SPARC

Strategic Promotion of Ageing Research Capacity
A special programme funded by EPSRC and BBSRC

First ANNUAL Report 2005-2006

Workshops
Advocacy
Awards

The SPARC Call 1 Award Holders
Objectives

This is the first Annual Report on SPARC (Strategic Promotion of Ageing Research Capacity).

SPARC has two primary objectives:

**Capacity Building**
- Facilitating the development of the capacity of the UK science base to undertake engineering and design-orientated and biologically-orientated ageing-related research.
- Initiating closer links between individuals who undertake, or seek to undertake, ageing research activities with the support of BBSRC and EPSRC.
- Providing financial support for small scale projects to academics who wish to establish themselves in ageing-related research.

**Integrated networking**
- Networking and supporting interdisciplinary areas of ageing research such that their value to the national research effort as a whole is both maximised and communicated.
- Strengthening the relationship between the research community and research end-users including the great variety of organisations which support older people.
- Contributing to the creation of a coherent, accessible and internationally competitive UK ageing research programme that meets the needs of older people, and is valued by policy-makers, practitioners and other relevant stakeholders.

Activities

SPARC is pursuing its objectives through three principal activities:

- A series of national workshops and some international workshops which variously showcase the latest research and developments to all stakeholders and bring together leading scientists to exchange ideas and discuss new avenues for research.
- Vigorous advocacy of the value of ageing research, and need for it, to policy makers and policy influencers.
- The development and operation of a small awards scheme to pump-prime the work of newcomers to ageing research.

Resources

SPARC is funded by EPSRC and BBSRC, directed and coordinated by a Secretariat based at the Universities of Reading and Brighton, and advised by a committee of experts with an independent Chair. Representatives of relevant NGOs and Research Council representatives also serve on the Committee. The members of the Secretariat and the Advisory Committee are given in Appendix 1.

In essence SPARC has an initial research grant of £1.4m with funding divided between the three principal activities. A large portion of the funds, £0.9m, is allocated to the small awards scheme. The awards are distributed as a result of competitive research proposals made by researchers from universities across the UK. Because SPARC is time limited these small projects have to be completed before the end of SPARC to allow the success of SPARC to be properly judged.

The SPARC grant will support the Secretariat for approximately three years, but the formal period of the grant is four years. This additional period will enable SPARC to accommodate any projects which experience delays.

Recently, a further £0.3m for small awards has been pledged by the sponsors provided that quality of proposals is maintained.
The First Year

SPARC was announced in October 2004 and launched on 1st January 2005 but funding did not commence until 1st April 2005 and the Secretariat was not fully staffed until July 2005. However this report covers the period 1st January 2005 until 28th February 2006.

Launching SPARC

Initial publicity about SPARC was particularly extensive because of the need to announce the existence of the small awards scheme and to give at least six months notice of the deadline for applications in response to the first call for proposals. This was achieved in part through email messages drawing extensively on existing mail lists and publicity on websites including the SPARC website (established November 2004). Although it was possible to use the lists and sites used by EQUAL for those with an interest in design and engineering aspects of ageing research, communicating with the biological research community required the compilation of new lists of contacts, an extensive and time consuming task. Assistance to SPARC was made available through a network of university research support officers who relayed information to relevant contacts in individual institutions. We were informed by Research Council representatives that the level of publicity achieved was approximately three times that of a normal special initiative.

In anticipation of SPARC, two institutions offered to host SPARC workshops in early 2005. These launch workshops took place at Brunel University in February and Strathclyde University in March. They were broadly based, drawing on a range of inputs from across design, engineering and biology. Both were very successful. As well as setting standards for future workshops both made a major contribution to establishing the multidisciplinary broad stakeholder ethos of SPARC.

Special Briefings

In addition to general announcements and the two launch workshops, information about SPARC and the awards scheme was presented at national and international conferences and at six special briefings specifically organised at the request of members of the research community. Typically these lasted two hours and each was attended by about thirty people, including very senior academics. The briefings are listed in Appendix 2.

Subsequently information about SPARC appeared in print, in newsletters and publications of the research councils and learned societies.

Membership

SPARC membership quite simply involves an individual registering their interest in SPARC activities so that they can receive email messages about forthcoming events and other activities as well as news items. There are now over 500 active members and membership continues to grow steadily, usually as a result of the publicity associated with workshops. Although a high proportion of the 1500 individuals registered with the EQUAL Research Network were expected to join SPARC this has not yet occurred. This is partly because members of EQUAL receive SPARC announcements, despite threats that the use of the EQUAL mail-list will cease, and because many EQUAL members are tightly focused on built environment or sensory impairment issues. The sheer breadth of SPARC workshops has thus rendered attendance difficult for these supporters. For example, accessibility officers find it difficult to justify attending an event which has a limited focus on accessibility or building design. However, as evidenced by frequent messages of encouragement, they follow the activities of SPARC very closely.

Gathering new information at Integrating Research on Ageing Workshop
Workshops
Seven workshops were held in 2005 of which one was an international workshop. In the first two months of 2006 there were two further workshops.

- **Maintaining Independence in Later Life**  
  *Host:* The Brunel Institute for Bioengineering, Brunel University, West London 24th February 2005

- **Integrating Research on Ageing: bridging the gap between biology, engineering, design and older people**  
  *Host:* The Bioengineering Unit, University of Strathclyde 16th March 2005

- **Pharmacology and Ageing**  
  *Host:* The Royal Pharmaceutical Society, London 12th April 2005

- **Living with Stroke**  
  *Host:* Sheffield Hallam University 16th June 2005

- **Towards the Integrative Biology of Premature Ageing**  
  10th-11th October 2005  
  *(International Workshop, see later)*

- **The Business Case for Ageing Research**  
  *Host:* Unilever R&D, Colworth, Bedfordshire 15th November 2005

- **The Biology and Business of Stroke**  
  *Host:* Thames Valley Life Sciences Network, Reading 14th December 2005

- **The Application of Research and Development in Long Term Care**  
  *Host:* CCC, venue: Corporation of London Guildhall, London 26th January 2006

- **Design for Older People**  
  *Host:* Coventry University 22nd February 2006

The workshops have varied greatly in terms of focus and appeal. The two launch workshops provided an opportunity for SPARC to “set out its wares” with a broad science base open and accessible to all stakeholders. Two others (*Pharmacology and Ageing, and Integrative Biology*) were principally concerned with bringing together leading scientists with a view to dissemination amongst specialists and developing new avenues for research. A further five have been principally concerned with engaging with research users and industry (*Living with Stroke*, the health care community; *The Business Case, Biology and Business of Stroke*, and *Long Term Care*, industry, business and commerce; *Design for Older People*, architects and designers).

Participants
The number of participants and their distribution across different stakeholder groups at the workshops has varied, reflecting the nature of the events. However, several workshops have shown that it is possible to attract large numbers of non-academic stakeholders, especially to those events which have a strong focus on health issues combined with a business dimension.

![Figure 1: Number of Participants at each Workshops](image)

**Figure 1:** Number of Participants at each Workshops
(note: a. Towards the Integrative Biology of Premature Ageing was a small residential workshop in which the majority of delegates attended by invitation. However some free places were available to the wider community; b. Non academic presenters are included in relevant categories.)

Feedback
Written feedback from the workshops has been consistently positive. The format of the non-specialist workshops provides:
- a relaxed yet structured environment for the presentation of material which can be quite technical but because of the mixture of presentations, are not over-burdensome for those who are not specialists;
- plenty of opportunity for networking with what is usually considered to be a refreshing and unusual range of participants, this is assisted by extensive information about those participants;
- professionally organised events with a sensitivity for the needs of all stakeholders and the requirements of specific participants (which can be quite demanding).

A summary of the feedback from the participants is given in Figures 2, 3 and 4.
General feedback
The feedback is similar to that achieved with the EQUAL workshops in the previous three years. This is reassuring as the material presented at the SPARC workshops has been more complex than at the EQUAL workshops. However, this has been compensated by the greater scientific knowledge of SPARC network members. Whilst the standard achieved has been high there is always room for improvement. Following each workshop there has been close scrutiny of the feedback forms and attempts to learn from these. Quite often suggestions can be acted upon, for example colour badges to assist networking, and even stronger requests that when participants find they can’t attend a workshop they should inform the secretariat so that someone from the Waiting List can be invited, but it is not possible to pursue all suggestions.

Whilst the vast majority of participants recognise the shoe-string nature of the workshops, that hosts have limited resources and that speakers give their time freely, there is always a minority of requests for facilities which would outstrip SPARC’s resources, for example, printed handouts (although most presentations are available on the SPARC website within a few days of an event), equipment demonstrations (but sometimes these are not possible), and break out groups to discuss the way forward (usually we do not have sufficient accommodation for these and almost universally they fail because of the disparate expertise at the workshops). Some complaints about catering are to be expected, as are those about the venues (although we are very attentive to the needs of older and disabled people and will not use lecture theatres which are not accessible to wheelchair users and we attempt to ensure a good PA system and a hearing loop).

Bigger and more workshops
By far the biggest request is to expand the workshops in terms of the numbers of people accommodated and their frequency. Here there are resource issues but principally we do not wish to turn all but a few workshops into conferences. Retaining an air of informality, friendliness and progressive development of the issues which are debated is very important. These highly desirable features would evaporate and would be replaced by expectations more appropriate to conferences which we would not be able to satisfy.
Encouraging Others
Where there is enthusiasm for more workshops to which we cannot respond immediately, either because we do not wish to run more workshops in the same location or with the same hosts or on the same theme, we encourage our hosts to set up their own workshop series and to adopt the SPARC workshop formula. We are very willing to help them with this. For example we have advised a new older people’s network in Bath, and WestFocus on its series of design-related workshops. Also, following the successful Stroke workshop in December, we are encouraging TVLSN to organise further events, and have recently been approached by a consortium of the three leading gerontological societies in the UK to provide advice on a proposed series of mixed stakeholder events.

Reflections

Appeal
SPARC has a broad membership. It appeals to disparate interests and motivations, but linked by an underlying concern, desire and even anxiety to hear about the latest developments and challenges and to keep up to date. Time and again practitioners, especially from health, social and housing services, have spoken of the difficulties of accessing information about recent developments, often research based, and the stimulation to their professional work from attending SPARC workshops. For example, at the first workshop on Stroke a very experienced community stroke nurse was just as excited about the latest biomedical stroke research as the researchers. She could easily delineate a path to how this work, which involved animals, might help older stroke victims. At the Second stroke workshop a director of a pharmaceutical company described his discovery of the contribution being made to stroke rehabilitation by cyberneticists as like being on the “road to Damascus”. This feeling of discovery pervades many of the comments made about the workshops and we are very pleased that the workshops are viewed as revealing and stimulating. However our task is more than just making participants feel good by showcasing the latest research. We have to be pushing ageing research forward and making an even stronger case for the value of ageing research to society and older people.

Developing the research agenda
Two good examples of workshops which progressed the ageing research agenda are Pharmacology and Ageing and Integrative Biology. These resulted in a range of initiatives, one special issue of a scientific journal, the formation of an international collaborative research network initially underpinned by a Japan Partnering Award, £50,000 obtained through competitive application and several grant proposals. The Biology and Business of Stroke workshop gave considerable encouragement to pharmaceutical firms to reconsider their approaches to stroke research and their links with academia. Another immediate outcome is that these firms have encouraged the host of that event to organise follow-on workshops. Another, very different outcome, is that one participant, a young stroke patient is now contributing to a speech therapy degree course.

The Business of Research
We have specifically focused on making the case for ageing research through a series of workshops with a strong business orientation, The Business Case, Biology and Business of Stroke, and Long Term Care. Although we cannot claim that an overwhelming business case for ageing research was made at each workshop, when taken together the evidence was quite considerable. A tightly orchestrated conference format might have been better than the slightly unpredictable content of workshop presentations. However as each workshop exposed rather different business cases so the essence of each case would have been diluted at a conference. Encouraged by the comments made by the more experienced participants, we believe that these three workshops have achieved far more in making the business case for ageing research than any other workshop over the last five years, save for those run by the Design Council and, of course, SPARC has been dealing with a far broader research landscape than just product design. This breadth adds value to these achievements to date.

Demonstrating a stroke recovery robot at Business and Biology of Stroke Workshop
Public platform for biological research
One of the issues which encouraged BBSRC to consider linking with EPSRC, eventually leading to SPARC, was its interest in encouraging a better public platform for biological research, such as had been achieved for design and engineering by the EQUAL Research Network. Of the eight open workshops, two have principally had design and engineering themes, two have had biological themes, although not exclusively, and the others have combined both themes. The high ratings given to all these workshops, attended by a broad range of stakeholders, and their detailed feedback, provide ample support to the view that with a well-balanced programme and with good presenters biological research can be as accessible to non-expert professionals and well-informed lay people as design and engineering research, and can be just as well-received.

Next steps
The aims of the first year of the workshop programme were to establish the credibility of SPARC with both a range of stakeholders and the international scientific community. The growing support for SPARC workshops provides strong evidence that this aim has been achieved. However, as SPARC develops so its workshops will need to accommodate a new set of requirements. Whilst continuing to mount workshops with a broad general appeal, in the second year the programme will also need to be more focused on the needs of the scientific community associated with SPARC, not least the award holders. As a consequence the balance will shift towards more specialist workshops, perhaps with the balance swinging back in the final year as SPARC projects are completed and the award holders showcase their findings. As a consequence of these considerations the workshops planned for the first part of the second year of SPARC are:

- **Award Holder’s Workshop**, University of Reading, 27th March 2006. This will help the process of building a research community with quite different interests in ageing research, briefing award holders and ensuring that there are appropriate support mechanisms in place from their host institutions and from SPARC.
- **Third Chemistry of Ageing Workshop**, Royal Society of Chemistry, 21st April 2006. This is the third workshop in a series bringing together biologists with an interest in the ageing process. The organisation of the workshop is being led by one of the SPARC award holders (Dr Richard Hartley) with support from the secretariat. The workshop is expected to produce further collaborative applications in this area.
- **Transatlantic Awareness & Collaboration Workshop on Ageing Research, 35th Annual Meeting of the American Aging Association, Boston 2nd –5th June 2006.** This workshop (funded by a competitive application to BBSRC International Branch) is intended to showcase the leading young UK researchers in the biology of ageing. It will also facilitate future collaboration between the US and UK. The Canadian Institute of Aging has also asked to participate in this special session.
- **European Science Open Forum (ESOF) Conference, Munich 16th July 2006.** This is funded completely by the Royal Society of Chemistry in collaboration with SPARC. ESOF is a large scale European public understanding of science activity. The SPARC session consists of examples of successful working between chemistry and biology of ageing. A social science perspective will also be given.
- **Writing Good Ageing Research Proposals**, November 2006. This workshop will be run primarily for the benefit of SPARC award holders but any places not filled will be offered to the wider community. A one day programme is envisaged with brief presentations from the Research Councils and Charities.

Other workshops are already in the planning stage for late 2006 and 2007 including a conference on Oxidative stress and Ageing at the University of Glasgow which is expected to attract between 200 and 300 participants, to which SPARC and RSC have already committed support, and workshops on Older People and the Internet and Transport Planning.
International Workshops
The proposal for SPARC indicated an intention to run six international workshops during the life of SPARC. One of these, Towards the Integrative Biology of Premature Ageing, has already taken place, and two more workshops are planned for mid 2006. These have been possible through additional funding from BBSRC along the lines envisaged in the proposal. There is every prospect of further approaches to BBSRC for other workshops over the next two years. It is hoped that in the coming year proposals will be developed for design and engineering orientated international workshops.

Advocacy
The promotion of the case that older people can benefit greatly from ageing research, a major objective of SPARC, takes many forms, including: presentations at conferences through to meetings with local older people’s clubs; discussions with the press; Radio and TV interviews; one to one conversations with policy makers and influencers; and the publication of articles. Although the first year of SPARC was expected to be quiet in terms of advocacy every opportunity has been taken to make the case for ageing research and to inform others about SPARC. Until recently there has been little to present about the achievements of SPARC, it has been too new, and a reluctance to spend time making promises about what SPARC intends to do. However, there have been a number of promotional opportunities.

Highlights of the media coverage of SPARC include initial announcements and, more recently, articles about the SPARC awards by the research councils, and the wide coverage by BBC TV 1, local radio and press of the Biology and Business of Stroke workshop as well as the extensive regional press coverage of Design for Older People. (A full Media Archive can be found in the News Archive of the SPARC website. [http://www.sparc.ac.uk/media_archive.asp])

Public presentations, which have to a large measure been about SPARC, EQUAL and ERA, have included a Reading University Public Lecture Designs for a Caring Society in October 2005. Special briefings on SPARC have been given, for example, to directors and staff of JRF, the BRE Trust, Counsel and Care, CABE and ODPM.

One-to-one advocacy has included a large number of opportunistic conversations and speculative correspondence. Whilst much does not lead anywhere occasionally there is a success. Dr Sian Henson has represented SPARC in discussions with MPs, leading to offers to raise questions about ageing research in the House of Commons.

As a consequence of a discussion about SPARC, Baroness Gardner of Parkes tabled a question in the House of Lords about workplace design for the older worker and travel to work. Following correspondence with OST, Lord Sainsbury asked to be brought up to date with progress with SPARC; his encouragement has continued. Margaret Hodge, Minister of State for Employment, and Welfare Reform, Baroness Kaye Andrews, Parliamentary Under Secretary of State, and Phil Woolas, Minister for Local Government have provided important contacts in DWP and ODPM.

By being “part of the woodwork” of the public debate about ageing, occasionally invitations are received: to attend receptions and meetings at Westminster organised by parliamentary committees and charities (for example, Care and Repair, Counsel and Care, Deafax), and seminars of influential groups such as the International Longevity Centre UK, permitting further advocacy; to comment on affairs of state (for example, on the government response to the House of Lords Select Committee Report on Scientific Aspects of Ageing); and to address policy committees, such as the Funders Forum.

In the coming year SPARC will continue to promote the value of ageing research to older people and society at every opportunity. Existing contacts will be followed up vigorously. New relationships will be sought. Continual attempts will be made to interest journalists and the media, and to lobby Ministers, MPs and civil servants.

Lively presentations, lively debates at Maintaining Independence Workshop
**Awards Scheme**

The defining feature of SPARC is its awards scheme. This absorbs much of the time of the secretariat. The scheme was announced in November 2004 with the deadline for proposals to the first call being 1st May 2005, giving ample time for the briefings mentioned earlier and for the preparation of proposals. The second call for proposals, announced in October 2005, had a closing date of 1st March 2006. Interestingly, although offers have been made by the secretariat, there have been no requests for special briefings on Call 2. It has been suggested that SPARC is now very well known, and that the application process is clear.

In response to the first call, 85 applications were received of which 66 were selected by the Advisory Committee for further consideration. Of these 20 were subsequently identified by the Committee as meeting the threshold suitable for funding support. There were sufficient funds available for the thirteen most highly rated of these. The ratings were based on the combined scores for two factors: scientific excellence and capacity building. Only those proposals rated above 7 for each factor on a scale of 1 to 10 were eligible for support. The successful projects are listed in Appendix 3.

Applications were received from people with disciplinary backgrounds from across the board. Whilst the Principal Investigators of the proposals generally had backgrounds in design, engineering, biology, chemistry and medicine a large number of the design-related proposals had Co-investigators who were social scientists.

During the course of their SPARC awards, holders will be expected to participate in at least two SPARC workshops and it is hoped that they and their teams will take part in an Award Holders’ Workshops. They will also receive editorial assistance in the production and dissemination of their final reports; help with producing posters about their work; and have the opportunity to participate in international activities. All but two have some form of mentoring or advisory group.

**Website**

The initial website, constructed to ensure a presence on the web and source of information for the community, was replaced by a professionally designed website. This is now well established and is maturing as new requirements come to light. The development work is being undertaken by Daniel Guth.

The website has enabled the secretariat to handle research proposals and workshop registrations almost entirely through the website and email. Unsolicited feedback has been positive and this has been confirmed by some small user opinion surveys. The website will continue to evolve with particular attention being given to accessibility issues and the danger of it becoming unwieldy.

**The Advisory Committee**

The Advisory Committee has met on three occasions 27th April, 28th June and 3rd & 4th October 2005. The first meeting considered terms of reference, received full briefings on SPARC and considered the details of the awards scheme. On the second occasion it considered which of the applications received in response to the first call for proposals were within the scope of the call, and selected those for further consideration by peer review, as well as receiving progress reports on workshops and other activities. At its third meeting the committee considered the referees’ reports and selected proposals for awards as well general SPARC business. On this third occasion it was joined by Professor Helen Petrie and Professor Roger Anderson, who assisted with assessment of the proposals.

**STOP PRESS: Additional Funding**

There has been strong national and international interest in the role played by SPARC and the first call attracted high quality proposals. As a result, in early 2006, the sponsors of SPARC pledged a further £325,000 for the second call provided that the quality of proposals is maintained. This endorsement of SPARC provides considerable encouragement for the year ahead.
Appendix 1. The Secretariat and the Advisory Committee

**Network Directors:**
Professor Peter Lansley, University of Reading  
Dr Richard Faragher, University of Brighton

**Network Coordinators:**
Verity Smith, University of Reading  
Kirsty Springall, University of Brighton

**Non-Academic Members**
Mrs Elizabeth Mills OBE, Eminence Grise Consulting - Chair of the Committee  
Dr Lorna Layward, Research into Ageing/Help the Aged - Deputy Chair of the Committee  
Dr Elizabeth White, British Association of Occupational Therapists/College of Occupational Therapists  
Professor Janet Askham, Special Adviser to the Department of Health on Older People’s Use of Services; Director of Research & Picker Institute Europe

**Research Council Representatives**
Dr Colin Miles, Head of Biomolecular Sciences, Biochemistry and Cell Biology Committee, BBSRC  
Dr Kedar Pandya, Associate Programme Manager, Engineering Programme, EPSRC

**Academic Members**
Dr Bernie Conway, Bioengineering Unit, University of Strathclyde  
Dr Deborah Dunn-Walters, Department of Immunobiology, GKT Medical School, KCL  
Dr Sian Henson, Department of Immunology and Molecular Pathology, University College London  
Professor David Kipling, Department of Pathology, School of Medicine, Cardiff University  
Dr Constantinos Maganaris, Centre for Biophysical and Clinical Research into Human Movement, Manchester Metropolitan University  
Professor Kevin Morgan, Department of Human Sciences, Loughborough University  
Marcus Ormerod, SURFACE Inclusive Design Research Centre, School of Construction and Property Management, Salford University

**Co-opted members for Awards Panel Meeting**
Professor Helen Petrie, Department of Computer Science, York University (Human Computer Interaction)  
Professor Roger Anderson, School of Biomedical Sciences, Ulster University (Vision Science)

Appendix 2: Special Briefings

12th January 2005, BBSRC Experimental Research on Ageing Initiative Grantholders Workshop, The Robinson Centre, Bedfordshire  
19th January 2005, SPARC Briefing for Universities in the South and West of England, University of Reading  
27th January 2005, SPARC Briefing organised by the HOPE (Housing for Older People) Network for Universities in the North East of England, University of Newcastle  
11th February 2005, SPARC Briefing for Universities in the North of England and the Midlands, Leeds Metropolitan University  
2nd March 2005, SPARC Briefing for Universities in the South and West of England, University of Reading  
21st March 2005, SPARC Briefing for Universities in Wales and the West of England, Glamorgan University  
8th April 2005, Include 2005 Conference, Royal College of Art, London

Appendix 3: SPARC Awards Call 1

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Institution</th>
<th>Project Title</th>
<th>Months</th>
<th>Award</th>
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<tbody>
<tr>
<td>Mr Philip Astley</td>
<td>South Bank</td>
<td>Integrating the technological and social models of later life in the maintenance and adaptation of private housing: a feasibility study of knowledge management information and visualisation systems</td>
<td>12</td>
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<td>Dr Mark Bagley</td>
<td>Cardiff</td>
<td>Chemical tool for ageing research</td>
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<td>£35,959</td>
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<td>Mr Mike Bradley</td>
<td>Middlesex</td>
<td>An investigation into the advanced technology desires, needs and requirements of older drivers</td>
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<td>Dr Richard Hartley</td>
<td>Glasgow</td>
<td>EPR, oxidative stress and ageing</td>
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<td>£58,534</td>
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<td>Dr Katrin Jennett-Burston</td>
<td>Brighton</td>
<td>A proteomics approach to understanding age-related changes in neuronal function</td>
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<td>Dr Matthew Lancaster</td>
<td>Leeds</td>
<td>Ageing, exercise and gender: complex interactions and outcomes for all muscles</td>
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<td>Dr Shaun Lawson</td>
<td>Lincoln</td>
<td>Multimodal augmented reality to support ageing in place</td>
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<td>Dr Gregory Marsden</td>
<td>Leeds</td>
<td>Transport and older people: integrating transport planning tools with users needs</td>
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<td>Dr Charles Musselwhite</td>
<td>Bournemouth</td>
<td>Prolonging safe driving behaviour through technology: attitudes of older drivers</td>
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<td>Prof Richard Neale</td>
<td>Glamorgan</td>
<td>Design and community regeneration: Investigating personal safety concerns in socio-economically deprived communities in South Wales</td>
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<td>Dr Elizabeth Ostler</td>
<td>Brighton</td>
<td>Chemical analysis of ageing tissue in Drosophila melanogaster</td>
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<td>Dr Fiona Wylie</td>
<td>Cardiff</td>
<td>Evaluating the role of p38 MAP kinase in the accelerated ageing of WS fibroblasts</td>
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<td>Dr Alaster Yoxall</td>
<td>Sheffield</td>
<td>The ‘inclusive engineering’ approach: enhanced data gathering for an optimum diameter for ease of opening</td>
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<td>£17,048</td>
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SPARC Annual Report 2005-2006