BRIAN FRANCIS - CURRICULUM VITAE  up to 2000

General Information

Name: Brian Joseph Francis
Department: Centre for Applied Statistics, Fylde College (Applied Sciences)
Date of Birth: 30th April 1953

Current and Past Posts

1974-75  Bacon and Woodrow, Consultant Actuaries, Epsom, Surrey.
1976-79  Statistician, Medical Care Research Unit, Department of Community Medicine, University of Sheffield Medical School.
1979-current Centre for Applied Statistics, Lancaster University

1979-84  Statistical Programmer.
1984-86  Assistant Director
1986-89  Head of Department and Acting Director
1994  Visiting senior lecturer at University Paul Sabatier, Toulouse for one month.
1995-current  Senior Lecturer
1997-current  Director and Head of Department

Academic and professional qualifications

1971-74  Imperial College, London. B.Sc. (Hons) Maths (2:1), A.R.C.S
1975-  Fellow of the Royal Statistical Society.
1993-  Chartered Statistician (C. Stat.) awarded by the Royal Statistical Society.

Publications up to 2000 * indicates refereed journals and symposium volumes)


60. *Francis, B and Whittaker, J (1996) Gassing during the growth of bacteriological infection. Student I (3), 211-214


   http://www.cas.lancs.ac.uk/software/sabre3.1/sabre.html


   http://www.cybergeo.presse.fr/semiogra/brian/franjoh2.htm

   http://www.agocg.ac.uk/reports/visual/casestud/francis/conten_1.htm)

79. *Soothill, K and Francis, B (1999) Reviewing the pantheon of sexual offending *Amicus Curiae, 17*, 4-8


**Doctoral Students supervised**


Leslie Humphreys 1999- 
Upgraded to Ph.D. Use of the Offenders Index to predict typologires of deceptive offenders. (50% supervision - joint supervisor Keith Soothill).

Dilhari Attygalle 2000- Upgraded to Ph. D Model coverage, forward searching and multiple outlier detection.

**Research Programme 1981-2000**

1981-1984 Consultant (advising on computational problems in large scale data handling) to EEC Statistics Office research project on the statistical modelling of large-scale survey data.

1984-1986 Consultant (advising on the use and applicability of statistical software) to joint CNRS/ESRC research initiative into the comparative analysis of complex social data using the British and French approaches to data analysis. (Centre for Applied Statistics). 20% of university salary paid by research grant.
1986-1988 Statistician and supervisor on the research project Nursing Recruitment and Wastage. (Directed by Keith Soothill). Particular responsibility for supervision of data analysis and the application of suitable statistical techniques to work history and attitude data. £47,000 funded by Leverhulme.

1987-current Grant Holder and joint supervisor of GLIM development and support project. Joint responsibility for producing the latest release of the well-known Royal Statistics Society statistics package GLIM. This was the first development and research grant issued by the Royal Statistical Society. £21,000 Royal Statistical Society + £15,000 university funding. Royalties from the sale of this package accrue to the University.

1987-1988 Grant Holder and member of Research Team on the graphical representation of work history data. (University funded) £3,000 - joint with Sociology.

1988-1989 Member of research team investigating admissions policy and practice in Higher Education. Responsibility for liaison with UCCA and supervision of conventional and variance component analysis of university and polytechnic offer scores. With Institute of Research and Development in Post Compulsory Education. Amount £15,000 from the Manpower Services Commission (Training Agency).

1989-1991 Member of research team as Senior Research Fellow on ESRC funded project on "Integration of Work History Software". 33% of time funded for three months. Particular responsibility for software design and user interface of the statistical package SABRE. (Director Roger Penn, Sociology). £15,300.

1992 Grant Holder and Director of research project into the statistical critique of the Standard Spending Assessment formula for Personal Social Services funding of Local Authorities. £4000. funded by a consortium of Local Authorities.

1993-1994 Grant Holder and Director of research project into the development and implementation of record linkage algorithms in the Health Service. Two grants totalling £25,000, funded by Walsall Health Authority.

1994-1995 Grant Holder and Director of research project into the development of visualisation methods for patient histories in the Health Service. £11,000, funded by Walsall Health Authority.

ESRC funded research as named investigator (up to 2000)

1985-1988 Grant Holder and Member of ESRC 'Social Change and Economic Life' research team (Department of Sociology and Centre for Applied Statistics in collaboration with the Department of Sociology at the University of Manchester - total value £160,000).

1987-1993 Grant holder and member of management team of the ESRC's North Western Regional Research Laboratory main phase. With Geography. Amount: £16,000 (initial phase) and £178,000 (main phase) from ESRC.

1993-1995 Statistical Modelling of Work/Life history data Particular responsibility for algorithmic and software development supervision. (ESRC - R000233850) £111,740

1993-1996 Analysis of Large and Complex Data Phase 1 - Longitudinal Data Analysis Research Unit - Visualisation of event history data. Member of management team. Particular responsibility for supervision of the development of methods of visualisation of longitudinal data. (ESRC - H519255029) £200,000
1995 - 1997  *Analysis of Large and Complex Data Phase 2 - Longitudinal Data Analysis*
Research Unit - The development of Longitudinal Analysis Software to demonstration quality (ESRC - H519255035) £195,050


1999-2002  *CASE award. The development of Criminal Careers Research* (ESRC and Home Office) £12,000 With Applied Social Science

2000-2002  *Criminal Careers: Analysing temporal changes in offending behaviour.* (ESRC - R000223035) £42,527 With Applied Social Science


**Other funded research as named investigator**

1992 Grant Holder and Director of research project into the statistical critique of the **Standard Spending Assessment formula for Personal Social Services funding** of Local Authorities. £4000. funded by a consortium of Local Authorities

1993-1995 Grant holder and joint director of research project into the detection of changepoints in conductance curves. Funded by Malthus Instruments Ltd, Preston. Two grants totalling £25,000


1998 *Population Distribution and the Personal Social Services SSA* (Norfolk County Council) £7,539


**Teaching related grants**

1986-1988  Grant Holder and Director of research team of statisticians funded by the Computer Board (Computers in Teaching Initiative) for the **establishment of a statistical computing laboratory** of ten Whitechapel MG-1 unix workstations and the development of appropriate teaching software on these machines. Grant joint with Mathematics department. Total value £126,000 from the Computer Board.

1992-1996 Member and joint grant holder of TLTP (Teaching and Learning Technology Programme) Statistics Consortium into the **development of courseware materials** for the teaching of statistics to students through problem solving. (STEPS) Lead site Glasgow University. £45,000 to Lancaster University's share of the project. Funded by HEFCE

1998-2000  Teaching Resources and Materials for Social Scientists. ESRC initiative under the Analysis of Large and Complex Datasets initiative to disseminate research results from the initiative to social scientists. Consortium of universities led development of web-based training materials. Lead development sites: Lancaster, Institute of Education, Essex. I led the Lancaster development and we developed 2 of 4 training 'problem

Elizabeth Ackerley 1993 – current; (A long sequence of quantitative criminology projects mostly involving work on criminal careers, sex offending and homicide.)

David Stott 1993-1994; (SABRE development, changepoints in conductance curves, health service record linkage)

Mark Fuller 1994-1996 (visualisation of event history data)

John Pritchard 1996-1997 (visualisation of event history data) – seconded from ISS

Kevin Buckley 1996-1997 (GLIM4 development)

Ian Jackson 1994-1997; (Teaching and Learning Technology Programme)

Alaa Al-Hamad 1996-1998; (Psycho-social needs in cancer)

Sam Collett 1996-1998 (Homicide in Britain – a comparative study)

Juliet Harman 1997-current (Psycho-social needs in cancer, Measuring Population Remoteness, TRAMSS, and a large amount of statistical consultancy projects)

Jayn Pearson 1999-2001; (Homicide and the Media)

Rachel Fligelstone 2000-2001; (Patterns of Offending Behaviour)

Jon Barry 2000-2001 (Using homicide data to assist homicide investigations)

Major conference and external seminar presentations 1992-2000

1992 COMPSTAT 92 (refereed contributed) Algorithmic approaches for fitting bilinear models (with A. de Falguerolles)

1992 Royal Statistical Society Conference (Invited presentation), Model fitting developments in GLIM4 (with M Green)

1993 Royal Statistical Society Medical Section (Invited presentation) Medical applications of GLIM4 (with AW Swan)

1993 Royal Statistical Society local group meeting in Edinburgh (Invited presentation) Model fitting developments in GLIM4

1994 Tenth International workshop in Statistical Modelling, Exeter (Refereed contributed) Random Effects modelling for growth curve analysis

1993 Fifth European Health Services Conference in Maastricht, NL (Refereed contributed) Record Linkage algorithms for health service data. (with Wain, R and Stott, D.)

1993 Seminar at Technical University of Graz, Austria Model fitting developments in GLIM4

1994 Seminar at Paul Sabatier University, Toulouse, France. Random Effects modelling for growth curve analysis

1994 COMPSTAT94 in Vienna, Austria (Refereed contributed) Fitting Power Models to Two-dimensional contingency tables.
1994 Invited presentation to a meeting on information technology the Health Services to health services managers organised by IBM UK. Record Linkage algorithms for linking health service data from multiple sources.

1994 Social Science and Information Technology meeting, Amsterdam. (Refereed contributed) Visualisation for work and life histories.

1995 Seminar at Wirtshaftsuniversitat Wien, Austria (invited) Visualisation for work and life histories.

1995 One day conference on event history models, Univeristy of Munich (invited). Visualisation of event history data.

1996 Visualisation of Categorical Data conference, Cologne, Germany (refereed contributed) Categorical event histories and visualisation methods.

1996 Seminar at Southampton University Medical school (invited) Visualisation of patient event histories.


1996 Royal Statistical Society Local Group, University of Glasgow. (invited) Visualisation of event history data.

1997 Association for Survey Computing conference, Imperial College (invited talk) Visualisation of event history data

1997 Visualisation for the Social Sciences conference, Leicester (invited) Visualisation of event history data

1997 Royal Statistical Society Statistical Computing Section (invited talk) Visualisation of event history data

1998 Bernoulli Society, Rostok, Germany. (invited speaker). Visualisation methods for event history data


2000 University of Cambridge ‘Secondary data analysis’ one day meeting. (invited) Uses of official criminal conviction data.

1999 Large Scale Data Analysis conference, Cologne (refereed contributed) The Greening of Europe – paired comparisons and the Inglehart hypothesis (With R. Dittrich)

1999 British Criminology Conference, Liverpool. (two papers) (refereed contributed).
   (i) Assessment of crime seriousness from conviction data
   (ii) Split population models and recidivism

2000 Society Of Photo-Optical Instrumentation Engineers (Data visualisation) San Francisco (refereed contributed) Lexis and the visualisation of criminal careers

2000 University of Manchester half day meeting (visualisation) (invited). Lexis and the visualisation of criminal careers

2000 University of Cambridge ‘Analysis of reconviction’ one day meeting. (invited) Uses of official criminal conviction data.

2000 Sociological Methodology conference, Cologne (two papers) (refereed contributed)
   (i) Latent class methods for random effects in paired comparison data (With R.Dittrich)
   (ii) TRAMSS – training social scientists in advanced quantitative methods (with D Wiggins)
**Administrative Responsibilities since 1987.**

1987- current  
Member, Computer Users Committee and Departmental Computer Representative. Member of IT co-ordinating group. Responsibility for day-to-day liaison with the Computer Centre on matters of software and hardware, the preparation of bids to the Computer Resources Committee, for the maintenance and allocation of filestore within the Centre. Maintenance of a statistics software library and a dataset library within the Centre for Applied Statistics.

1982-current  
Day to day responsibility for running and developing the University's statistical consulting service. Since 1985, direction and management of the statistical consultancy service, including support and supervision of Centre staff providing the service.

1982-current  
Supervision of work of Consulting and Research Fellows. The Centre provides a scheme to other departments and groups within the University whereby time for a Centre for Applied Statistics Consulting Fellow can be written in to research grants. The resulting work needs scheduling, costing and supervising if the grant is successful.

1984-1995  
An active Grizedale College Tutor and member of Grizedale College Council. I have provided assistance to the college setting up and funding of a small personal computer laboratory for Grizedale students, and in organising social mixers between staff and students.

1986-1991  
Administration and development of John Nelder Statistical Laboratory. This includes day-to-day administration and troubleshooting of the Laboratory, systems development and maintenance of ten UNIX workstations, hardware development and planning and production of an intermittent newsletter.

1986-1989  
Head of Department of Centre for Applied Statistics.

1988-1989  
Membership of various Committees in the School of Engineering, Computing and Mathematical Sciences representing the Centre for Applied Statistics. (SECAMS Policy and Resources Committee, SECAMS research committee).

1987 - 88  
Organiser of the 21st Inter-University Software Committee meeting on Statistical Software, held at Lancaster University 7th-8th July, 1988. (120 participants). Responsibility, backed by IUSC steering committee, for administration of conference and exhibition, academic programme and social events.

1988  
Joint Organiser (with Dr. G. Tunnicliffe-Wilson) of the 1988 Midlands and Northern Universities Statistics Group meeting held at Lancaster. (70 participants)

1988-1989  
Joint organiser of the North-West Regional Research Laboratory's conference on Managing Databases and Geographic Information Systems. Particular responsibility for exhibition publicity and organisation, attracting 14 exhibitors to the conference. Chaired session on Local Authority uses of GIS. Profit of c.£9000 to University.

**External Responsibilities:**
1994-1997  Member of the Council of The Royal Statistical Society. The Council is the governing body of the RSS, and the post is an elected one. Members serve for a period of three to four years.

1993-current  Member of Statistical Computing Committee of the Royal Statistical Society. 1993-7 Particular responsibility for software reviews and for reporting to RSS Council.

1984-current  Member of the Royal Statistical Society working party on GLIM. (Secretary since 1993) The GLIM working party meets around four times a year, and is responsible to the Royal Statistical Society for the maintenance of the integrity of the current version of GLIM, advising the Royal Statistical Society on the needs for future software development, the production of user documentation, newsletters, courses and other products.

1986-current  Joint editor, GLIM newsletter, with particular responsibility for academic content. The GLIM newsletter is sold by the Numerical Algorithms Group to about 1000 users of GLIM. It is issued twice a year. NAG provides the other joint editor, who is concerned with production and marketing content.

1986-1987  Member of scientific programme committee of the International Workshops on Statistical Modelling held at Perugia, Italy, July 1987.
Trento, Italy, July 1989
Toulouse, France, July 1990
Utrecht, Netherlands, July 1991
Munich, Germany, July 1992
Leuven, Belgium, July 1993
Innsbruck, Austria; 1995

Approximately 130 participants attended each meeting, with between 80 and 90 papers submitted.

1989-current  Member of steering committee overseeing the statistics section of the national Computers in Teaching Initiative Centre for Mathematics and Statistics. The purpose of this group is collect and disseminate information on software and courseware for the teaching of statistics in the U.K.

1989-1991  Member of Board of Examiners for the ESRC Advanced Course Studentship competition, and Board of Examiners for ESRC Research Studentship competition. Particular responsibility for applications in statistics, research methods and computing. Three year term.

1991-1994  Software Review Editor and member of the Editorial Board of Applied Statistics".