Fred H. Gage PhD
Adler Professor
Laboratory of Genetics

Salk Institute for Biological Studies
10010 N Torrey Pines Rd
La Jolla, California 92037
PH (858) 453-4100 x1012
gage@salk.edu
www.salk.edu

May 20, 2024

Salk Institute Appointments Committee
Tanya Sharpe and Sam Pfaff, Co-Chairs

Dear Tanya and Sam,

Re: Reappointments of Ian Wilson and James Williamson as Adjunct Professors

We are in full support of the reappointments of Drs. Ian Wilson and Jamie Williamson, two of the world leaders in structural biology.

Dr. Wilson is the Hansen Professor of Structural Biology at the Scripps Research and a world-renowned expert in using protein crystallography to define antibody structures, most recently reporting the structures of several neutralizing monoclonal antibodies against the SARS-CoV2 virus, establishing exactly where their binding sites map on the surface of the viral spike protein. He is currently collaborating with Dmitry Lyumkis and Tony Hunter on a project related to the antibody recognition of phosphohistidine protein modifications, and they have recently submitted a paper where they used antibody engineering to increase the affinity of an anti-phosphohistidine monoclonal antibody 10-fold, making it a more useful community reagent.

Dr. Williamson is Professor of Chemistry and Integrative Structural & Computational Biology at Scripps Research. His research program involves understanding the structural role of RNA in mediating its many biological functions. He was elected to the NAS in 2022. His fruitful collaborations with Dmitry Lyumkis have resulted in several publications, most recently an article in *Nature Communications* entitled "Assembly landscape for the bacterial large ribosomal subunit.", and another in submission: https://www.biorxiv.org/content/10.1101/2024.04.10.588894v1.

With the continued success of Dmitry Lyumkis' research program, our utilization of cryo-EM technologies has increased. Currently, Salk has a contract with Scripps Research to allow our faculty the use of their cryo-EM facilities. Drs. Wilson and Williamson continue to facilitate the discussions around our continued ability to use the Scripps Research facilities, and for this reason their reappointment as adjunct faculty is vital. They have both also committed to giving a lecture to the Salk community.

Thank you for your consideration of these two reappointments. Attached are their updated CVs and Service/Contribution Forms.

Sincerely,

Rusty Gage Ron Evans Tony Hunter Joe Noel

Salk Adjunct Service/Contributions Form

Name: Ian A. Wilson **Appointment Start Date:** July 1, 2024
Sponsors: Gage, Evans, Noel, Hunter

To be eligible for appointment and reappointment in the Adjunct series, appointees are expected to be engaged in **at least two** Institute-related activities outlined below. If you are being considered for your first Adjunct Professor appointment, provide information about your plans to engage in the Salk community and select any of the activities you would be interested in below. If you are being considered for reappointment, select your ongoing activities and give a brief summary of your engagement in each activity during the past appointment period. Also provide a summary of your plans to engage in the Salk activities during the next appointment period.

Salk Activities (list the course/seminar titles, committees, and student names if known)
** Please note research collaborations with a Salk Faculty sponsor(s) do not qualify as Institute-related activities expected for an Adjunct position*

- ■ Giving Seminars, such as those hosted by Sponsors or by the Institute
- ☐ Teaching in Salk-organized courses
- ☐ Serving on UCSD Student Review committees and/or Thesis Committees in Salk Labs
- ☐ Reviewing Postdoctoral and other Internal Grants
- ☐ Participating in Salk's outreach and educational efforts to recruit underrepresented minority student applicants
- ■ Consulting on Salk scientific initiatives or multi-PI grants
- ■ Serving on Faculty Review Committees
- ☐ Promoting award and nomination opportunities for Salk Faculty
- ☐ Organizing or participating on Salk Meetings or Conferences
- ☐ Other

Salk Service Summary & Plans: Describe your plans to engage in the activities marked above during the next appointment period (i.e.: Salk Course or Seminar Titles, names of Student or Faculty review committee, description of contributions to grants, etc. if unable to fit above). If you are being considered for reappointment, also describe your engagement in the Salk activities during the last appointment period. You may attach a supplemental letter with these activities as needed.

I am willing to participate in any of the above activities or others that would be beneficial and helpful to Salk. I participated on committees overseeing Dmitri Lyumkis for several years. I have collaborated with Dr. Tony Hunter on phospho-histidine projects over the last few years. I was not asked by Salk to do anything else in my last appointment.

Curriculum Vitae

IAN ANDREW WILSON, D. Phil., D.Sc., F.R.S., F.R.S.E.

CURRENT STATUS:

Hansen Professor of Structural Biology
Chair, Department of Integrative Structural and Computational Biology
The Scripps Research Institute
Department of Integrative Structural and Computational Biology
10550 North Torrey Pines Road, BCC 206, La Jolla, CA 92037
Telephone: 858-784-9706 Facsimile: 858-784-2980
E-mail: wilson@scripps.edu;
URL: http://www.scripps.edu/mb/wilson ; wilson.scripps.edu

PERSONAL STATISTICS:

Citizenship	British; USA Permanent Resident (Green card)
Place of Birth	Perth, Scotland
Home Address	1025 Newkirk Drive, La Jolla, CA 92037, USA

EDUCATION:

1971 B. Sc.	Biochemistry, University of Edinburgh, Scotland (First Class Honors)
1976 D. Phil.	Molecular Biophysics, Corpus Christi College, Oxford University, England
2000 D. Sc.	Biological Sciences, Corpus Christi College, Oxford University, England

BIOSKETCH:

Prof. Wilson obtained his B.Sc. from University of Edinburgh (1971), D. Phil. (1976) and D.Sc. (2000) from Oxford University. He joined The Scripps Research Institute as faculty member in 1982, where he is currently Hansen Professor of Structural Biology and Chair of the Department of Integrative Structural and Computational Biology. His laboratory focuses on the structural basis of immune recognition of microbial pathogens. His current focus is on how influenza virus, HIV-1, HCV, SAR-CoV-2 and *P. falciparum* are recognized by broadly neutralizing and protective antibodies to inform on design of novel vaccines and therapeutics. Prof. Wilson is a Fellow of the Royal Society, Corresponding Fellow of Royal Society of Edinburgh, Member of the American Academy of Arts and Sciences, International Member of the National Academy of Sciences, and an Honorary Fellow of Corpus Christi College, Oxford. He has authored more than 850 papers, and is on the Statistical Board of Reviewing Editors of Science and the Editorial Board of Immunity.

RESEARCH INTERESTS:

Research in my lab is related to immune recognition of microbial pathogens. We have structurally characterized many key antigen recognition receptors in innate and adaptive immunity, including T cell receptors, MHC class I and II, antibodies and antibody complexes, CD1, TLRs, VLRs, NODs, etc. We currently focus on viral glycoproteins from influenza, HIV-1, HCV, and SARS-CoV-2 and other enveloped viruses using x-ray crystallography and other biophysical approaches. We identify sites of vulnerability on HIV-1, influenza virus, HCV, SARS-CoV-2 and related CoVs, and *P. falciparum* malaria parasite, that are targeted by broadly neutralizing and protective antibodies, why these antibodies are so effective, and how we can use this information for structure-based design of vaccines and therapies, including antibody therapeutics.

PROFESSIONAL RECORD:

1975 - 1977	Junior Research Fellow, Corpus Christi College, Oxford
1977 - 1980	Research Fellow in Biochemistry, Department of Biochemistry and Molecular Biology, Harvard University
1977 - 1982	Tutor in Biochemistry, Board of Tutors in Biochemistry, Harvard University
1978 - 1982	Resident Tutor in Biochemistry, Quincy House, Harvard University
1978 - 1982	Teaching Associate in Biochemistry, Harvard Summer School
1979 - 1982	Teaching Associate in Biochemistry, Harvard Extension School
1980 - 1982	Research Associate, Department of Biochemistry and Molecular Biology, Harvard University
1982 - 1983	Assistant Member, Department of Immunology, The Scripps Research Institute
1983 - 1984	Assistant Member, Department of Molecular Biology, The Scripps Research Institute
1984 - 1990	Associate Member, Department of Molecular Biology, The Scripps Research Institute
1987 - 2017	Chair, Structure and Chemistry Affinity Group, The Scripps Research Institute
1988 - Present	Professor and Course Director, The Scripps Research Institute Graduate School
1991 - 2013	Professor, Department of Molecular Biology, The Scripps Research Institute
1996 - Present	Professor, The Skaggs Institute for Chemical Biology, The Scripps Research Institute
1998 - 2013	Adjunct Professor, Department of Pathology, University of California at San Diego
2009 - Present	Hansen Professor of Structural Biology, The Scripps Research Institute
2013 - Present	Chair and Professor, Department of Integrative Structural and Computational Biology, The Scripps Research Institute
2014 - 2020	Distinguished Adjunct Professor, ShanghaiTech University
2018 - Present	Adjunct Professor, Salk Institute for Biological Studies

HONORS AND AWARDS:

- First Class Honors, Biochemistry, University of Edinburgh, 1971
- Medical Research Council Studentship No. G77/3780, Laboratory of Molecular Biophysics, Department of Zoology, Oxford University, 1971 - 1975
- I.C.I. Postdoctoral Research Fellowship, Oxford University, 1975 - 1977
- The Newcomb Cleveland Prize for an Outstanding Contribution to Science, 1996 – 1997
- Red Hot Research Papers; *Science Watch*, published by the Institute for Scientific Information (ISI), Philadelphia: cited, 1994, 1996, and 1998
- Who's Who in Science and Engineering, Marquis Millennium Edition, 2000
- Peter Gorer Lectureship, British Society for Immunology, December 2000
- Fellow of the Royal Society of London for Improving Natural Knowledge, 2000
- Burroughs-Wellcome Visiting Professor in the Medical Sciences, U. Missouri, Columbia – 2001
- Member of the American Academy of Arts and Sciences, 2002
- European Patent Application – 20.09.04, US/19.09.03/USP 504123, "Peptide that binds to a broadly neutralizing anti-HIV antibody-structure of 4E10 FAB fragment complex, uses thereof, compositions therefrom."
- Boehringer Ingelheim Plenary Lecture, 7th Annual Symposium, Laval University, Quebec, Canada, February 2007
- USA Patent #7,272,508, issue date 9/18/07, "Small molecule mimetics of erythropoietin."
- Honorary Doctorate of Science, University of St. Andrews, Scotland, 2007
- Fellow of the Royal Society of Edinburgh, 2008
- Hansen Professor of Structural Biology, The Scripps Research Institute, 2009
- Israel Chemical Society, Honorary Membership, 2009

- Honorary Fellow, Corpus Christi College, Oxford, 2009
- Fellow of the American Academy of Microbiology, 2016
- U.S. National Academy of Sciences, International Member, 2016
- Henry Kunkel Society, Member, 2019

PROFESSIONAL SOCIETIES:

British Biophysical Society, American Society for Virology, American Association of Pathologists, American Crystallographic Association, International Union of Crystallography, British Society of Immunologists, Protein Society, American Chemical Society, American Society for Cell Biology

EDITORIAL BOARDS AND APPOINTMENTS:

- Board of Reviewing Editors and Statistical Board of Reviewing Editors, *Science* 1997 - present
- Editorial Board, *Peptide Research* 1994 - 2000
- Editorial Board, *Journal of Structural and Functional Genomics*, 2001 - 2015
- Associate Editor, *Journal of Molecular Biology* 1994 - 2013
- Editorial Board, *Immunity* 1997 - present
- Chairman, BioSync Committee on Synchrotron Radiation for USA, 1997
- Advisory Editor, *Journal of Experimental Medicine*, 1998 – 2017
- Scientific Advisory Board, DGI Biotechnologies, LLC, 1996 - 2002
- Joint Scientific Council, Novartis/TSRI collaboration, 1996 - 2012
- Keystone Symposia Scientific Advisory Board and Board of Directors, 2000 - 2017
- Burroughs Wellcome Career Awards Advisory Committee, 1997 - 2005
- BBCB Study Section, National Institutes of Health, 1998 - 2002
- Member, Royal Society Sectional Committee 6, 2001 - 2005.
- Member, AIDS Vaccine Research Working Group (AVRWG), 2004 - 2007.
- Scientific Advisory Board for BIOXHIT, European Commission FP6 Program, 2004 - 2008
- Scientific Advisory Board for UCSF Membrane Protein Expression Center, 2006 – 2015
- Keystone Symposia Board of Directors, 2008 - 2017
- Advisory Board, SCOPe (Structural Classification of Proteins – extended), 2015 - 2020
- International Scientific Advisory Board (ISAB), Academia Sinica, Taipei, Taiwan, 2015 - 2016
- Editorial Board, *Cell*, 2016 – 2020
- Scientific Advisory Board, Center for Research on Influenza Pathogenesis (CRIP), Icahn School of Medicine at Mount Sinai, NYC, 2016 - present
- Advisory Committee of the Genomics Research Center, Academia Sinica, Taipei, Taiwan 2017-2022

PATENTS

U.S. Patent # 17/915,559 issued 02/22/23. Small molecule inhibitors of influenza virus (Yao, Yao, Kadam, Rameshwar U, Lee, Chang-Chun David, Woehl, Jordan L, Wu, Nicholas C, Zhu, Xueyong, Kitamura, Seiya, **Wilson, Ian A**, and Wolan, Dennis W. (2020). An influenza A hemagglutinin small-molecule fusion inhibitor identified by a new high-throughput fluorescence polarization screen)
US Patent #11008368 issued 05/18/21. (He, Linling, Zhu, Jiang, Giang, Erick, Law, Mansun, **Wilson, Ian A.**, Tzarum, Netanel. (2021). Engineered HCV E2 immunogens and related vaccine compositions)
US Patent US-10934345-B2 issued 03/02/21. (Shao, Yiming, Zhu, Jiang, **Wilson, Ian A.**, Kong, Leopold, JU, Bin, He, Lingling, Ren, Li, Chen, Yajing, Liu, Jiandong (2017). Broadly neutralizing antibodies against HIV-1 and use thereof)
US Patent # 10906944 issued 02/02/21. (He, Lingling, Zhu, Jiang, **Wilson, Ian A.** (2020). Stabilized coronavirus spike (S) protein immunogens and related vaccines)

EPO Patent # 2765138 issued 01/10/18. (Caulfield, Michael, Cupo, Albert, Dean, Hansi, Hoffenberg, Simon, King, C. Richter, Klasse, P. J., Marozsan, Andre, Moore, John P., Sanders, Rogier W., Ward, Andrew, **Wilson, Ian**, Julien, Jean-Philippe (2013). Novel HIV-1 inv envelope glycoprotein)
Australia Patent # 2013208003 issued 03/29/18. (Bazirgan, Omar A., Mao, Hongyuan Helen, Smider, Vaughn, Ekiert, Damian, Schultz, Peter, Wang, Feng, **Wilson, Ian**, Zhang, Yong (2013). Ultralong complementarity determining regions and uses thereof)
China Patent # CN105452546B issued 05/29/18. (Zhang, Hongkai, **Wilson, Ian A.**, Lerner, Richard A. (2013). Methods and compositions related to modulators of eukaryotic cells.)
US Patent # 9,738,719 issued 06/19/18. (**Wilson, Ian A.,** Stanfield, Robyn L, Pejchal, Robert (2014). HIV-1 gp120 mini V3 loop and uses thereof)
US Patent # 9738719 issued 08/22/17. (Zhang, Hongkai, **Wilson, Ian A.,** Lerner, Richard A. (2015). Methods and compositions related to modulators of eukaryotic cells)
US Patent # 9,738,688 issued 08/22/17. (Caulfield, Michael, Cupo, Albert, Dean, Hansi, Hoffenberg, Simon, King, C. Richter, Klasse, P. J., Marozsan, Andre, Moore, John P., Sanders, Rogier W., Ward, Andrew, **Wilson, Ian**, Julien, Jean-Philippe (2015). HIV-1 envelope glycoprotein)
Australia Patent # 2013309272 issued 06/22/17. (Zhang, Hongkai, **Wilson, Ian A.**, Lerner, Richard A. (2013). Methods and compositions related to modulators of eukaryotic cells)
US Patent # 9,593,150 issued 03/14/17. (Grover, Rajesh, Lerner, Richard, **Wilson, Ian,** Zhu, Xueyong. (2015)**.** Immunoglobulin-binding human mycoplasma antigens and methods of use thereof)

PUBLICATIONS

1. Banner, D.W., Bloomer, A.C., Petsko, G.A., Phillips, D.C., Pogson, C.I., **Wilson, I.A.**, Corran, P.H., Furth, A.J., Milman, J.D., Offord, R.E., Priddle, J.D., and Waley, S.G. (1975). Structure of chicken muscle triose phosphate isomerase determined crystallographically at 2.5 Å resolution using amino acid sequence data. Nature *255*, 609-14.
2. Banner, D.W., Bloomer, A., Petsko, G.A., Phillips, D.C., and **Wilson, I.A.** (1976). Atomic coordinates for triose phosphate isomerase from chicken muscle. Biochem Biophys Res Commun *72*, 146-55.
3. Browne, C.A., Campbell, I.D., Kiener, P.A., Phillips, D.C., Waley, S.G., and **Wilson, I.A.** (1976). Studies of the histidine residues of triose phosphate isomerase by proton magnetic resonance and x-ray crystallography. J Mol Biol *100*, 319-43.
4. Phillips, D.C., Rivers, P.S., Sternberg, M.J., Thornton, J.M., and **Wilson, I.A.** (1977). An analysis of the three-dimensional structure of chicken triose phosphate isomerase. Biochem Soc Trans *5*, 642-7.
5. Petsko, G.A., Phillips, D.C., Williams, R.J., and **Wilson, I.A.** (1978). On the protein crystal chemistry of chloroplatinite ions: general principles and interactions with triose phosphate isomerase. J Mol Biol *120*, 345-59.
6. Phillips, D.C., Sternberg, M.J., Thornton, J.M., and **Wilson, I.A.** (1978). An analysis of the structure of triose phosphate isomerase and its comparison with lactate dehydrogenase. J Mol Biol *119*, 329-51.
7. **Wilson, I.A.**, Skehel, J.J., and Wiley, D.C. (1980). Structure studies on the haemagglutinin. In Structure and Variation in Influenza Virus, G. Laver, and G. Air, eds. North Holland: Elsevier, pp. 339-349.
8. Alber, T., Banner, D.W., Bloomer, A.C., Petsko, G.A., Phillips, D., Rivers, P.S., and **Wilson, I.A.** (1981). On the three-dimensional structure and catalytic mechanism of triose phosphate isomerase. Philos Trans R Soc Lond B Biol Sci *293*, 159-71.
9. Wiley, D.C., **Wilson, I.A.**, and Skehel, J.J. (1981). Structural identification of the antibody-binding sites of Hong Kong influenza haemagglutinin and their involvement in antigenic variation. Nature *289*, 373-8.

10. **Wilson, I.A.**, Skehel, J.J., and Wiley, D.C. (1981). Structure of the haemagglutinin membrane glycoprotein of influenza virus at 3 Å resolution. Nature *289*, 366-73.
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12. Skehel, J.J., Douglas, A.R., **Wilson, I.A.**, and Wiley, D.C. (1982). Antigenic variation in the influenza A (Hong Kong) virus. In Virus Persistence, B.W. Mahey, A.C. Minson, and G.K. Darby, eds. Cambridge University: University Press, pp. 215-226.
13. Daniels, R.S., Douglas, A.R., Gonsalves-Scarno, F., Palu, G., Skehel, J.J., Brown, E., Knossow, M., and **Wilson, I.A.** (1983). Antigenic structure of influenza virus haemagglutinin. In The Origin of Pandemic Influenza Viruses, G.W. Laver, and C.M. Chu, eds. North Holland, New York: Elsevier, pp. 9-10.
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15. Krystal, M., Young, J.F., Palese, P., **Wilson, I.A.**, Skehel, J.J., and Wiley, D.C. (1983). Sequential mutations in hemagglutinins of influenza B virus isolates: definition of antigenic domains. Proc Natl Acad Sci USA *80*, 4527-31.
16. Niman, H.L., Houghten, R.A., Walker, L.E., Reisfeld, R.A., **Wilson, I.A.**, Hogle, J.M., and Lerner, R.A. (1983). Generation of protein-reactive antibodies by short peptides is an event of high frequency: implications for the structural basis of immune recognition. Proc Natl Acad Sci USA *80*, 4949-53.
17. Rogers, G.N., Paulson, J.C., Daniels, R.S., Skehel, J.J., **Wilson, I.A.**, and Wiley, D.C. (1983). Single amino acid substitutions in influenza haemagglutinin change receptor binding specificity. Nature *304*, 76-8.
18. **Wilson, I.A.**, Ladner, R.C., Skehel, J.J., and Wiley, D.C. (1983). The structure and role of the carbohydrate moieties of influenza virus haemagglutinin. Biochem Soc Trans *11*, 145-7.
19. Skehel, J.J., Daniels, R.S., Douglas, A.R., Knossow, M., Paulson, J.C., Rogers, G.N., Waterfield, M.D., **Wilson, I.A.**, and Wiley, D.C. (1984). Studies on the structure and activities of influenza virus haemagglutinin. In Mechanisms of Viral Pathogenesis, A. Kohn, and P. Fuchs, eds. Hingham, MA Martinus-Nijhoff, pp. 217-225.
20. Skehel, J.J., Daniels, R.S., Douglas, A.R., Wang, M., Knossow, M., **Wilson, I.A.**, and Wiley, D.C. (1984). Studies on the haemagglutinin. In The Molecular Virology and Epidemiology of Influenza, C. Stuart-Harris, and C.W. Potter, eds. London: Academic Press, pp. 61-75.
21. Skehel, J.J., Stevens, D.J., Daniels, R.S., Douglas, A.R., Knossow, M., **Wilson, I.A.**, and Wiley, D.C. (1984). A carbohydrate side chain on hemagglutinins of Hong Kong influenza viruses inhibits recognition by a monoclonal antibody. Proc Natl Acad Sci USA *81*, 1779-83.
22. Wiley, D.C., **Wilson, I.A.**, and Skehel, J.J. (1984). The haemagglutinin membrane of glycoprotein of influenza virus. In Biological Macromolecules and Assemblies, A. McPherson, eds. New York: John Wiley, pp. 299-336.
23. **Wilson, I.A.** (1984). Structure of antigenic and immunogenic determinants in proteins and synthetic peptides. Ann Sclavo Collana Monogr *1*, 129-38.
24. **Wilson, I.A.**, Niman, H.L., Houghten, R.A., Cherenson, A.R., Connolly, M.L., and Lerner, R.A. (1984). The structure of an antigenic determinant in a protein. Cell *37*, 767-78.
25. **Wilson, I.A.**, Skehel, J.J., and Wiley, D.C. (1984). The structure and function of the haemagglutinin glycoprotein of influenza virus. In X-Ray Crystallography and Drug Action, A.S. Horn, and C.J. DeRanter, eds. Oxford: Clarendon Press, pp. 222-234.
26. **Wilson, I.A.**, Skehel, J.J., and Wiley, D.C. (1984). The three-dimensional structure of a viral antigen: The haemagglutinin glycoprotein of influenza virus. In Modern Approaches to Vaccines, R. Lerner, and R. Chanock, eds. New York: Cold Spring Harbor Press, pp. 1-6.
27. Dyson, H.J., Cross, K.J., Houghten, R.A., **Wilson, I.A.**, Wright, P.E., and Lerner, R.A. (1985). The immunodominant site of a synthetic immunogen has a conformational preference in water for a type-II reverse turn. Nature *318*, 480-3.

28. Skehel, J.J., Brown, E., Daniels, R.S., Douglas, A.R., Knossow, M., **Wilson, I.A.**, Wrigley, N.G., and Wiley, D.C. (1985). Studies with monoclonal antibodies prepared against X-31 influenza virus haemagglutinin. Biochem Soc Trans *13*, 12-4.
29. **Wilson, I.A.** (1985). Probing the structure and antigenic determinants of influenza virus haemagglutinin using antipeptide monoclonal antibodies. In Current Communications in Molecular Biology: Immune Recognition of Protein Antigens, G.W. Laver, and G.M. Air, eds. New York: Cold Spring Harbor Press, pp. 30-34.
30. **Wilson, I.A.**, Haft, D.H., Getzoff, E.D., Tainer, J.A., Lerner, R.A., and Brenner, S. (1985). Identical short peptide sequences in unrelated proteins can have different conformations: a testing ground for theories of immune recognition. Proc Natl Acad Sci USA *82*, 5255-9.
31. Dyson, H.J., Cross, K.J., Ostresh, J., Houghten, R.A., **Wilson, I.A.**, Wright, P.E., and Lerner, R.A. (1986). Selection by site-directed antibodies of small regions of peptides which are ordered in water. Ciba Found Symp *119*, 58-75.
32. Knossow, M., Lewis, M., Rees, D., **Wilson, I.A.**, Skehel, J.J., and Wiley, D.C. (1986). The refinement of the haemagglutinin membrane glycoprotein of influenza virus. Acta Crystallogr Sect B *42*, 627-632.
33. **Wilson, I.A.** (1986). The three-dimensional structure of surface antigens from animal viruses. In Concepts in Viral Pathogenesis II, A.L. Notkins, and M. Oldstone, eds. New York: Springer-Verlag, pp. 15-23.
34. **Wilson, I.A.**, Bergmann, K.F., and Stura, E.A. (1986). Structural analysis of antipeptide antibodies against influenza virus haemagglutinin. In Vaccines '86, New Approaches to Immunization: Developing Vaccines Against Parasitic, Bacterial, and Viral Diseases R.A. Lerner, R. Chanock, and F. Brown, eds. New York: Cold Spring Harbor Laboratory, pp. 33-37.
35. Wright, P.E., Dyson, H.J., Rance, M., Ostresh, J., Houghten, R.A., **Wilson, I.A.**, and Lerner, R.A. (1986). Antipeptide antibodies and the disorder-order phenomenon. In Vaccines '86, New Approaches to Immunization: Developing Vaccines Against Parasitic, Bacterial, and Viral Diseases R.A. Lerner, R. Chanock, and F. Brown, eds. New York: Cold Spring Harbor Laboratory, pp. 15-19.
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38. Stura, E.A., Arevalo, J.H., Feinstein, A., Heap, R.B., Taussig, M.J., and **Wilson, I.A.** (1987). Analysis of an anti-progesterone antibody: variable crystal morphology of the Fab' and steroid-Fab' complexes. Immunology *62*, 511-21.
39. Stura, E.A., Feinstein, A., and **Wilson, I.A.** (1987). Crystallization and preliminary crystallographic data for an antiprogesterone monoclonal antibody Fab' and steroid-Fab' complexes. J Mol Biol *193*, 229-31.
40. White, J.M., and **Wilson, I.A.** (1987). Anti-peptide antibodies detect steps in a protein conformational change: low-pH activation of the influenza virus hemagglutinin. J Cell Biol *105*, 2887-96.
41. **Wilson, I.A.** (1987). X-ray crystallographic studies of biologically important macromolecules. In Health Prospectus for the Year 2000eds. New York: Academic Press, pp. 35-39.
42. Clarke, A.E., and **Wilson, I.A.** (1988). Current Topics in Microbiology and Immunology. Carbohydrate - Protein Interaction, Vol 139 (Berlin: Springer-Verlag).
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45. Lambert, G., Stura, E.A., and **Wilson, I.A.** (1989). Crystallization and preliminary X-ray diffraction studies of a complex between interleukin-2 and a soluble form of the p55 component of the high affinity interleukin-2 receptor. J Biol Chem *264*, 12730-6.
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