

CURRICULUM VITAE

Chaya Rapp

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EDUCATION

1990-1993 Columbia College; Columbia University
B.A. in Biochemistry
1993-1998 Graduate School of Arts and Sciences; Columbia University
M.A in Chemistry, M. Phil, Ph.D. in Theoretical Chemistry

POSITIONS HELD

2006 - Present Stern College for Women, Yeshiva University; Clinical Associate
Professor of Chemistry
1999 - 2006 Stern College for Women, Yeshiva University; Assistant Professor of
Chemistry
1999 - 2006 Department of Chemistry, Columbia University; Adjunct Associate
Research Scientist
2001 Schrödinger Inc., Consultant
1999 Yeshiva College, Yeshiva University; Instructor of Chemistry
1995 - 1996 Manhattan High School for Girls, Instructor of Physics

TEACHING

1999 - Present Teach General Chemistry, Honors General Chemistry and Physical
Chemistry, Stern College for Women
1999 2016 Supervise student research in computational chemistry, Stern College for
Women
2002 Led joint Senior Seminar in Advanced Chemistry at Stern College for
Women and Yeshiva College
2000, 2002 Taught Biochemistry, Stern College for Women
2000 Initiated Biochemistry major at Stern College for Women
2000 Current T
1999 Sabbatical Replacement Yeshiva College, General Chemistry,
Physical Chemistry and Senior Seminar
1995 - 1996 High School Physics Instructor, Manhattan High School for Girls
1994 Graduate Instructor Quantum Mechanics, Columbia University
1993 Graduate Instructor General Chemistry, Columbia University

SERVICE

2015-present Chair, Department of Chemistry and Biochemistry, Stern College for
Women
2010 - Present Advisor to pre-medical and pre-dental students, Stern College for Women

2002 - Present	Faculty advisor to Student Affiliate Chapter of the American Chemical Society, Stern College for Women
2016-present	Honors committee, S. Daniel Abraham Honors Program
2014-2021	Faculty council, Yeshiva University
2018-2019	Academic Technology Committee, Yeshiva University
2015-2016	Task Force on Student Success, Yeshiva University
2017	JED Campus Initiative, Yeshiva University

FELLOWSHIPS, HONORS AND AWARDS

2011	Karen Bacon Award to a Senior Faculty Member
2011	Awarded R15 AREA grant (3 years, \$250,000) from National Institutes of Health
2000	Faculty Summer Research Fellowship
1994 - 1997	National Science Foundation Fellow
1993	<i>Phi Beta Kappa</i> Achievement Prize
1993	<i>Summa cum laude</i>
1993	<i>Phi Beta Kappa</i>
1993	Milton Handler Prize for Scholastic Excellence (best academic record in science)
1993	<i>Salutatorian</i> of graduating class; Columbia College Columbia University.
1992	National Science Foundation Summer Research for Undergraduates Fellowship
1990 - 1993	Gross Life Monument Fund - full tuition award

REVIEWER FOR SCIENTIFIC JOURNALS AND TEXTS

Journal of Chemical Education
 Proteins: Structure, Function and Bioinformatics
 Journal of Chemical Information and Modeling
 Herrington and Dwyer, Chemistry Thompson Brooks/Cole Publishers
 Fine, Bealle and Stuehr, Chemistry for Engineers and Scientists John Wiley and Sons
 Reisel, Principles of Engineering Thermodynamics Cengage

ABSTRACTS (Bold face name indicates a student co-author)

Tishbi, N. and Rapp C. ~~TRACETS: Surface-Mediated CR5-Growth on Resorcinol-Formaldehyde Resin~~ *Chemistry Letters* 2014, 43(10), 1904-1906

receptor complex, 245th National Meeting of the American Chemical Society, New Orleans, LA.

A. Schiffmiller of Protein Kinase
Columbia Undergraduate Research Symposium, April 2009.

R. Eisner, C. Schonbrun, N. Huang and C. Rapp. "Force field based Receptor Ligand Rescoring", 40th American Chemical Society Middle Atlantic Regional Meeting, Ursinus, PA, May 2007.

E. Levine
th American Chemical Society Meeting, Atlanta.
Georgia, April 2006.

I. Rienman, D. Benmurgui
th American Chemical Society Meeting, Philadelphia, PA, August 2004.

R. Frankel, T. Fischer cking on Protein Loop
th American Chemical Society Middle Atlantic Regional Meeting, Princeton, NJ,
June 2003.

L. Blau, C. Dobin, D. Estes, and C.S. Rapp, "Nontraditional Experiments in an Honors Biochemistry Laboratory Course", 225th American Chemical Society Meeting, New Orleans, LA, March 2003.

M.P. Jacobson, Y. An, T. Day, V. Eylich, R. Farid, J. Gunn, S. Harrington, X. Li, D.L. Pincus,

Bioi *CASP5*, Community Wide Assessment of Techniques for Protein Structure Meeting, Asimolar, CA, December 2002.

th American Chemical Society Middle Atlantic Regional Meeting,
Fairfax, VA, May 2002.

INVITED TALKS

Department of Chemistry, Yeshiva College, December 2003.

Department of Chemistry and
Biochemistry, Vassar College, April 2002.

Department of Chemistry,
St , January 2002.

Yeshiva College, November 1999.

Department of Chemistry
and Department of Biochemistry and Molecular Biophysics, Columbia University, June 1997.

mulation of Large Scale Domain Motions in
Department of Chemistry, Columbia University, November 1996

PUBLICATIONS (Bold face name indicates a student co-author)

C. Rapp, **E. Goldberger**, **N. Tishbi**, and **R. Kirshenbaum**. Cation- π Interactions of Methylated Ammonium Ions: A Quantum Mechanical Study : Structure, Function, and Bioinformatics 82:1494-1502.

C. Rapp, **S. Snow**, **T. Laufer**, and C.L. McClendon. The role of tyrosine sulfation in the dimerization of the CXCR4:SDF-1 complex Protein Science 22:1025-1036.

C. Rapp, **H. Klerman**, **E. Levine**
Phosphorylated and Sulfated Amino Acid Residues . PLoS ONE 8(3): e57804.
doi:10.1371/journal.pone.0057804

C. Rapp, C. Kalyanaraman, **A. Schiffmiller**, **E.L. Schoenbrun**, and M.P. Jacobson.
"A Molecular Mechanics Approach to Modeling Protein-Ligand Interactions: Relative Binding Affinities in Congeneric Series" (2011) Journal of Chemical Information and Modeling 51(9), 2082-2089.

C. Rapp, **C. Schonbrun**, M.P. Jacobson, C. Kalyanaraman and N. Huang. "Automated Site Preparation in Physics-Based Rescoring of Receptor Ligand Complexes" (2009) Proteins: Structure, Function, and Bioinformatics 77(1), 52-61.

C. Rapp, **T. Strauss**, G. Fuentes and A. Nederveen. Prediction of Protein Loops in S (2007) Proteins: Structure, Function, and Bioinformatics 69(1), 69-74.

D.J. Mandell, I. Chorny, E.S. Groban, S. Wong, **E. Levine**, C.S. Rapp, and M.P. Jacobson. "The strengths of hydrogen bonds involving phosphorylated amino acid side chains" (2007) Journal of the American Chemical Society, 129(4), 820-827.

C. Rapp and **R.M. Pollack**. (2005) Proteins: Structure, Function, and Bioinformatics 60(1), 103-109.

M.P. Jacobson, D.L. Pincus, C.S. Rapp, T. Day, B. Honig, D.E. Shaw and R.A. Friesner. "A

M.P. Jacobson, G.A. Kaminski, R.A. Friesner and C.S. Rapp.

-11680.

C.S. Rapp and R.A. Friesner.
of Solvation

: Structure, Function, and Bioinformatics 35(2), 173-183.

A. Ghosh, C.S. Rapp and R.A. Friesner.

-10990.