

THE ANZAAS MERCURY

ANZAAS: Empowering the Community with Science

∞ Issue No. 28, March 2006 ∞

Editor's Edict



Here in the new Mercury Federal Minister Brendan Nelson and Paul Adam discuss 'Intelligence Design', in ANZAAS Debate. See science news and our report on Youth ANZAAS 2006. Mike Murray talks about the bright future of ANZAAS. Don't forget Victor Bien's Media Report and the bright and breezy ANTENNA.

-Duncan Rouch

Murray's Matters

Comment From The Chair
By Mike MURRAY



Reinventing ANZAAS

Broadly speaking ANZAAS is looking carefully at its *raison d'être* in the light of changes in the science and science communication in today's world. It is not my objective to change the fundamentals, on which ANZAAS is based,

but to take the best features of ANZAAS and to build on them. A few examples are the following:

(a) The very successful Youth ANZAAS event held each year will continue, but we shall be looking to expand our involvement with school and University students through new youth programmes.

(b) A new Congress format is being considered to replace the old style Congresses of the past, the last of which took place in Adelaide in 1997.

(c) Science week is held throughout Australia each September and I would like ANZAAS to take a much bigger role in it. For example, as part of Science Week the Victorian Division this last year held a 'Kids Questions' event in the Victorian Museum aimed at primary school children. Young children asked the questions and a panel of prominent Melbourne-based scientists

provided the answers. This event proved very popular. A lecture hall in the Museum was filled to capacity with young families, and there is strong demand to stage the event in future years.

(d) State-based Divisions are being encouraged to stage new events and programmes. By way of example, again in Victoria, a new initiative entitled 'Science to the Country' has been trialled. ANZAAS brought together The Mechanics Institutes of Victoria Inc., the Royal Society of Victoria, and the Science Teachers Association of Victoria, to stage lectures throughout rural Victoria by prominent scientists. In a trial run of the scheme I toured regional Victoria giving lectures in which I explained how the new Synchrotron being built in Melbourne might be used to address many science issues of special relevance to country areas. The talks were greeted with some enthusiasm and the program will now be continued into the future. The trial tour was largely funded by the Victorian State Government's Synchrotron Project Team, to whom we are

Contents

| | |
|---|---|
| Editor's Edict | 1 |
| Murray's Matters- From The Chair | 1 |
| ANZAAS Debate: Intelligent Design: Faith or Science? | 3 |
| News And Analysis: | |
| What's Wrong With Noni-Juice | 4 |
| Youth ANZAAS 2006 | 5 |
| Perrin's Points | 7 |
| Media Report | 8 |

Printed By TS Press, 140 Johnston Street, Fitzroy Vic 3065

ANZAAS

Australian and New Zealand Association for the Advancement of Science
The University of Adelaide, Adelaide, South Australia 5005
Telephone: (08) 8303 4965 Facsimile: (08) 8303 4965
E-mail, ANZAAS: info@anzaas.org.au Web-site: <http://www.anzaas.org.au>
ABN: 79 883 488 910
ANZAAS Mercury, E-mail: newsletter_editor@anzaas.org.au
Editor in Chief: Duncan Rouch; ANTENNA Editor: Peter Toomer



most grateful. The expansion of our programmes will not only increase value to our membership but also ultimately bring enhanced benefits to the Australian community as a whole. However, to carry out these larger programmes will require a more professional Association. In particular, we shall need an enlarged central office in Adelaide, and better organization in our State-based Divisions. These are urgent issues currently being considered by the Executive Committee and the Council. With better central and Divisional structures in place we shall need better communication channels than we have at present. In particular we shall need a more informative website, including up-to-date information on Divisional web pages.

We need to select our new programmes so that they can be clearly demonstrated to be of benefit to Australians, in general, and to other significant organizations and institutions, in particular. Such beneficial outcomes will bring us extra resources from Federal and State Government grants, and sponsorships from elsewhere. These will be the financial sources for our reconstruction.

Of course, the changes outlined here cannot be accomplished overnight, as it were, but the Executive

Committee and Council along with Divisional Committees have made a start on these issues. For example, Last November the new ANZAAS Executive Committee met in Adelaide. This Committee is comprised of myself (Chairman), Curtis Clark (Deputy Chairman), Robert Perrin (Secretary), and Norman Trueman (Treasurer). The agenda revolved around the issues I have discussed here.

With sustained determination over the next few years we aim to put a new, invigorated ANZAAS back on the map in a position of prominence. In achieving this we shall be glad to hear from our membership at all times concerning both our progress and with new ideas for the future.

Please send your thoughts and suggestions to Robert Perrin as soon as you can at secretary@anzaas.org.au. The Council looks forward to hearing from you and taking your views forward.

ANZAAS News

Victorian Division

Science Talks

The final science talk in the 2005 series was on 16th November, by Professor Rachel Webster *School of Physics, University of Melbourne*, entitled, "Dark energy and the accelerating universe".

Cosmologists have suspected for a long time that the universe might be mostly made of dark matter, rather than the normal matter experienced in everyday life. However, it seems that the universe is actually more intriguing. An additional component, called 'dark energy', is now thought to be the dominant component. This stuff behaves quite differently from matter: instead of gravitationally attracting, it behaves in the opposite sense. Thus the universe today may be accelerating rather than decelerating. These ideas and the projects to measure the geometry of the universe were discussed in detail.

Next Laboratory Visit

Following the successful laboratory visit to the Walter and Eliza Hall Institute in July 2005 the Committee of the Victorian Division is planning further visits this year. The first visit for 2006 will held in March or April.

Members are encouraged to contact the committee with suggestions for visits.

Dear Divisional Secretaries

Here is the space for your news.

For the next issue please send your reports to the Hon Editor
E-mail: newsletter_editor@anzaas.org.au

The ANZAAS Debate - 'Intelligent Design' for Schools: Faith or Science?



Paul Adam:
timely questions.

We present discussion on the 'Intelligent Design' push. Associate Professor Paul Adam, previous Chair of ANZAAS, questions The Hon Dr Brendan Nelson MP, when Minister For Education, Science And Training, on the government's response to requests for 'Intelligent Design' to be taught in schools. We present the discussion in two parts, 'Teaching Intelligent Design?', and the related issue of, 'Consistency of School Syllabi?'. In each part Paul Adam first reviews the topic, then Minister Nelson's response follows.*

Teaching Intelligent Design?

Paul Adam writes. The subject 'Intelligent design' has become an issue much debated in the media in recent months.

Many of the media comments have reflected misunderstanding or ignorance of what Darwin wrote in 'The Origin of the Species', and of the scientific method. Nevertheless the fact that there is media discussion is important as it draws attention to an issue about which many in the community have strong and deeply held views. It is also desirable that society at large is aware of the diversity of the views present within the community.

ANZAAS respects the rights of members of the community to hold views supporting intelligent design. We are, however, concerned that intelligent design is advanced as science, and that it is held out as an alternative to the Theory of Evolution (which is not one theory but the amalgamation of a large number of discrete theories). Intelligent design is fundamentally untestable under any of the paradigms that are recognised as the Scientific method. As such, we would be very much opposed to intelligent design being taught as science. We would have no objection to it being taught in philosophy or religion courses or even within science courses if it were given as an example of a belief system that cannot be tested scientifically.

When the intelligent design issue appeared a few months ago you were reported as not opposing it being taught in schools, although not supporting it being taught in science classes, as we understand from the reports of your comments. I am sure that the members of ANZAAS would appreciate clarification of your views and, if it were acceptable to you, we would like to reprint your response in the newsletter 'The Mercury'.

Minister Nelson responds. I strongly support the important role parents can play in helping to shape school curriculum. I do not, however, advocate the teaching of Intelligent Design to Australian school children as science, nor in competition with the theory of evolution. I also do not support the replacement of the teaching of evolutionary theory with the teaching of Intelligent Design.

State and Territory school curricula follow the Australian Academy of Science's position that, whilst evolutionary theory - like any other scientific idea - is imperfect and subject to testing, creationist accounts of the origin of life are not

scientific ideas because they are not subject to empirical testing.

However, Intelligent Design could appropriately be taught as part of religious education in schools if the school community chooses to do so.

It is important that Australian schools aim to provide students with a balanced exposure to the wealth of ideas - orthodox or not, scientific or not - which enrich our society, and to equip students to make their own informed judgements about the validity of those ideas.

While the Australian Government's funding contribution for schools is significant, State and Territory education authorities have the primary responsibility for the provision of schooling in Australia. School curriculum issues, including in relation to science and religious education, are therefore State and Territory responsibilities, determined by government and non-government education authorities.



Minister Nelson:
well aware of the difference between faith and science.

Consistency of School Syllabi?

Paul Adam writes. A further comment that has been attributed to you is to the effect that intelligent design could be taught in schools if the parents wanted it. Within the School system there are many opportunities for choice - choice of School, choice of subjects - but we would be concerned if there was to be choice of syllabus within courses, particularly in the later school years. If there is to be external assessment of pupils, which has long been a feature of Australian education, and which is, in our view, something which is essential to maintain standards and credibility, it is both impractical and inappropriate to have wide variation in the syllabus between schools.

Minister Nelson responds. You also refer in your letter to the issue of consistency of syllabi between schools. In relation to the issue of consistency, the Government indicated in its 2004 election policy document Higher Standards and Values in Schools that it would legislate to bring about greater consistency in schooling. We followed through on this commitment with the Schools Assistance Act 200 (the Act), which was passed by Parliament in December 2004.

The Act contains a number of important provisions to deliver on the commitment to a more nationally consistent curriculum. Government and non-government education authorities will, as a condition of funding over the next four years, be required to develop Statements of Learning before 1 January 2006 in the key subject areas of English, Mathematics, Science, Civics and Citizenship and Information and Communications Technology. These are key areas of the curriculum where I would like to see greater national consistency in what is taught and assessed in schools.



Intelligent Design claims that complex organisms were created by God, while science provides evidence that they evolved by natural selection.

Photo: www.sxc.hu

The Statements will describe the key knowledge, skills, understandings and capacities that all students should have the opportunity to acquire in these subject areas, irrespective of where they attend school. The Statements will focus on the most important or core aspects of the subjects, rather than attempt to encompass the whole of what could be included in subject curricula. It is expected that school systems and authorities will use the Statements in developing syllabus documents, curriculum frameworks and resources.

Statements of Learning for English for Years 3, 5, 7 and 9 have already been developed and endorsed by all Education Ministers. Work is underway on developing Statements of Learning in the other domains under the direction of Curriculum Corporation. Curriculum writers have been seconded from State and Territory education departments to work on this project. The development and implementation of the Statements of Learning will lead to greater consistency in curriculum in subjects such as Science.

Another significant initiative we are currently undertaking to ensure greater national consistency between schools is the Comparative Study of Year 12 Standards in Key Subjects. This independent analysis will compare the content, curriculum and standards in Year 12 English, Literature, Mathematics, Physics and Chemistry throughout Australia.

Standards in Year 12 subjects vary across the country and curriculum and assessment have evolved, in some cases, to the detriment of content and standards. There has been much debate recently about what these changes and differences mean for students and parents and ongoing concern about inconsistent and falling standards in these essential learning areas. The proposed study will closely examine the facts and will inform the Australian community.



Human Development: a cutting edge in science. Scientific hypotheses about life can be tested, but Intelligent Design is untestable.
Photo: www.sxc.hu

* The Hon Dr Brendan Nelson MP has moved on to become Minister of Defence.

News And Analysis

Noni Juice – Health Fix or Wallet Leach?

By Duncan ROUGH

Do you know an alternative health drink, called Noni juice? It is available in alternative health shops around Australia. Is it a health food or snake oil? It must have been a sight in the olden days when an angry mob would run a snake oil salesman out of town. Why would a group of people get that upset? What was the snake oil salesman's crime?

The conman would gather an innocent group of unsuspecting folks and convince them into believing his bottles of useless sugar water were some kind of miracle cure. He'd charge an arm and a leg for his cheap "magic" potion and then try to high tail it out of town –before the mob found out.

The interesting thing about this story is that the snake oil salesman is still alive and doing quite well today. And people are still getting conned into buying his "magic" bottles of sugar water. It's sad but true.

But what does all this have to do with Noni Juice? Everything! For example, Noni contains a so-called "miracle" ingredient named proxeronine, which is supposed to be a precursor to xeronine. Now, have you ever heard of anyone dying from a deficiency of either proxeronine or xeronine? No, you haven't? Have you ever seen either of these two elements on the list of Recommended Daily Allowances (RDA)? No? Well, have you ever seen any valid peer review research that proves anything whatsoever about these two ingredients? Of course not! And, more than likely, you never will.

There's absolutely NO real science, NO real research and NO real proof – NOTHING – behind the Noni salesman's hype that his bottles of sugary juice cures arthritis, ulcers, sprains, depression, high blood pressure, menstrual cramps and on and on and on. Well, you may ask, have these con artists ever been taken to court?

Unsubstantiated claims for the benefits of "Tahitian noni" have landed marketers in court in the US and prompted bans of the product in some European countries too. The Morinda company, which first hyped Noni Juice, has been busy settling legal actions taken against them by the Attorney Generals of California, Arizona, New Jersey and Texas. The charges? Making unsubstantiated claims about Noni Juice. Sounds like snake oil salesmen to me.

The European novel foods approval in 2003 for Noni included the requirement that there were no accompanying health claims to the product. The Irish food authority says, however, that a number of independent distributors have begun to procure Noni juice through internet sites and to market the product in Ireland with health claims. In response, the Irish Food Safety Authority issued a warning to consumers that any health or medical claims appearing on products containing Noni juice were 'totally unsubstantiated'.

Noni is supposed to be a juice from the fruit of the Polynesian morinda citrifolia tree. That tropical island origin gives the Noni marketers some pretty exotic looking background pictures from which to hype their snake oil. And you might think that since it's a fruit juice, it couldn't taste all that bad. Not so. The citrifolia fruit is so bitter it has to go through some very hefty processing to make it palatable.

Sources: <http://www.bellaonline.com/articles/art4883.asp>
<http://nutraingredients.com/news/ng.asp?id=55125&n=wh41&c=#em ailcode>

There's a gene in my food – but don't bite my head off!

-Youth ANZAAS 2006

By Robert PERRIN

Youth ANZAAS 2006 took place in Adelaide at St Mark's College at the University of Adelaide from 9th to 13th January.

It was a bright cheery day that greeted the Gang of Four who were to be the mainstay of Youth ANZAAS 2006 as they assembled at St Marks College during the early morning of January 9th for what was to be the third Youth ANZAAS in Adelaide in five years. Obviously a popular venue! **David Drury** and **Peter Toomer**, previous volunteers, were familiar with Youth ANZAAS. The fourth member of this merry band, **Rebecca Dyer**, was new to Youth ANZAAS. Rebecca is at the Flinders University of South Australia and generously gave her time to ensure the success of the Forum. Planning meetings held at regular intervals in the preceding months had determined a meet and greet schedule for delegates arriving by air. The newly arrived delegates were taken to the accommodation by car or mini-bus and registered by Rebecca and Peter. Eventually all delegates had arrived and were registered by 8pm.

After a welcome and some essential food, delegates were at leisure until the next day when the Forum moved to the School of Dentistry at the University of Adelaide for a programme organised by Professor Lindsay Richards, a long-time ANZAAS member and Secretary of the SA Division. First, the delegates were treated to a most interesting and well-illustrated talk by **Dr Olivia Samardic**, DSTO and Chairman of AIP, who spoke authoritatively on "Dark Matter and Black Holes". This talk was followed by **Dr Helena Ward** of the University of South Australia who spoke authoritatively about tissue growth and repair, with particular reference to stem cell potential and therapies determined at the gene level, including xenotransplantation. Dr Ward remarked that the media often gave the impression that scientists working in this field were like Mary Shelley's famous dark hero, Dr. Frankenstein. There was some spirited discussion and excellent, intelligent questions on the philosophy and ethics of genetic manipulation. The morning concluded with an entertaining talk by **Dr Giacomo Cirillo** who explained how forensic dentistry was used to identify bodies and solve crimes. A planned tour of the research facilities was cancelled due to time constraints. The Forum retired to the Botanic Park for a luncheon in the sun. The afternoon session was taken up with a visit to the Australian Centre for Water Quality and the Bolivar Sewerage Treatment Works some 25km north of Adelaide where the application of science to public health is wonderfully demonstrated. Unfortunately, the sky failed to remain clear for the astronomical evening, there being full cloud cover with some thunder at the scheduled departure time of 7.30pm. The alternative for the evening was a visit to



The Stuff of life: faces of concentration on students as they extract DNA at the Australian Centre for Plant Functional Genomics. Photo: P. Toomer.

the beach at Brighton for a sunset swim. Wednesday saw the Forum visit the SARDI Aquatic Science Centre to hear a talk on "The Southern Rock Lobster" by **Professor Adrian Linnane**. This talk was superbly illustrated with some excellent underwater video footage and photography. The talk demonstrated the importance of maintaining the aquatic food chain and how humans have caused behaviour modification in some ocean denizens, with some spectacular footage showing seals robbing lobster pots, taking the bounty up to the surface and eating the lobsters after first biting the heads off. After lunch, which was taken on the beach, the Forum moved to, and enjoyed, an in-depth workshop conducted by **Belinda Barr**. The group extracted DNA from a sample of wheat and prepared a "DNA fingerprint" using by using a restriction enzyme to cut the DNA into fragments, which were separated into bands during agarose-gel electrophoresis. Wednesday evening was reserved for the conference dinner followed by dancing, for which everyone makes a special effort to dress well. The Hon. Secretary kept to his promise *never* to tell his after-dinner story again and so the delegates heard from Dr Barbara Hardy, the celebrated environmentalist, about her

experiences of ANZAAS at the Adelaide Congress of 1946. The 1946 Congress was the first Congress to have a programme specifically organised for young people, and was thus the first "Youth ANZAAS"

Thursday was given over entirely to a geological and environmental theme and the Forum was fortunate to have **Professor David Boyd, Dr Nick Direen and Dr David Kelsey** as guides for the day. The first stop was Hallett Cove to inspect the striations on the rock surface left by glacial action. During the ANZAAS Congress of 1907, hot debate raged over the origin of the

striations, some delegates vigorously disputing that glaciers could have existed at South Australian latitudes; a debate eventually resolved by the work of ANZAAS president-to-be Professor Sir Douglas Mawson. Further striations were seen at Glacier Rock as the geologists explained the geological development of the Fleurieu Peninsula. The final stop for the day was at The Bluff in very hot conditions, where large phenocrysts of feldspar could be seen in the granite. Again, the guides expertly put the entire area into historical perspective with a superb account of the chronology of the intrusion. Delegates were encouraged to look for evidence of a chilled margin and thermally metamorphosed country rock. Eventually it was time to return to base and enjoy the final evening during which there was to be a Quiz Night plus Table-football and Table-tennis tournaments. George McLintock won the table- football and the table-tennis tournament was won by David Waddington; both received vouchers for the ABC shop. Delegates began to leave for the airport for early flights shortly after 7.15 am and, occasionally teary, farewells were accompanied by a casual breakfast.

By any measure this Forum was a success, a judgement supported by the traffic on the Youth ANZAAS discussion board. Thanks must go to all those who contributed to the programme, to the SA Division for its generous sponsorship. That it was such a success is due to the unstinting and untiring efforts of David, Peter, and Rebecca, without whom none of the programme could have been so relaxed and safe.

Youth ANZAAS has been confirmed for July 2007 in Perth, where Youth ANZAAS was last held back in 1993.

Have BSc -Will Travel!

Associate Professor Diana TEMPLE reflects on the life of young educated Australians who travelled to England and Europe in the 1940s and '50s.

It was in 1949 that, with friends Helen and Pam, I boarded the old Moreton Bay in Fremantle to sail to England. This was the fashion for independent-minded young persons after the travel restrictions of WW2. Many of these travellers seemed to be young women, travelling for various reasons: to see the world before settling down, to look for culture they believed to be lacking in Australia, for adventure, for career advancement. We were young, carefree, middle class, but mostly financially insecure, well educated and with diverse training and interests. There were some people of both sexes with artistic, literary and musical ambitions, a few of whom later became household names. There was for example June Mendoza. Our journeys perhaps could be compared with the Grand Tours of Europe made by well-to-do young Englishmen in the nineteenth century, but we were almost never well-to-do.

The young men making this voyage at that time - and since - were more likely to be career-motivated; to gain overseas experience, to spend time in the London headquarters of their firms, to take up scholarships to study for higher degrees in the great, or even less-than-great, British universities. Most of the blokes I knew were going to the UK with scholarships to do PhDs at British universities, or to further their careers at the Centre of the World. This was just about the time when studying for a PhD degree first became possible in Australia: our universities, at that time, numbered only seven, one for each state and the ACT. Many young men of my generation or older were ex-servicemen who had benefited from government grants (the Commonwealth Reconstruction Training Scheme) to study for Australian degrees, to compensate for the time they had spent in the services. Medical graduates went for overseas experience or to study for memberships of the illustrious Colleges of physicians and surgeons.

The young women travellers were, in contrast, going to explore Britain and Europe, often travelling on a shoestring. They were much less inclined to be career-oriented, in that period when careers and higher degrees for women were regarded as luxuries and rather abnormal. Usually they had saved up for the adventure and were prepared to find any work they could in or out of London to support themselves. They set out to absorb culture, to visit relatives or locate the British origins of their Australian families, perhaps to seek a suitable husband. Some had parental financial help to send them to the "mother country", as mothers and grandmothers of our generation tended to describe it.

Why?

Why did I plan to go? Giving thought to the future during my first full-time job after graduating BSc soon after the end of the war, it seemed important to see something of the world while still free of family encumbrances. We perhaps all had this attitude and no doubt encouraged each other. There was pressure in the 1940s-1950s, as always, for girls in their twenties to find suitable husbands and to marry. If one didn't, well-meaning aunts would think - how sad. Those of us privileged to have acquired education or training to enable us to live independent lives if we so wished were in a strong position to indulge in these explorations. Some were nurses or schoolteachers or journalists. Some were subsidised by family,

but few of my friends were in this category. While employed in the late 1940s, living independently far from family and sharing flats with girl friends. I was strong and determined about putting a quarter of my earnings into a travel bank account. In two years, this was enough to pay a one-way fare at the cheapest level, and leave a small amount as support while job-hunting at the far end.

The Sea Voyage

Inevitably travel overseas was by sea; that was how it happened. Air travel in the 1940s and for decades later was prohibitively expensive as well as slow, occupying many days, with many overnight stopovers. Sea voyages were very slow but enjoyable and exciting - new places, new friends and acquaintances, a month of new experience. Nothing like it happens now, being totally cut off from real life and normal environments, no telephone contacts, no radio, and before the days of television and email or internet contacts. It seemed as though this unreal life might continue for ever, but of course it didn't.

The Moreton Bay was a smallish, oldish, slow-speed steamship of the Aberdeen-Commonwealth Line. Launched in 1921 in Barrow-in-Furness, she displaced nearly 14000 tons, was 548 feet long, had speed 15 knots, 216 crew and 542 tourist class passengers on 6 passenger decks. The Moreton Bay, like the other Bay-named ships, had been converted in 1939 into an armed merchant cruiser. In 1949 It had been refitted quite recently as a passenger liner, no doubt because of the post-war shortage of ships. It was one-class and as cheap as could be found. I shared a 4-berth cabin on a lower deck with Helen and two older women.

Arrival

Then came Southampton, the chaos of disembarkation and farewelling shipboard friends and the environment that had been home for five long weeks. The interlude of living in a transient other-world was over, marking a transition for all of us from a familiar Australian lifestyle to a different lifestyle and another phase of life.

Luggage, customs, a boat-train. From the train, we had our first views of English towns, and the English landscape, with its dolls-house buildings and lettuce-coloured countryside. We reached London, and Helen, Pam and I went our separate ways. Some time later, all employed, we were fortunate to find a flat to share in Earl's Court. After more than half a century, we all remain good friends.

Expectations And Reality

This voyage to the other side of the world was something we had to do. It filled that great gap of an unknown "home" country of which older generations spoke, sometimes wistfully. Australian author Shirley Hazzard puts it well in her book "Transit of Venus": her Australian heroine, in the 1950s, says "London is our achievement; our career, for the time being. Having got here is an attainment, being here is an occupation."

For us, it was a rite of passage, a significant part of growing up. Maturity included a need to have travelled, to have seen great European cities, explored London and experienced some of what it had to offer, even in its post-war shabby and part-ruined state. We had great expectations of this centre of the world and of the country from which our Australian families had originated. I believe we were not disappointed.

Perrin's Points

NOTICES TO MEMBERS FROM
THE HON. SECRETARY



Contact Details for ANZAAS Office-bearers and Council Members

Chairman:

Dr. Michael Murray
15 Kenmare Street
MONT ALBERT NORTH
VIC 3129
tel: 03 9849 0026
mob: 0408 373 114
e-mail: Mike Murray
<mike.murray@optusnet.com.au>

Deputy Chairman

Mr. Curtis Clark,
20A Mort Street
RIVERVALE
WA 6103
tel: 08 9221 9455 [O]
08 9362 3430 [H]
fax: 08 9362 3491
e-mail: Curtis Clark
<crclark@graduate.uwa.edu.au >

Honorary Secretary:

Robert Perrin
ANZAAS
The University of Adelaide,
ADELAIDE,
South Australia 5005
tel: [08] 8303 4965 [O]
[08] 8374 2203 [H]
fax: [08] 8303 4965 [O]
e-mails: secretary@anzaas.org.au

Honorary Treasurer:

Norman A. Trueman
1/62 Childers Street
NORTH ADELAIDE
South Australia 5006
tel: [08] 8267 4416
e-mails: secretary@anzaas.org.au

ACT representative:

ACT members should contact the
Hon Secretary
for the time being.

NSW Representative:

Dr. Robert Vickery
2/22 Pacific Street
BRONTE NSW 2024
tel: 02 9369 2705
fax: 02 9385 1558
e-mail: Bob Vickery
<rsvickery@fastmail.fm>

VIC representative:

Mr. Eric Webb
12 Scott Grove
GLEN IRIS
Victoria 3146
tel: 03 9885 6407 [H]
e-mail: ericwebb@connexus.net.au

WA representative:

Professor David Treagust
SMEC
Curtin University of Technology
BENTLEY
WA 6102
tel: 08 9266 7924
fax: 08 9266 2503
e-mail:
David Treagust
d.treagust@smec.curtin.edu.au

TAS representative:

Dr. Peter Smith,
55, Lipscombe Avenue,
SANDY BAY,
Tasmania 7005
tel: 03 6225 1067
fax: 03 6225 1067

SA representative:

Professor Lindsay Richards
School of Dentistry,
The University of Adelaide,
Adelaide,
South Australia 5005
tel: [08] 8303 3296
fax: [08] 8303 4444
e-mail:
lrichards@dentistry.adelaide.edu.au

Member-at-large:

Dr. Pat Quilty, AM
Honorary Research Professor
Dept. of Geology
University of Tasmania
GPO Box 252-79
HOBART
Tasmania 7050
tel: 03 6226 2184 [O]
03 6225 3217 [H]
fax: 03 6223 2547
e-mail: Pat Quilty
<P.Quilty@utas.edu.au>

Honorary Editor:

Dr. Duncan Rouch
S.A.F.S.
Gilbert Chandler Campus
University of Melbourne

WERRIBEE
VIC 3030
tel: 03 9217 9205
e-mail: Duncan Rouch
<duncanar@iprimus.com.au>

ex-officio members of Council:

Mr W. [Bill] Palmer
P.O. Box 41622
CASUARINA
NT 0811
tel: 08 8946 6148
fax: 08 8946 6151
e-mail:
bill.palmer@darwin.ntu.edu.au

Associate Professor Paul Adam
School of Biological Sciences,
University of NSW,
Sydney, NSW 2052
tel: 02 9385 2076 [O]
fax: 02 9385 1635

e-mail: Paul Adam
<P.Adam@unsw.EDU.AU>

Media Report

By Victor BIEN

Is the Style of Science Presentation an Issue? + Media on-Demand



On Sunday night 8 January SBS broadcast a program "Science: The Dark Secret of Hendrik Schoen". This was about a case of massive scientific fraud. Physicist Hendrik Schoen claimed he made a nanotechnology type molecule which in the future could be exploited to do all kinds of

incredible things such as molecular computers allowing us to "download" thoughts and knowledge but which conversely, like all advances like electricity or explosives, has a dark side, in this case the program envisaged some "grey goo" might be developed which could destroy humanity.

Schoen's work was published by Nature, where he claimed to have made a transistor out of organic molecules and presented a graph (which if true) showed the device could amplify a current - the characteristic of a transistor.

The story was couched in terms of projecting forward the implications of this, rather like winding the tape back and following the consequence of the discovery of DNA. No more would we have to rely on silicon. These new transistors being organic could be closely interweaved with living matter of all sorts, creating incredible technologies!

About 11 or 12 January on the ABC breakfast show Stephen Crittenden hosted Robyn Williams expressing his concern and disgust at the Schoen story being presented in that fashion. He mentioned that some of his old colleagues in Britain are seriously put out by the demands on them by television producers who seem to be following a fad to present science stories in similar vein. He mentioned that Karina Kelly was moving on or thinking of doing so because even Catalyst was under this pressure.



I have to admit that for me such a style presentation doesn't bother me. The Sydney Morning Herald TV Guide billed the Schoen show as "a great science fiction story". I think that was because the hoi polloi are turned on by this style of presentation, so they at least get some exposure to real science which otherwise may not happen. While the style is a consequence of pursuing ratings, that in itself is not necessarily a bad thing. We "elites" may not like the character of the hoi polloi but if that is democracy we have to go along with it!

My own off-spring (now grown up) are examples of how a mind not naturally tuned to science can switch on to things scientific. These are an indicator of what the TV producers are trying to tap.

I use to ferry them to school and during the drive quite often my son, in particular, would ask a scientific question prompted by some show like Batman or the Ninja Turtles. I was able to give many small scientific discussions in this manner. Rarely if ever would they listen or view a science program such as

Catalyst or something else in those days. (I hasten to add he doesn't like my reflecting on him in this way). My relatives, who are also "not scientific", would blissfully sail through life unaware and uncaring about science matters, except when something sensational catches their eye, notably on Discovery Channel (which Williams sort of disparaged), or when they get sick and the wonders of modern medicine command their attention.

At this writing there is an SBS TV science series of three programs entitled "Dr Tatiana's Sex Advice To All Creation". This is quite a brilliant production with a style along that troublesome vein. The otherwise staid London biologist Dr Olivia Judson transforms into shapely sex queen Dr Tatiana! Quite solid science of evolution and the sexual behaviour of all manner of creatures is conveyed embedded in music, dance, play acting and outright explicit pornographic scenes flashing past. The old view that birds are faithful and monogamous is dramatically shown to be false! Promiscuous behaviour is widespread in the animal kingdom and the reason for it is as ever - evolution.

The Royal Society has turned to video on demand as a means to disseminate their public lecture series to a wider audience over the internet. See <http://www.royalsoc.ac.uk/>.

If undeliverable, please return to:
Australian and New Zealand Association for the Advancement of Science
The University of Adelaide, Adelaide, SA 5005

