

# Portrait of a Society A Brief History of the Society for Medicines Research 1966-2006

#### Mission

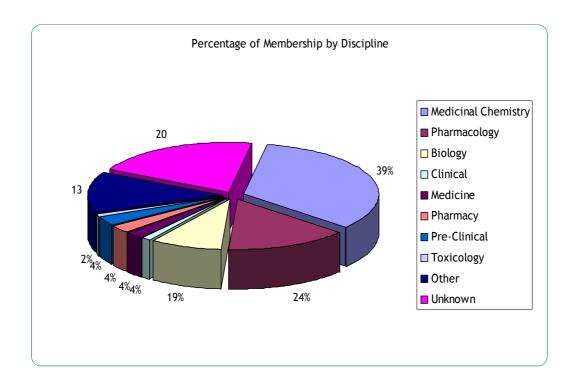
To provide a forum for those interested in medicines research.

#### The formation of the SMR

The origins of the Society can be traced back to a symposium organised by members of the Pharmacy Department of Chelsea College, London in April 1965. Entitled "Interactions of Drugs with Receptors", it received much acclaim and brought participants from many countries. When many of the papers presented at the Symposium were published, the need for a multidisciplinary approach to drug discovery became clear. This provided the drive for a group of scientists (predominantly medicinal chemists) to work towards establishing an organisation dedicated to encouraging interdisciplinary approaches to drug research. Scientists interested in drug research were invited to become members. In May 1966, it was decided that the group should be called the Society for Drug Research. The inaugural meeting was held on 28<sup>th</sup> September, 1966 at 17 Bloomsbury Square, in the Hall of the Royal Pharmacological Society of Great Britain. The first need was for cash and £300 was raised from a number of companies (a maximum of £5 was requested from each company approached), which, together with the generous support of the Royal Pharmacological Society, provided the sound footing to establish the Society. Since then, it has organised 3 to 4 one-day meetings a year, usually in London. It also organised a number of residential meetings (both in and outside of London) and has recently introduced a system of holding a meeting at Pharmaceutical companies every two years. The first major residential meeting was held in London in 1969. Entitled simply "Medicinal Chemistry", it attracted nearly 300 delegates. The Society gained Charitable Status in 1977 and changed its name to the "Society for Medicines Research" in 1994.

#### Membership profile

Members of the SMR come from all sections of the medicines discovery community, as shown below:



# The SMR prize

In 1981, we established a biennial award for drug discovery (see Table). The prize is a combination of both cash and a celebratory certificate. Within our professional lives, we achieve success either as an individual or as a member of a team. Seldom, however do we celebrate these achievements. The Society for Medicines Research Award for Drug Discovery provides a perfect conduit for scientific recognition of therapeutic inventions. Individuals, teams and the institutional source of the invention are duly acknowledged for their contribution by the scientific community. The multi-disciplinary nature of the achievement is inherent in this award, from a Society that places the whole of the research process at the heart of its credo. With members from all disciplines of drug research, we are proud to recognize the successes of others in order to help the individuals and their host institution gain the reward and kudos they deserve from within the medicines research community.

The SMR award is intended to recognise outstanding research leading to drug discovery. The distinguishing feature of the award is the clear demonstration of scientific innovation leading to actual drug discovery, which in most cases will require that the discovery is in very late clinical trials or on the market. The award is not limited to an individual but may be granted to a group or team.

Year	Prizewinner(s)	Contribution
2006	Dr Napoleone	A new therapy for cancer: The Avastin story
	Ferrara, Genentech	
2003	Dr Juerg	The successful discovery and development of Glivec
	Zimmermann, Dr	(Imatinib) a selective tyrosine kinase inhibitor introduced as
	Elisabeth	a safe treatment for chronic myeloid leukaemia
	Buchdunger, Dr	

	Ulrike Pfaar, Dr Peter	
	Graf, Dr John Ford	
	and Dr Renaud	
	Capdeville	
2001	Dr Michael	Improving insulin sensitivity as an approach to the
	Cawthorne, Dr	treatment of Type 2 Diabetes Mellitus, and for their seminal
	Stephen Smith, Dr	and enabling contributions in the discovery of rosiglitazone
	Barrie Cantello, Mr	(Avandia), which promises to be an innovative new
	Richard Hindley and	medicine for treating the disease.
	Dr David Haigh	
1999	Dr David Tupper, Mr	Olanzapine
	Terence Hotten and	
	Dr Nicholas Moore	
	(Eli Lilly)	
1997	Drs Duncan,	Saquinavir
	Redshaw and Roberts	
	(Roche)	
1995	Prof Pat Humphrey	Sumatriptan
	(Glaxo)	
1993	Dr Ken Richardson	Fluconazole
	(Pfizer)	
1991	Drs Dutta, Furr and	Zoladex
	Hutchinson (ICI)	
1989	Sir James Black, in	Beta-blockers and H2 antagonists
	association with Dr	
	Albert Crowther &	
	Prof Robin Ganellin	
	(ICI and SK&F)	
1987	Prof John Stenlake	Atracurium
	(University of	
	Strathclyde)	
1985	Dr David Jack	Identifying and developing anti-asthmatic and anti-ulcer
		drugs
1983	Mr Peter Doyle	The discovery and development of semi-synthetic antibiotics

#### **Encouraging student participation**

The SMR has a broader purpose than professional development. A significant proportion of our meeting attendees are students, normally post-graduates. We believe our meetings strengthen the intellectual base of the life science sector in the UK, for future careers in the pharmaceutical industry and in academia. We have therefore set up a student bursary fund, supported by those likely to benefit from a strong pool of university leavers eager to enter the pharmaceutical industry. We are very pleased to report the donation of a cornerstone contribution of £5,000 from AstraZeneca as a major employer in this sector in the UK. We intend to run this fund separately from the rest of the SMR's accounts in order that its accountability is guaranteed. Disbursements would be supported by investment income to the fund. The benefits will be long-lasting, stimulating many future years of student learning opportunities followed by many more years of productive contribution to the UK science base. Other major pharmaceutical companies are also being invited to support the SMR Student Bursary Fund.

#### **Collaboration with Prous**

In 1997, the SMR began collaborating with Prous publishing on the basis of publishing reports of SMR meetings in their journal, Drug News and Perspectives.

 Williams R Searcey M and Potter B .Cancer Treatments for the New Millennium Drug News Perspect 19(4), May 2006 229-232

#### 2005

- Williams R and Brown K. Chemical genetics and genomics and drug discovery..
   Drug News Perspect. 2005 May;18(4):285-8.
- Morris ID and Palmer AM. Therapeutic strategies for tissue regeneration Drug News Perspect. 2005 Oct;18(8):525-30.
- Cowley P and Witherington J. Challenges facing drug discovery in vascular disease. Drug News Perspect. 2005 Dec;18(10):657-62.
- Armer R, Warne P and Witherington J. Recent disclosures of clinical drug candidates Drug News Perspect. 2006 Jan-Feb;19(1):65-72.

#### 2004

- Palmer AM and Stephenson FA. CNS drug discovery: challenges and solutions. Drug News Perspect. 2005 Jan-Feb;18(1):51-7
- Williams R and Morris I. Meeting the needs of type 2 diabetes patients Drug News Perspect. 2004 Oct;17(8):539-42
- Hodgson S, Charlton S, Warne P. Chemokines and drug discovery Drug News Perspect. 2004 Jun;17(5):335-8.
- Armer RE and Cowley PM. Trends in medicinal chemistry 2004.Drug News Perspect. 2005 Mar;18(2):142-8.

#### 2003

- Warne P and Page C. Is there a best strategy for drug discovery? Drug News Perspect. 2003 Apr;16(3):177-82.
- Armer AE and Morris ID Trends in early drug safety. Drug News Perspect. 2004 Mar;17(2):143-8..
- SMR Committee Successes in drug discovery and design.. Drug News Perspect. 2004 Apr;17(3):213-8
- Pullar S and Palmer AM Pharmacotherapy for neuropathic pain: progress and prospects. Drug News Perspect. 2003 Nov;16(9):622-30.

#### 2002

- Morris I and Williams Research Strategies for Orphan G-Protein-Coupled Receptors.
   Drug News Perspect. 2002 May;15(4):249-252
- Palmer AM New horizons in drug metabolism, pharmacokinetics and drug discovery. Drug News Perspect. 2003 Jan-Feb;16(1):57-62
- Nagy JM and Brown KA Proteomics: New Developments in Target Discovery Drug News Perspect. 2002 Nov;15(9):601-603.
- ◆ Armer RE and Cowley PM. Trends in medicinal chemistry 2004. Drug News Perspect. 2005 Mar;18(2):142-8.

- Hansel TT Smoking-related lung disease: prospects for new drug therapy.. Drug News Perspect. 2001 Apr;14(3):175-80.
- Cavalla D Adaptations and innovations in drug delivery.. Drug News Perspect. 2001 Oct;14(8):495-9.Nagy JM and Brown KA Proteomics: New Developments in Target Discovery Drug News Perspect. 2002 Nov;15(9):601-603.

• SMR Committee. Case Histories in Drug Discovery and Design 2001 Drug News Perspect 15(1), Jan.-Feb. 2002

#### 2000

- Jupp RA, Palmer AM and Greengrass PM. Functional genomics. Drug News Perspect. 2000 Apr;13(3):188-92
- Palmer AM, Greengrass PM and Cavalla D The role of mitochondria in apoptosis. Drug News Perspect. 2000 Aug;13(6):378-84
- Conquering Antibacterial Resistance
- Trends in Medicinal Chemistry

#### 1998

- Gilmore J and Horton R. Stroke: therapeutic approaches Drug News Perspect 11(7), September438-441
- Wilson CA and Cavalla D Update on antiobesity drugs Drug News Perspect 11(4), May 1998 240-247

The Abstracts for some of these publications are shown below:

# **Cancer Treatments for the New Millennium**

The SMR Symposium *Cancer Treatments for the New Millennium* was held on March 9, 2006, at the National Heart and Lung Institute, Imperial College London. The conference program brought together an international line-up of speakers representing academia, biotech and large pharma to discuss the development status of a number of new innovative treatments for the treatment or prevention of cancer. Presentations also focused on how new technologies are being applied to the design of the next generation of cancer drugs and the fundamental biological challenges that must be addressed in attempting to discover effective new treatments.

#### Chemical genetics and genomics and drug discovery

The SMR Symposium Chemical Genetics and Genomics: What Are They and Are They Helping Drug Discovery was held on March 10, 2005 at the National Heart and Lung Institute, Imperial College London. The conference program brought together an international line up of speakers representing academia, biotechnology and large pharmaceutical companies to discuss a variety of drug discovery strategies, falling under the umbrella terminology Chemical Genomics and Genetics. Highlights of the meeting are discussed.

#### Therapeutic strategies for tissue regeneration

Tissue regeneration represents an emerging approach to the development of new medicines. It has even been described as the major therapeutic approach of the 21st century. Realization of this promise depends on overcoming a number of significant challenges. In the Society for Medicines Research symposium, held on June 6, 2005, in London, United Kingdom, and organized by Prof. Ian Morris (Hull York Medical School, York, UK) and Dr. Alan M. Palmer (Pharmidex, London, UK), several visionaries shared their confidence and determination to overcome these challenges. It is clear that persistence in this difficult area of research is increasingly paying dividends as the commercial potential of strategies for tissue regeneration are recognized by the biopharmaceutical industry, investors and government funding agencies worldwide.

#### Challenges facing drug discovery in vascular disease

The Society for Medicines Research symposium Challenges Facing Drug Discovery in Vascular Disease was held September 30, 2005, at Organon Research, Newhouse, Scotland. The conference brought together an international panel of speakers representing academia and the pharmaceutical industry to review approaches to the treatment of diseases affecting the vasculature. The focus of the meeting was on atherosclerosis and one of its clinical manifestations, stroke. The meeting reviewed current and emerging therapeutic approaches and improving technologies to monitor risk and disease progression in patients.

#### Recent disclosures of clinical drug candidates

On December 8, 2005, the Society for Medicines Research held a one-day meeting in London, United Kingdom, entitled Recent Disclosures of Clinical Drug Candidates. The meeting brought together speakers from Europe representing the pharmaceutical industry and provided an overview of some the latest approaches being taken in a range of therapeutic areas such as oncology, inflammation, CNS disease and reproductive medicine. 2006

#### Chemokines and drug discovery

Chemokines and Drug Discovery was a one-day meeting organized by the Society for Medicines Research, held at the Novartis Horsham Research Centre in Horsham, United Kingdom, on March 11, 2004. More than 100 scientists, mostly from industry, attended this meeting.

# Type II Diabetes: Mechanisms and Emerging Therapeutic

The SMR Symposium 'Type II Diabetes: Mechanisms and Emerging Therapeutic Targets' was held on 17th June 2004 at the National Heart and Lung Institute, Imperial College, London. The conference programme brought together an international program of speakers representing academia, small biotech and large pharma to review approaches aimed at increasing our understanding of the aetiology of the disease and advances in the development of novel therapeutics. Type II Diabetes is a major, worldwide healthcare problem and the incidence of this disease is rising. In the USA alone 13.3 million people were diagnosed with diabetes in 2002, an increase of 5.8 million in a decade following an alarming trend beginning in the eighties. People who have diabetes are at an increased risk of developing serious life threatening complications, notably cardiovascular disease as well as experiencing morbidity, which severely impairs their quality of life. This trend will pose an increasing burden on governmental healthcare budgets.

#### Successes in drug discovery and design.

The Society for Medicines Research (SMR) held a one-day meeting on case histories in drug discovery on December 4, 2003, at the National Heart and Lung Institute in London. These meetings have been organized by the SMR biannually for many years, and this latest meeting proved extremely popular, attracting a capacity audience of more than 130 registrants. The purpose of these meetings is educational; they allow those interested in drug discovery to hear key learnings from recent successful drug discovery programs. There was no overall linking theme between the talks, other than each success story has led to the introduction of a new and improved product of therapeutic use. The drug discovery stories covered in the meeting were extremely varied and, put together, they emphasized that each successful story is unique and special. This meeting is also special for the SMR because it presents the "SMR Award for Drug Discovery" in recognition of outstanding achievement and contribution in the area. It should be remembered that drug discovery is an extremely risky business and an extremely costly and complicated process in which the success rate is, at best, low.

#### Pharmacotherapy for neuropathic pain: progress and prospects.

Neuropathic pain, a persistent chronic pain resulting from damage to the central or peripheral pain signaling pathway, has become an area of intense research activity--largely because it represents a disorder with high unmet medical need. It is not a single disease entity, but rather

includes a range of heterogeneous conditions that differ in etiology, location and initiating cause. Despite this diversity, the clinical presentation is frequently surprisingly similar, which suggests a common biological basis. Until recently, little was known of the mechanisms underlying the various neuropathic pain conditions, making the directed development of novel therapies almost impossible. However, the steady increase in our understanding of the anatomical, cellular and molecular basis of neuropathic pain, coupled with the advent of a number of experimental models of neuropathy, has permitted relatively rapid progress, and the prospects for the emergence of new, more effective therapies look very good. Gabapentin (Pfizer), which appears to act by blocking calcium channels, is the first drug to acquire widespread regulatory approval for the treatment of neuropathic pain. The Society for Medicines Research symposium held June 26, 2003, considered this treatment modality alongside other approaches to therapy, such as N-methyl-D-aspartate receptor antagonists and cannabinoid receptor agonists. The whole meeting provided an excellent description of the challenges facing neuropathic pain drug discovery--at both the research and the development phases of the value chain.

# Is there a best strategy for drug discovery?

The Society for Medicines Research held a meeting on March 18, 2003, at the National Heart & Lung Institute in London, United Kingdom, to discuss strategies for drug discovery. Have the new technologies and management practices enhanced the rate at which we discover new molecular entities? The impressive list of speakers assembled for this conference included a Nobel Laureate and the greatest drug discoverer of all time to make their assessments. They and the metrics provided by the Centre for Medicines Research point to an "innovation gap" in current drug discovery but there are signs that a new foundation bulit upon the genomic sciences is in formation.

# **Proteomics: New Developments in Target Discovery.**

The Society for Medicines Research in collaboration with the Biological and Medicinal Chemistry sector of the Royal Society for Chemistry held a meeting on September 19, 2002, in London, United Kingdom to discuss proteomics in drug discovery. The meeting gave the most up-to-date overview of current progress in this new field, the challenges in silico, in vitro and in vivo, together with consideration of the increasing contribution of bioanalysis, bioinformatics and pharmacogenomics. Speakers from Celera Genomics, Oxford GlycoSciences and GlaxoSmithKline, among other companies and institutions, were present.

# The role of mitochondria in apoptosis.

It has recently become apparent that mitochondria play a pivotal role in the process of cell death. In the absence of adenosine 5'-triphosphate (ATP) cells die by necrosis, but if sufficient ATP is available, a cascade of changes is initiated that lead to a much more orderly process of cell death (apoptosis). In addition to providing energy to the cell, mitochondria serve to sequester Ca(2+). Excessive accumulation of Ca(2+) leads to the formation of reactive oxygen species, together with the opening of the mitochondrial permeability transition pore, which depolarizes the mitochondria and leads to mitochondrial swelling. This may also provide a mechanism for the release of cytochrome c from the intermembrane space, although it is clear that there are probably other mechanisms also. Cytochrome c normally functions as part of the respiratory chain, but when released into the cytosol it becomes a critical component of the apoptosis execution machinery, where it activates caspases (cysteine aspartate proteases) and (if ATP is available) causes apoptotic cell death. The regulation of mitochondrial function by proteins related to Bcl-2 is also discussed, together with the prospects for the development of new therapies for disorders associated with cell death.

#### **Functional genomics.**

We are in the midst of a genomics revolution. The first chapter of this revolution will end later this year with the completion of the first draft of the entire human genome; estimates for the exact number of genes in the human genome vary from 50,000 to 140,000. This

endeavour has been a major catalyst for the genomics revolution and has moved science into uncharted territories, which has led to the need to establish both new disciplines and a new vocabulary. Thus we now have pharmacogenomics, genotyping, pharmacogenetics, microarrays, biochips, differential display, bioinformatics and cheminformatic. The meeting provided a taste of the wealth of information that is now being accumulated under the name of both genomics and proteomics. The challenge ahead will be turning this information into knowledge and then translating this knowledge into new therapies.

#### Case Histories in Drug Discovery and Design 2001.

The Society for Medicines Research (SMR) held a one-day symposium, entitled "Case Histories in Drug Discovery 2001," on December 6, 2001, at the National Heart and Lung Institute in London. The talks shared one common theme: success stories in drug discovery that have led to new and improved products for therapeutic use. With an emphasis on individual contributions to drug research, each story was considered in the context of an everchanging, high-risk industry in which research processes are complicated, the success rate is low and costs are extreme. Also incorporated in the meeting was the presentation of the "SMR Award for Drug Discovery," an award given in recognition of outstanding achievement in and contribution to drug discovery.

# Research Strategies for Orphan G-Protein-Coupled Receptors.

The Society for Medicines Research meeting on orphan G-protein-coupled receptors (GPCRs) was held on March 7, 2002 at the Novartis Research Centre in Horsham, United Kingdom. The dynamic and highly competitive field of GPCR research was the focus of this SMR meeting, featuring speakers from Pharmagene, Manchester University, GlaxoSmithKline, The Royal Danish School of Pharmacy, Pfizer, AstraZeneca, Merck and Synaptic. The meeting attracted a large and enthusiastic audience interested in the research efforts of leading international research teams in the area of GPCR research, whose immediate aim is to evolve the novel molecular targets into lead discovery programs.

# Trends in medicinal chemistry.

The Society for Medicines Research held a meeting on Trends in Medicinal Chemistry on November 30, 2000, in Stevenage, U.K., with the goal of alerting researchers to emerging areas of chemistry and novel classes of compounds likely to lead to new approaches to the treatment of disease. Speakers from nine pharmaceutical companies described areas of research that included phosphodiesterase inhibitors, adenosine receptor ligands, VEGF RTK inhibitors, RNA-protein interaction inhibitors, NMT inhibitors, anti-HCV agents and antidepressants.

#### Research Strategies for Orphan G-Protein-Coupled Receptors.

The Society for Medicines Research meeting on orphan G-protein-coupled receptors (GPCRs) was held on March 7, 2002 at the Novartis Research Centre in Horsham, United Kingdom. The dynamic and highly competitive field of GPCR research was the focus of this SMR meeting, featuring speakers from Pharmagene, Manchester University, GlaxoSmithKline, The Royal Danish School of Pharmacy, Pfizer, AstraZeneca, Merck and Synaptic. The meeting attracted a large and enthusiastic audience interested in the research efforts of leading international research teams in the area of GPCR research, whose immediate aim is to evolve the novel molecular targets into lead discovery programs.

# New horizons in drug metabolism, pharmacokinetics and drug discovery

Along with minimal toxicity, good drug metabolism and pharmacokinetic (DMPK) properties are essential for the clinical success of a drug candidate. A major cause of failure of orally administered drugs during their development is the discovery that in humans they have low intestinal absorption and/or high clearance causing low and variable bioavailability. In addition, drug interactions and the presence of active metabolites can prevent or complicate their successful development. With poor pharmacokinetics, it can be difficult to achieve a

suitable dosage regimen for the required pharmacodynamic action. The main role of DMPK in discovery is, therefore, the prediction of human pharmacokinetics and metabolism. Reducing the rate of attrition during drug discovery and development is now considered essential, particularly as it is now possible to screen an ever-greater number of compounds.

# Smoking-related lung disease: prospects for new drug therapy

The first 2001 meeting of the Society for Medicines Research, held in London on March 14, was devoted to emerging treatments for chronic obstructive pulmonary disease, commonly referred to as smoking-related lung disease or COPD. As COPD afflicts more and more people around the world, the dual need for preventative measures and therapeutic approaches will also continue to grow. During this sobering yet inspiring symposium, researchers looked at compounds that are currently in phase III clinical studies; reactive oxidant species, proteases and neutrophil chemotactics as therapeutic targets; and finally, the potential of monoclonal antibodies and retinoids.

# Adaptations and innovations in drug delivery

The most recent meeting organized by the Society for Medicines Research, entitled Improving Medicines Through Drug Delivery, was held at the National Heart and Lung Institute in London on July 5, 2001. Drug delivery is increasingly becoming a central technology in the research and development of better medicines. This is so for at least three reasons. First, new drugs are being derived from complex biological molecules that are not readily amenable to oral delivery. Second, improved medicine is recognized as requiring better dosing regimens for the patient. Both compliance and preference are improved by reduced dosing frequency, and it is rare for new products to require three-times-daily administration. Lastly, drug delivery technology has come a long way in the past 20 years, beyond controlled-release pharmaceuticals to polymer conjugates and dry powder-inhaled proteins.

# Case Histories in Drug Discovery and Design 2001

The Society for Medicines Research (SMR) held a one-day symposium, entitled .Case Histories in Drug Discovery 2001,. on December 6, 2001, at the National Heart and Lung Institute in London. The talks shared one common theme: success stories in drug discovery that have led to new and improved products for therapeutic use. With an emphasis on individual contributions to drug research, each story was considered in the context of an ever-changing, high-risk industry in which research processes are complicated, the success rate is low and costs are extreme. Also incorporated in the meeting was the presentation of the .SMR Award for Drug Discovery, an award given in recognition of outstanding achievement in and contribution to drug discovery.

#### **Functional genomics.**

We are in the midst of a genomics revolution. The first chapter of this revolution will end later this year with the completion of the first draft of the entire human genome; estimates for the exact number of genes in the human genome vary from 50,000 to 140,000. This endeavor has been a major catalyst for the genomics revolution and has moved science into uncharted territories, which has led to the need to establish both new disciplines and a new vocabulary. Thus we now have pharmacogenomics, genotyping, pharmacogenetics, microarrays, biochips, differential display, bioinformatics and cheminformatic. The meeting provided a taste of the wealth of information that is now being accumulated under the name of both genomics and proteomics. The challenge ahead will be turning this information into knowledge and then translating this knowledge into new therapies

#### The role of mitochondria in apoptosis.

It has recently become apparent that mitochondria play a pivotal role in the process of cell death. In the absence of adenosine 5'-triphosphate (ATP) cells die by necrosis, but if sufficient

ATP is available, a cascade of changes is initiated that lead to a much more orderly process of cell death (apoptosis). In addition to providing energy to the cell, mitochondria serve to sequester Ca(2+). Excessive accumulation of Ca(2+) leads to the formation of reactive oxygen species, together with the opening of the mitochondrial permeability transition pore, which depolarizes the mitochondria and leads to mitochondrial swelling. This may also provide a mechanism for the release of cytochrome c from the intermembrane space, although it is clear that there are probably other mechanisms also. Cytochrome c normally functions as part of the respiratory chain, but when released into the cytosol it becomes a critical component of the apoptosis execution machinery, where it activates caspases (cysteine aspartate proteases) and (if ATP is available) causes apoptotic cell death. The regulation of mitochondrial function by proteins related to Bcl-2 is also discussed, together with the prospects for the development of new therapies for disorders associated with cell death.

#### **Stroke: therapeutic approaches**

Speakers at the Society for Medicines Research Symposium on Stroke, held July 9, 1998, in Windlesham, U.K., covered topics ranging from reasons for failure of drugs in late-stage clinical trials to in vitro and in vivo models of ischemia to therapeutic approaches to this disorder. The take-home message was that the side effect profile in humans needs to be closely examined, with emphasis on the pharmacokinetics and distribution to minimize the cardiovascular effects.

#### Update on antiobesity drugs

The Society for Medicines Research organized a one-day meeting on antiobesity drugs on March 26, 1998, in London. Current environmental risks for obesity include an increase in the proportion of fat consumption especially an increase in the fat-tocarbohydrate ratio.and an increase in a sedentary life-style without an appropriate lowering in food intake. Energy balance plays a pivotal role of in the control of body stores. Knowing the mechanisms of the control of energy intake and energy expenditure provides explanations for the incidence of obesity and also possible sites for drug intervention. The genetic basis for obesity is complex, with the probability of a number of interacting genes being involved (polygenic inheritance). Each of the main components of the energy balance relationship has a distinct genetic basis. The ob gene was first identified in 1994 by Friedman, and its product is leptin, which may well be a potential target for obesity treatment. Speakers at the meeting highlighted various targets that hold promise in developing pharmacological treatments for obesity: increasing the activity of satiety factors (CCK-8, GPL-1, ACTH, aMSH and 5-HT acting on 5-HT2C receptors); inhibiting orexigenic agents (NPY, MCH, galanin); targeting thermogenesis (b3-adrenergic agonists and uncoupling proteins); targeting fat absorption; and targeting neuropeptides. Some of the compounds developed to act on these sites are now becoming available.

#### Links and collaborations

The Society is a member of the European Federation of Medicinal Chemistry (EFMC) and in correspondence with the Commission on Medicinal Chemistry of the International Union of Pure and Applied Chemistry (IUPAC).

#### **Contact details**

The permanent address of the Society's Secretariat is 840 Melton Road, Thurmaston, Leicester, LE4 8BN at (Tel: 0208 44 (0)116 269 1048; Fax: +44 (0)116 264 0141; E mail: secretariat@smr.org.uk), to which all routine enquiries should be addressed.

# **Executives of the Society**

Chairs	Secretaries	Treasurers
Dr A.M Palmer	Prof I. Morris	Dr P. Warne
(2005-2007)	(2005-2007)	(2003-)
Dr G. Stemp	Dr A.M Palmer	Dr P. Warne
(2003-2005)	(2001-2005)	(2003-)
Dr M. Duckworth	Dr M. Duckworth	Dr M Giembycz
(2002-2003)	(1999-2002)	(2001 -2003)
Dr D. Cavalla	Dr D. Cavalla	Dr G. Stemp
(2000-2001)	(1995-1999)	(1999-2001)
Dr I. Francois	Dr J.J. Archibald	Dr C.A.J. Wilson
(1998-2000)	(1987-1995)	(1995-1999)
Dr B. Morgan	Dr J.D. Flack	Dr M.P.L. Caton
(1996-1998)	(1976-1987?)	(1986-1995)
Dr M. Chapleo	Dr Alma Simmonds	Dr K.J. Child
(1994-1996)	(1966-1975)	(1980-1985)
Dr C.A.J. Wilson		Dr R.W. Brimblecombe
		(1976-1979)
Dr C.R. Ganellin		Dr J.F. Cavalla
(1985-		(1966-1975)
Dr B.C.L. Walker		
(1984-1985)		
Dr A Bennett		
(1982-1983)		
Dr J.D. Coombes		
(1980—1981)		
Dr J.F Cavalla		
(1977-1979)		
Dr T.I. Wrigley		
(1975-1976)		
Dr W.G.M. Jones		
(1973-1974)		
Dr D. Jack		
(1970-1972)		
Dr N.J. Harper		
(1966-1969)		

**Honorary Life Members** Dr Alma Simmonds Dr John F. Cavalla

# List of Past Symposia

#### 2006

- Translational Sciences Turning Drug-like Molecules into Medicines
- Cancer Treatments for the New Millennium

#### 2004

- Chemokines and Drug Discovery
- Type II Diabetes: Mechanisms and Emerging Therapeutic Targets
- CNS Drug Discovery: Challenges and Solutions
- Trends in Medicinal Chemistry

#### 2003

- Is there a best strategy for Drug Discovery?
- Pharmacology for Neuropathic pain: progress and prospects
- Trends in early drug safety
- Case Histories in Drug Discoveries and Design

#### 2002

- Orphan Receptors
- New horizons in drug metabolism, pharmacokinetics and drug discovery
- Proteomics
- Trends in medicinal chemistry

#### 2001

- Smoking-related Lung Disease (COPD): Prospects for New Therapy
- Improving medicines through drug delivery
- The role of sodium channels in disease
- Case histories in drug discovery and design

# 2000

- Functional Genomics
- The Role of Mitochondria in Apoptosis
- Conquering Antibacterial Resistance
- Trends in Medicinal Chemistry

# 1999

- Anti-Obesity Drugs
- Protein Kinases: Therapeutic Opportunities
- Angiogenesis
- Nuclear Receptors
- Case Histories & SMR Award Lecture

# 1998

- Anti-Obesity Drugs
- Stroke: Therapeutic Opportunities
- Therapeutic Aspects of Cell Adhesion
- Trends in Medicinal Chemistry

- New Frontiers in the Treatment of Epilepsy
- Controlling Pain in the 21st Century

- Alzheimer's Disease
- Case Histories & SMR Award Lecture

- New Technologies in Drug Discovery
- Cancer Therapy the way forward
- Trends in Medicinal Chemistry
- Endothelins: New Therapeutic Opportunities

# 1995

- Choline lipids & their role in cellular signalling
- Trends in Medicinal Chemistry
- Case Histories & SMR Award Lecture

#### 1994

- Possibilities for Novel Therapies the L-Arginine to Nitric Oxide Pathway
- Trends in Medicinal Chemistry
- Schizophrenia
- Case Histories

#### 1993

- Channel Modulators-new therapeutic opportunities
- Depression & Aspartic proteinases( Joint with Italian Chemical Society)
- Neuroendocrinimmunology
- Membrane Transport, Case Histories & SMR Award Lecture (Joint with BACR)

#### 1992

- Therapeutic opportunities from purinergic transmission
- Antiviral chemotherapy Psoriasis
- Osteoporosis
- Gene therapy & Genetic disorders

#### 1991

- Non-Peptide Antagonists for Peptide Receptors
- PAF
- Osteoarthritis
- Case Histories of Drug Discovery

# 1990

- Tropical Diseases
- Immunity and Chemotherapy (Residential)
- Molecular Approaches to the treatment of HIV Infection
- Drugs for the treatment of Sexual Dysfunction

#### 1989

- Aspects of Endocrine Toxicology
- Obesity
- Leukotrienes
- Case Histories of Drug Discovery

- Diabetes
- Atherosclerosis
- Peptides and drug discovery

> 5HT

#### 1986

- Chemistry and pharmacology of dopamine receptor agonists and antagonists
- Advances in drug delivery (Residential meeting in Cambridge)
- Trends and changes in drug research and development
- Antiviral chemotherapy

#### 1985

- Joint meeting with the Pharmaceutical division of the Italian Chemical Society; Rimini, Italy)
- Rheumatoid arthritis
- Computers in drug design
- Senile dementia of the Alzheimer type

#### 1984

- The role of membrane receptors in drug discovery
- Drug aspects in gastro-intestinal motility, secretion & absorption (Satellite symposium to IUPHAR 9<sup>th</sup> International Congress of Pharmacology; residential meeting in Cambridge)
- Natural products research as an aid to future drug discovery

#### 1983

- Advances and research methodology for CNS drugs (Residential meeting in Bristol)
- Current trends in cancer chemotherapy
- Current concepts in ocular therapy
- Cannabinoids their possible therapeutic uses?

#### 1982

- Recent aspects of skin disorders
- Centrally acting analgesics
- Cardiac failure
- Fertility control in the 21<sup>st</sup> Century

#### 1981

- Adrenoreceptor drugs (Residential in Manchester)
- Recent advances in veterinary medicine
- Asthma
- Isotopes in drug research

#### 1980

- Risk-benefit analysis in drug research (Residential meeting in Cantebury)
- Drugs and the foetus
- Chemical properties and drug action
- Genetic engineering

- Computers in research and development
- The gut as a target for drug research
- Oral cavity diseases and treatment
- Synthetic development in the prostanoid field

- Burns and drug action
- Drugs, transmitters and behaviour
- International symposium on medicinal chemistry (Brighton)

#### 1977

- Drugs used in diseases of the skin
- Industrial drug discovery (Residential meeting in York)
- Drug intervention in the ageing process
- Stimulation of immunological defence mechanisms
- Biochemical approaches to antibiotics

#### 1976

- Allergic reactions in skin
- Fertility
- Cyclic nucleotide systems: Targets for drug design

#### 1975

- Chemical properties of drugs (Joint meeting with the British Pharmacological Society)
- The role of toxicology in the development of a drug
- Prolactin
- Inflammation (Residential meeting in Nottingham)
- Headache
- Drug metabolism and drug development

#### 1974

- Essential hypertension
- Anti-obesity drugs
- Human and veterinary trematode infections

# 1973

- Development of analgesic drugs
- Biochemistry and treatment of depression
- Perspectives in ischaemic heart disease
- Recent developments in antibiotics

## 1972

- Anaesthetic and neuromuscular blocking drugs
- Drug availability for medicines
- Drug research and development: Factors governing its productivity
- Conformation and drug action
- The anxiety state and its treatment with drugs

- Recent advances in medicinal chemistry
- Peptic ulceration
- Horizons in drug research
- Interferon and interferon inducers
- Schizophrenia: Biochemistry and drug treatment

- Non-steroidal anti-inflammatory drugs
- Drugs in the treatment of Parkinson's disease
- The nature of the immune process
- Prostoglandins: their possible physiological and therapeutic roles

- Fibrinolysis
- Medicinal chemistry
- Platelet aggregation
- Cancer chemotherapy

# 1968

- Anti-fertility agents
- Maturity onset diabetes
- Drugs in the treatment of asthma and related conditions

# 1967

- Drugs affecting the uptake of catecholamines at adrenergic synapses
- Gastrointestinal hormones and their implications in drug research
- Trematode infections

# 1966

• The Chemotherapy of nematode infections