Merton Sandler
March 1926 – August 2014

Merton Sandler was a past President of the BAP, and a recipient of its Lifetime Achievement award. He attended a dinner for past Presidents in Cambridge a few weeks before he died, where he was happy to meet many old friends.

Merton Sandler was a pioneer of Psychopharmacology, and published influential scientific papers in the field for nearly 50 years. He formulated the monoamine hypothesis of depression in 1959. He, together with Mike Pare, confirmed that iproniazid acted as an antidepressant. It had already been reported that this drug acted to inhibit the enzyme monoamine oxidase. They therefore suggested that depression was caused by a deficiency of monoamines in the brain (Pare CM, Sandler M (1959) A clinical and biochemical study of a trial of iproniazid in the treatment of depression. J Neurol Neurosurg Psychiatry 22:247–251). This was at a time when most psychiatry was still quite psychoanalytic, and was part of the beginning of biological psychiatry.

continued on page 2
He remained interested in monoamine oxidase for the rest of his working life (Sandler M (2004) My fifty years (almost) of monoamine oxidase. 419 Neurotoxicology 25(1-2):5-10). He and his colleagues demonstrated that the enzyme had multiple forms, and that deprenyl, a selective inhibitor of monoamine oxidase B was helpful and safe in the treatment of Parkinson’s disease. In later years, he and colleagues discovered the endogenous monoamine oxidase inhibitory activity, which he named tribulin (after trials and tribulations) and identified the selective B inhibitory component as isatin.

Merton Sandler was born in Salford on March 28 1926 into an observant Jewish family and won a scholarship to Manchester Grammar School, which he loathed, but from which he won a place at Manchester University to read Medicine. After qualifying in 1949, he did two years National Service at Shoreham on Sea. As he had already done a year of pathology training, the Army gave him a small hospital laboratory, but with very few routine duties and left him to get on with it. It was in this freewheeling environment that he met Michael Pare, a fellow doctor-soldier and future psychiatrist who became a lifelong friend. “We started doing things we called research”, Merton recalled. “We were enthusiastic but had no idea of research discipline. Even so, we had a bit of luck and the Lancet published our first two papers”.

In 1951 Merton was appointed consultant chemical pathologist at Queen Charlotte’s Hospital and, from 1973 until 1991 was Professor of Chemical Pathology at the University of London’s Royal Postgraduate Medical School Institute of Obstetrics and Gynaecology. He took the job originally as he had a theory about the role of 5-HT in pre-eclampsia, but he disproved his own theory within 6 months. His role in chemical pathology only took up a few days each year, as he had a good team working with him, and this gave him freedom to work as he chose for the rest of his life. He was not idle, and published over 700 papers.

From the beginning he experimented on himself. He used to describe how he took reserpine and it made him, usually a very calm man, aggressive towards his wife Lorna. Luckily the effect wore off fairly soon. He continued to encourage members of his lab to test things on themselves too. In studies of the effects of wine in triggering migraine, we all drank cold red wine or an equivalent amount of vodka in lemonade in darkened bottles, first thing in the morning. The red wine certainly made many of us feel quite unwell. Some bottles of wine remained in the lab for a while, raising eyebrows in visitors. Merton took a freewheeling approach to rules and laws throughout his life. He recalled how he had smuggled some deprenyl out of Hungary to London, where it had been developed by József Knoll, in the pockets of his mackintosh. When we finally had to clear out the labs where he had worked for many decades we found an unlocked cupboard full of LSD, amphetamines, and many other banned substances.

The labs certainly did not look state-of-the-art. In the 1990s they were used to make a black and white film of research in the 1930s. However, Merton was quick to appreciate and invest in new techniques and was an early user of both gas chromatography and mass spectrometry. Peter Riederer recalls how he developed a method for the proper detection of MHPG using gas chromatography as a young postdoc. “Merton Sandler’s laboratory was at that time the centre for GC and GC–MS. They had more than 15 GCs available with every useful methodological variation”.

continued from page 1
As well as the well-trodden pathways of 5-HT, dopamine and noradrenaline, he loved the more obscure byways of tyramine, phenylethylamine, isoquinolines and carbo-lines. He developed the tyramine test as a marker for depression, where the subject took a 100 mg capsule of tyramine and the level of tyramine sulphate conjugate excreted in the urine, was measured. People with depression produced less of the conjugate. This too was tested on members of the lab. A more recent interest was in the neurotrophins, and especially the role of BDNF in depression.

His extraordinary breadth of interest is shown by the range of topics of the books he wrote or edited. Their titles include: Wine; Mental Illness in Pregnancy and the Puerperium; Psychopharmacology of Anticonvulsants; Psychopharmacology of Food; Design of Enzyme Inhibitors as Drugs; Migraine; 5-HT in Psychiatry; Sexual Behaviour: Pharmacology and Biochemistry; Psychopharmacology of Alcohol; Migraine: Pharmacology and Genetics; Progress in Catecholamine Research; Psychopharmacology of Aggression; Parkinson's Disease; as well as one on Medical Humour and Anecdotes.

Merton loved to travel to conferences around the world. He and Lorna were often to be seen by the pool. The ACNP meeting in Puerto Rico was a particular favourite. But he was always networking, talking, discussing new ideas, stimulating new avenues of research, forging new collaborations and making connections for others. He was very funny too, and the best after-dinner speaker on the conference circuit. Merton had colleagues from the UK, many countries in Europe, Israel, USA, Russia, India, Japan, and Australia. All regarded him as their friend. He stimulated and furthered the careers of many younger scientists, including future Presidents of the BAP such as Gavin Reynolds and Barry Everitt.

He is survived by his wife Lorna, their four children and eleven grandchildren.

Vivette Glover
We at the BAP sadly note that Professor Ian C Reid, of the University of Aberdeen, passed away peacefully at home in Newtyle on Monday 16th June 2014. He was surrounded by family and friends.

Ian was a graduate of the medical school at Aberdeen and his interest in Neuroscience developed at a young age during an intercalated BSc and led to him being appointed by Professor George Ashcroft as a lecturer in psychiatry whilst still a trainee psychiatrist. Thereafter Ian moved to Edinburgh where he completed a PhD in cognitive neuroscience in the laboratory of Professor Richard Morris, CBE, FRS. Academic appointments in Edinburgh, Aberdeen and Dundee followed prior to Ian being appointed to the Chair of Mental Health in Aberdeen.

Ian's longstanding clinical and research interests focussed on Affective Disorders, particularly on the mechanism of action of electroconvulsive therapy (ECT) but he also did important work about the use of antidepressant medication.

A longstanding member of the BAP and an elected member of the BAP Council for four years, Ian contributed much over the years including teaching at BAP organised educational events and supporting young colleagues presenting research findings at the annual meeting. Ian also served the Royal College of Psychiatrists as Chairperson of the Special Committee for ECT, an important role which supported the proper use of this important treatment.

A stimulating and sometimes challenging colleague Ian's early death robs us all of good friend who would never tolerate sloppy thinking. His recent research, published in highly prestigious international journals, sets the scene for real advances in the understanding of how ECT works.

Ian co-edited (with Professor Ian Anderson) the BAP publication the Fundamentals of Clinical Psychopharmacology and the forthcoming revised edition is dedicated to his memory.

Allan Young
As part of the celebration of the 40th anniversary meeting of the BAP in Cambridge this year Sarah Channing-Wright and Susan Chandler mounted an historical exhibition of some of the material from the BAP archives including photographs and early documents. This was enjoyed by many present. The exhibition started with reprints of the letter sent by the founding fathers to the Lancet and BMJ announcing the formation of the BAP. However it occurred to me, and some others involved in the early days, that this letter was actually about the founding of the British Academy of Psychopharmacology, not the British Association for Psychopharmacology and that this transition only occurred following several rather fractious meetings. The original BAP, as envisaged by the founders, was rather different to the Association that was finally born.

I therefore thought it would be good to try and write a history of the BAP from its origins to today, something that particularly interests me having been a member since those early days. I am aware that parts of the story have been published over the years as the result of personal recollections and structured interviews with those involved. However such information can be biased by memory or even personal prejudice. Such articles are usually fascinating to read but are not always reliable historically. What I therefore wanted to do was use official documents, primarily the minutes and other official files and letters, as my primary source. Nevertheless I realised that using only such documents would lead to a very dry account, and that talking to some early members and officers will also be required to bring ‘life’ to the narrative. Interviews will also provide information missing as the result of incomplete documentation. The BAP was founded by persons working in their own time, writing letters that were not filed in one centre and were certainly not saved for posterity. There were no computers and no permanent office.

In addition I could see the project would have to encompass not only the Council meetings and the decisions made about the general organisation of the Association but also review the scientific meetings, the role of the BAP in education, the prize-giving, and the founding and development of the Journal of Psychopharmacology.

My next move was to write to the President and Susan Chandler to ask if they felt writing a history would be a good idea and if so whether Council would accede to my desire to go through all the files held in the BAP office. I received an enthusiastic response and also a letter from Peter Haddad. He had recently been awarded a Wellcome Research Award to study the introduction of first generation antipsychotic drugs into UK medical practice between 1952 and 1980, and related aspects of the development of clinical psychopharmacology. Peter had seen the possible overlap of our activities and wondered whether we might collaborate. A few emails revealed our similarity of thinking and we agreed we would enjoy working with each other. In mid-September we met in the BAP office, being received with great hospitality by Susan, Lynne and Sarah. We began to review and organise the material in the archives and divided the work required for a systematic historical review of the BAP between us. A quick browse through the early Council minutes has already revealed some fascinating and enjoyable information. For example we discovered who was responsible for designing and approving the BAP logo and also the history of the Presidents symbol of office which is worn during formal occasions. We also gained an insight into why the BAP is not called a College, in contrast to both the CINP and the ACNP, both of which were formed prior to the BAP.

So during the coming months Peter and I will try and discover as much as possible about the formation and history of the BAP. We hope to produce an authoritative monograph on the subject including full lists of officers and prize winners (Sarah has already done much on this for the display at the Summer meeting). We also hope to provide a shortened version for possible publication in the J Psychopharmacol.

Our main source of information will be a review of relevant documents, but we also plan to talk to some early members and officers. If any members of the BAP, or other readers of this article, have relevant information including documents that would assist us in our work on history of BAP then we would be very interested to hear from them. This would also extend to Peter’s additional work on the introduction of antipsychotics drugs into clinical practice. Peter and I can be contacted through Susan at the BAP Office.

A Richard Green and Peter Haddad
MEMBERS’ ACTIVITIES

A showcase for the media and public engagement activities of BAP members.

Following are some of the latest members’ activities over the past few months. All members’ activities, with links, can be found at www.bap.org.uk/members

Oliver Robinson
Lancet Psychiatry Podcast
Oliver Robinson talks about the neurobiology of anxiety disorders
14th August 2014

Sarah Bailey
Hitler’s Hidden Drug Habit: Secret History
Sarah Bailey features in the Channel 4 documentary about Hitler’s medicines.
19th October 2014

Ciara McCabe
Inside Out South
Ciara talks about the brain and sugar
1st September 2014

Akeem Sule
Hip Hop Psych
Dr. Akeem Sule and Dr. Becky Inkster demystify mental illness through hip-hop beats and lyrics.
October/November 2014

Have you recently engaged with the public in science via the media or public events?

As you may be aware, both the Medical Research Council and the Wellcome Trust advocate engagement with the public regarding scientific and medical research, and BAP is keen for members to engage with the media, so that we can share our important research findings with the public, including enthusiastic students and trainees.

We would like to invite you to share your most recent media activities with us, so that we can disseminate them to the public through our website and social media.

In particular we are looking for media articles, video interviews, podcasts, websites and blogs.

Please send any links or other engagement with the media to Sarah Channing-Wright (sarah@bap.org.uk).
REPORT KERWIN
INTERNATIONAL BURSARY

Report by Abbie Pringle

I was honoured to be awarded a Robert Kerwin International Bursary to attend the World Congress of Psychiatry in Madrid, where I spoke in a symposium entitled “Biomarkers of Antidepressant Treatment Outcomes”.

The meeting was excellent, with many fantastic talks and posters, generating interesting ideas for ways of developing current studies as well as for future work. The meeting was particularly useful in reaching from basic pre-clinical science all the way up to clinical work, and it was very useful to speak to people working in mood disorders across these different levels of explanation.

My talk focussed on the potential of healthy volunteer models of emotional processing for both antidepressant treatment development and treatment outcome. In terms of treatment development, I discussed the utility of such models in screening novel, putative antidepressants. The talk also considered whether such models might be able to differentiate some specific effects on emotion and reward processing of different antidepressant treatments, and the potential implications of this for stratified treatment. My talk was well received, and I had several interesting questions at the end. The other talks in the same symposium were very stimulating, and there was a lively discussion at the end.

Thanks again for this fantastic opportunity to attend a really interesting meeting and to present my work.

EXTERNAL EVENTS

7th International Congress on Psychopharmacology and 3rd International Symposium on Child and Adolescent Psychopharmacology

Integration in Psychiatric Treatments: From Simplicity to Sophistication

15–19 April 2015
Maritim Pine Beach Hotel, Antalya, Turkey
www.psychopharmacology2015.org

ONLINE CPD RESOURCE

New Topics online:

Old Age – Delirium added 03/11/2014
Old Age – Vascular Cognitive Impairment added 03/11/2014
Old Age – Diagnosis and management of Alzheimer’s Disease added 03/11/2014
General Psychopharmacology - Pharmacokinetics added 19/11/2014

MCQs are not yet available for these modules, as they are still in development.
**Certificate in Clinical Psychopharmacology**

**Overview**

Psychopharmacology is the single most effective treatment modality in psychiatry. It is vital we use drugs to their optimal effect – matching our choices and regimes to the needs and symptoms of patients whilst minimising side effects and avoiding adverse interactions with other drugs. New drugs and new ways of using old ones regularly appear. With ever increasing demands on our professional time it is difficult to keep up to date. This programme for CPD in state-of-the-art psychopharmacology is tailored to emphasise practical everyday problems encountered by all prescribing psychiatrists.

**Content includes:**
- lectures
- workshops
- discussion sessions

**Forthcoming Modules**

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<tr>
<th>Module</th>
<th>Date</th>
<th>Location</th>
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<tr>
<td>Anxiety Disorders</td>
<td>22nd January 2015 – 23rd January 2015</td>
<td>Bristol</td>
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<tr>
<td>Schizophrenia</td>
<td>7th May 2015 – 8th May 2015</td>
<td>Manchester</td>
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<td>Drug Treatments in Affective Disorders</td>
<td>17th September 2015 – 18th September 2015</td>
<td>Newcastle</td>
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<td>Drug Treatments in Old Age Psychiatry</td>
<td>22nd October 2015 – 23rd October 2015</td>
<td>Newcastle</td>
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<tr>
<td>Child &amp; Adolescent Psychopharmacology</td>
<td>March 2016</td>
<td>Nottingham</td>
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**Registration fees**

£350 per 1.5 day module

To book a place go to [www.bap.org.uk/certificate](http://www.bap.org.uk/certificate)

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**Masterclasses in Clinical Psychopharmacology**

**Overview**

The Masterclasses are held over three consecutive days, twice a year. You can register for one, two or all three days, depending on your needs and interests. The full three day package is intended to provide a state-of-the-art update in psychopharmacology for clinicians.

**Content includes:**
- a review of the basic pharmacology of the relevant drugs
- the clinical use of those drugs
- discussions around relevant BAP and NICE guidelines
- questions and discussion with the speakers

**Forthcoming modules**

<table>
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<tr>
<th>Day</th>
<th>Module</th>
<th>Date</th>
<th>Location</th>
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<tr>
<td>A</td>
<td>Schizophrenia / Substance Misuse</td>
<td>22nd April 2015</td>
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<td>25th Nov 2015</td>
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<td>Bipolar / Perinatal ADHD</td>
<td>23rd April 2015</td>
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<td>26th Nov 2015</td>
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<td>Depression / Anxiety / Sleep</td>
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<td>27th Nov 2015</td>
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**Registration fees**

£310 per day

£840 for all three days

To book a place go to [www.bap.org.uk/masterclasses](http://www.bap.org.uk/masterclasses)
ONLINE CPD RESOURCE

A HIGH QUALITY, UP-TO-DATE RESOURCE TAUGHT BY TOP EXPERTS IN THEIR FIELD

Schizophrenia
Substance Misuse Including Comorbidity
Bipolar Disorder
Perinatal Disorders
ADHD Focussing On Adult
Depression
Anxiety Disorders
Sleep
Old Age*
General Psychopharmacology*

with new Child and Adolescent module currently in production as well as others in the pipeline

Reviews of recent psychopharmacology papers, regularly updated

PLUS

Multiple Choice Questions, printable certificate on completion and reading lists

£120 per year
non-members

£60 per year
members and those who have registered or attended recent BAP meetings/courses

£45 per year
multiple users (10+)

For more information and to subscribe go to www.bap.org.uk/onlinecpd

* MCQs not currently available for these modules
12 - 15 April 2015
Edinburgh

Join us for the UK’s premier interdisciplinary neuroscience conference

10 plenary and public lectures by leading neuroscientists, 8 special events including lectures and workshops, 50 symposia, over 240 speakers, 20 partner societies ....................4 DAYS OF NEUROSCIENCE!

50th Anniversary Lecture
Professor John O’Keefe, University College London, London, UK
- Nobel Laureate for Physiology or Medicine, 2014 -

Public Lectures
Professor David Nutt, Imperial College London, UK
“How Scotland can use neuroscience to lead the world in drugs and alcohol policy”
Professor Adrian M. Owen, Western University, Ontario, Canada
“The search for consciousness”

Plenary Lectures
Professor Dame Kay Davies, University of Oxford, UK
Professor Annette C Dolphin, University College London, UK
Professor Thomas M Jessell, Columbia University, USA
Professor Richard G M Morris, University of Edinburgh, UK
Professor Giacomo Rizzolatti, University of Parma, Italy
Professor Susumu Tonegawa, Massachusetts Institute of Technology, USA: - Nobel Laureate for Physiology or Medicine, 1987
Professor Lorraine Tyler, University of Cambridge, UK

Plus 50 symposia, a large trade exhibition, links with Edinburgh Science Festival and more! Check the website for details.

info@bna2015.org www.bna2015.org 44 (0)1360 680 180
ECNP MEDICINES CHEST

The ‘Medicines Chest’ is an initiative by the ECNP to provide access for researchers to pharmacological tools in order to support human experimental medicine studies. This initiative is viewed as particularly important given the recent reduction of research by pharmaceutical companies in this field.

We have concentrated on compounds that could readily be employed in human studies, for example those that have been shelved by pharmaceutical companies, but for which clinical safety packages and possibly drug substance are available. If there is no drug substance, this does not matter if the appropriate regulatory documents are available to allow compound to be synthesized to the appropriate specification for use in a human study (e.g. by Contract Manufacturing Organisation). The cost would have to be covered in a grant application.

THE CHALLENGE
- The high risk of failure has led many pharmaceutical companies to disinvest in neuroscience.
- The development of many novel, selective compounds has therefore been halted.
- How can academics gain access to clinical-stage compounds for use in clinical studies?

THE VISION
To build a data repository for clinical-stage compounds, with:
- Non-confidential data, e.g. publications, compound information
- Access to live data packages that will support human studies, if available
- Access to compound if available; if not, compound specification so the compound can be synthesized

Which will enable clinical studies on CNS compounds to fill the gap left by pharma’s withdrawal and to improve translation.

For use in human studies by ECNP members, with:
- Proposals invited and vetted by ECNP
- Terms of use defined by contracts between companies and academics, facilitated by ECNP

### COMPOUNDS IN THE CHEST

<table>
<thead>
<tr>
<th>Compound</th>
<th>Description</th>
<th>Company</th>
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<tbody>
<tr>
<td>Gaboxadol</td>
<td>Extra-synaptic GABA agonist</td>
<td>Lundbeck</td>
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<tr>
<td>Idazoxan</td>
<td>Adrenergic α2/Imidazoline antagonist</td>
<td>Pierre-Fabre now owns rights</td>
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<tr>
<td>Emapalumil</td>
<td>Translocator Protein agonist</td>
<td>Dalichi</td>
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<tr>
<td>ADX10061</td>
<td>Dopamine D2 antagonist</td>
<td>Addex</td>
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### OTHER COMPOUNDS AVAILABLE*

<table>
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<tr>
<th>Compound</th>
<th>Description</th>
<th>Availability</th>
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<tbody>
<tr>
<td>SB-742457</td>
<td>5-HT6 receptor antagonist</td>
<td>Available directly from GSK</td>
</tr>
<tr>
<td>GSK-958108</td>
<td>5-HT7 receptor antagonist</td>
<td>Available directly from GSK</td>
</tr>
<tr>
<td>Talnetant</td>
<td>Neurokinin NK3 antagonist</td>
<td>Available directly from GSK</td>
</tr>
<tr>
<td>AZD-7325</td>
<td>GABA-Aa2.3 agonist</td>
<td>Available directly from AstraZeneca</td>
</tr>
<tr>
<td>AZD-8529</td>
<td>Metabotropic glutamate mGluR2 positive allosteric modulator</td>
<td>Available directly from AstraZeneca</td>
</tr>
<tr>
<td>AZD-0328</td>
<td>α7 nicotinic acetylcholine agonist</td>
<td>Available directly from AstraZeneca</td>
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* This table includes compounds that the relevant companies do not want to put into the chest, but they are available for academic research via the company’s own initiative for access to clinical-stage compounds.

### COMPOUNDS UNDER DISCUSSION

- SHT1α antagonist (vinolinanserin)
- mGluR5 negative allosteric modulator (dipragurant)
- GABA-B receptor PAM (ADX71441)
- H2 antagonist (Bavisant)
- SHT, receptor antagonist (NJ-18038683)
- CRF2, receptor antagonist
- 5-HT1a receptor agonist
- α7 nicotinic positive allosteric modulator

### CONTRACTS
- Several sample templates are available on the ECNP website
- Some companies have agreed a contract with NIH for NCATS – an adapted version of this may be a convenient route

### PROCESS FOR APPLYING
- Visit the ECNP website: www.ecnp.eu/medicineschest
- Submit 2-3 page proposal for clinical study on one of compounds, to be vetted by ECNP before being forwarded to company for approval
- Draw up contract between company and academic institution
- Access confidential information, e.g. IB, IMPD
- Write grant application

### FURTHER INFORMATION
www.ecnp.eu/medicineschest
ecnp-medicineschest@ecnp.eu