February 2016

CURRICULUM VITAE

PERSONAL DATA

Name:	WITOLD K. SUREWICZ
Position:	Robert F Bennett MD Professor
Address:	Department of Physiology and Biophysics Case Western Reserve University Cleveland, Ohio 44106 Phone: (216) 368-0139; E-mail: wks3@case.edu
Citizenship:	United States

UNIVERSITY EDUCATION

1976	University of Lodz, Lodz, Poland	M.Sc. (Physics)
1982	University of Lodz, Lodz, Poland	Ph.D. (Biochemistry)

POSTDOCTORAL TRAINING

1983-1985	Department of Biochemistry, McMaster University, Hamilton, Ontario, Canada (Advisor: Dr. Richard M. Epand)

PROFESSIONAL APPOINTMENTS

2014-present	Robert F Bennett MD Professor of Neurological Research Department of Physiology and Biophysics Case Western Reserve University, Cleveland, OH
2001-present	Professor Department of Physiology and Biophysics Case Western Reserve University, Cleveland, OH
2012-present	PROFESSOR (secondary appointment) Department of Pathology, Case Western Reserve University, Cleveland, OH
1996-2000	Associate Professor Department of Pathology Case Western Reserve University, Cleveland, OH
1994-1996	Assistant Professor Departments of Biochemistry and Ophthalmology University of Missouri, Columbia, MO
1986-1994	Research Officer Division of Chemistry and Institute for Biological Sciences National Research Council of Canada, Ottawa, Ontario

ADMINISTRATIVE RESPONSIBILITIES

2013-2015	Director, PhD Program in Physiology and Biophysics
2007-2011	Chair, Faculty Search Committee, Department of Physiology and Biophysics. *This extensive search effort during the rapid expansion phase of the Department resulted in the recruitment of seven junior faculty*
2008-2013	Director, Graduate Program in Molecular Biophysics
2006-2008	Chair, DPB Committee on Appointment, Promotion and Tenure
2001-2003	Director, Graduate Program in Biophysics and Bioengineering, CWRU

JUNIOR FACULTY MENTORING

Tingwei Mu (recruited in 2010)
Radjesh Ramachandran (recruited in 2011)
Tomasz Religa (recruited in 2011)
Sudha Chakrapani (recruited in 2011)

TEACHING

Courses

PHOL530 Metods in Physiological and Biophysical Sciences *(Course Director)*
PHOL456 Proteins and Nucleic Acids
PHOL475 Protein Biophysics
BCHEM 430 Advanced Structural Biology

Ph.D Students Advised

Jamshid Davoodi (graduated 1995)
Yangbo Zhang (graduated 2001)
David Vanik (graduated 2003)
Adrian Apetri (graduated 2004)
Eric Jones (graduated 2006)
Xiaojung Lu (graduated 2007)
Qiuye Li - present

Postdoctoral Fellows Mentored

Peter Butko (1992-1994)
Kalipada Das (1994-1996)
Lin-P'ing Choo-Smith (1996-1997)
Wieslaw Swietnicki (1997-2000)
Manuel Morillas (1997-2000)
Reddy Geereddy (1999-2000)
Natalia Narizhneva (2000-2001)
Nilesh Maiti (2000-2001)
Bishwajit Kundu (2001-2003)

Joanna Nagy (2003-2004)
Adrian Apetri (2004-2005)
Salima Patel (2005-2006)
Nathan Cobb (2005-2009)
Dragomir Ganchev (2006-2008)
Jae-Il Kim (2007-2010)
Jonathan Cannon (2007-2009)
Vitautas Smirnovas (2008-2010)
Shugui Chen (2009-2013)
Marcin Apostol (2010-2012)
Arpana Dutta (2011-2013)
Jin-Kyu Choi (2011-present)
Krzysztof Nieznanski (2012-2013)
Thomas Williams (2013-2015)
Xiangzhu Xiao (2013-present)
Xu Qi (2014-present)
Saketh Chemuru (2015-present)

PROFESSIONAL SERVICE

Advisory Boards and Study Sections:

NIH Special Study Section 7, Member (1995)

NIH Special Emphasis Panel (review of prion disease program projects), Member (1998)

NIH Special Emphasis Panel (RFA Program “Protein Structure and Function in Aging”), Member (1999)

NIH Biophysical Chemistry Study Section, Ad Hoc Member (2000, 2001)

NIH NCRR Study Section ZRR RI-03, Member (2002)

Alzheimer’s Association Research Grant Program, Initial Review Board, Member (1999, 2000, 2001)

Cerus Corporation Prion Diseases Advisory Board (2001-2003)

Advisory Expert Panel for the selection of a Canadian Network of Centers of Excellence on BSE/TSE (2005)

Board of Scientific Councelors, National Institute of Allergy and Infectious Diseases, Member (2006)

PrioNet Canada Advisory Expert Panel, Member (2008)

NIH MSFB Study Section, Member (2009)

NIH BNS Study Section, Member (2011)

NIH Special Emphasis Panel, Member (2013)

External Reviewer of Grant Proposals for the Following Agencies:

National Science Foundation
Natural Sciences and Engineering Research Council (Canada)
Multiple Sclerosis Society (U.S.A.)
Medical Research Council of Canada

Medical Research Council (U. K.)
Wellcome Trust (U. K.)

Editorial Responsibilities:

Journal Editorial Boards:

Journal of Biological Chemistry (2003-2008; 2010-2015)
Biochemistry (2006-present)
AMYLOID: The Journal of Protein Folding Disorders (2001-present)
Archives of Biochemistry and Biophysics (2002-2011)
Current Chemical Biology (2006-present)
Prion (2006-present)

Reviewer for the following scientific journals:

Biochemistry, Biochimica et Biophysica Acta, Biophysical Journal, Cell, EMBO Journal, Journal of Biological Chemistry, Journal of Molecular Biology, Journal of Neurochemistry, Journal of Virology, Molecular Cell, Nature, Nature Structural and Molecular Biology, Neuron, PLOS Biology, Proceedings of the National Academy of Sciences USA, Protein Science, Science

ACTIVE RESEARCH SUPPORT

NIH P01 AI106705
Title: Mechanisms of Transmissibility in Prion Diseases
Duration: 09/15/2014 – 08/30/2019
Role: Principal Investigator/Program Director

NIH R01 NS074317
Title: Replication Mechanisms of Human Prions
Duration: 08/01/2011-07/30/2016
Role: Principal Investigator

NIH R01 NS060729
Title: Synthetically generated prions
Duration: 07/01/2013-06/30/2018
Role: Principal Invesigator

NIH R01 NS083687
Title: Structural correlates of prion strain and infectivity in human prion diseases
Duration: 07/01/2014-06/30/2019
Role: Principal Investigator

PATENTS

Parathyroid Hormone Analogues fo the Treatment of Osteoporosis (with G. Willick, J.F. Whitfield, W. Sung and W. Neugebauer) US Patent 5,556,940

PUBLICATIONS

1. Surewicz, W.K., Electron spin resonance spectra of spin-labeled membranes, *Adv. Biophys*. 3, 21-44 (1980)
2. Kaminska, B., Surewicz, W.K., Koter, M. and Leyko, W.K., Effect of ionizing radiation and hyperthermia on the fluidity of porcine lymphocyte membrane, in: *Hyperthermia in Radiation Oncology* (Arcangeli, G. and Mauro, F.,eds.) Mason Italia (1980)
3. Surewicz, W.K., Fijalkowska, I. and Leyko, W., The effect of propranolol on the osmotic fragility of red cells and liposomes and the influence of the drug on glycerol transport across the membrane of red cells, *Biochem. Pharmacol*. 30, 839-842 (1981)
4. Surewicz, W.K. and Leyko, W., Interaction of propranolol with model phospholipid membranes. Monolayer, spin label and fluorescence spectroscopy studies, *Biochim. Biophys. Acta* 643, 387-397 (1981)
5. Surewicz, W.K., Propranolol-induced structural changes in human erythrocyte ghost membrane: A spin label study, *Biochem. Pharmacol*. 31, 691-694 (1982)
6. Surewicz, W.K. and Leyko, W., Interaction of local anesthetics with model phospholipid membranes. Effect of pH and phospholipid composition studied by quenching of an intramembrane fluorescent probe, *J. Pharm. Pharmacol*. 34, 359-363 (1982)
7. Surewicz, W.K. and Leyko, W., Effect of local anesthetics on the osmotic fragility of liposomes, *Biochem. Pharmacol*. 31, 2299-2300 (1982)
8. Surewicz, W.K. and Leyko, W., Effect of local anesthetics on cytochrome c-induced lateral phase separation in cardiolipin-steroid spin label model membrane, *Studia Biophysica* 91, 229-235 (1982)
9. Surewicz, W.K., Quinidine is a strong perturber of acidic phospholipid bilayer order and fluidity, *Biochim. Biophys. Acta* 692, 315-319 (1982)
10. Surewicz, W.K. and Jozwiak, Z., Effect of quinidine on membrane properties: Depression of lipid phase transition temperature and changes in the permeability of lipid bilayer, *Biochem. Pharmacol*. 31, 1467-1471 (1983)
11. Surewicz, W.K., Effect of osmotic gradient on the physical properties of membrane lipids in liposomes, *Chem. Phys. Lipids* 33, 81-85 (1983)
12. Surewicz, W.K., Electron spin resonance study on the mechanism of polyethylene glycol-membrane interaction, *FEBS Lett*. 151, 228-232 (1983)
13. Surewicz, W.K., Membrane actions of water soluble fusogens: Effect of dimethyl sulfoxide, glycerol and sucrose on lipid bilayer order and fluidity, *Chem. Phys. Lipids* 34, 363-372 (1984)
14. Kralisz, U., Surewicz, W.K., Kotelba-Witkowska, B. and Pietrucha, T., Effect of dimethyl sulfoxide on plasma membrane of human platelets, *Studia Biophysica* 100, 33-40 (1984)

15. Kralisz, U., Pietrucha, T., Surewicz, W.K. and Kotelba-Witkowska, B., Stimulant-induced plasma membrane microviscosity changes of human and porcine platelets, *IRCS Med. Sci. Biochem.* 12, 767-768 (1984)
16. Epand, R.M. and Surewicz, W.K., Effect of phase transition on the interaction of peptides and proteins with phospholipids, *Can. J. Biochem. Cell Biol.* 62, 1167-1173 (1984)
17. Epand, R.M., Dell, K., Surewicz, W.K. and Moscarello, M.A., The effect of vesicle structure on the ability of myelin basic protein to alter vesicle properties: Potent effects of aliphatic aldehydes in promoting basic protein-induced vesicle aggregation, *J. Neurochem.* 43, 1550-1555 (1984)
18. Surewicz, W.K. and Epand, R.M., The role of peptide structure in lipid-peptide interactions: A fluorescence study of the binding of pentagastrin-related pentapeptides to phospholipid vesicles, *Biochemistry* 23, 6072-6077 (1984)
19. Kralisz, U., Surewicz, W.K. and Kotelba-Witkowska, B., Effect of freezing-thawing on the human platelet membrane, *Cryo-Letters* 6, 15-24 (1985)
20. Koter, M. and Surewicz, W.K., Radiation-induced structural changes in model lipid membranes. An electron spin resonance and fluorescence study, *Studia Biophysica* 106, 79-86 (1985)
21. Surewicz, W.K. and Epand, R.M., The role of peptide structure in lipid-peptide interactions: High sensitivity differential scanning calorimetry and electron spin resonance studies on the structural properties of dimyristoyl phosphatidylcholine membranes interacting with pentagastrin-related pentapeptides, *Biochemistry* 24, 3135-3144 (1985)
22. Surewicz, W.K., Epand, R.M., Vail, W.J. and Moscarello, M.A., Aliphatic aldehydes promote myelin basic protein-induced fusion of phospholipid vesicles, *Biochim. Biophys. Acta* 820, 319-323 (1985)
23. Surewicz, W.K., Epand, R.M., Epand, R.F., Hallet, R. and Moscarello, M.A., Modulation of myelin basic protein-induced aggregation and fusion of liposomes by cholesterol, aliphatic aldehydes and alkanes, *Biochim. Biophys. Acta*, 863, 45-52 (1986)
24. Surewicz, W.K. and Epand, R.M., Phospholipid structure determines the effects of peptides on membranes: Differential scanning calorimetry studies with pentagastrin-related pentapeptides, *Biochim. Biophys. Acta* 856, 290-300 (1986)
25. Surewicz, W.K., Epand, R.M., Hui, S.W. and Pownall, H.J., Human apolipoprotein A-I forms thermally stable complexes with anionic but not with zwitterionic phospholipids, *J. Biol. Chem.* 261, 16191-16197 (1986)
26. Surewicz, W.K., Epand, R.M., Orlowski, R.C. and Mantsch, H.H., Structural properties of acidic phospholipids in complexes with calcitonin: A Fourier-transform infrared spectroscopic investigation, *Biochim. Biophys. Acta* 899, 307-310 (1987)

27. Surewicz, W.K., Moscarello, M.A. and Mantsch, H.H., Fourier-transform infrared spectroscopic investigation of the interaction between myelin basic protein and dimyristoylphosphatidylglycerol bilayers, *Biochemistry* 26, 3881-3886 (1987)

28. Surewicz, W.K., Moscarello, M.A. and Mantsch, H.H., Secondary structure of the hydrophobic myelin protein in a lipid environment as determined by Fourier-transform infrared spectrometry, *J. Biol. Chem.* 262, 8598-8602 (1987)

29. Surewicz, W.K., Szabo, A.G. and Mantsch, H.H., Conformational properties of azurin in solution as determined from resolution-enhanced infrared spectra, *Eur. J. Biochem.* 167, 519-523 (1987)

30. Surewicz, W.K., Stahl, G.L. and Epand, R.M., Infrared spectroscopic evidence of conformational transitions of an atrial natriuretic peptide, *Proc. Natl. Acad. Sci. U.S.A.* 84, 7028-7030 (1987)

31. Surewicz, W.K. and Mantsch, H.H., New insight into protein secondary structure from resolution-enhanced infrared spectra, *Biochim. Biophys. Acta* 952, 115-130 (1988)

32. Surewicz, W.K., Stepanik, T., Szabo, A.G. and Mantsch, H.H., Lipid-induced changes in the secondary structure of snake venom cardiotoxins, *J. Biol. Chem.* 263, 786-790 (1988)

33. Surewicz, W.K. and Mantsch, H.H., Solution and membrane structure of enkephalins as studied by infrared spectroscopy, *Biochem. Biophys. Res. Commun.* 150, 245-251(1988)

34. Epand, R.M., Igbal, M., Gawisch, A., Segrest, J.P., Anantharamaiah, G.M., Surewicz, W.K., Phospholipid organization and motion in the presence of amphipathic helix-forming peptides with opposite distribution of charges, in: *Peptides*: *Chemistry and Biology* (Marshall, R.R., ed.) pp. 386-389; ESCOM, Leiden (1988)

35. Surewicz, W.K. and Mantsch, H.H., Conformational properties of angiotensin II in aqueous solution and in a lipid environment: A Fourier-transform infrared spectroscopic investigation, *J. Am. Chem. Soc.* 110, 4412-4414 (1988)

36. Epand, R.M., Surewicz, W.K. and Yeagle, P., Role of peptide structure in lipid-peptide interactions: NMR study of the interaction of pentagastrin and [Arg4] pentagastrin with dimyristoylphosphatidylcholine, *Chem. Phys. Lipids* 45, 105-110 (1988)

37. Epand, R.M., Surewicz, W.K., Hughes, D.W., Mantsch, H.H., Segrest, J.P., Gawisch, A. and Anantharamaiah, G.M., Properties of dimyristoylphosphatidylcholine complexes with amphipathic helix-forming peptides: Role of distribution of peptide charges, *J. Biol. Chem.* 264, 4628-4635 (1989)

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39. Surewicz, W.K., Surewicz, K., Mantsch, H.H. and Auclair, F., Interaction of Shigella toxin with globotriaosyl ceramide receptor containing membrane: A fluorescence study, *Biochem. Biophys. Res. Commun.* 160, 126-132 (1989)

40. Surewicz, W.K. and Mantsch, H.H., The conformation of dynorphin A-(1-13) in aqueous solution as studied by Fourier-transform infrared spectroscopy, *J. Mol. Structure* 214, 143-148 (1989)
41. Mantsch, H.H., Surewicz, W.K., Muga, A., Moffatt, D.J., Casal, H.L., Problems and caveats associated with the determination of protein conformation by Ft-IR spectroscopy, *SPIE Proc.* 1145, 580-581 (1989)
42. Muga, A., Surewicz, W.K., Wong, P.T.T., Mantsch, H.H., Singh, V.K., Shinohara, T., Structural studies with the uveopathogenic peptide M derived from retinal S-antigen, *Biochemistry*, 29, 2925-2930 (1990)
43. Whitaker, J.N., Moscarello, M.A., Herman, P.K., Epand, R.M., Surewicz, W.K., Conformational correlates of the epitopes of human myelin basic protein peptide, *J. Neurochem.* 55, 568-576 (1990)
44. Surewicz, W.K., Leddy, J.J., Mantsch, H.H., The structure, stability and receptor interaction of cholera toxin as studied by Fourier-transform infrared spectroscopy, *Biochemistry* 29, 8106-8111 (1990)
45. Choma, C.T., Surewicz, W.K., Carey, P.R., Pozsgay, M., Raynor, T., Kaplan, H., Unusual proteolysis of the protoxin and toxin from *Bacillus thuringiensis*. Structural implications, *Eur. J. Biochem.* 189, 523-527 (1990)
46. Choma, C.T., Surewicz, W.K., Carey, P.,, H.H., Kaplan, H., Secondary structure of the entomocidal toxin from *Bacillus thuringiensis* subsp. kurstaki HD-73, *J. Protein Chem.*, 9, 87-94 (1990)
47. Surewicz, W.K. and Mantsch, H.H., The conformation of proteins and peptides in a membrane environment: A spectroscopic approach, in: *Protein Engineering*: *Approaches to the Manipulation of Protein Folding* (Narang, S., ed.), pp. 131-157, Butterworth, (1990)
48. Choma, C.T., Surewicz, W.K., Kaplan, H., The toxic moiety of the *Bacillus thuringiensis* protoxin undergoes a conformational change upon activation, *Biochem. Biophys. Res. Commun.* 179, 933-938 (1991)
49. Lebruyere, E., Mock, M., Surewicz, W.K., Mantsch, H.H., Rose, T., Sarafi, R.S., Barzu, O., Structural and ligand binding properties of a truncated form of Bacillus anthracis adenylate cyclase and of a catalytically inactive variant in which glutamine substitutes for lysine-346, *Biochemistry* 30, 2619-2624 (1991)
50. Muga, A., Mantsch, H.H., Surewicz, W.K., Apocytochrome c interaction with phospholipid membranes studied by Fourier-transform infrared spectroscopy, *Biochemistry* 30, 2629-2635 (1991)
51. Muga, A., Mantsch, H.H., Surewicz, W.K., Membrane binding induces destabilization of cytochrome c structure, *Biochemistry* 30, 7219-7224 (1991)
52. Rose, T., Brune, M., Wittinghofer, A., Surewicz, W.K., Barzu, O., Gilles, A.M., Structural and catalytic properties of a deletion derivative of *E. coli* adenylate kinase, *J. Biol. Chem.* 266, 10781-10786 (1991)

53. Rose, T., Glaser, P., Surewicz, W.K., Reinstein, J., LeBlay, K., Gilles, A.M., Barzu, O., Structural and functional consequences of amino acid substitutions in the second conserved loop of *E. coli* adenylate kinase, *J. Biol. Chem.* 266, 23654-23659 (1991)

54. Fraser, P.E., Nquen, J.T., Surewicz, W.K., Kirschner, D.A., pH-dependent structural transitions of Alzheimer amyloid peptides, *Biophys. J.* 60, 1190-1201 (1991)

55. Mantsch, H.H. and Surewicz, W.K., Probing protein secondary structure by infrared spectroscopy, in: *Proteins - Structure, Dynamics and Design* (Renugopalakrishnan, V., Carey, P.R., Smith, I.C.P., Huang, S.G. and Storer, A.C., eds.) pp. 125-132, ESCOM, Leiden (1991)

56. Gordon, H., Neugebauer, W., Rixon, R., Somorjai, R., Sung, W., Jouishomme, H., Surewicz, W.K., Whitfield, J., Willick, G., Parathyroid hormone domain for protein kinase C stimulation located within amphiphilic helix, *Peptides - Chemistry, Structure and Biology*, pp. 37-39 (1992)

57. Neugebauer, W., Surewicz, W.K., Gordon, H.L., Somorjai, R.L., Sung, W., Willick, G., Structural elements of human parathyroid hormone and their possible relation to biological activities, *Biochemistry* 31, 2056-2063 (1992)

58. Glaser, P., Presecan, E., Surewicz, W.K., Mantsch, H.H., Barzu, O., Gilles, A.M., Zinc - a novel structural element found in the family of bacterial adenylate kinases, *Biochemistry* 31, 3038-3043 (1992)

59. Epand, R.M., Gabel, B., Epand, R.F., Sen, A., Hui, S.W., Muga, A., Surewicz, W.K., Formation of a new stable phase of phosphatidylglycerols, *Biophys. J.* 63, 327-332 (1992)

60. Fraser, P.,E., Nquyen, J.T., Inouye, H., Surewicz, W.K., Selkoe, D.J., Podlisny, M.B, Kirschner, D.A., Fibril formation by primate, rodent and Dutch-hemorrhagic analogues of Alzheimer amyloid beta-protein, *Biochemistry*, 31, 10716-10723 (1992)

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62. Surewicz, W.K., Muga, A., Mantsch, H.H., Modulation of protein structure by the lipid environment, in: *Structural and Dynamic Properties of Lipids and Membranes*, pp. 153-164, Portland Press Ltd. (1992)

63. Muga, A., Gonzalez-Manas, J.M., Lakey, J.H., Pattus, F., Surewicz, W.K., pH dependent stability and membrane interaction of the pore-forming domain of colicin A, *J. Biol. Chem.* 268, 1553-1557 (1993)

64. Surewicz, W.K., Mantsch, H.H., Chapman, D., Determination of protein secondary structure from infrared spectra. A critical assessment, *Biochemistry* 32, 389-394 (1993)

65. Gilles, A.M., Sismeiro, O., Munier, H., Fabian, H., Surewicz, W.K., Barzu, O., Danchin, A. Structural and physico-chemical characteristics of Bordetella pertusis adenylate kinase, a tryptophan containing isoform, *Eur. J. Biochem.* 218, 921-927 (1993)

66. Yaguchi, M., Pusztai-Carey, M., Roy, C., Surewicz, W.K., Carey, P.R., Richards, W.C., Takai, S. Amino acid sequence and spectroscopic studies of Dutch Elm Disease toxin, cerato-ulmin, in: *Dutch Elm Disease Research* (Sticklen, M. and Sherald, J.L., eds.) pp. 153-170, Springer-Verlag (1993)

67. Surewicz, W.K., Neugebauer, W., Gagnon, L., Whitfield, J.F., Willick, G., Structure-function relationships in human parathyroid hormone: The essential role of amphiphilic α-helix, *Peptides: Chemistry, Structure and Biology* 556-558 (1994)

68. Butko, P., Cournoyer, M., Pusztai-Carey, M., Surewicz, W.K., Membrane interaction and surface hydrophobicity of *Bacillus thuringiensis* δ-endotoxin CryIC, *FEBS Lett*. 340, 89-92 (1994)

69. Muga, A., Neugebauer W., Hirama, T., Surewicz, W.K., Membrane interaction and conformational properties of the putative fusion peptide of PH-30, a protein active in sperm-egg fusion, *Biochemistry*, 33, 4444-4448 (1994) [Accelerated Publication]

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71. Fraser, P.E., McLachlan, D.R., Surewicz, W.K., Snow, A.D., Nguyen, J.T., Kirschner, D.A., Conformation and fibrillogenesis of Alzheimer Aβ peptides with selected substitution of charged residues, *J. Mol. Biol*. 244, 64-73 (1994)

72. Fraser, P.E., McLachlan, D.R., Surewicz, W.K., Mizzen, C.A., Snow, A.D., Nguyen, J.T., Kirschner, D.A., Conformational properties and fibrilliogenesis of Alzheimers Aβ peptides, in: *Research Advances in Alzheimer Disease and related Disorders*, pp. 577-584, Wiley & Sons, New York (1995)

73. Davoodi, J., Wakarchuk, W.W., Campbell, R.L., Carey, P.R., Surewicz, W.K., Abnormally high pK of an active site glutamic acid in *Bacillus circulans* xylanase: The role of electrostatic interactions, *Eur. J. Biochem*. 232, 839-843 (1995).

74. Surewicz, W.K., Olesen, P.R., On the thermal stability of α-crystallin. A new insight from infrared spectroscopy, *Biochemistry* 34, 9655-9660 (1995)

75. Das, K.P., Surewicz, W.K., Temperature-induced exposure of hydrophobic surfaces and its effect on the chaperone activity of α–crystallin, *FEBS Lett*. 369, 321-325 (1995)

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77. Das, K.P., Petrash, J.M., Surewicz, W.K., Conformational properties of substrate proteins bound to a molecular chaperone *a*-crystallin, *J. Biol. Chem*. 271, 10449-10452 (1996) [Accelerated Publication]

78. Serina, L., Bucurenci,, N., Gilles, A.M., Surewicz, W.K., Fabian, H., Takahashi, M., Petrescu, I., Batelier, G., Barzu, O., Structural properties of UMP-kinase from E. coli: Modulation of protein solubility by pH and UTP, *Biochemistry* 35, 7003-7011 (1996)

79. Butko, P., Pusztai-Carey, M., Surewicz, W.K., Membrane permeabilization induced by cytolytic δ-endotoxin CtyA from *Bacillus thuringiensis* var. israelensis, *Biochemistry* 35, 11355-11360 (1996)
80. Carey, P., Surewicz, W.K., Spectroscopic and calorimetric methods for examining protein structure, in: *Protein Engineering and Design* (Carey, P., ed.), pp. 231-263, Academic Press (1996)
81. Surewicz, W.K., Mantsch, H.H., Infrared absorption methods for examining protein structure, in: *Determination of Protein Structure in Solution by Spectroscopic Methods*, (Havel, H., ed.), pp. 135-162, VSH Publishers (1996)
82. Choo-Smith, L.P., Surewicz, The interaction between Alzheimer amyloid β(1-40) peptide and ganglioside GM1-containing membranes, *FEBS Lett*. 402, 95-99 (1997)
83. Sayre, L.M., Zagorski, M., Surewicz, W.K., Krafft, G.A., Perry, G., Mechanism of neurotoxicity associated with amyloid β deposition and the role of free radicals in the pathogenesis of Alzheimer's disease. A critical appraisal, *Chem. Res. Toxicol*. 10, 518-526 (1997)
84. Butko, P., Huang, F., Pusztai-Carey, M., Surewicz, W.K., Interaction of δ-endotoxin CytA from *Bacillus thuringiensis* with lipid membranes, *Biochemistry* 36, 12862-12868 (1997)
85. Choo-Smith, L.P., Garzon-Rodriguez, W., Glabe, C.G., Surewicz, W.K., Acceleration of amyloid fibril formation by specific binding of Alzheimer Aβ peptide to ganglioside containing membrane vesicles, *J. Biol. Chem*. 272, 22987-22990 (1997) [Accelerated Publication]
86. Swietnicki, W. Petersen, R., Gambetti, P., Surewicz, W.K., pH dependent conformation and stability of the recombinant human prion protein PrP(90-231), *J. Biol. Chem.* 272, 27517-27520 (1997) [Accelerated Publication]
87. Davoodi, J., Wakharczuk, A., Surewicz, W.K., Carey, P.R., Scan-rate dependence in protein calorimetry: The reversible transitions of B. circulans xylanase and a disulfide bridge mutant, *Protein Sci*. 7, 1538-1544 (1998)
88. Perrier, V., Burlacu-Miron, S., Bourgeois, S., Surewicz, W.K., Gilles, A.M. Genetically engineered zinc-chelating adenylate kinase from E. coli with enhanced thermal stability, *J. Biol. Chem*. 273, 19097-19101 (1998)
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