



The Royal Society of New Zealand
Science Media Centre

Contract reporting of progress for
12 months to 30 June 2011

INDEX

		Page
1	Progress during the period	
2	Our outputs at a glance 2010 -2011	
3	Media Landscape	
4	Funding Strategy	
5	Notable Alerts and Briefings	
6	Outreach Activities	
7	Year 4 – future Goals	
8	Financial	
9	Appendices	

Signed on 01 August 2011

Dr Dianne McCarthy
Chief Executive
Under authority delegated by the
Royal Society of New Zealand

Science Media Centre

Full-year report to the Ministry of Science and Innovation

12 months to June 30, 2011



Report from Peter Griffin,
SMC Manager

Progress during the period:

The last year saw massive growth in the output of the SMC on the back of increased demand driven by major science-related stories such as the Canterbury earthquakes, the Pike River mining disaster and the Fukushima nuclear disaster.

These three stories alone account for the majority of the increase in media enquiries to the centre and the number of stories with quotes and material attributable to SMC experts and information. The three stories noted above not only stretched the SMC's resources, but tested its ability to respond to breaking stories of national interest.

The experience was hugely valuable for the SMC's media advisors and has given us a much deeper understanding of what is required by the media, when complex science-related issues need explaining in short order. The feedback noted below and received via other channels suggests the reputation of the SMC has been greatly enhanced by the role it played as an information hub as these challenging stories played out.

The SMC spent the year visiting newsrooms as it distributed the publication *SMC Desk Guide for Covering Science* and strengthened relationships with the science sector as it ramped up media training activities at universities, CRIs and independent research organizations.

The SMC Establishment Board now turned its attention to the future funding of the SMC and a plan to broaden the revenue base of the centre was formulated. This lays the groundwork for efforts that will be undertaken in the current period to ensure the long-term sustainability of the centre.

Our output - the SMC at a glance:

1681 media enquiries | **1878** SMC media items placed | **823** papers downloaded
(up 24%) (up 21%) (up 22%)

The number of journalists registered for embargoed access to scientific papers increased from 190 to 258.

Science Media Centre website statistics:

July 1 2010 – June 30, 2011

July 1 2009 – June 30, 2010



Web traffic increased 54 per cent on the previous corresponding period.

The changing media landscape

Major changes to the media landscape that will have an impact on the coverage of science-related subjects were flagged in the second part of the year with news that press agency NZPA will shut in August and public broadcast channel TVNZ7 will not have its funding renewed.

The closure of NZPA will remove a key stakeholder for the SMC and end a prolific run of stories from NZPA's science reporter Ken Atkinson. With NZPA syndication of stories contributing around 10 per cent of the SMC's media output, the closure of the press agency could have a direct impact on the SMC's effectiveness in disseminating expert comment within the media.

To what extent the change will impact on the SMC will depend on how much emphasis media groups Fairfax and APN News & Media focus on science reporting as they launch their own agency services to fill the void left by a departing NZPA. In the TV sector, a rich channel for science-related content will be closed when TVNZ7 programmes are discontinued from the middle of next year.

Shows such as *Ever Wondered*, which is in its second season of production, have received extensive input from SMC media advisors. A show like *Ever Wondered* will struggle to find a place in the commercial TV environment and subsequently, science-related content of this nature will be more challenging to produce for a TV audience.

Development of funding strategy

Extensive work by the SMC management, Establishment Board and the Royal Society has been completed in the last year on developing a strategy to broaden the revenue base of the SMC.

This work has been given high priority by the SMC Establishment Board as it seeks to lay the groundwork for a structure for the SMC that will take it into an environment where funding comes from multiple sources. The SMC Strategy for Broadening the Revenue Base is attached to this report (Appendix I).

The SMC has drawn on the experience of the SMC network in developing a potential membership and sponsorship structure to help fund the SMC. Thought has also been given to the likelihood of the SMC being able to offer services to businesses and the science and media sectors, which could result in revenue being generated to support the core activities of the centre.

The SMC is now preparing to test the market with the ideas formulated in the strategy document. This will involve SMC management and board engaging key groups of potential funders over the coming months to ascertain appetite for a SMC membership structure and for revenue-generating services.

Notable SMC Alerts

For a full list of Science Media Centre science alerts issued in the past year visit:

<http://www.sciencemediacentre.co.nz/category/science-alert-experts-respond/>

Prescription drug found in synthetic cannabis: The SMC rounded up comment from scientists in response to news that a particular variety of synthetic cannabis blends was being recalled due to the presence in the product of the controlled drug phenazepam. The move by the Government sparked discussion about legal highs and the SMC subsequently partnered with ESR to hold a briefing for the media to detail just what scientists do and do not know about the contents of so-called “herbal highs”.

1080 report ‘correct on the science’: Scientists were approached by the SMC for their feedback on the Parliamentary Commissioner for the Environment, Jan Wright’s report examining the use of 1080 (sodium monofluoroacetate) for pest control in the conservation estate. While 1080 is a controversial topic in New Zealand, the input of scientists with expertise in this area was appreciated by the media and helped garner some thorough, balanced coverage of the report.

Experts on discovery of free floating planets: New Zealand astronomers and astrophysicists helped discover a collection of Jupiter-sized free-floating planets that do not orbit stars, but instead drift through space. The SMC gathered comment from New Zealand scientists on the significance of the research and publicized the research with the media which led to extensive coverage of science in an area that New Zealand is not typically associated with.

The future of coal in New Zealand: The SMC covered a symposium in Wellington on the future of coal, interviewing the scientists involved on their views about the sustainability of mining lignite in Southland and New Zealand’s strategy for the future of coal overall. The SMC’s involvement injected some rational scientific expertise into a highly politicized and polarized debate.

SMC alert series – Fukushima tsunami and nuclear disaster: The SMC was able to draw on the resources of the SMC network to issue rolling updates from scientists on the devastating tsunami in Japan and the subsequent nuclear meltdown at the Fukushima nuclear power plant. The experts featured in our thirteen releases were extensively quoted in the New Zealand media and the SMC played a brokering role over the course of a two week period as the media required experts on everything from the impact of radiation on the body to the irradiation of food as a result of nuclear material escaping into the environment.

Pike River mining disaster: The SMC delivered alerts containing extensive commentary from mining experts on the Pike River mine explosion. Alerts also covered the robotics deployed into the mine, the make-up of gases in coal mines and the psychological trauma suffered by the West Coast community. The alerts were incredibly well received and the experts featured were quoted in hundreds of news stories. We also assisted graphics editors putting infographics together and at least two scientists featured by the SMC were subsequently drafted into the rescue and recovery effort.

Some feedback from key stakeholders on our coverage:

“I don’t know if ‘congratulations’ is the right word given the tragic circumstances of the moment, but the work of you and your team in getting the mine disaster robot material up yesterday and the pressure wave CCTV material today is most impressive. Very well done! Both are really solid contributions to the understanding of these two aspects of the drama. I was pleased to see that some media picked up your robot material yesterday and acknowledged its source to SMC. Keep up the good work.”

Ian Collins, Communications Manager, Lincoln University

“Just a quick note to say a big thanks to you and your team over the year. The help on the earthquake and Pike River was invaluable and much appreciated.”

Susan Pepperell, Senior reporter, *Sunday Star Times*

Canterbury earthquake: Our work on the Canterbury earthquake involved issuing alerts quoting experts on the science-related elements of this natural disaster, from Saturday morning soon after the earthquake struck. We also helped in lining up interviews with scientists and in research for infographics, particularly to do with the phenomenon of liquefaction which for a period pre-occupied the media.

Cancun climate agreements: December saw the climate talks held in Cancun and significant progress made with the world’s nations coming to agreement on ways to reduce greenhouse gas emissions. The SMC sought out reaction from New Zealand’s leading climate scientists.

Light trap for single atom devised: University of Otago physicists discovered a way to trap a single atom, using a clever technique to circumvent the quantum uncertainties involved. Their research, was published in the journal *Nature Physics*. The SMC gathered local opinion on the research from physicists and facilitated media interested in finding out more about the discovery.

Arsenic-eating bacteria: A remarkable announcement from NASA centered on the discovery of bacteria in California’s Mono Lake, which are capable of replacing phosphorous – one of the building blocks of life, with the toxic substance arsenic. New Zealand scientists weighed in with commentary.

Early results from longitudinal study: A wide range of experts were approached by the SMC to comment on preliminary findings from the new Auckland-based longitudinal study, *Growing Up in New Zealand*, resulting in extensive coverage with SMC contacts quoted on numerous angles.

PSA and kiwifruit: The SMC prepared a scientific backgrounder and acted as an information source for journalists covering the outbreak of the PSA disease on kiwifruit orchards.

Light drinking during pregnancy: A controversial study suggested light drinking during pregnancy had no adverse effects on a woman’s offspring. Local experts analysed the research and identified flaws in the research methodology. The paper attracted widespread coverage and experts put forward by the SMC were able to point out the methodology flaws, putting the research in context.

Climate scientists on IPCC overhaul: Local scientists gave their feedback on a major report from the influential international InterAcademy Council, which recommended a series of changes take place to restore the scientific credibility of the Intergovernmental Panel on Climate Change.

Deepwater Horizon oil spill: The SMC was able to receive quality commentary through the SMC network as experts based in the United Kingdom examined the environmental impact of the oil spill and commented on the drawn-out engineering effort to stem the flow of oil.

Notable SMC briefings

For a full list of Science Media Centre briefings held in the last year visit:

<http://www.sciencemediacentre.co.nz/category/briefings/>

Building design in the wake of the Canterbury quakes: An SMC press conference was the venue for the launch of a Royal Society of New Zealand report looking at earthquake damage to buildings and structures during the Christchurch earthquakes and what it means for building design in the future.

This was the third briefing the SMC held in the last year on the earthquakes and various seismological and engineering issues relating to them.

Adolescent health report launch: The SMC partnered with the Chief Science Advisor to the Prime Minister, Professor Sir Peter Gluckman, for the launch of his much-anticipated report on the health and social issues faced by New Zealand's teenagers. The highly successful launch in Wellington attracted widespread media attention and the SMC was responsible for coordinating media on the day of the launch. The SMC hopes to repeat such partnerships with Sir Peter's office in future.

Scientists find part of Pink Terraces: Stunning research and pictures were released in February at a Science Media Centre briefing as scientists unveiled details of a survey of Lake Rotomahana that showed for the first time the intact nature of the famed Pink Terraces. The SMC held a press conference in conjunction with GNS Science in Wellington that remains one of the best-attended briefings to date. Media coverage was widespread.

Observing Earth from above: The SMC hosted a briefing featuring top scientists from the European Space Agency who were in New Zealand to monitor from a Southland-based ground station, the progress of the Johannes Kepler unmanned spacecraft, The briefing focused on the ability of remote sensing satellites to inform science in everything from climate change to agricultural management and featured New Zealand scientists.

Biodiversity in 2010 – taking stock: As the international year of biodiversity closed, the SMC rounded up experts to take stock of New Zealand's record in preserving biodiversity and look at areas in need of further attention.

How earthquake-resilient are our cities?: In the wake of the Christchurch earthquake and in support of a Royal Society of New Zealand emerging issues paper on the issue, the SMC held a media briefing looking at areas of research requiring urgent attention as experts seek to learn more about the forces that triggered the earthquake and how to plan for future quakes. This briefing received 22,000 page views on the Science Media Centre website, making it the most popular single article on the website to date.

Whale strandings – what science can tell us?: Mass strandings of whales in October and November triggered discussion in the media about the cause of whale strandings and whether the phenomenon is increasing. A panel of scientists participated in this media briefing which helped to dispel some of the myths around whale strandings and present a scientific view of them.

Scientists on implications of sea level rise: New Zealand scientists presented the media with the latest research on sea level rise internationally and put this in context for journalists seeking to learn more about the implications of sea level rise for New Zealand.

Food insecurity – who is affected? The issue of food insecurity was on the agenda during the year as recession saw visits to food banks increase and strain on family finances meant healthy eating dropped down the list of priorities.

Innovation – will science be the key to economic growth? In a year when New Zealand businesses and the government focused more on the process of innovation and carrying out research & development, the SMC held a media briefing looking at definitions of innovation and how it is measured and benchmarked internationally.

Outreach activities

The period was a busy one in terms of engagement with key stakeholders, with SMC staff travelling the country to present on the topic of science communication. Some of the highlights included:

Distribution of the SMC Desk Guide for Covering Science: During the period, SMC staff visited the newsrooms of the Dominion Post, TVNZ, TV3, The Press, Radio Live, Radio New Zealand, NZPA, the regional broadcasters of New Zealand and several community and regional newspapers to distribute the *SMC Desk Guide for Covering Science*.

The booklet has become a useful resource for journalists new to the science round and the visits to newsrooms provided an invaluable opportunity to meet with journalists to promote the services available to them from the SMC.

SCANZ conference programme organization: Peter Griffin and Dacia Herbulock were responsible for the entire programme of this year's SCANZ conference in Auckland. While a major undertaking, the conference, which had a distinct theme of science communication and was titled "Listening to the other side", was hugely successful and received very positive feedback. The participation in SCANZ increased the profile of the SMC and promoted our services to journalists and scientists who attended the conference.

Climate Change workshops for senior journalists: The SMC hosted high-level workshops in Wellington and Auckland featuring visiting climate change journalist Fred Pearce and science historian Eric Conway.

These highly successful background briefings for selected media helped to up-skill journalists who are covering climate change on a regular basis and were fully subscribed.

Running Hot lecture: The SMC's Peter Griffin and Dacia Herbulock presented to a packed house of emerging researchers in Wellington as part of the bi-annual Running Hot conference.

Ever Wondered critical evaluation: Dacia Herbulock, in addition to supplying contacts and information to the producers of the Ever Wondered science TV show also for a second year, sat on the reviewing panel for Ever Wondered, attending pre-screenings of each episode and supplying feedback to the production company to improve the content before it was finalised for broadcast.

Judging of Canon Media Awards, New Zealand Association of Scientists awards, Agricultural Science Journalism awards: Peter Griffin acted as a judge in numerous categories and for numerous awards during the year.

Café Scientifique Palmerston North: Peter Griffin delivered the May Café Scientifique in Palmerston North on the topic of science communication and how it can go wrong in the media. A podcast of his presentation is available here: <http://www.sciencemediacentre.co.nz/2011/05/06/podcast-peter-griffin-does-cafe-scientifique/>

Climate Change workshop at Victoria University: Peter Griffin and Dacia Herbulock hosted a climate change workshop at Victoria University focusing in particular on the issue of communication of climate science.

Centre for Brain Research media workshop: Media training session delivered by Dacia Herbulock

RSNZ Emerging Researchers workshops: SMC manager Peter Griffin toured the country presenting science communication workshops to over 600 emerging researchers from Auckland to Dunedin.

Visit to NSF and AAAS: In September Dacia Herbulock while holidaying in the US arranged meetings with the National Science Foundation and the American Association for the Advancement of Science in Washington D.C. These meetings proved invaluable as they constituted the first real interaction between the groups and the Science Media Centre network. The discussions kicked off in these meetings is ongoing and will likely result in useful collaboration.

Running Hot conference: Peter Griffin and Dacia Herbulock ran a pre-conference workshop at Running Hot offering up tips and advice on how to communicate science to conference attendees.

Auckland University & Christchurch Broadcasting School lectures: Peter Griffin again visited the Christchurch Broadcasting School to lecture students on science journalism and was guest lecturer at the University of Auckland's science communication course which started in 2010.

Otago University, Christchurch School of Medicine: Peter Griffin and Dacia Herbulock were invited to Christchurch to present to some of the country's top medical researchers, an event that allowed the SMC to significantly add to its health researcher contact list.

New Zealand Science Festival and Food Safety conference: Peter Griffin was invited to moderate panel discussions at the Science Festival in Dunedin and at the New Zealand Food Safety Authority's annual conference in Auckland.

Association of Dietitians and Nutrition Foundation: SMC staff including part time consultant and registered nutritionist Amanda Johnson undertook a number of workshops and keynote presentations in Auckland and Wellington for food-related research associations.

Society of freshwater scientist's conference: Dacia Herbulock delivered a workshop at this meeting of freshwater scientists in Christchurch, developing an extensive network of contacts in the process.

SMC summit in Doha

June saw SMC manager Peter Griffin visit Doha to attend the World Conference of Science Journalists and participate in the first summit featuring representatives from each of the Science Media Centres.

The global network of science media centres expanded during the period with centres launching in Tokyo, Japan and Ontario, Canada, bringing the total number of SMCs to six.

In addition to featuring representatives from New Zealand, Australia, United Kingdom, Canada and Japan, the meeting was also attended by representatives from organizations in Denmark, Norway, Italy and China, which are at various stages of setting up SMCs.

The meeting set the framework for collaboration among the SMCs moving forward including the settling on wording of a draft "SMC Charter", which encapsulates values and principles that the SMCs collectively subscribe to. This document will be ratified by the SMCs after sign-off from each centre's board of directors.

The collaboration among the centres has increased significantly in the past year and the SMC's place as part of this network is opening up international exposure to New Zealand science and giving journalists greater access to international scientific expertise.

The power, visibility and brand recognition of the science media centres has increased as the network has become truly global, with the five science media centres now collaborating to try and secure international sources of funding and to work collectively on science media training initiatives.

A pilot training programme developed by the AusSMC during the period will be prepared for trial in New Zealand as well as infographics that the AusSMC has been funded to produce. The NZ SMC is leading development of a global website to represent all of the science media centres.

Sciblogs continues to grow its audience

The Sciblogs blogging platform saw its busiest period to date with traffic to the site increasing 60 per cent.

Much of the increased traffic was down to comprehensive Sciblogs coverage of topical, hot-button issues such as the Christchurch earthquakes and discussion of Ken Ring's earthquake predictions. The latter in particular led to a large spike in Sciblogs traffic in March and the syndication of key Sciblogs posts on the issue via media outlets such as the Herald Online and the National Business Review.

The SMC undertook a restructure of Sciblogs which involved the blog network being accounted for under a separate cost centre at the Royal Society of New Zealand. This means Sciblogs is now operated completely independently and no MSI funding is attributed to it. Staff time spent on the site is limited to four hours per month and this time is accounted for with revenue generated by site advertising and sponsorship.

Sciblogger Elf Eldridge, of the MacDiarmid Institute, is leading the development of a Sciblogs weekly podcast which will feature bloggers from the network and be hosted on the Sciblogs website.

Sciblogs consistently ranks in the top 7 blogs in the country according to Sitemeter statistics that are gathered and published on a monthly basis.

Sciblogs website statistics

July 1, 2010 – June 30, 2011

July 1, 2009 – June 30, 2010

Site Usage	Site Usage
 536,170 Visits	 216,113 Visits
 883,631 Pageviews	 361,838 Pageviews
 1.65 Pages/Visit	 1.67 Pages/Visit

Sciblogs web traffic increased 60 per cent on the previous corresponding period. Page views increased 59 per cent.

Year four – future goals

Maintain SMC's high standard of service during personnel changes: The absence of senior media advisor Dacia Herbulock, who will depart the SMC on maternity leave in mid August 2011 and return to the SMC in February 2011, will have an impact on the centre.

The SMC is currently recruiting a replacement for Dacia and it is hoped that a fixed term contract can be agreed with a suitable candidate who can perform the duties Dacia has been primarily responsible for, including preparing and running SMC virtual briefings, hosting media training activities and providing input into SMC content projects and press release material.

The SMC's primary focus during the next 12 month period is minimizing the impact on a three person team of having a senior team member absent for an extended period of time. In March the SMC welcomed new media advisor John Kerr, who in a matter of months has become an integral part of the SMC team, comfortable hosting press conferences, dealing with journalists' enquiries and working with scientists on press releases.

Implementation of the SMC funding strategy: The SMC Establishment Board has undertaken extensive work in preparing for the SMC to approach the market to test its strategy for broadening the revenue base of the SMC. Efforts to interact with the science sector, the media and the business community at board level will ramp up in the first half of the year as the SMC approaches organisations at a high level to seek funding support.

Review of Science Advisory Panel: The Science Media Centre established a Science Advisory Panel shortly after its foundation, developing a panel of around 30 scientists who offer guidance and feedback to the SMC on a regular basis. While the SMC regularly surveyed the SAP on a monthly basis using an electronic survey system, this practice was discontinued in the previous year due to poor uptake of the surveys. The SMC is seeking better ways to interact and obtain feedback from SAP members.

During the period, the SMC will also undertake a review of the SAP and its current roster of members with the aim of broadening its areas of expertise and developing a closer relationship with members, hopefully resulting in more timely delivery of information that may be of interest to the media as well as critical feedback on the SMC's operations and output.

Establishment of Media Advisory Panel: The SMC will, during the period, establish a Media Advisory Panel of 6 – 8 senior journalists, editors and executive producers, with the aim of receiving regular feedback on the SMC's operation from the media. The purpose of the SMC Media Advisory Panel is twofold – (i) to improve the suitability of our output by better identifying the needs of the media and (ii) to strengthen and broaden our relationships with key media organizations by interacting with journalists and newsroom decision makers at a high level to give them "ownership" in the services offered up by the SMC.

Enhancement of online briefing technology: The sponsorship arrangement concluded with TelstraClear will allow the SMC to migrate its virtual briefings to a more sophisticated system based on the Cisco Webex platform.

A key advantage of this system is that journalists will be able to log into SMC briefings for audio and visual material via the Internet, rather than having to simultaneously log in via the web as well as via phone. Streaming audio will broaden the options for journalists and the Webex system is much more robust and professional looking. The Webex system is more complex than our existing system so some up skilling of journalists and checking of compatibility with existing newsroom IT systems will be required.

The SMC will also explore the option of using TelstraClear's telepresence facilities dotted around the country to host occasional, high-level press conference for important topics of high media value, media training sessions or briefings with overseas guests.

Interaction with incoming science minister: The SMC enjoyed a good relationship with the Minister of Science and Innovation, Hon. Dr Wayne Mapp, and made all SMC press releases available to the Minister and his office. The SMC will make it a priority to keep the incoming science minister informed of our activities and to brief the minister on science media matters at his or her convenience.

Launch of global SMC website: A long-running project has seen the NZ SMC take responsibility for developing a website that will act as the online presence for the SMC network. Work has been underway on the website for the last six months and was disrupted by the departure of SMC media advisor and technical leader Aimee Whitcroft. The website however is in an advanced state of development and will be completed before the end of the calendar year. It will form an important part of the SMC network's strategy of seeking support from organizations and growing awareness of its activities on a global scale.

SMC representation at AAAS conference in Vancouver, January 2012: A bid by the NZ SMC to secure a session on the itinerary of the next meeting of the American Association for the Advancement of Science (AAAS) was successful, which means the SMCs will be represented at the meeting in Vancouver. This is an important strategic development for the SMC for a number of reasons.

Financial report

	12 months to 30 June 2011		
	\$ Actual	\$ Budget	\$ variance
Income			
Contract income MSI	578,000	578,000	0
Other income	4,593	50,000	-45,407
Total Income	582,593	628,000	-45,407
Expenses			
RSNZ staff salaries, wages	286,659	268,568	-18,091
Other direct expenses			
Honoraria	18,000	24,000	6,000
Freelance contributors	15,869	16,656	787
Contractors	0	996	996
Staff travel	14,003	14,110	107
Other staff costs	601	2,736	2,135
Non-staff travel	1,340	3,900	2,560
Software & website	3,360	9,900	6,540
Other IT costs	14,182	9,792	-4,390
Office rental	20,362	22,860	2,498
Events catering/hireage	832	8,760	7,928
Sponsorship	1,130	2,500	1,370
Marketing	7,724	10,448	2,724
Sundry premises costs	4,645	12,900	8,255
Capital charge	54,264	54,264	0
Total other direct expenses	156,312	193,822	37,510
RSNZ overheads	144,430	179,904	35,474
Total expenses	587,401	642,294	54,893
Net Income	-4,808	-14,294	10,116