Curriculum Vitae

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Personal Data:

Year of Birth: 1946
Citizenship: U.S.
Marital Status: Married to Joanna B. Olmsted; one child, Richard
Military Status: Captain, U. S. Army Reserve, inactive

Education:

1967	Harvard College, A.B. cum laude in Chemistry
1972	Columbia University, Ph.D., Physical Chemistry, Advisors, G. W. Flynn and N. Sutin (Brookhaven National Labs)
1973-74	University of California, Berkeley, Postdoctoral Fellow, Biophysical Chemistry, with I. Tinoco, Jr.

Professional Experience:

1975-81	Assistant Professor of Chemistry, University of Rochester
1981-85	Associate Professor of Chemistry, University of Rochester
1986-	Professor of Chemistry, University of Rochester
1999-09	Professor of Pediatrics, University of Rochester, School of Medicine and Dentistry

Honors:

National Institutes of Health Predoctoral Fellowship	1968-1972
Alfred P. Sloan Fellow	1979-1983
NIH Senior Fellowship, University of Colorado, Boulder	1984-1985
Member, Biomedical Sciences Study Section, NIH	1984-1988
Member, Editorial Board of *Biophysical Journal*	1992-1995, 1997-2003
Guggenheim Fellow and American Cancer Society Scholar	1993-1994
Co-chair, Nucleic Acids Gordon Conference	1995
Member, BBCA Study Section, NIH	1995-1999
Member, Editorial Board of *Folding and Design*	1996-1998
Associate-director, University of Rochester M.D./Ph.D. Program	1998-2014
Bridging Fellowship to Department of Pediatrics, University of Rochester	1999
Fellow, American Association for the Advancement of Science	1999
Member, International Advisory Board of the Institute of Bioorganic Chemistry, Polish Academy of Sciences, Poznan	2002-2013
Member, Biomedical Research and Research Training Subcommittee A, NIH	2004-2008
Gordon Hammes Lectureship sponsored by the journal, *Biochemistry*, and the Biological Chemistry Section of the American Chemical Societv	2011

University of Rochester Doctoral Commencement Award for Lifetime Achievement in Graduate Education	2014
American Association for the Advancement of Science	2016
Poland – US Science Award (shared with Ryszard Kierzek)	
Honorary member, Phi Beta Kappa, Harvard College	2017
Total publications exceed 250	2022
Total citations exceed 20,000 (H-index > 70)	2022

Publications

1. "The Stimulated Raman Effect. A New Source of Laser Temperature-Jump Heating," J. V. Beitz, G. W. Flynn, D. H. Turner, and N. Sutin, J. Am. Chem. Soc., 92 4130-4132 (1970).

2. "Laser Raman Temperature-Jump Study of the Kinetics of the Triiodide Equilibrium. Relaxation Times in the 10^{-7}-10^{-8} Second Range," D. H. Turner, G. W. Flynn, N. Sutin, and J. V. Beitz, J. Am. Chem. Soc., 94, 1554-1559 (1972).

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4. "Raman Laser Temperature-Jump Studies," Ph.D. Thesis, Columbia University (1972).

5. "Rate of Intersystem Crossing between ^{1}A and ^{5}A States of an Iron(II) Complex in Solution," J. K. Beattie, N. Sutin, D. H. Turner and G. W. Flynn, J. Am. Chem. Soc., 95, 2052-2054 (1973).

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8. "The Kinetics of Codon-Anticodon Interaction in Yeast Phenylalanine Transfer RNA," K. Yoon, D. H. Turner, and I. Tinoco, Jr., J. Mol. Biol., 99, 507-518 (1975).

9. "Fluorescence Detected Circular Dichroism Study of the Anticodon Loop of Yeast $tRNA^{Phe}$," D. H. Turner, I. Tinoco, Jr., and M. Maestre, Biochemistry, 14, 3794-3799 (1975).

l0. "Some Very Rapid Reactions of Porphyrins in Aqueous Solution," R. F. Pasternack, N. Sutin, and D. H. Turner, J. Am. Chem. Soc., 98, 1908-1913 (1976).

11. "Fluorescence Detected Circular Dichroism. Theory," I. Tinoco, Jr. and D. H. Turner, J. Am. Chem. Soc., 98, 6453-6456 (1976).

12. "The Kinetics of Binding of U-U-C-A to a Dodecanucleotide Anticodon Fragment from Yeast $tRNA^{Phe}$," K. Yoon, D. H. Turner, I. Tinoco, Jr., F. von der Haar, and F. Cramer, Nucleic Acids Research, 3, 2233-2241 (1976).

13. "Solvent Effects on Stacking: A Kinetic and Spectroscopic Study of Thionine Association in Aqueous Alcohol Solutions," T. G. Dewey, P. S. Wilson, and D. H. Turner, J. Am. Chem. Soc., 100, 4550-4554 (1978).

14. "Fluorescence-Detected Circular Dichroism," D. H. Turner, Methods in Enzymology, Vol. 49G, ed. by C. H. W. Hirs and S. N. Timasheff, Chapter 8, Academic Press, 1978.

15. "Raman Laser Temperature-Jump Kinetics," T. G. Dewey and D. H. Turner, Adv. Molec. Relaxation, 13, 331-350 (1978).

16. "Comparative Biophysical Analysis of Monoclonal Cryo and Noncryoprecipitable IgGl, IgG2 and IgG3 Globulins," C. D. Scoville and D. H. Turner, Fed. Proc., 37, 1853 (1978).

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20. "Raman Laser Temperature Jump Study of Solvent Effects on Simple Stacking Systems," T. G. Dewey and D. H. Turner, "NATO Adv. Study Inst. Ser., Techniques and Applications of Fast Reactions in Solution," ed. by E. Wyn-Jones, D. Reidel, Pub., p. 235-238 (1979).

21. "Laser Temperature-Jump Study of Stacking in Adenylic Acid Polymers," T. G. Dewey and D. H. Turner, Biochemistry, 18, 5757-5762 (1979).

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23. "Study of the Kinetic and Structural Properties of a Monoclonal Immunoglobulin G Cryoglobulin," C. D. Scoville, D. H. Turner, J. L. Lippert, and G. N. Abraham, J. Biol. Chem., 255, 5847-5852 (1980).

24. "Intersystem-Crossing Dynamics and Coordination Geometry Changes Observed by Ultrasonic and Laser Temperature-Jump Relaxation of the $^2T\ ^6A$ Spin Equilibrium of Hexadentate Iron (III) Complexes in Solution," R. A. Binstead, J. K. Beattie, T. G. Dewey and D. H. Turner, J. Am. Chem. Soc., 102, 6442-6451 (1980).

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28. "Solvent Effects on the Kinetics and Thermodynamics of Stacking in Poly (cytidylic acid)," S. M. Freier, K. O. Hill, T. G. Dewey, L. A. Marky, K. J. Breslauer, and D. H. Turner, Biochemistry, 20, 1419-1426 (1981).

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65. "Predicting Optimal and Suboptimal Secondary Structure for RNA," J. A. Jaeger, D. H. Turner, and M. Zuker, Methods in Enzymology, Vol. 183, 280-305 (1990).

66. "Thermodynamic and Spectroscopic Study of Bulge Loops in Oligoribonucleotides," C. E. Longfellow, R. Kierzek, and D. H. Turner, Biochemistry, 29, 278-285 (1990).

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68. "Effects of GA Mismatches on the Structure and Thermodynamics of RNA Internal Loops," J. SantaLucia, Jr., R. Kierzek, and D. H. Turner, Biochemistry, 29, 8813-8819 (1990).

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213. "Benchmarking AMBER Force Fields for RNA: Comparisons to NMR Spectra for Single-stranded r(GACC) are Improved by Revised χ Torsions," I. Yildirim, H. A. Stern, J. D. Tubbs, S. D. Kennedy, and D. H. Turner, J. Phys. Chem. B, 115, 9261-9270 (2011).

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216. “Revision of AMBER Torsional Parameters for RNA Improves Free Energy Predictions of Tetramer Duplexes with GC and iGiC Base Pairs,” I. Yildirim, S. D. Kennedy, H. A. Stern, J. M. Hart, R. Kierzek, and D. H. Turner, J. Chem. Theory Computation, 8, 172-181 (2012).

217. "Testing the Nearest Neighbor Model for Canonical RNA Base Pairs: Revision of GU Parameters," J. L. Chen, A. L. Dishler, S. D. Kennedy, I. Yildirim, B. Liu, D. H. Turner, and M. J. Serra, Biochemistry 51, 3508-3522 (2012).

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224. “Secondary Structure of a Conserved Domain in the Intron of Influenza A NS1 mRNA,” S. F. Priore, E. Kierzek, R. Kierzek, J. R. Baman, W. N. Moss, L. I. Dela-Moss, and D. H. Turner, PLoS ONE, 8(9): e70615. Doi: 10.1371/jounal.pone.0070615 (2013).

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243. “RNA Secondary Structure Prediction,” D. H. Mathews, D. H. Turner, and R. M. Watson, Curr. Protoc. Nucleic Acid Chem. 67, 11.2.1 – 11.2.19 (2016), doi: 10.1002/cpnc.19

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245. “Nuclear Magnetic Resonance Structure of an 8X8 Nucleotide RNA Internal Loop Flanked on Each Side by Three Watson-Crick Pairs and Comparison to Three-Dimensional Predictions,” A. D. Kauffmann, S. D. Kennedy, J. Zhao, and D. H. Turner, Biochemistry, 56, 3733-3744 (2017).

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250. “Molecular Dynamics Correctly Models the Unusual Major Conformation of the GAGU RNA Internal Loop and with NMR Reveals an Unusual Minor Conformation,” A. Spasic, S. D. Kennedy, L. Needham, M. Manoharan, R. Kierzek, D. H. Turner and D. H. Mathews, RNA 24, 656-672 (2018).

251. “NMR Reveals that GU Base Pairs Flanking Internal Loops can Adopt Diverse Structures,” K. D. Berger, S. D. Kennedy, and D. H. Turner, Biochemistry 58, 1094-1108 (2019).

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255. "Nuclear Magnetic Resonance Spectra and AMBER OL3 and ROC-RNA Simulations of UCUCGU Reveal Force Field Strengths and Weaknesses for Single Stranded RNA,” J. Zhao, S.D. Kennedy, and D.H. Turner, J. Chem. Theory Comput. 18, 1241-1254 (2022).

256. "Nuclear Magnetic Resonance Reveals a Two Hairpin Equilibrium near the 3’-Splice Site of Influenza A Segment 7 mRNA that can be Shifted by Oligonucleotides,” A.D. Kauffmann, S.D. Kennedy, W.N. Moss, E. Kierzek, R. Kierzek, and D.H. Turner, RNA 28, 508-522. (2022).

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258. “Norman Sutin, founding editor of Comments in Inorganic Chemistry: A Remembrance and Tribute,” B.S. Brunschwig and D.H. Turner, Comments Inorg. Chem. (2022).

Research Support

American Chemical Society - Petroleum Research Fund, Type G Grant, "The Kinetics and Thermodynamics of Stacking Reactions", $9,000, 1975-1977.

Research Corporation, "Fluorescence Detected Circular Dichroism Studies", $16,790, 1975-1976.

National Science Foundation Department Equipment Grant, "Circular Dichroism Instrumentation", coauthored with T. R. Krugh, $37,200, 1975-1976.

American Cancer Society Institutional Research Grant, "Sequence Specificity of Drug-Nucleic Acid Complexes", $1,966, 1975-1976.

Alfred P. Sloan Fellowship, $20,000, 1979-1983.

Biomedical Research Support Grant, "Laser Cross Linking of Nucleic Acids and Proteins, coauthored with D. C. Hinkle, $5,000, 1979-1980.

National Institutes of Health, "Laser Cross Linking of Proteins and Nucleic Acids", $79,765 (direct cost), 1980-1983.

National Institutes of Health, "Fluorescence Detected CD Studies of Nucleic Acids", $81,006 (direct cost), 1981-1984.

Biomedical Research Support Grant, "Temperature Control for Absorption Spectroscopy", $4,040, 1984-1985.

National Institutes of Health (National Research Service Award for Senior Fellowship), "Studies of Self Splicing RNA", $30,140, 1984-1985.

National Institutes of Health, "Effects of Drugs on Nucleic Acids", $94,346 (direct cost), 1984-1987.
National Institutes of Health, "500 MHz NMR Spectrometer" (DRR BRS Shared Instrumentation), $300,000 (equipment only), Co-P.I. with T. R. Krugh, 1987.

Office of Naval Research, "Molecular Basis of RNA Catalysis," $155,337 (direct cost), 1988-1991.

National Institutes of Health, "Computer Graphics Equipment" (DRR BRS Shared Instrumentation), $172,000 (equipment only).

National Institutes of Health, GM22939, "Kinetic and Spectroscopic Studies of Nucleic Acids",

$128,415 (direct cost), 1976-1979.
$154,759 (direct cost), 1979-1982.
$423,255 (direct cost), 1982-1987.
$691,574 (direct cost), 1987-1992.

National Institutes of Health, GM22939, "Folding RNA: from AIDS to the Human Genome".

$753,829 (direct cost), 1992-1996 (funded with priority score in top 2%)
$876,545 (direct cost), 1996-2000, (funded with priority score in top 1%)
$1,059,037 (direct cost), 2000-2004 (funded with priority score in top 6%)
$1,211,970 (direct cost), 2004-2008 (funded with priority score in top 7%)
$1,252,046 (direct cost), 2008-2013 (funded with priority score in top 10%)
$ 110,000 (direct cost), 2012-2013 (funded supplement)
$2,356,955 (total cost), 2013-2017 (funded with priority score in top 16%)

National Institutes of Health, 1 R03 TW 01068-01, "Folding RNA with Modified Oligonucleotides," (Fogarty International Research Collaboration Award to fund Dr. Ryszard Kierzek's synthesis program at the Polish Academy of Sciences, Institute of Bioorganic Chemistry in Poznan, Poland) $82,285 (direct cost), 1999-2002, $96,000 (direct costs), 2002-2005.

National Institutes of Health, 1 R03 AI 45398-01, "RNA Targeting with Tertiary Interactions," (Innovative Drug Discovery Research in AIDS Opportunistic Infections) $100,000, 1999-2001.

National Institutes of Health, 1 RO3 TW008739, "Folding RNA: Influenza," (Fogarty International Research Collaboration Award to fund Dr. Elzbieta Kierzek (Institute of Bioorganic Chemistry in Poznan, Poland) to work on determining structures of domains in influenza RNA and to discover oligonucleotides that could potentially serve as therapeutics. $174, 509 (direct cost), 2011-2014 (priority score in top 2%).

Research Students

["Position" is either last prior to retirement or current. Subsequent Positions are last known.]

Research Associates

Susan M. Freier
Ph.D., University of California, Berkeley, l976
Position: Director of Molecular and Structural Biology at IONIS Pharmaceuticals, Carlsbad, CA. Retired.

Naoki Sugimoto
Ph.D., Kyoto University, 1985
Positions: Professor of Chemistry, Konan University, Kobe, JAPAN
Director, Frontier Institute of Biomolecular Engineering Research (FIBER)

Sean Moran
Ph.D., University of Colorado, Boulder, 1987
Position: Director, Structural Biology Core Facility, Uniform Services University of the Health Sciences

Matthew Fountain
Ph.D., University of Rochester, 1994
Position: Professor and Chair of Chemistry, State University College at Fredonia NY

Stephen M. Testa (NIH Postdoctoral Fellow)
Ph.D., Purdue University, 1994
Position: Associate Professor of Chemistry, University of Kentucky

Sherry Spinelli
Ph.D., University of Rochester, 1999
Position: Research Associate Professor of Pathology and Laboratory Medicine, University of Rochester Medical Center

Irina Catrina
Ph.D., Utah State University, 2001
Position: Clinical Assistant Professor of Chemistry, Yeshiva University

Elzbieta Kierzek
Ph.D., Institute for Bioorganic Chemistry, Poznan, Polish Academy of Sciences
Position: Professor, Institute of Bioorganic Chemistry, Poznan

Elzbieta Lenartowicz
Ph.D., Institute for Bioorganic Chemistry, Poznan, Polish Academy of Sciences, 2016
Position: Head of Laboratory of Molecular Diagnostics, Institute for Bioorganic Chemistry, Poznan, Polish Academy of Sciences

Ph.D. Students

1979 T. Gregory Dewey
"Laser Temperature Jump Kinetics of Solvent Effects on Stacking Reactions in Dyes and Nucleic Acids"
Position: President, Albany College of Pharmacy and Health Sciences

1980 Craig D. Scoville
"Studies on a Monoclonal IgG Cryoglobulin", joint student with G. N. Abraham (Department of Microbiology)
Position: Practicing Physician

1981 Eric W. Lobenstine
"Fluorescence Detected Circular Dichroism: Verification and Applications to Proteins"
Position: Manager of Computers and Network, Chemistry Department, University of Rochester

1981 Diane DePrisco Albergo
"Solvent Effects on the Thermodynamics and Kinetics of Double Helix Formation in Nucleic Acids"
Position: Scientist at Abbott Laboratories, Irving, Texas

1982 Matthew Petersheim (deceased)
"Stabilization of Ribonucleic Acid Double Helices by 'Dangling' Bases: Optical and NMR Studies"
Position: Associate Professor and Chair of Chemistry, Seton Hall University, South Orange, NJ

1984 Catherine A. Harrison
"Photochemistry of Nucleic Acids Including Crosslinking to Proteins"
Subsequent position: Scientist at Eastman Kodak Company, Rochester, NY

David R. Hickey
"Thermodynamic Effects of Solvent and Terminal Mismatches on Oligoribonucleotide Stability"
Position: Instructor, Department of Chemistry, University of Rochester

1985 Michael Lamos
"Fluorescence Detected Circular Dichroism of Ethidium-Nucleic Acid Complexes"
Subsequent Position: Scientist at Sienna Biotech, Stillwater, MN

1988 Alison Williams
"Raman Laser Temperature-Jump, Spectroscopic and Thermodynamic Studies of Salt Effects on Duplex Formation by dGCATGC"
Position: Vice President for Equity and Inclusion, Wesleyan University

1989 Carl Longfellow
"Thermodynamic and Spectroscopic Studies of Bulge Loop Structures Formed by Oligoribonucleotides"
Subsequent Position: Scientist at Wyeth-Ayerst Labs, Rouses Point, NY

1989 John Jaeger
"RNA Secondary Structure: Prediction, Melting, and Chemical Modification"
Subsequent Position: Information Technology Business Partner for Research, Bristol Myers Squibb

1991 John SantaLucia, Jr.
"The Role of Hydrogen Bonding in the Thermodynamics and Structure of Mismatches in RNA Oligonucleotides"

Positions:

Professor of Chemistry, Wayne State University, Detroit, MI
CEO, DNA Software, Ann Arbor, MI

1993 Adam E. Peritz
"Studies of Symmetric and Asymmetric Internal Loops in RNA"
Subsequent position: Staff member, Nucleic Acid Facility, University of Pennsylvania

Philip C. Bevilacqua
"Dynamics of Substrate-Ribozyme Interaction: Binding, Conformational Changes, and Catalysis"
Position: Professor of Chemistry (Department Chairman), Pennsylvania State University, University Park, PA

Liyan He
"Thermodynamic and Structural Studies of G•U Mismatches in RNA"
Subsequent position: Sr. Technology Commercialization and Liaison Officer at Weill Cornell Medical College, New York City

1994 Amy E. Walter (Morsch)
"Thermodynamic Studies of the Sequence Dependence of Stability for Interfaces of Coaxially Stacked Helixes and Tandem GA Mismatches in RNA"
Subsequent position: Programmer, A-LIFE Medical, Inc., San Diego, CA

Aloke Raj Banerjee
"Investigation of the Folding Pathway of a Group I Ribozyme: Melting, Chemical Modification and Kinetics Studies"
Subsequent position: Manager, Assay Research, Nanosphere

1996 Ming Wu
"Structure and Thermodynamic Stability of Symmetric Tandem Mismatches in RNA"
Subsequent position: Manager, Gilead Sciences Inc., Foster City, CA

Jeffrey A. McDowell
"Investigation of the Structural Basis of the Thermodynamic Stability of Symmetric, Tandem GU Mismatches in RNA"
Position: Senior Manager – The Janssen Pharmaceutical Companies of Johnson & Johnson, Greater Philadelphia Area

1997 James Kim
"The Thermodynamics of Coaxial Stacking and Its Effect on RNA Secondary Structure"
Position: Associate Professor of Internal Medicine, University of Texas Southwestern Medical School

Yi Li
"Effects of Temperature, Mg^{2+} and the 2' OH of Guanosine on Substrate Binding and Reactivity with the Tetrahymena Ribozyme"
Subsequent Position: Scientist, Alza Pharmaceuticals, Mountain View, CA

1998 Louis Profenno
"Conformational Rearrangements in the Catalytic Mechanism of the *Tetrahymena* Ribozyme"
Position: Psychiatrist, Syracuse, NY

1999 Tianbing Xia
"Sequence Dependence of Stabilities and Structures of Tandem Mismatches and Watson-Crick Base Pairs in RNA"
Position: Systems Engineer, Abbott Labs, Dallas

2000 Xiaoying Chen
"Stability and Structure of Guanosine-Uridine and Isoguanosine-Isocytidine Pairs"
Subsequent position: Manager, Bioinformatics, Roche Molecular Systems, Inc., Pleasanton, CA

Mark E. Burkard
"Base Stacking Interactions and the Thermodynamics and Structure of Guanine-Guanine Pairs in RNA"
Position: Professor of Medicine and Oncology, University of Wisconsin, Madison

2001 David H. Mathews
"Prediction of RNA Secondary Structure"
Position: Maquat Distinguished Professor of RNA Biology, Department of Biochemistry and Biophysics, University of Rochester

Thomas W. Barnes III
"The Impact of Long-Range Cooperativity, Base Composition and Structure on the Molecular Recognition of RNA by C5-(1-Propynyl) Pyrimidine-Containing Oligodeoxynucleotides"
Subsequent position: Patent Attorney, International Paper Co.

2002 Susan J. Schroeder
"Exploring the Thermodynamic Stabilities and Structures of Asymmetric Internal Loops in RNA"
Positions: Associate Professor, Departments of Chemistry and of Microbiology and Plant Biology, University of Oklahoma

Matthew D. Disney
"*In vitro* and *in vivo* Targeting of RNA in Fungal Pathogens with Oligonucleotides and Small-Molecules"
Position: Professor of Chemistry, Scripps Research Institute - Florida

2003 Jessica Childs (Disney)
"Oligonucleotide Directed Misfolding of RNAs"
Position: Senior Staff Scientist, Chemistry Dept., Scripps Research Institute - Florida

2004 Brent Znosko
"Thermodynamic and Structural Properties of RNA Oligomers Containing Purine Rich Internal Loops and DNA:RNA Hybrids with C5-Propynyl Substitutions"
Position: Professor of Chemistry, St. Louis University

2005 Gang Chen
"Expanded Sequence Dependence Improves Prediction of RNA Internal Loop Stability and NMR Reveals Molecular Recognition Interactions Accounting for Stability, Structure and Dynamics"
Position: Associate Professor, School of Life and Health Sciences, The Chinese University of Hong Kong, Shenzhen

2006 Shenghua Duan
"Applying Oligonucleotide Microarrays in Determining RNA Secondary Structure"
Subsequent position: Bioinformatics Analyst II, Center for Cancer Computational Biology, Dana Farber Cancer Institute

Blanton Tolbert
"The Solution NMR Structures of Model RNA Duplexes Containing Non-Canonical GA Pairs: Insights into the Factors Affecting Thermodynamic Stability of RNA 2X2 Nucleotide Internal Loops"
Position: Professor of Chemistry, Case Western Reserve University

2007 Neelaabh Shankar
"NMR Studies of Two Conserved RNA Internal Loops Found in Ribosomes"
Position: Patent Attorney

2008 Ilyas Yildirim
"Free Energy Calculations of RNA Duplexes with Tandem GA Base Pairs Using the Thermodynamic Integration Approach"
Position: Assistant Professor of Chemistry, Florida Atlantic University

2009 James M. Hart
"NMR-Assisted Prediction of RNA Secondary Structure"
Position: Medical Director at Abbott Core Diagnostics

2010 Ruiting Liang
"RNA Secondary Structure Determination: Isoenergetic Oligonucleotide Microarray Compared with Chemical Mapping and MALDI MS Detection of Chemical Mapping"
Position: Director, Analytical Research and Development, Beigene

Biao Liu
"Fluorescence Competition Assay Meassurements of Thermodynamics for RNA Pseudoknots and Multibranch Loops"
Position: Computational Scientist, Intellia Therapeutics, Cambridge MA

2011 Walter N. Moss
"RNA Secondary Structure Discovery and Characterization"
Position: Associate Professor of Molecular Biology and Biophysics, Iowa State University

Nicolas Hammond
"Investigating the mechanism of Hoechst 33258 inhibition of Candida spp. growth and II. RNA internal loops with tandem AG pairs: the structure of the 5′GAGU/3′UGAG loop can be dramatically different from others, including 5′AAGU/3′UGAA"
Position: Assistant Director of University of Rochester Workshop Program

2013 Jason Tubbs
"Computational and Experimental Advances in the RNA Therapeutic Pipeline"
Position: Associate Director of Quality Operations, CoreRX, Clearwater, FL

Salvatore Priore
"Discovery and Characterization of Influenza Virus RNA Secondary Structures"
Position: Assistant Professor of Clinical Pathology and Laboratory Medicine, Perelman School of Medicine, University of Pennsylvania

Indee Dela-Moss
"Analysis of RNA Secondary Structure: Common Themes in Spliced Segments of Influenza A, B, and C"
Subsequent Position: Postdoctoral Fellow, Iowa State University

2015 David Condon
"Nucleic Acid Force Fields in Prediction of Ensemble NMR Properties"
Position: Assistant Professor of Internal Medicine, University of South Dakota, Lead Computational Bioinformatics Analyst at Sanford Health, Sioux Falls, South Dakota

Jonathan Chen
"Two- and Three-Dimensional Modeling of RNA Structures with NMR and Thermodynamics Methods"
Position: Staff Scientist, Center for RNA Biology, University of Rochester Medical Center

Tian Jiang
"RNA Structure and Function of Influenza Virus"
Position: Systems Engineer, Abbott Labs, Dallas

2018 Kyle Berger
"Thermodynamic and Structural Studies of RNA Internal Loops Closed by GU Pairs"
Position: Postdoctoral Fellow in laboratory of David MacLean, University of Rochester School of Medicine and Dentistry

2019 Andrew Kauffmann
"Structures of RNA Sequences from Influenza"
Position: Assistant Professor of Chemistry, Truman State University, Missouri

2020 Jianbo Zhao
"Molecular Dynamics and Quantum Mechanics Studies of RNA Structures"
Position: Senior Scientist, Nested Therapeutics, Boston, MA

Visiting Scientists

Dr. Ryszard Kierzek, Professor, Institute of Bioorganic Chemistry, Poznan, Poland

Dr. Elzbieta Kierzek, Professor, Institute of Bioorganic Chemistry, Poznan, Poland

Dr. Peter Müller, Scientist, Dr. Karl Thomae, GmbH, Bieberach, Germany
Head, Department of Chemical Research, Dr. Karl Thomae, GmbH, Bieberach, Germany
Senior Vice President, Research and Development, Boehringer Ingelheim Pharmaceuticals, Ridgefield, CT
Chief Scientific Officer & Senior Vice President, Vertex Pharmaceuticals
Retired

Dr. Martin J. Serra, Paul E. and Mildred L. Hill Professor of Chemistry, Allegheny College
Retired

Dr. Janet Morrow, Professor of Chemistry, SUNY at Buffalo

Dr. Neena Grover, Professor of Chemistry & Biochemistry, Colorado College