Jayaraman S., Mei X., Atkinson D., Gursky O. (2014) Amyloidogenic mutations in human apolipoprotein A-I are not necessarily destabilizing: A common mechanism of apoA-I misfolding in familial amyloidosis and atherosclerosis. *GRC – Biopolymers*, Salve Regina University, Newport RI, June 1-6, 2014 (**Best poster award**).
3. Gao X. and Gursky O. Determinants of structural stability and functional remodeling of human plasma HDL. *GRC Lipoprotein Metabolism*, Waterville Valley, NH June 2010.
4. Lu M., and Gursky O. Structural stability and remodeling of human plasma LDL: Effects of lipoprotein size and composition. *GRC Lipoprotein Metabolism*, Waterville Valley, NH June 2010.
5. Jayaraman S. and Gursky O. Pressure perturbation and differential scanning calorimetry of model and plasma lipoproteins: An endothermic transition without volume changes? *GRC Biopolymers*, Salve Regina U., Newport RI, June 2010.
6. Gao X., Jayaraman S., Gursky O. Structural stability and functional remodeling of human HDL: Role of particle size, protein composition & oxidation. *GRC Proteins*, Holderness School, Meredith NH, June 2009.
7. Gursky O., Guha M., Gao X., Jayaraman S. High-density lipoproteins and reverse cholesterol transport: The importance of being disordered. *GRC Biopolymers*, Salve Regina U., Newport RI, June 2008.

8. Jayaraman S., Gantz D. L., Gursky O. Effect of oxidative and lipolytic modifications on the structure and stability of low-density lipoprotein. *GRC Lipoprotein Metabolism*, MA June 2008.
9. Gao X., Jayaraman S., Gursky O. Effects of oxidation and protein composition on thermal stability of plasma high-density lipoprotein: Correlation with cholesterol efflux and HDL remodeling. *GRC Lipoprotein Metabolism*, MA June 2008 (**Nominated for best student poster award**).
10. Guha M., Gantz D. L., Gursky O. Hydrophobic and electrostatic effects in the stability of model discoidal high-density lipoproteins: Effects of fatty acyl chain length, unsaturation and pH. *GRC Protein Folding*, CA, January 2008.
11. Klimtchuk E., Gursky O., Eberhard J., Connors L.H., Skinner M. Immunoglobulin light chain thermal unfolding and aggregation studied by circular dichroism and light scattering. *GRC Proteins*, Holderness School, Meredith NH, June 2007.
12. Guha M., England C.O., Herscovitz H.H., Gursky O. Thermal transitions in human very low-density lipoprotein. *GRC Proteins*, Holderness School, Meredith NH, June 2007.
13. Gao X., Jayaraman S., Gursky O. Effects of oxidation on the structure and stability of human high-density lipoprotein. *GRC Lipoprotein Metabolism*, Kimball Union Academy, NH, June 2006.
14. Jayaraman S., Gantz D.L., Gursky O. Effects of oxidation on the structure and stability of human LDL. *GRC Lipoprotein Metabolism*, Kimball Union Academy, NH, June 2006.
15. Jayaraman S., Gantz D.L. Gursky O. Molecular mechanism of stabilization and fusion of human LDL: effects of oxidation. *GRC Proteins*, Holderness School, Meredith NH, June 2005.
16. Gursky O. Molecular factors determining HDL stability. *GRC Lipoprotein Metabolism*, Kimball Union Academy, NH, June 2004.
17. Gursky O. Molecular origin of lipoprotein stability: Thermodynamic or kinetic? *GRC Proteins*, Holderness School, Meredith NH, June 2003. (**Session Chair.**)
18. Gursky O. Novel mechanism of lipoprotein stabilization. *GRC Lipoprotein Metabolism*, Kimball Union Academy, NH, June 2002.
19. Gursky O. Solution conformation of human apoC-1 inferred from Pro scanning mutagenesis. *GRC Proteins*, Holderness School, Meredith NH, June 2001.

Peer-reviewed Abstracts and Conference Presentations (* platform talks)

1. Gursky O. (2014) Hot spots in apolipoprotein A-II misfolding and amyloidosis in mice and men. XIV International Symposium on Amyloidosis: Insoluble but Solvable. Indianapolis, IN, April 2014. Abstract & paper # PC-22.
2. Das M., Jayaraman S., Mei X., Atkinson D., Gursky O. (2014) Molecular mechanism of apoA-I misfolding in amyloid: When a good protein goes bad. XIV International Symposium on Amyloidosis: Insoluble but Solvable. Indianapolis, IN, April 2014. Abstract & paper # PC-14.
3. Klimtchuk E.S., Gursky O., Prokaeva T., Spenser B.H., Connors L.H., Seldin D.C. (2014) Prediction of Amyloid "Hot Spots" in Immunoglobulin Light Chain: Effects of mutations. XIV International Symposium on Amyloidosis: Insoluble but Solvable. Indianapolis, IN, April 2014. Abstract & paper #PB-11.
4. Das M., Jayaraman S., Mei X, Atkinson D., Gursky O. (2013) Probing molecular mechanism of destabilization and misfolding of human apolipoprotein A-I in amyloidosis. Abstract # 1641. Experimental Biology - ASBMB Meeting, Boston MA, April 20-24, 2013.
5. Das M., Jayaraman S., Mei X, Atkinson D., Gursky O. (2013) Amyloidogenic mutations in human apolipoprotein A-I are not always destabilizing: New insights into apoA-I misfolding and proteolysis in hereditary amyloidosis and atherosclerosis, Symposium of the Protein Society, Boston MA, July 20-23 2013.
6. Das M., Mei X., Atkinson D., Gursky O. (2013) Probing molecular mechanism of destabilization and misfolding of human apolipoprotein A-I in familial amyloidosis. ASBMB – Experimental Biology meeting, April 2013. Boston MA.
7. *Gursky O. (2013) Structure-Based Mechanism for the Adaptation of Apolipoprotein A-I to the Changing Lipid Load in Good Cholesterol. ASBMB – Experimental Biology meeting, April 2013. Boston MA.

8. *Gursky O., Mei X., Atkinson D. (2012) High-resolution crystal structure of the C-terminal truncated human apoA-I sheds new light on the amyloid formation by the N-terminal fragment. XIIth International Symposium on Amyloidosis: From Misfolded Proteins to Well-designed Treatment. May 2012, Groningen, the Netherlands.
9. Klimtchuk E.S., Gursky O., Prokaeva T., Doros G., Costello C. E., Connors L. H., Seldin D. C. (2012) Effect of Dimerization *via* Cys214 on Immunoglobulin Light Chain Thermal Stability and Aggregation in AL Amyloidosis: Comparison to Germline and Multiple Myeloma LCs. XIIth International Symposium on Amyloidosis: From Misfolded Proteins to Well-designed Treatment. May 2012, Groningen, the Netherlands. **(Recognized as new outstanding work in the meeting summary)**.
10. Gursky O., Klimtchuk E.S., Patel R.S., Laporte K., Connors L.H., Skinner M., Seldin D. (2011) Constant Region of Immunoglobulin Light Chain is Critical for Thermal Stability and Protein Aggregation: a New Paradigm for LC Amyloidogenesis. 25th Symposium of the Protein Society, July 23-27, 2011, Boston MA. **(Session Chair – Lipoproteins and Membrane Proteins)**
11. Gao X. and Gursky O. (2011) New insights into the role of apolipoprotein A-II in the structure, stability and remodeling of human high-density lipoproteins. 25th Symposium of the Protein Society, July 23-27, 2011, Boston MA.
12. Lu, M. and Gursky O. (2011) Key determinants for structural stability and fusion of human low-density lipoproteins: Role of particle size, crowding, and solvent ionic conditions. 25th Symposium of the Protein Society, July 23-27, 2011, Boston MA.
13. Jayaraman S. and Gursky O. (2011) Thermal remodeling of high-density lipoprotein: Relevance to reverse cholesterol transport. 25th Anniversary Symposium of the Protein Society, July 23-27, 2011, Boston MA.
14. Guha M. and Gursky O.* (2011) Lipoprotein alchemy: Conversion of very bad into good cholesterol by heat denaturation. 4th International Proteins and Peptides PepCon Meeting, Beijing, China, March 2011 **(Invited Speaker, Section Chair, Structural Biology & Protein Folding, Dynamics and Function)**.
15. Jayaraman S., Cavigiolio G., Gantz D.L., Gursky O. (2010) Factors determining structural stability and remodeling of high-density lipoprotein. ATVB Meeting, San Francisco CA, April 8-10, 2010.
16. Klimtchuk E.S., Gursky O., Patel R.S., Laporte K.L., Connors L.H., Skinner M., Seldin D.C. (2010) Critical role of the constant region in immunoglobulin light chain thermal stability and aggregation. XII International Symposium on Amyloidosis, Rome, Italy, April 18-21, 2010.
17. Gao X., Yuan S., Jayaraman S., Gursky O. (2010) Effects of particle size and protein composition on structural stability and functional remodeling of human high-density lipoproteins. ASBMB Meeting - Lipid Interactions in Physiology and Disease, Anaheim CA, April 2010 **(invited presentation)**.
18. *Gursky O., Jayaraman S., Guha M., Gao X. (2010) Structural stability and functional remodeling of plasma lipoproteins: functional role of structural disorder. PepCon Life Science International Conference, Beijing, China, March 2010 **(*Invited speaker)**.
19. Jayaraman S., Gantz D.L., Gursky O. (2010) Effect of post-translational modifications on the structure and stability of human LDL. Biophysical Society 54th Annual Meeting, San Francisco CA, Feb. 20-24, 2010.
20. Gao X., Yuan S., Jayaraman S., Gursky O. (2010) Effects of particle curvature and oxidation on structural stability and functional remodeling of human high-density lipoproteins. Keystone Symposium: Molecular Basis for Biological Membrane Organization and Dynamics. Snowbird UT, Jan. 11-16, 2010.
21. *Gao X., Yuan S., Jayaraman S., Gursky O. 2009. Structural Stability and Functional Remodeling of Human High-Density Lipoprotein: Role of Particle Size, Protein Composition and Oxidation. **(Winner of the Young Protein Scientist Award; platform talk)**. Abstract: #, *Protein Science*, July 2009.
22. Gao X., Yuan S., Jayaraman S., Gursky O. 2009. Structural Stability and Functional Remodeling of Human High-Density Lipoprotein. **(Winner of the Early Career Investigator Travel Award)**, Kern Aspen Lipid Conference, Aspen CO August 2009.
23. Jayaraman S., Gantz D. L., Gursky O. 2008. Effect of oxidative and lipolytic modifications on the structure and stability of model and plasma lipoproteins. Symposium on Oxidative Post-Translational Modifications in the Cardiovascular System, BUSM, Boston MA Oct. 1-3, 2008
24. * Gao X., Jayaraman S., Gursky O. 2008. Mild oxidation promotes and advanced oxidation impairs remodeling of human high-density lipoprotein *in vitro*. National Symposium on Oxidative Post-Translational Modifications in the Cardiovascular System, BUSM, Boston MA Oct. 1-3, 2008 **(graduate student selected to give a platform talk)**.

25. Gao X., Jayaraman S., Gursky O. Effects of oxidation and particle size on the structure and stability of high-density lipoprotein. Protein Society Meeting, Boston MA, July 2007. Abstract # 312, *Protein Sci.* 16(1): 172.
26. Klimtchuk E.S., Gursky O., Eberhard J., Connors L.H., Skinner M. 2006. Thermal unfolding of immunoglobulin light chains is linked to aggregation: circular dichroism and light scattering studies XIth International Symposium on Amyloidosis, Woods Hole MA, Nov. 5-9, 2006.
27. *Gao X., Jayaraman S., Gursky O. 2006. Effect of oxidation on the structure and stability of high-density lipoprotein. Cardiovascular Proteomics - Oxidative Post-translational Modifications of Proteins in Cardiovascular Disease, BU School of Medicine, Boston MA, Oct. 2006.
28. Benjwal S., Gursky O. Effect of secondary structure on HDL stability and remodeling. 20-th Symposium of the Protein Society, San Diego CA, August 2006. Abstract: *Protein Science* 16, 2006.
29. * Gursky O. Novel mechanism of lipoprotein stabilization. 231st National American Chemical Society Meeting, Division of Physical Chemistry - Interactions of Peptides and Proteins with Membranes. Atlanta GA, March 26-30, 2006 (**Invited speaker.**)
30. Jayaraman S., Gantz D.L., Gursky O. 2005. Energetic and structural basis for LDL stability and the effects of oxidation. Keystone Symposium on High-Density Lipoproteins, Aspen CO (**Early Career Investigator Travel Award**).
31. * Guha M., Gantz D. L., Gursky O. 2005 Kinetic stabilization and fusion of human plasma very low-density lipoproteins. 19th Symposium of the Protein Society, Boston MA (**Winner of the Young Protein Scientist Award; selected among top 8% for a platform talk**). Abstract #115, *Protein Science*, August 2005.
32. Verma S., Derst C., Wendt M.M., Gursky O., Röhm K.H. Chemical and thermal stabilities of type II asparaginases from *E. coli*, *E. chrysanthemi*, and *Pseudomonas 7A*: A comparative study. 19-th Symposium of the Protein Society, Boston MA, August 2005. Abstract: *Protein Science*, July 2005.
33. Benjwal S., Gursky O. Molecular mechanism of HDL stabilization: Electrostatic effects in kinetic stability of apoC-1:DMPC disks. Colorado Protein Stability Conference, Breckenridge, CO July 2005.
34. Gursky O., Jayaraman S. and Gantz D.L. Effect of protein composition on the kinetic stability of high-density lipoproteins: comparison of human apolipoproteins A-1, A-2 and C-1. VI-th European Symposium of the Protein Society, Barcelona, Spain April-May 2005; Abstract # 05-9, p. 95.
35. Benjwal S., Jayaraman S., Gantz D.L., Gursky O. Molecular Mechanisms of HDL Stabilization: Effects of Mutations and Solvent Conditions on the Kinetic Stability of Discoidal HDL. 18-th Symposium of the Protein Society, Aug. 14-18, 2004, San Diego CA. Abstract #366 *Protein Science* August 2004
36. Verma S., Wendt M.M., Gursky O., and Röhm K.H. Mutational Analysis of the Dimer-Dimer Interface of *E. coli* Asparaginase II, an Enzyme Used in Leukemia Treatment. 18-th Protein Society Symposium, Aug. 14-18, 2004, San Diego CA. Abstract: *Protein Science* Aug. 2004.
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