

What you said: Members discussions with the President, 2010/2011

Meetings with:-

2010

May 26th Prof Max Bennett, AO, BMRI May 28th NeuRA June 2nd Monash Neuroscience Network June 22nd Andrew Milner, Neurosciences Australia June 22nd Prof Geoff Donnan, Howard Florey August 25th Tasmania (State Rep: Rob Gasperini) August 26th Victoria (State Rep: Jo Britto) NSW (State Rep: Peregrine Osborne) September 13th September 14th Garvan September 15th University of Newcastle October 13th South Australia (State Rep: Nick Spencer) October 18th ACT (State Rep: Clarke Raymond) October 20th Queensland (State Rep: Lizzie Coulson) November 5th WA (State Rep: Lindy Fitzgerald) January 26th Dunedin (Contact: Cliff Abraham; State Rep: Louise Nicholson) Auckland (Contact: Richard Faull; State Rep: Louise Nicholson) January 27th

I. Early- and mid-career researchers

Enthusiastic support from the membership for a dedicated satellite to the main ANS meeting

Satellite early- / mid-career researcher meeting to ANS

- Consistent suggestion to have stand-alone day organised exclusively by, and for, early- / midcareer researchers
- Enthusiastically supported at all sites
- > ERCs would like to form their own ANS ECR Committee to organise such an event
- Would provide experience in communicating science and the opportunity to promote leadership skills, discuss issues in an "ECR environment" without more senior peers, to hold workshops to discuss a number of skills such as grant writing and rebuttals, networking, publishing high impact papers etc
- Allows opportunity to be invited to speak at a scientific meeting which is rare given the current emphasis on posters and for invitations to speak at Symposia, Plenaries etc going to more senior researchers
- Concern was raised about career opportunities once one had graduated with a PhD. This has been recently examined in New Zealand http://sciblogs.co.nz/guestwork/2010/11/23/careers-in-science/ and is worrying. The breakdown for the total number of science-related PhDs (11,505) in 2006, is:
 - Careers outside science or not in the labour force: 7,914 (68.8%)
 - Careers inside science: 3,591 (31.2%)
 - Non-university research staff: 1,665 (14.5%)
 - University research staff: 1,926 (16.7%)

- University professors (estimate): 202 (1.8%)
- Support and information regarding career options other than research would be valuable.
- ➤ Ideal forum to which to invite Members of Parliament since they are particularly interested hearing about issues from young people

Early- / mid-career researcher night at ANS meeting

- Highly valued, much enjoyed, would like to see as a permanent feature of the Program
- Suggestion to have a brief formal side to the Social, perhaps with an opening introduction/address from a speaker that the early-/mid-career researchers select. For example, an update on recent changes in funding policy could be given

Role of ANS in relation to early- / mid-career researchers

Early- / mid-career researchers made the following suggestions regarding the Society and its meetings:

- "Speed-dating the Experts" sessions. The opportunity to discuss career issues with more experienced researchers, i.e. beyond discussions at the end of a research seminar. For example, Networking Breakfasts for different research areas / themes
- Suggestion for Mid-Career Plenaries which would be a welcome addition as would opportunities for Early career high profile presentations, since currently high profile presentations are from senior researchers
- For Greater guidance in networking to enable them to set up collaborations with more senior researchers both within Australia and internationally
- ➤ Capture career paths after training for a PhD (see concern re career paths under "Issues for early- / mid-career researchers" below). Perhaps ANS could ask PhD supervisors to find out what sort of career paths their students took and post a "What I did with my PhD" page on the ANS website
- > To partner with other Societies to organize exchanges between labs so that early-/mid-career researchers could gain experience interstate and internationally. Such a venture could be supported by reciprocal memberships for the partner Societies thereby enabling early-/mid-career researchers to combine going to a meeting and visiting a lab
- ANS to host a lunch at major international neuroscience meetings, and invite Editors-in-Chief of the top journals as well as Australia and New Zealand's brightest ECRs. In this way, our emerging neuroscience talent could be showcased informally
- Suggestion to initiate a mid-career ANS Plenary given that the major ANS Plenary is given by senior members; this could be part of the proposed early- / mid-career researcher ANS satellite meeting
- More ways to be more involved with ANS and Local Organising Committees
- For students to be attracted to the Society during their undergraduate years, i.e. before they become early- / mid-career researchers
- Formation of a small sub-group, associated with Council, to develop ways to attract funding support for early- / mid-career researchers
- Suggested that ANS have a searchable database with more details instead of its current ANS membership booklet
- Would like to see an eNewsletter rather than a hard copy

Issues for Early- / Mid-career researchers

Whereas PhD students are well supported, once you have your PhD and are starting a career, early- / mid-career researchers are not as well supported. For example, there are very limited, if any, funds for travel, to help set up new directions (collaborations, equipment) specifically available to early- / mid-career researchers. As a consequence, without their own grant funding,

- it is often difficult for in particular early career researchers to attend meetings and so attend important career events
- "Glass ceiling" for early- / mid-career researchers with increasing numbers competing for funding in their own right. Situation is likely to worsen rather than improve as a result of capped, or even decreased, NHMRC funding
- > Tension between being encouraged to train for a research career by undertaking a PhD followed by a post-doctoral position relative to the smaller likely-hood of being able to establish an independent lab in the longer term. In other words, there is a mid-career funding gap and so are we are training people to do research / follow careers that cannot be funded?
- ➤ Having trained for a research career, other career options are considered to be limited and also carried a perception of failure
- ➤ Early- / mid-career researchers are despondent about current funding opportunities to enable them to develop their careers in their own right
- Opposite view was also expressed in that research training involves skill sets which can be used in many walks of life, the challenge being to identify those options. Perhaps ANS can assist in this way (see above re ANS webpage and "What I did with my PhD")
- Working as an early- / mid-career researcher in large teams was discussed with respect to the need to strike a balance on publications which recognises the contribution of the early- / mid-career researcher as well as that of other team members and the lab head. A balance is also needed with timing to avoid gaps on a cv and at the same time publish the best paper. This issue is also driven by selection criteria for grants and Fellowships which place emphasis on papers in high impact journals that often need contributions from large teams, sometimes to the detriment of early career researchers
- Concern expressed regarding the insecurity of a research career and the need for stability with family responsibilities
- Lack of flexible funding to allow for early- / mid-career researchers to return from overseas
- ➤ General lack of flexibility for early- / mid-career researchers wanting to start a family while maintaining their foothold in the competitive research environment; specifically, some lab heads look down on researchers wanting to work part-time

General comments:

- Noted that a bottom-up (i.e. supporting up and coming early- / mid-career researchers) approach is more likely to have greater and faster impact in raising the profile of neuroscience in long term and therefore funding for neuroscience (see III below)
- Need for undergraduate neuroscience programs in Australian Universities to develop base of neuroscience students

II. ANS Meeting

Membership agreement that main focus of ANS should be to run the best possible meetings (and that the Society should also become more involved in advocacy, see "V. Advocacy" below)

Profile of the meetings

- The current size and nature of the ANS meetings is highly valued; frustration was expressed regarding very large meetings
- Re-instatement of Public lectures with good media promotion. ANS used to host the FASTS lecture to which the public were invited, although attendance by the public was generally low

- Suggestion for ANS to act as an umbrella to bring together a series of high-powered smaller satellite meetings which could be combined with Public Lectures
- More involvement with the clinicians. If this were to happen, we would need to broaden the categories under which members could submit Abstracts

Public outreach

- A number of members do a very considerable amount of work on national public outreach programs, e.g. the Brain Bee, Science meets Parliament and Brain Awareness Week. This work is widely recognized and highly valued.
- There are also a number of state-based outreach activities e.g. those organized by South Australian Neuroscience Institute (SANI) and the Society for West Australian Neuroscientists (SWAN)
- ANS should consider ways to further support these public outreach activities, possibly by a paid Secretariat (see "VI. A Peak Body" below)

Involvement of clinicians

- This has been a long standing issue and the interaction of ANS and clinicians and the professions should be developed
- Possibility of joining with clinicians and relevant professions and their societies to have one large meeting on a regular basis. Potential economy of scale plus greater public/media impact
- > Stronger ties with clinicians and the professions would also enable a more coordinated and potent approach to advocacy/lobbying (see "IV. Advocacy" below
- Do other Neuroscience Societies have better integration with clinicians and, if so, what do they do?
- It was suggested that ANS should organise a Satellite/Workshop/Forum with various clinical Societies to discuss these issues and think of ways to identify the issues and goals and break down the barriers. These could be held on a regular basis at the meetings, for example as a Breakfast Forum.

Poster sessions

- With shift away from oral presentations, more structure is needed for the poster sessions. Brief presentations for each poster and mini fora for specific topics, thereby increasing exposure for the students
- Posters should have a photograph of the presenter on them to help people identify the presenting author
- > Split discipline areas more rigorously across the days of the meeting so that presenting authors in a poster session could at least view some posters in their discipline
- ➤ Balance of orals and posters is always difficult, and with increased numbers of posters, there is seldom enough time to view them. Note: Balance is dictated ~2 years in advance once Council and the respective LOC have agreed to a venue and its room configurations

Date of ANS meeting

- ➤ Issue is still a major concern for many members because 1) start of the school year and impact on families & 2) proximity to NHMRC and ARC grant submissions
- Any new date would need to 1) avoid clashes with other meetings (SfN, FENS, JNS, ISN, IBRO every 4th year, etc), 2) occur during a week during the year when the Universities have a common week off and 3) avoid public holidays for all States. The difficulty in finding a new suitable date is exemplified by the fact that the issue was raised a few years ago and the membership voted to keep the same date

Membership fees

- Separate the membership fee from the registration and link membership fees to the financial year. One can only go to the meeting if one is a member. NB Subsequent discussions with Sally Jay and SD revealed that there would be an increased cost
- Increase the registration fee to cover the cost of the meeting; membership fees should not necessarily fund the meeting
- > By increasing the registration fee, you effectively release membership funds to enable the Society to the costs of its current roles (e.g. support for ACAN and Brain Bee) and may even free up funds for other support (e.g. towards paid Secretariat)
- The opposite view is that the major role of ANS is to run its scientific meetings and so the Society should be providing members' funds for the meeting

Satellite meetings

- Comment was also made on the fact that the ANS Satellite meetings are completely separate from the main meeting. Although not supported financially or organisationally by ANS, the satellite meetings benefit substantially from being linked to the main meeting in terms of kudos, advertising, critical mass and in-kind support. For example, CBR organized the location and catering for the Satellite meetings in the new business school at no cost.
- Great concern was expressed both by the New Zealand membership and by other members at the ANS meeting that many people come only to the Satellite meetings and do not attend the main meeting. This was regarded as inappropriate and a loss of valuable income to the Society.

Expanded role for ANS and a paid part-time Secretariat (see also "VI. A Peak Body" below)

- ➤ The current 4 member ANS Executive each spend approximately 2 days a week on Society business and therefore the only way that ANS could expand its role along the lines suggested above is to find funding for a paid position to support Council
- ➤ Raising the membership would be the only way to cover the costs of a part-time Secretariat. It was noted that, with a membership of ~1,000 (say 60:40 full \$115 + GST vs student \$55 + GST split) we would need to double the membership to raise \$91,000 (\$69,000 + \$22,000)
- Institutional membership was regarded as potentially problematic because it could create factionalism, particularly if larger Institutes contributed more funding than smaller ones and might expect more influence. However, the meeting of Neuroscience Leaders on Stradbroke Island has given in principle support to Institutional support for ANS
- If we are to consider an expanded role for ANS supported by a paid secretariat, we need to clearly define the Secretariat's role. A constitutional change would be required

III. Name of the Society

The main point discussed in New Zealand related to the name of the Society. The New Zealand Membership would like to see "New Zealand" included in the name

The main point discussed in New Zealand related to the name of the Society. The New Zealand membership wants to have "New Zealand" included in the name since this would make a huge difference now and in the future. The spirit of New Zealand's commitment to the Auckland meeting and its Satellite meetings as well as the New Zealand memberships wish for a greater voice in ANS would be reflected in a name change. Indeed, comment was made that the numbers of registrants was "breathtaking". The success of the meeting and New Zealand's future commitment would be promoted by having both Australia and New Zealand in the name and we should not miss the opportunity to ride on the ANS2011 success.

- It was noted that the majority, if not all, clinical colleges, have both Australia and New Zealand in their names.
- ➤ "Australasian" does not have the right feel [SD's subsequent discussions with members supported this view]. "Australia and New Zealand" has more impact.
- ➤ New Zealand's commitment to the Auckland meeting was substantial with significant in-kind support from the Centre for Brain Research, University of Auckland and the Brain Health & Repair Centre, University of Otago. This commitment is just the beginning for New Zealand's future growth and involvement with ANS. Although membership has been traditionally low (range 0 40), over 200 New Zealand members registration and it is hoped this will be maintained.
- > SD pointed out that, apart from State Representatives for New Zealand, there has been no New Zealand member of the ANS Executive. Comment was made that "it was hard to break in as a member of Council, if not impossible".

IV. Neuroscience funding, the profile of neuroscience and measuring research quality

Are the data on neuroscience funding and the profile of neuroscience accurate and can we measure research quality in better ways?

IVA. Neuroscience funding

NHMRC

- > The accuracy of the NHMRC funding figures was questioned with respect to whether they captured all neuroscience. Some grants could have gone to non-neuroscience panels, e.g. genetics, cell biology, epidemiology, pharmacology etc. However, in general, neuroscience funding appears low relative to other disciplines
- Could the apparent low and declining proportion of NHMRC funding for neuroscience be explained by a smaller number of neuroscience grants being submitted? Need hard data. e.g. Do some committees / disciplines give more category 6s than others? Variation in the success of funding rates across the different GRPs?
- ➤ Grants are now of higher quality and significant "bunching" is occurring with a disproportionate number of grants now falling into Category 5 compared to previously when there were more Category 2-4 grants. One way around this might be to encourage people to write more grants
- > State-wide comment regarding perceived consistent harshness of Neuroscience GRPs in their ranking of grants. The level of severity in some instances is disturbing. We should continue the informal conversations amongst the neuroscience community to highlight this issue
- Almost "hysterical" mantra for translation. Need to get the balance right in funding neuroscience research to ensure that the cornerstone of basic research is maintained while being balanced by strategic and clinical research
- Perception that NHMRC funding for clinical trials, which is extremely expensive, is decreasing funds available for clinical and basic research and that funding for clinical trials should come from a separate source

IVB. Measuring research quality

Excellence Research Australia (ERA)

> Concern expressed about the field of research (FOR) codes for with fields (e.g. pain) missing

- Important not to miss future opportunities, they do not come up very often, and are the basis of much of the governments statistics
- > ANS should be prepared to be rapidly and actively involved in any future ERA or equivalent

How to measure research quality?

- ANS membership would represent a good cross section of researchers that are better than average, and therefore it was considered that the Butler report cannot be a true reflection. Important to develop other ways to measure research quality
- ➤ Different ways to do the calculations, e.g. numbers of grants, per dollars spent, normalize to number of authors?
- Could ANS sponsor a prize/contract for a student or ECR to generate our own ANS H factor?

V. Advocacy

Neuroscience funding and advocacy are part of the same spectrum and ANS should develop ways to be more involved in advocacy

Advocacy

- Individuals (unfunded) will never have enough energy or time to undertake advocacy voluntarily and, with current Society finances, it is difficult to extend the Society's commitments beyond the main meeting
- However, there is a great deal of attractiveness in running an advocacy program under the one banner involving ANS to develop a collective voice
- Although the National Neuroscience Initiative gained significant buy-in, it was unable to engage all parties, in terms of both geography and the balance between basic and clinical neuroscience disciplines. More work would be needed and perhaps ANS, with the bulk of its membership being involved in basic neuroscience, could be more involved.
- FASTS and ASMR are existing large peak bodies which support science in general but are somewhat limited in their ability to support specific disciplines such as neuroscience. Nevertheless, FASTS and ASMR do a great deal of work and ANS should not work against them in an effort to increase funding for neuroscience research. A coordinated approach to increase the overall funding pot for medical research will be the most powerful approach
- Advocacy for neuroscience should be inclusive and especially it should emphasise the value of basic research for its fascination, as well as the potential benefits of medical / translational research

Advocacy: comparing neuroscience to other health areas

- Health care areas such as cancer and diabetes are highly successful in advocacy
 - Cancer / diabetes etc are readily identifiable
 - They have very specific branding, e.g. pink ribbon for breast cancer
 - There is a relatively direct link in the public's mind between e.g. cancer and the need to do cancer research to cure the disease. The public do not necessarily want to know about the nature of the research; they want a cure
- Neuroscience does not seem to be as successful in advocacy

- In contrast to cancer / diabetes, the neuroscience discipline is highly diverse covering a range of conditions (e.g. Alzheimer's, Parkinson's, stroke, head and spinal cord injury, multiple sclerosis, schizophrenia, mental illness, alcohol and drug abuse etc) that hit at the very core of "self" (personality, behaviour)
- Neuroscience thus has a very diverse brand to sell
- For neuroscience, the link for the public between research and the cure is different.
 They want both research on how to fix different brain and eye diseases as well as the "wow / awe" factor (e.g. how the brain works, how we learn, think, what is consciousness, how the brain changes, what grandmother cells are, how we behave well or badly etc)
- The issue of brain diseases representing 35% of disease burden yet attracting relatively much less in terms of research funding is not a unique argument and that other disease burdens such as cardiovascular, cancer, diabetes and arthritis would all make the same point
- ➤ We should identify what is special about neuroscience in Australia; brain disease will have a similar profile to elsewhere in the world. Other disciplines such as geophysics and the marine environment have unique "geo-political luck" on which the proponents capitalise very successfully to give Australia the advantage. This "what is unique in Australia" approach was reflected, for example, in various Nationally Competitive Research Infrastructure Scheme (NCRIS) awards a few years ago, and also by the National Neuroscience Initiative

Advocacy: Selling the neuroscience research argument

- Combined, diseases of the brain and mind represent a massive (35%) burden of disease, encompass a wide range of socio-economic factors and will increase as the population ages (see Appendix A)
- Investment in brain sciences does not match that burden now, let alone in the future. Thus, there is a major gap between public need and research funding in neuroscience and the gap is likely to increase given the aging population
- The hearts and minds of the general public (i.e. the tax payer who provide the funds in the first place) have been won, since most are impacted directly or indirectly by diseases of the brain and mind
- By contrast, we have yet to win the hearts and minds of the politicians
 - Sometimes politicians see researchers as merely always asking for money and not giving anything in return
 - Politicians do not yet appear to be convinced of research as an investment rather than a cost
 - Science is at a disadvantage in explaining our key role partly because the political cycle is 3 years, whereas research is ~20+ years
- There thus seems to be a disconnect between public perception of the need and securing funding for neuroscience research
- The National Neurosciences Initiative has already taken the approach of focusing on the major burden of diseases of the brain and mind yet this has yet to lead to extra funding
- It was noted that much of the recent increase in funding for mental health, which came about as a result of high profile lobbying, was for care and not research. This is an expensive way of coping with burden of disease rather than trying to discover new ways to reduce it

- The question of "why should Australia do medical research?" was raised, i.e. for Australia not to have a medical research, yet alone a neuroscience research profile. Why not allow NIH to do this and Australia imports the products?
- In reply, importing health products is expensive but we need good economic arguments stemming from Australian basic and medical research which support the notion that funding research is an investment not a cost. Another reason for supporting medical research is to enable preparedness so that Australia can evaluate new health care products

Advocacy: Do we need to re-brand "neuroscience"?

- Government, industry and philanthropy all want to see how high quality research is related to important diseases of the brain. The Government wants to see treatments and cost savings
- Are we addressing major issues; or are we focussing more and more on minutiae of the same issues?
- We need clear examples of how fundamental research leads to translation, improvements in brain health and health outcomes, policy and a reduction in burden of disease and costs
- ANS could run a competition to get good examples of success stories in basic research which could be posted on the ANS website
- > The neuroscience Research Institutes would have extensive data in their annual reports on current neuroscience areas of excellence in Australia and the potential benefits
- ANS could have a media officer (publicist / policy director) who is experienced in the field and knows how to talk to politicians. This role would be different to the Public Officer, based in Canberra, who has minor administrative duties relating to the Constitution
- If we were to use the ANS website for advocacy, we would need a graphic designer

VI. A Peak Body: Joining forces with the clinicians and the professions

There is general support for ANS to discuss joining forces with the clinicians and the professions to form a peak body which would have advocacy / lobbying as its major role

Joining forces with the clinicians and the professions

- There was general agreement from the membership that ANS should engage with the clinical professions and their societies in forming a Peak Body
- ANS already represents over 1,000 neuroscientists and a number of clinicians undertaking research
- Neurologists have merged different professional societies to form the Australian and New Zealand Association of Neurologists (ANZAN)
- ANS, which represents by and large the majority of basic and pre-clinical research scientists, should consider initiating talks with ANZAN
- Neuroscience GRPs include both basic scientists and clinicians, yet many of those clinicians are not regular ANS members and do not come to the meeting. However, the basic/clinical composition of the GRPs is a natural blend that could be captured in establishing a Peak Body
- In forming a Peak Body, we should also bring in the user/patient groups thus forming a stronger alliance. These groups are often highly organized, energetic and motivated and we should be working with them
- FASTS already has a full-time Executive Officer and lobbyist which would be an expensive position for ANS to replicate thus strengthening the argument to work with the clinical professions and their societies as well as user groups

- In reality, we already receive large amounts of funding from the Federal Government. In addition, various States, in particular Queensland, Victoria and NSW, have attracted significant amounts of funding for neuroscience research in their own right. It was suggested that ANS should continue the Stradbroke Island meetings and capitalise on the experience and skills of the participants to play a bigger role in awakening a sense of coordination and achieve a global/national view
- Forming a peak body would be a long-term undertaking

Possible roles for a paid ANS Secretariat

The ANS Executive have yet to formally discuss this issue. The points below are from the membership:

- Assistance is needed for the ANS Executive to enable it to expand its roles
- Capture research success stories which would be useful in lobbying and which could be posted on the ANS website and in the newsletter
- Find out which Senators to target for lobbying and find out what members of parliament want to hear about
- Inviting members of Parliament to the meeting, possibly to open them. More regular invitations to Research Institutes for events
- ➤ Part of the lobbying should include the argument about the long-range economic benefits that arise from basic research with concrete examples
- Note: SfN already has made substantial investments in advocacy/lobbying and ANS could learn from their experience. Note: Discussions are underway between SfN, FENS, JNS and ANS regarding the possibility that SfN provides these other neuroscience societies with materials and expertise on advocacy/lobbying

APPENDIX A. Brain disorders and the case for advocacy

Disease of the brain and mind represent approximately one third of the burden of disease yet funding form NHMRC represents just over 8% of the total budget

Data from a consensus document on European brain research (Olesen J et al., J Neurol Neurosurg Psychiatry 2006;77(Suppl I):i1–i49):

- > Brain diseases are responsible for 35% of Europe's total disease burden (WHO)
- ➤ Brain research received only 8% of the life science budget in the European Commission's Fifth Framework Programme
- > Research investment represents less than 0.01% of the annual cost of brain disorders for that period

Numerous Access Economic reports on the burden of neuroscience related clinical conditions in the public domain:

- Clear Focus The Economic Impact of Vision Loss in Australia in 2009 Date: Jun 2010
- Projections of dementia prevalence and incidence in NSW Date: Sep 2009
- The economic impact of youth mental illness and the cost effectiveness of early intervention Date: Dec 2009Keeping dementia front of mind: incidence and prevalence 2009-2050 Date: Aug 2009
- > The economic cost of spinal cord injury and traumatic brain injury in Australia Date: Jun 2009
- Cost effectiveness of early intervention for psychosis Date: Oct 2008
- Economic Impact of Dementia in New Zealand Date: Jul 2008
- Smoking and Mental Illness: Costs Date: Nov 2007
- > Dementia in the Asia Pacific Region: The Epidemic is here Date: Sep 2006
- > The high price of pain: the economic impact of persistent pain in Australia Date: Nov 2007
- Dementia Estimates and Projections: Queensland and its Regions Date: Oct 2007
- > Living with Parkinson's Disease: Challenges & positive steps for the future Date: Jun 2007
- Acting Positively: Strategic Implications of the Economic Costs of Multiple Sclerosis in Australia Date: Aug 2005
- > Strategic Interventions to Prevent Vision Loss in Australia Date: Jun 2005