

Curriculum Vitae of Stephen Kevin Burley, M.D., D.Phil.

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Positions

2017-Present: University Professor, Rutgers, The State University of New Jersey
2017-Present: Henry Rutgers Chair, Rutgers, The State University of New Jersey
2017-Present: Co-Lead, Cancer Pharmacology Program, Rutgers Cancer Institute of New Jersey
2017-Present: Executive Vice-Chancellor, Rutgers, The State University of New Jersey
2016-Present: Research Scientist, Step IX, San Diego Supercomputer Center, UC San Diego
2015-Present: Founding Director, Institute for Quantitative Biomedicine at Rutgers
2014-Present: Director, RCSB Protein Data Bank
2013-Present: Member, Cancer Institute of New Jersey
2005-Present: Adjunct Professor, University of California at San Diego
2002-Present: Adjunct Professor, The Rockefeller University
2013-2018: Director, Center for Integrative Proteomics Research, Rutgers University
2013-2017: Distinguished Professor, Rutgers, The State University of New Jersey
2013-2015: Director, BioMaPS Institute for Quantitative Biology
2013-2014: Associate Director, RCSB Protein Data Bank
2008-2012: Distinguished Lilly Research Scholar, Eli Lilly and Company
2002-2008: Chief Scientific Officer and Senior Vice-President, SGX Pharmaceuticals, Inc.
1997-2002: Richard M. and Isabel P. Furlaud Chair, The Rockefeller University
1994-2002: Professor/Head of Laboratory, The Rockefeller University
1993-1994: Associate Professor/Head of Laboratory, The Rockefeller University
1990-1993: Assistant Professor and Head of Laboratory, The Rockefeller University
1994-2002: Investigator, Howard Hughes Medical Institute
1993-1994: Associate Investigator, Howard Hughes Medical Institute
1990-1993: Assistant Investigator, Howard Hughes Medical Institute
1988-1990: Resident, Internal Medicine, Brigham and Women's Hospital, Harvard Medical School
1987-1988: Intern, Internal Medicine, Brigham and Women's Hospital, Harvard Medical School
1987-1990: Postdoctoral Research Fellow in Protein Crystallography, Department of Chemistry, Harvard University (Supervisor: Professor William N. Lipscomb)
1983-1987: Postdoctoral Research Fellow in Protein Crystallography, Department of Chemistry, Massachusetts Institute of Technology (Supervisor: Professor Gregory A. Petsko)

Education

September 1983 - June 1987: **M.D.**, Harvard Medical School (Harvard-M.I.T. Division of Health Sciences and Technology). M.D. Thesis Supervisor: Dr. Gregory A. Petsko; M.D. Thesis Title: X-ray Crystallographic Studies of Some Model Therapeutic Agents for Sickle Cell Disease and of Protein Structure Stabilization
October 1980 - September 1983: **D. Phil.**, University of Oxford (Exeter College), United Kingdom. Professor: Sir David C. Phillips; Research Supervisor: Dr. Andrew Miller; Thesis Title: Molecular Arrangement in Viruses Studied by X-ray and Neutron Scattering and Other Physical Techniques

September 1976 - June 1980: **B.Sc.** (Physics), University of Western Ontario, Canada

Honors and Prizes

Fellow, American Crystallographic Association (2020)

Henry Rutgers Chair, Rutgers, The State University of New Jersey (2017)

Doctor of Science (honoris causa), Western University (2016)

Richard M. and Isabel P. Furlaud Chair, The Rockefeller University (1997)

Fellow, New York Academy of Sciences (elected 1997)

Fellow, Royal Society of Canada (elected 1995)

Harvard Medical School (1983-1987)

Magna Cum Laude

Leon Reznick Memorial Prize for Excellence and Accomplishment in Research

Rhodes Scholar (elected 1980)

University of Western Ontario (1976-1980)

Gold Medal in Physics

VEECO Instruments Incorporated Prize for Physics

University of Western Ontario Faculty Association Award

University of Western Ontario Undergraduate Scholarship (Full)

Memberships (* No longer active)

American Association for the Advancement of Science

American Chemical Society

American Crystallographic Association

American Society for Biochemistry and Molecular Biology

Biophysical Society

International Society for Biocuration

International Society for Computational Biology

New York Academy of Sciences

Protein Society

Royal Society of Canada

American Association of Cancer Research*

American Society of Clinical Oncology*

American Society of Hematology*

International Structural Genomics Organization*

Alpine Club of Canada

Trout Unlimited

Oxford University Ice Hockey Club (Half-Blue, 1982)*

Fellowships

Medical Foundation Inc. Research Fellowship, 1988-1990

W.R. Grace Foundation Research Fellowship, 1986-1987

Natural Sciences and Engineering Research Council of Canada Research Fellowship, 1984-1986

Natural Sciences and Engineering Research Council of Canada Summer Research Fellowship, 1980

Rockefeller University Governance and Administrative Activities (1990-2002)

Founding Director, Pels Family Center for Biochemistry and Structural Biology, 1997-2002
Member, Executive Committee of the Academic Senate, 1995-1998
Chair, Academic Senate, 1997-1998
Deputy for Academic Affairs, 1999-2002

Rutgers University Governance and Administrative Activities 2013-Present

Co-Lead, Cancer Pharmacology Program, Cancer Institute of New Jersey, 2017-Present
Founding Director, Institute for Quantitative Biomedicine at Rutgers, 2015-Present
Senator, Rutgers University Senate, 2015-2018
Director, Center for Integrative Proteomics Research, 2013-2018
Director, BioMaPS Institute for Quantitative Biology, 2013-2015

Extramural Academic Service Activities (* Completed)

INSTRUCT-ERIC Independent Scientific Advisory Board (Chair) 2019-Present
Harrington Discovery Institute Investment Advisory Board (Member) 2014-Present
US National Committee for Crystallography (Member) 2014-2016, 2018-Present
American Crystallographic Association Data, Standards and Computing Committee (Member) *
American Crystallographic Association Industrial Special Interest Group (Chair) *
American Crystallographic Association Synchrotron Radiation Special Interest Group (Chair) *
American Crystallographic Association Transactions Symposium (Co-Organizer) *
Cancer Research Foundation Fellowship Advisory Panel (Member) *
Chemistry in Cancer Research Task Force, AACR (Member, Steering Committee) *
DIAMOND CEO Search Committee (Member, Wellcome Trust Representative) *
DIAMOND Synchrotron Scientific Advisory Committee (Member) *
DIAMOND MX Beamline Review Committee (Chair) *
INSTRUCT Advisory Board (Member) *
International Structural Genomics Organization Executive Committee (Member) *
Life Sciences Research Foundation, Postdoctoral Fellowship Advisory Panel (Member) *
National Academy of Sciences Study on Intellectual Property in Genomic and Proteomic Research and Innovation Committee (Member) *
NIGMS/NCI APS X-ray Beamline Scientific Advisory Board (Member) *
Nucleic Acids Data Base Scientific Advisory Board (Member, *
RCSB Protein Data Bank (Chair, Scientific Advisory Board) *
RIKEN Cluster of Life Science Platform (Member, Advisory Board) *
Royal Society of Canada, Life Sciences Fellowship Committee (Member) *
Sick Kids Hospital Research Institute (Member and Chair, Scientific Advisory Board)*
Worldwide Protein Data Bank (wwPDB; Chair, Scientific Advisory Board) *
Worldwide Protein Data Bank Foundation (Chair, Board of Directors) *

Scientific Journal Editorial Advisory Boards (* Completed)

Oncogene Editorial Advisory Board (Member) 2015-Present
Structure Editorial Advisory Board (Member) 1995-Present
Nature Scientific Data Editorial Board (Member) 2013-Present
Genome Biology Editorial Advisory Board (Member) *
Genes and Development Editorial Advisory Board (Member) *
Journal of Functional and Structural Genomics Editorial Advisory Board (Member) *
Molecular Cell Editorial Advisory Board (Member) *

For-Profit Roles Founder/Boards of Directors/Scientific Advisory Boards/Consultancies (* Completed)

Prospect Genomics, Inc. (Co-Founder) *

Oncothyreon, Inc. (Member, Board of Directors) *

Eclosion, SA (Member, Scientific Advisory Board) *

GENSET SA (Member, Scientific Advisory Board) *

Gryphon Pharmaceutical Sciences, Inc. (Member, Scientific Advisory Board) *

Protein Solutions, Inc. (Chair, Scientific Advisory Board) *

Scriptgen Pharmaceuticals, Inc. (Member, Scientific Advisory Board) *

Structural GenomiX, Inc. (Member, Scientific Advisory Board) *

Vincere Biosciences, Inc. (Member, Scientific Advisory Board)

Amgen, Inc. (Consultant)*

Coferon, Inc. (Consultant)

Novagen, Inc. (Consultant)*

SQI Diagnostics, Inc. (Consultant)*

Tularik, Inc. (Consultant)*

Patents

1. U.S. Patent No. 5,935,810, issued August 10, 1999. Modulators of body weight, corresponding nucleic acids and proteins, and diagnostic and therapeutic uses thereof. Jeffrey M. Friedman, Yiyang Zhang, Ricardo Proenca, Margherita Maffei, Jeffrey L. Halaas, Ketan Gajiwala, Stephen K. Burley.

2. U.S. Patent No. 5,872,011, issued February 16, 1999. Crystal structure of a protein-ligand complex containing an N-terminal truncated eIF4E, and methods of use thereof. Stephen K. Burley, Nahum Sonenberg, Joseph Marcotrigiano, Anne-Claude Gingras.

3. U.S. Patent No. 7,544,492, issued June 9, 2009. OB polypeptides, modified forms and derivatives. Jeffrey M. Friedman, Jeffrey L. Halaas, Ketan Gajiwala, Stephen K. Burley.

Contributions to US FDA New Drug Approvals

1. Metreleptin (trade names Myalept, Myalepta) is a synthetic analog of the hormone leptin approved for the treatment of diabetes and various forms of dyslipidemia. Contributed to animal proof-of-concept studies at The Rockefeller University that were published in J.L. Halaas, K.S. Gajiwala, M. Maffei, S.L. Cohen, B.T. Chait, D. Rabinowitz, R.L. Lallone, S.K. Burley, and J.M. Friedman (1995) Weight reducing effects of the plasma protein encoded by the *obese* gene. *Science* 269, 543-546.

2. Abemaciclib (trade names Verzenio and Verzenios) is a selective CDK4/CDK6 inhibitor approved for the treatment of advanced or metastatic breast cancers. Contributed to structure-guided drug discovery at Lilly Research Laboratories.

Publications

1. S.K. Burley, S.O. John, and J. Nuttall (1981) Vector orthogonal polynomials. *SIAM Journal of Numerical Analysis* 18, 919-924.
2. R.T. Baumel, S.K. Burley, D.F. Freeman, J.L. Gammel, and J. Nuttall (1982) The rise of a cylindrical bubble in an inviscid fluid. *Canadian Journal of Physics* 60, 999-1007.
3. J.W. Erickson, P. Tollin, J.F. Richardson, S.K. Burley, and J.B. Bancroft (1982) The structure of an unusual ordered aggregate of Papaya Mosaic Virus protein. *Virology* 118, 241-245.
4. S.K. Burley, A. Miller, K.A. Harrap, and D.C. Kelly (1982) Structure of the *Baculovirus* nucleocapsid. *Virology* 120, 433-440.
5. P.A. Fraser and S.K. Burley (1982) A simple model of a Feschbach resonance. *European Journal of Physics* 3, 230-238.
6. S.K. Burley, P.W. Whippey, and W.P. Alford (1983) Image enhancement in electron microscopy. *Physics in Canada* 39, 40-44.
7. S.K. Burley and R.G.E. Murray (1983) Structure of the regular surface layer of *Bacillus polymyxa*. *Canadian Journal of Microbiology* 29, 775-780.
8. A. Miller, R.J. Greenall, S.K. Burley, R. Ruigrok, P.C.J. Krygsman, and C. Nave (1984) X-ray and neutron studies of non-crystalline biological materials. In *Biological Systems: Structure and Analysis* Proceedings of the Study Weekend 24-25 March, 1984. edited by G.P. Diakun and C.D. Garner (Science and Engineering Research Council, Daresbury Laboratory, Daresbury, Warrington, United Kingdom DL/SCI/R22) pp. 60-64.
9. S.K. Burley, R.J. Greenall, A. Miller, M.T. Stubbs, C. Nave, and D.C. Kelly (1984) An X-ray and neutron small-angle scattering study of the structure of insect iridovirus IV29. In *Biological Systems: Structure and Analysis* Proceedings of the Study Weekend 24-25 March, 1984. edited by G.P. Diakun and C.D. Garner (Science and Engineering Research Council, Daresbury Laboratory, Daresbury, Warrington, United Kingdom DL/SCI/R22) pp. 118-120.
10. S.K. Burley and G.A. Petsko (1985) Aromatic-aromatic interaction: A mechanism of protein structure stabilization. *Science* 229, 23-28.
11. S.K. Burley, A.H.-J. Wang, J.R. Votano, and A. Rich (1985) Hydrophobic peptide inhibitors of sickle hemoglobin aggregation have similar structural features. In *PEPTIDES: Proceedings of the Ninth American Peptide Symposium*, edited by C.M. Deber, V.J. Hruby, and K.D. Kopple (Pierce Chemical Co., Rockford, Illinois) pp. 155-158.
12. C. Nave, J.R. Helliwell, P.R. Moore, A.W. Thompson, J.S. Worgan, R.J. Greenall, A. Miller, S.K. Burley, J. Bradshaw, W.J. Pigram, W. Fuller, D.P. Siddons, M. Deutsch, and R.T. Tregear (1985) Facilities for solution scattering and fibre diffraction at the Daresbury SRS. *Journal of Applied Crystallography* 18, 396-403.
13. S.K. Burley and G.A. Petsko (1986) Amino-aromatic interactions in proteins. *FEBS Letters* 203, 139-143.
14. S.K. Burley and G.A. Petsko (1986) Dimerization energetics of benzene and amino acid side-chains. *Journal of the American Chemical Society* 108, 7995-8001.
15. T.L. Blundell, J. Singh, J. Thornton, S.K. Burley, and G.A. Petsko (1986) Aromatic interactions. *Science* 234, 1005.
16. S.K. Burley, A.H.-J. Wang, J.R. Votano, and A. Rich (1987) Antigelling and antisickling bisphenyl oligopeptides and peptide analogs have similar structural features. *Biochemistry* 26, 5091-5099.

17. A.H.-J. Wang and S.K. Burley (1987) Structure of an antisickling agent L-phenylalanine benzyl ester monochloride. *Acta Crystallographica C43*, 1011-1012.
18. A.H.-J. Wang and S.K. Burley (1987) Structure of an antigelling agent L-lysyl-L-phenylalanyl-L-phenylalanine dibromide. *Acta Crystallographica C43*, 1635-1636.
19. S. Fujii, S.K. Burley, and A.H.-J. Wang (1987) Structure of an antigelling agent L-phenylalanyl-glycyl-glycyl-D-phenylalanine trihydrate. *Acta Crystallographica C43*, 1008-1009.
20. S.K. Burley and A.H.-J. Wang (1987) Structure of an antisickling agent N-phenylacetyl-L-phenylalanine. *Acta Crystallographica C43*, 797-799.
21. S.K. Burley and A.H.-J. Wang (1987) Structure of an antisickling agent L-phenylalanyl-3-aminopyridinium dichloride monohydrate. *Acta Crystallographica C43*, 1010-1011.
22. S.K. Burley (1987) Structure of an antisickling agent N-phenylacetyl-L-phenylalanine monohydrate. *Acta Crystallographica C43*, 1316-1318.
23. S.K. Burley and A.H.-J. Wang (1987) Structure of 6-benzoyl-5'-tertbutyldimethylsilyl-2'-deoxyadenosine monohydrate. *Acta Crystallographica C43*, 988-990.
24. S.K. Burley and G.A. Petsko (1988) Weakly polar interactions in proteins. *Advances in Protein Chemistry 39*, 125-189.
25. S.K. Burley and G.A. Petsko (1989) Electrostatic interactions in aromatic oligopeptides contribute to protein stability. *Trends in Biotechnology 7*, 354-359.
26. D. Ringe, S.K. Burley, and G.A. Petsko (1989) Weakly polar interactions in proteins. In *Synthetic Peptides*, edited by J.P. Tam and E.T. Kaiser (A.R. Liss, New York) pp. 87-96.
27. G. Shoham, S.K. Burley, and W.N. Lipscomb (1989) Crystal and molecular structure of *cyclo*(-L-prolylglycyl)₂. *Acta Crystallographica C45*, 1944-1948.
28. S.K. Burley, P.R. David, A. Taylor, and W.N. Lipscomb (1990) Molecular structure of leucine aminopeptidase at 2.7Å. *Proceedings of the National Academy of Sciences USA 87*, 6878-6882.
29. J. Kuriyan, K. Osapay, S.K. Burley, A.T. Brunger, W.A. Hendrickson, and M. Karplus (1991) Exploration of disorder in protein structures by X-ray restrained molecular dynamics. *Proteins: Structure, Function and Genetics 10*, 340-358.
30. S.K. Burley, P.R. David, and W.N. Lipscomb (1991) Leucine aminopeptidase: Bestatin inhibition and a model for enzyme-catalyzed peptide hydrolysis. *Proceedings of the National Academy of Sciences USA 88*, 6916-6920.
31. P.R. David and S.K. Burley (1991) A method for equilibrating protein crystals with heavy atom reagents. *Journal of Applied Crystallography 24*, 1073-1074.
32. S.K. Burley, P.R. David, A. Taylor, R.M. Sweet, and W.N. Lipscomb (1992) Structure determination and refinement of bovine lens leucine aminopeptidase and its complex with bestatin. *Journal of Molecular Biology 224*, 113-140.
33. S.K. Burley (1992) Looking at proteins. *Protein Science 1*, 1227-1228.
34. J. Kuriyan and S.K. Burley (1992) DNA recognition: Warts and all. *Nature 359*, 476.
35. D.B. Nikolov, S.-H. Hu, J.P. Lin, A. Gasch, A. Hoffmann, M. Horikoshi, N.-H. Chua, R.G. Roeder, and S. K. Burley (1992) Crystal structure of TFIID TATA-box binding protein. *Nature 360*, 40-46. [Cover Article]
36. H. Kim, S.K. Burley, and W.N. Lipscomb (1993) Re-refinement of the X-ray crystal structure of bovine lens leucine aminopeptidase complexed with bestatin. *Journal of Molecular Biology 230*, 722-724.

37. A.R. Ferre-D'Amare, G.C. Prendergast, E.B. Ziff, and S.K. Burley (1993) Recognition by Max of its cognate DNA through a dimeric b/HLH/Z domain. *Nature* *363*, 38-45.
38. K.L. Clark, E.D. Halay, E. Lai, and S.K. Burley (1993) Co-crystal structure of the HNF-3/*fork head* DNA-recognition motif resembles histone H5. *Nature* *364*, 412-420.
39. J.L. Kim, D.B. Nikolov, and S.K. Burley (1993) Co-crystal structure of TBP recognizing the minor groove of a TATA element. *Nature* *365*, 520-527. [Cover Article]
40. E. Lai, K.L. Clark, S.K. Burley, and J.E. Darnell (1993) The HNF-3/*fork head* or "winged helix" proteins: A new family of transcription factors of diverse biologic function. *Proceedings of the National Academy of Sciences USA* *90*, 10421-10423.
41. S.K. Burley, K.L. Clark, A. Ferre-D'Amare, J.L. Kim, and D.B. Nikolov (1993) X-ray crystallographic studies of eukaryotic transcription factors. *Cold Spring Harbor Symposium on Quantitative Biology* *58*, 123-132.
42. A.R. Ferre-D'Amare, P. Pognonec, R.G. Roeder, and S.K. Burley (1994) Structure and function of the b/HLH/Z domain of USF. *EMBO Journal* *13*, 180-189.
43. S.K. Burley (1994) Forward to the fundamentals. *Nature Structural Biology* *1*, 8-10.
44. S.K. Burley (1994) DNA-binding motifs from eukaryotic transcription factors. *Current Opinion in Structural Biology* *4*, 3-11.
45. S.K. Burley (1994) Plus ça change, plus c'est la même chose. *Nature Structural Biology* *1*, 207-208.
46. D.B. Nikolov and S.K. Burley (1994) 2.1Å Resolution refined structure of TBP. *Nature Structural Biology* *1*, 621-637. [Cover Article]
47. J.L. Kim and S.K. Burley (1994) 1.9Å Resolution refined structure of TBP recognizing the minor groove of TATAAAAG. *Nature Structural Biology* *1*, 638-653. [Cover Article]
48. A.R. Ferre-D'Amare and S.K. Burley (1994) Use of dynamic light scattering to assess crystallizability of macromolecules and macromolecular assemblies, *Structure* *2*, 357-359.
49. E. Steingrimsson, K.J. Moore, M.L. Lamoreux, A.R. Ferre-D'Amare, S.K. Burley, D.C. Sanders-Zimring, L.C. Skow, C.A. Hodgkinson, H. Arnheiter, N.G. Copeland, and N.A. Jenkins (1994) Molecular genetic dissection of the bHLH-Zip protein encoded by the mouse *microphthalmia* locus. *Nature Genetics* *8*, 256-263.
50. S.K. Burley (1994) p53: A cellular Achilles' heel revealed. *Structure* *2*, 789-792.
51. A.R. Ferre-D'Amare and S.K. Burley (1995) DNA recognition by helix-loop-helix proteins. *Nucleic Acids and Molecular Biology* *9*, 285-298.
52. L.E. Canne, A.R. Ferré-D'Amaré, S.K. Burley, and S.B.H. Kent (1995) Total chemical synthesis of a unique transcription factor-related protein: cMyc-Max. *Journal of the American Chemical Society* *117*, 2998-3007.
53. S.K. Burley (1995) Rel revealed: Cocrystal structures of the NF-κB p50 homodimer. *Chemistry and Biology* *2*, 77-81.
54. S.L. Cohen, A.R. Ferré-D'Amaré, S.K. Burley, and B.T. Chait (1995) Probing the solution structure of the DNA-binding protein Max by a combination of proteolysis and mass spectrometry. *Protein Science* *4*, 1088-1099. [Cover Article]
55. J.L. Kim and S.K. Burley (1995) PCD/DCoH: More than a second molecular saddle! *Structure* *3*, 531-534.

56. M. Sha, A.R. Ferré-D'Amaré, S.K. Burley, and D.J. Goss (1995) Anticooperative biphasic equilibrium binding of transcription factor USF to its cognate DNA measured by protein fluorescence changes. *Journal of Biological Chemistry* 270, 19325-19329.
57. J.L. Halaas, K.S. Gajiwala, M. Maffei, S.L. Cohen, B.T. Chait, D. Rabinowitz, R.L. Lallone, S.K. Burley, and J.M. Friedman (1995) Weight reducing effects of the plasma protein encoded by the *obese* gene. *Science* 269, 543-546.
58. D.B. Nikolov, H. Chen, E.D. Halay, A. Usheva, K. Hisatake, D.K. Lee, R.G. Roeder, and S. K. Burley (1995) Crystal structure of a TFIIB-TBP-TATA element ternary complex. *Nature* 377, 119-128.
59. X. Xie, S.L. Cohen, U. Mirza, B.T. Chait, A. Hoffmann, R.G. Roeder, Y. Nakatani, and S. K. Burley (1996) Structural similarity between TAFs and the heterotetrameric core of the histone octamer. *Nature* 380, 316-322.
60. A. Hoffmann, C.-M. Chiang, T. Oelgeschlager, X. Xie, S.K. Burley, Y. Nakatani, and R.G. Roeder (1996) A histone octamer-like structure within TFIID. *Nature* 380, 356-359.
61. H. Houbaviv, A. Usheva, T. Schenk, and S. K. Burley (1996) Cocrystal structure of YY1 bound to the Adeno-associated virus P5 Initiator. *Proceedings of the National Academy of Sciences USA* 93, 13577-13582.
62. S.K. Burley (1996) TATA box-binding protein. *Current Opinion in Structural Biology* 6, 69-75.
63. S.K. Burley (1996) X-ray crystallographic studies of eukaryotic transcription initiation factors. *Proceedings of the Royal Society Series B351*, 483-489.
64. S.K. Burley and R.G. Roeder (1996) Biochemistry and structural biology of transcription factor IID. *Annual Reviews of Biochemistry* 65, 769-799.
65. D.B. Nikolov, H. Chen, E.D. Halay, A. Hoffmann, R.G. Roeder, and S.K. Burley (1996) Crystal structure of a human TATA box-binding protein/TATA element complex. *Proceedings of the National Academy of Sciences USA* 93, 4862-4867.
66. G.O. Bryant, L. Martel, S.K. Burley, and A.J. Berk (1996) Radical mutations reveal TATA box-binding protein surfaces required for activated transcription *in vivo*. *Genes and Development* 10, 2491-2504.
67. S.K. Burley (1996) Picking up the TAB. *Nature* 381, 112-113.
68. E. Steingrimsson, A. Nii, M.L. Lamoreux, D.E. Fisher, A.R. Ferre-D'Amare, R. McCormick, L.B. Russell, S.K. Burley, J.M. Ward, N.A. Jenkins, and N.G. Copeland (1996) The semidominant *M^b* mutation identifies a role for the HLH domain in DNA binding in addition to its role in protein dimerization. *EMBO Journal* 15, 6280-6289.
69. D.B. Nikolov and S. K. Burley (1997) RNA polymerase II transcription initiation: A structural view. *Proceedings of the National Academy of Sciences USA* 94, 15-22.
70. S.K. Burley (1997) Structural studies of eukaryotic transcription initiation. *Nucleic Acids and Molecular Biology* 11, 251-264.
71. A.R. Ferre-D'Amare and S.K. Burley (1997) Dynamic light scattering as a tool for evaluating crystallizability of macromolecules. *Methods in Enzymology* 276, 157-166.
72. G. Patikoglou and S.K. Burley (1997) Eukaryotic transcription factor-DNA complexes. *Annual Reviews of Biophysics and Biomolecular Structure* 26, 289-325.
73. S.K. Burley, X. Xie, K.L. Clark, and F. Shu (1997) Histone-like transcription factors. *Current Opinion in Structural Biology* 7, 94-102.
74. D. Rhodes and S.K. Burley (1997) Protein-nucleic acid interactions: Editorial overview. *Current Opinion in Structural Biology* 7, 73-75.

75. M.H. Werner and S.K. Burley (1997) Architectural transcription factors: Proteins that remodel DNA. *Cell* **88**, 733-736.
76. J. Marcotrigiano, A.-C. Gingras, N. Sonenberg, and S.K. Burley (1997) Co-crystal structure of the messenger RNA 5' Cap-binding protein (eIF4E) bound to 7-methyl-GDP. *Cell* **89**, 951-961.
77. L.E. Berman, Z. Yin, S.B. Dierker, E. Dufresne, S.G.J. Mochrie, O.K.C. Tsui, S.K. Burley, F. Shu, X. Xie, M. Capel, and R.M. Sweet (1997) Performance of the double multilayer monochromator on the NSLS wiggler beam line X25. In *Synchrotron Radiation Instrumentation: Tenth US National Conference, AIP Conference Proceedings 417*, edited by E. Fontes (American Institute of Physics, New York) pp. 71-79.
78. J. Marcotrigiano, A.-C. Gingras, N. Sonenberg, and S.K. Burley (1997) X-ray studies of the messenger RNA 5' Cap-binding protein (eIF4E) bound to 7-methyl-GDP. *Nucleic Acids Symposium* **36**, 8-11.
79. L.A. Carillo, C.E. McPherson, S. Cherian, E.Y. Shim, P. Bossard, K.L. Clark, S.K. Burley, and K.S. Zaret (1998) Nucleosome-specific binding activity of the winged-helix transcription factor HNF3. *EMBO Journal* **17**, 244-254.
80. E. Rom, H.C. Kim, D. Favre, J. Marcotrigiano, H. Olsen, S.K. Burley, and N. Sonenberg (1998) Cloning and characterization of 4EHP, a novel mammalian eIF4E-related cap-binding protein. *Journal of Biological Chemistry* **273**, 13104-13109.
81. A. Parraga, L. Bellsollell, A.R. Ferre-D'Amare, and S.K. Burley (1998) Co-crystal structure of SREBP-1 recognizing a sterol regulatory element. *Structure* **6**, 661-672.
82. E. Wolf, A. Vassilev, Y. Makino, A. Sali, Y. Nakatani, and S.K. Burley (1998) Crystal structure of a GCN5-related N-acetyltransferase: *Serratia marcescens* aminoglycoside 3-N-acetyltransferase. *Cell* **94**, 439-449.
83. N.S. Sturm, Y. Lin, S.K. Burley, J.L. Krstenansky, J.-M. Ahn, B.Y. Azizeh, D. Trivedi, and V.J. Hruby (1998) Structure-function studies on positions 17, 18, and 21 replacement analogues of glucagon: The importance of charged residues and salt bridges in glucagon biological activity. *Journal of Medicinal Chemistry* **41**, 2693-2700.
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Protein Data Bank Depositions (Total=1241)

1LAP, 6RAT, 1VOL, 1VOK, 1TAF, 1CDW, 1UBD, 1AN4, 1AN2, 1AM9, 1BO4, 1BH0, 1B54, 1CI0, 1CT5,
 1CVJ, 1DJ8, 1QN4, 1QN3, 1QNE, 1QNC, 1QNB, 1QNA, 1QN5, 1QN9, 1QN8, 1QN7, 1QN6, 1DTJ, 1DF7,
 1EJH, 1EJ4, 1EJ1, 1DFC, 1G62, 1G61, 1G7T, 1G7S, 1G7R, 1HU3, 1I27, 1FI4, 1I9A, 1I2T, 1JD1,
 1JF9, 1JG8, 1JF1, 1JR7, 1JMT, 1JZT, 1F89, 1HQZ, 1KMJ, 1KMK, 1KNZ, 1K4Z, 1KUY, 1KUX, 1KUV,
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 1XXL, 1PV1, 1R3D, 1TXN, 1TXZ, 1TY8, 1RZN, 1Y1L, 1Y23, 1TR9, 1TSJ, 1TT7, 1U6M, 1U6L, 1Y65,
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 2I5G, 2I6E, 2HY3, 2I52, 2I9U, 2I9I, 2I76, 2IA1, 2IEC, 2IF6, 2ICS, 2IJ9, 2IML, 2IMH, 2IMG,
 2IMR, 2IMO, 2IM9, 2I00, 2ANR, 2ANN, 2IJQ, 2IM5, 2IJR, 2IOJ, 2NN4, 2ISN, 2IQ1, 2INLZ, 2NLY,
 2NPO, 2NR4, 2IPQ, 2IQI, 2IJZ, 2NQL, 2NQ5, 2NRJ, 2NRH, 2NS9, 2IRM, 2NWI, 2NV5, 2HDW, 2NRQ,
 2NYV, 2NWU, 2NYG, 2O16, 2O34, 2O3J, 2O56, 2O8R, 2NX2, 2NXO, 2O3A, 2OCE, 2OGF, 2OHW, 2OGK,
 2OKT, 2OLA, 2OOG, 2O06, 2O03, 2O02, 2OGJ, 2OOF, 2OOD, 2OPJ, 2OQH, 2OG9, 2OX7, 2OX4, 2OZ3,
 2OYN, 2OQY, 2OZ8, 2OYC, 2OZT, 2P0I, 2P27, 2OVL, 2OUX, 2OY9, 2P0L, 2P1J, 2P1G, 2P2E, 2P4U,
 2P3Z, 2P5I, 2P61, 2P2U, 2P67, 2P76, 2P5Z, 2P69, 2P84, 2P8E, 2P9B, 2PAJ, 2PAG, 2PBN, 2PB9,
 2PBZ, 2PBE, 2PCE, 2PCS, 2PGE, 2PGW, 2PGS, 2PHP, 2PLG, 2PMB, 2PMR, 2PMQ, 2PNW, 2POF, 2POZ,
 2PTF, 2PJU, 2PPG, 2PS2, 2PUZ, 2PWW, 2PW9, 2Q01, 2PZZ, 2POD, 2Q07, 2Q09, 2Q08, 2Q5E, 2Q6E,
 2QDD, 2Q5C, 2QDE, 2NO1, 2NO0, 2NO7, 2NO6, 2QF9, 2QH0, 2QH5, 2QEE, 2QGY, 2QJC, 2QKP, 2QGO,
 2QR3, 2QQ6, 2QR4, 2QSJ, 2QSD, 2QS8, 2QV5, 2QUP, 2R0B, 2QV0, 2QU7, 2QVH, 2QVG, 2QW6, 2QVC,
 2QWT, 2QY6, 2QYA, 2QXY, 2QZB, 2QYZ, 2R1F, 2QZJ, 2QSR, 2QT3, 2R5X, 2R9G, 2RAG, 2RDY, 2RDX,
 2RDM, 2RBB, 2RG4, 2RXY, 2RJO, 2RZN, 2ZAY, 2RK0, 2RK9, 3B2N, 2RJZ, 3B40, 3B59, 3B5M, 3B89,
 3BBL, 3BE3, 3BCV, 3BE7, 3BG2, 3BH1, 3BGH, 3BGA, 3BHW, 3BIL, 3BJS, 3BMA, 3BGE, 3BOX, 3BQ9,
 3BPD, 3BQT, 3BQX, 3BS4, 3BT5, 3BSM, 3BUT, 3BY5, 3C19, 3BRS, 3C3K, 3C3M, 3BZW, 3BVC, 3C4R,
 3C6F, 3C8C, 3C9F, 3CBN, 3CB3, 3CAW, 3C8T, 3C97, 3CBW, 3CDX, 3CG4, 3BT3, 3CAX, 3CE2, 3CG0,
 3CFY, 3CK5, 3CJP, 3CIH, 3CLK, 3CMN, 3CO8, 3C04, 3CNB, 3COI, 3COK, 3COM, 3CS3, 3CRN, 3CKW,
 3CKX, 3CLW, 3CMG, 3CTA, 3CT2, 3CTD, 3CYJ, 3CU5, 3CTP, 3CWV, 3CZ5, 3C9G, 3D0C, 3CPG, 3CVG,
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 3E0S, 3E2V, 3E3M, 3E61, 3DLS, 3E82, 3DXI, 3DOU, 3E3V, 3DUP, 3DO9, 3E7P, 3E8V, 3E96, 3E9N,
 3EB2, 3DTN, 3DTD, 3EAF, 3E03, 3ED4, 3EEG, 3EEY, 3EBV, 3EDM, 3EEQ, 3EEZ, 3EGO, 3EGC, 3EKG,
 3EOI, 3E9V, 3E9M, 3EHE, 3EMU, 3EMX, 3EQZ, 3ER6, 3ERV, 3ESM, 3ES7, 3ES8, 3EUD, 3EVT, 3EVY,
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 3FBG, 3FCM, 3FCD, 3FBT, 3FEQ, 3EWB, 3FDU, 3FDW, 3FHL, 3F19, 3FEF, 3F5Q, 3EZY, 3FIJ, 3FK4,
 3FK9, 3FJY, 3FM3, 3FMR, 3FN9, 3FMQ, 3FNR, 3FV9, 3FVD, 3FD8, 3FKD, 3FXG, 3FYY, 3FRN, 3FND,
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 3GBT, 3GBU, 3GH1, 3GHY, 3GKB, 3GMF, 3GMG, 3G17, 3GBW, 3GDO, 3GFO, 3GG2, 3GFG, 3GG7, 3GG9,
 3GHF, 3G2E, 3GM8, 3GO2, 3GPK, 3FJ4, 3GG4, 3GL3, 3GRZ, 3GRN, 3GTZ, 3GUV, 3G8R, 3GPV, 3GRA,
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 3H12, 3GPI, 3GMS, 3H49, 3GVX, 3H14, 3H5T, 3H5I, 3H5L, 3H50, 3H7A, 3H70, 3H75, 3H7V, 3H7L,
 3HDO, 3HDG, 3HCW, 3HD5, 3HEB, 3HDP, 3HDV, 3HH0, 3HG7, 3HG9, 3H74, 3HDC, 3HIN, 3HJG, 3H6E,
 3HM7, 3HN2, 3HPA, 3HP0, 3HS3, 3HV1, 3HV2, 3HUH, 3HU5, 3HUT, 3HYO, 3HZ4, 3H9M, 3HIC, 3HUU,
 3HMU, 3I0T, 3I3V, 3I47, 3I45, 3I4S, 3I4J, 3I4K, 3I5T, 3HUR, 3HUL, 3I6E, 3HWJ, 3HQC, 3I3Y,
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 3IGH, 3I8B, 3IE7, 3IK4, 3IJ6, 3IKH, 3ILH, 3IMH, 3ILV, 3IFR, 3IO1, 3IPL, 3IJD, 3IRV, 3IRS,
 3ISA, 3IH0, 3IN1, 3IQ0, 3IPI, 3IVR, 3ID9, 3JU2, 3JTE, 3JVD, 3IP3, 3IP1, 3IVD, 3IVE, 3IWA,
 3K17, 3JUL, 3K2G, 3K4I, 3JY6, 3JYG, 3JZV, 3K2W, 3JTY, 3K12, 3K9D, 3KD6, 3KEW, 3K4U, 3K9C,
 3KD9, 3KCM, 3KHT, 3K4H, 3K9E, 3KCN, 3KJX, 3KG4, 3KGZ, 3KL2, 3KOL, 3K4W, 3KFW, 3KHN, 3KSU,
 3KKE, 3KQ5, 3KTS, 3K5W, 3K85, 3KRT, 3KSM, 3KTN, 3KTO, 3KEP, 3KES, 3KZG, 3KZH, 3L0Q, 3L3S,
 3L49, 3L60, 3L6U, 3L6D, 3L8D, 3KHK, 3KW2, 3L8C, 3IOY, 3KFO, 3LDT, 3L6E, 3L8K, 3LJI, 3LKB,
 3LKE, 3LMD, 3L0M, 3LHL, 3LM4, 3LOP, 3LQ7, 3LPM, 3LTO, 3LUF, 3LGX, 3LHX, 3LME, 3LSN, 2KUC,
 3LVS, 3LXZ, 3LY0, 3LXT, 3KZB, 3LKI, 3LJS, 3LK5, 3KXW, 3M0F, 3LOC, 3M3M, 3LSZ, 3LUA, 3LX6,
 3LYP, 3LYK, 3LYB, 3LL3, 3M1Y, 3M3P, 3LLW, 3M0G, 3LQ1, 3LTE, 3MAE, 3MC1, 3M7V, 3M8N, 3M9U,
 3M9L, 3LNV, 3M2P, 3M2T, 3MAB, 3ME7, 3ME8, 3MF4, 3ME5, 3MGG, 3MGK, 3MIZ, 3MKC, 3MKV, 3MN1,

3MMZ, 3MDK, 3MDN, 3MPO, 3MQT, 3MSR, 3MWC, 3MZN, 3N2C, 3N3D, 3N4E, 3N4F, 3MZV, 3N7C, 3MOG,
3NEK, 3NFU, 3MSY, 3NEH, 3NIW, 3N05, 3MY9, 3N01, 3N28, 3NIV, 3NPK, 3N1U, 3N6H, 3N6J, 3NHM,
3N53, 3NAS, 3NQB, 3NRJ, 3NXL, 3N07, 3NF5, 3NF2, 3NZG, 3OAN, 3OCQ, 3N08, 3ODG, 3OF3, 3OHP,
3NYW, 3OOQ, 3OP2, 3OPS, 3OQB, 3OR5, 3OC4, 3NND, 3OPN, 3P0W, 3OU8, 3OVG, 3OXN, 3OYR, 3P41,
3P8R, 3P8L, 3OCC, 3PDE, 3PDW, 2L57, 3PKO, 2L5L, 2L5O, 3PAN, 3PAO, 3PBM, 3PBK, 3PR8, 3PU5,
3Q10, 3Q2Q, 3PZL, 3P3D, 3Q1Y, 3PU6, 3PVE, 3PWX, 3QK7, 3QDK, 3QFW, 3QKC, 3Q34, 3QQV, 2YBD,
3QNM, 3QUQ, 3QUT, 3QYP, 3R09, 3QLD, 3QU2, 3QU4, 3QU5, 3QUB, 3QUC, 3QU7, 3QU9, 3QX7, 3R9K,
3QXG, 3R03, 3RAZ, 3RMG, 3P3B, 1VTN, 1VTL, 1VTO, 3S6J, 3SMD, 3SLR, 3SN0, 3SN1, 3SN4, 3T81,
3T8L, 3TVI, 4D8L, 4DWD, 4F2D, 4F0R, 4F0S, 4HN8, 4HL7, 4IBP, 4ID0, 4IKH, 4HYR, 4IJI, 4JHM,
4MZY, 4N7T, 4RKQ, 4RKR, 5Q0M, 5Q0L, 5Q0O, 5Q10, 5Q0N, 5Q0Q, 5Q12, 5Q0P, 5Q11, 5Q0S, 5Q14,
5Q0R, 5Q13, 5Q0I, 5Q0K, 5Q0J, 5Q1F, 5Q1E, 5Q1H, 5Q1G, 5Q1I, 5Q1B, 5Q1A, 5Q1D, 5Q1C, 5Q0U,
5Q16, 5Q0T, 5Q15, 5Q0W, 5Q18, 5Q0V, 5Q17, 5Q0Y, 5Q0X, 5Q19, 5Q0Z, 5QCH, 5QCG, 5QCJ, 5QCI,
5QCB, 5QCA, 5QCD, 5QCC, 5QCF, 5QCE, 5QBW, 5QC8, 5QBV, 5QC7, 5QBY, 5QBX, 5QC9, 5QBZ, 5QC0,
5QC2, 5QC1, 5QC4, 5QC3, 5QBU, 5QC6, 5QC5, 5PZX, 5PZW, 5PZZ, 5PZY, 5PZR, 5PZQ, 5PZT, 5PZS,
5PZV, 5PZU, 5Q01, 5Q03, 5Q02, 5Q0A, 5Q0C, 5Q0B, 5Q05, 5Q04, 5Q07, 5Q06, 5Q09, 5Q08, 5Q00,
5QDA, 5QDC, 5QDB, 5QDD, 5QCX, 5QD9, 5QCW, 5QD8, 5QCZ, 5QCY, 5QCP, 5QD1, 5QCO, 5QD0, 5QCR,
5QD3, 5QCQ, 5QD2, 5QCT, 5QD5, 5QCS, 5QD4, 5QCV, 5QD7, 5QCU, 5QD6

Cambridge Structural Database Depositions (Total=8)

FESRIE, FEYZEO, FEYZUE, FEZBOB, FIFMOW, FIMVOM, FONNAX, SEFTIG