Science Media Centre
Dacia Herbulock, Senior Media Advisor
2016 Evaluation survey results
2016 Evaluation of SMC activities

- Survey targeted scientists, journalists and editors
- Previous contact with SMC: participants in our training and registered users
- Aim: to evaluate impact, effectiveness, and influence of SMC resources
Survey responses
What we found

- SMC training improves scientists’ confidence and willingness to engage with media
- Journalists use and value SMC resources; most do so irregularly (≤1/mo.)
- Positive attitudes to science from media and demand for free, exclusive content
Survey overview: Scientists

- Focus on Science Media SAVVY training workshop impacts:
  - Full workshop – (2-day)
  - Express – (15 min)
  - New media (video, animation, podcast, blog)
- Broader attitudes to media, communicating research to public
Media training for scientists
Science Media SAVVY - workshop overview

Day One
Communication skills and media training

Welcome and introduction
   Experiences -- media encounters, impressions, stereotypes
Using clear, compelling language
   Breaking free of jargon
   Your science in a soundbite
Distilling your message
   What does your audience care about?
Presence and performance
   Overcoming nerves
   Turning on your ‘elevated self’
Handling the first phone call
   Getting a read on the media agenda
Giving an effective interview
   On-camera practice, feedback
When the interview gets challenging...
   How to respond effectively
Practicing your media pitch

Day Two
Behind the scenes: news and social media

New Zealand’s changing media landscape
Inside the news media
   How journalists work, news cycle demands
   Newsroom tour
New media opportunities
   Blogging and social media for scientists
   Producing your own online content
Your science media toolbox
   Working with your press office
   Online tools to help you stay savvy
Visiting media panel - Q&A
   Journalists from television, radio, newspaper and magazines offer their perspectives and answer your questions
Media pitch session
   Put your new skills to the test, panel of visiting media “judges” offer feedback
Media coverage frequently results from contacts made during SAVVY workshops.
FIGHT FOR LIFE

Neurobiologist Melanie Cheung (right) discusses a brain scan with radiographer Andrea Champion at the University of Auckland’s Centre for Advanced MRI.

Fifteen years ago, Melanie Cheung was a university dropout struggling to find a sense of direction in her life. Now she’s leading a world-first research project giving hope to people who are slowly losing themselves to Huntington’s disease.

Long-term relationships: In-depth articles may appear years later as direct result of SAVVY workshop media pitch.
SAVVY Express training
NZ Marine Science Society conference 2015
Resources for scientists
New Zealand Herald Science reporter Jamie Morton plots the development of a story through the day from idea to finished product...

8.30am
I sit down at my desk and read the paper. I want to see how my stories were treated, how I can improve. I catch up on news that broke overnight, browsing science sections of overseas media and check the debates running on Sciblogs.

Press releases from universities or research institutes will be waiting in my inbox. Whatever turns up, via releases or news tips, I ask myself a few questions: Is it new, a world-first? Why should a reader care about it? Will it have some significant impact on their life? Or is it simply interesting or quirky enough to make the grade?

9.30am
The first general news meeting is held in the newsroom. I’ll pitch my stories to the morning duty chief reporter, and hopefully I’ll have chosen them well enough that they’ll sell themselves.

10am
I hit the phone, lining up interviews. The key is to get quotes from key sources in the bag as early as possible. I’ll think about photos, graphics, factboxes. Do we need them? If so, I’ll let the photography and graphics teams know early. The middle part of the day is research and writing, maybe a site visit or coffee catch-up on a slow news day.

2.30pm
The afternoon chief reporter will ask how my story is tracking. If it is looking good, they’ll add it to the newslist for the editorial heads to consider at the afternoon general news meeting. My bosses will make suggestions or query the research. They want to make sure it’s a strong story.

4.30pm
For anything other than breaking news, the story has to be finished by this time. I’ll file my article in our system and it will be picked up, sub-edited, and placed on a designated page.

5.30pm
The final newslist is sent out to all reporters and I’ll finally be able to see what page my story is destined for. But I don’t see exactly how it will look, the layout team will work into the night. I check my inbox and science websites one last time and head home.

9pm
My mobile phone rings - a sub editor wants to check a fact. I talk her through it, she tweaks the sentence. The story is finally put to bed and within a couple of hours will be rolling off the presses.
Survey results: Scientists

Confidence responding to media query before / after SAVVY

- Not confident
- Very confident

Before

After
Scientists

Because of participation in Science Media SAVVY...

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

...My research is reaching a wider audience

...I am communicating my research more often

...I am able to communicate my research more effectively
"I feel confident responding to media queries on a broad range of issues within my area of expertise"
Scientists

Did SAVVY Express lead to any changes in the way you prepare to communicate your research?

15 min intervention
Skills from SAVVY workshop

- Understanding the media’s perspective
- On-camera interview skills / performance
- Preparing key messages
- Managing interactions with media
- Using clear, compelling language
- Raising the profile of your research
- Engaging with social media
- Handling controversy
- Planning strategically for outreach

Percentage of respondents
Scientists

"If approached by the media today to discuss my research..."

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly agree

...I would feel confident
...I would feel prepared
...I would be likely to respond
Scientists

When did you last respond to a media query or make a media appearance?

- Never
- 2 - 5 years ago
- 1 - 2 years ago
- 6 - 12 months ago
- 3 - 6 months ago

0 - 3 months ago
Scientists

Following the SAVVY workshop, did you have further contact with journalists you met during the workshop?

- Yes
- No

Resulting in media coverage

No media coverage
Scientists

Overall, how would you rate your experiences interacting with the media since the workshop?

- Very negative
- Very positive

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Scientists

On the whole, are your interactions with media...

- Frequent
- Infrequent
- Irregular bursts of activity
- Almost never have contact with media

Percentage of respondents
Scientists

How many media queries do you respond to in a year?

- Newspaper: 12
- Radio: 12
- Television: 8
- Online: 5
- Magazine / feature: 2
Scientists

In your current role, how many hours a week do you typically spend on public science communication activities?

- None
- Less than 5 hours
- 5 to 10 hours
- More than 10 hours

Percentage of respondents
As a result of engaging with media, have you seen an impact on any of the following aspects of your career?

- Collaborations
- Conference invitations
- Referencing of your work / citations
- Funding opportunities
- Awards
- Appointments / promotions
- Commercialisation opportunities
- Teaching / student numbers
- Increased profile
- Other, please specify

Percentage of respondents
Scientists

"Communicating research to the public is valued as an important activity for researchers within my organisation..."

- "...by my peers"
- "...by my manager(s)"
- "By our media / comms / marketing staff"
- "By our executive leadership"

[Bar chart showing the percentage of respondents agreeing or disagreeing with the statement, with categories for strongly disagree, disagree, neutral, agree, and strongly agree.]
Scientists

What is your field of research?

- Biological Sciences
- Medical and Health Sciences
- Environmental Sciences
- Physical Sciences
- Earth Sciences
- Psychology and Cognitive Sciences
- Information and Computing Sciences
- Agricultural and Veterinary Sciences
- Technology
- Engineering
- Chemical Sciences
- History and Archaeology
- Education
- Mathematical Sciences
- Language, Communication and Culture
- Law and Legal Studies
- Economics
- Built Environment and Design
- Philosophy and Religious Studies
- Studies in Human Society
- Commerce, Management, Tourism and Services

Number of respondents
MEDIA SKILLS FOR MĀORI RESEARCHERS

Kimihia ngā mōhiotanga o te ao pāpāho
Survey results: Journalists

Use of Science Media Centre resources

- SMC Alert emails
- SMC Picks email
- Responding to individual media queries
- Science Media Exchange (Scimex)
- SMC Briefings
- Sciblogs
- Science Deadline email
- SMC Desk Guide for Covering Science

Percent of respondents

- Have used myself
- Use regularly
Journalists

How often do you access SMC-related resources to help you produce stories?

- Daily: 5%
- 2-3 Times a Week: 10%
- Once a Week: 10%
- 2-3 Times a Month: 15%
- Once a Month: 20%
- Less than Once a Month: 40%
Within your media organisation, how would you characterise the way science is usually perceived?

Percentage of respondents

- Interesting
- Good source of content
- Important
- Easy to get wrong
- Quirky
- Compelling
- Difficult
- High priority
- Low priority
- Inaccessible
- Boring
- Irrelevant

Journalists
Editors
Survey results: Editors

How interested in science-related content is your audience?

- Not interested
- Very Interested

Mean response

1 - Not interested
5 - Very Interested
Which areas of science is your audience mainly interested in?

- Environment
- Health and Medicine
- Technology and innovation
- Natural hazards
- Scientific discoveries
- Space
- Agriculture
- Social science
- Psychology
- Energy
- Sports Science

Percentage of respondents
Editors

If an external independent organisation offered to supply high-quality science news content for New Zealand media, how likely would you be to use this service?

If it were made available to all media?  
If it were customised / exclusive?
Editors

If an external independent organisation offered to supply high-quality science news content for New Zealand media, how likely would you be to use this service?

If it were a paid-for service?

If it were free?
Editors

How useful is the Science Media Centre and its resources to your staff when writing science-related stories?

Mean response

1 - Not useful
5 - Very useful
Gender

- Male
- Female

Ethnicity

- European 96%
- Other 1%
- Asian 2%
- Maori 1%

Age

- 15-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65-75

Media – Journalists & Editors
Media – Journalists & Editors

Years working in media

Media type

- Print multimedia: 43%
- Newspaper: 19%
- Broadcast multimedia: 14%
- Magazine: 9%
- Radio: 6%
- Television: 4%
- Multi-platform: 4%
- Other: 1%
Resources for journalists
Types of scientific evidence

Being able to evaluate the evidence behind a claim is important, but scientific evidence comes in a variety of forms. Here, different types of scientific evidence are ranked and described, particularly those relevant to health and medical claims.

**INCREASING STRENGTH OF EVIDENCE**

- **ANECDOCTAL & EXPERT OPINIONS**
  - Anecdotal evidence is a person's own personal experience or view, not necessarily representative of typical experiences. An expert's stand-alone opinion, or that given in a written news article, are both considered weak forms of evidence without scientific studies to back them up.

- **ANIMAL & CELL STUDIES (experimental)**
  - Animal research can be useful, and can predict effects also seen in humans. However, observed effects can also differ, so subsequent human trials are required before a particular effect can be said to be seen in humans. Tests on isolated cells can also produce different results to those in the body.

- **CASE REPORTS & CASE SERIES (observational)**
  - A case report is a written record on a particular subject. Though low on the hierarchy of evidence, they can aid detection of new diseases, or side effects of treatments. A case series is similar, but tracks multiple subjects. Both types of study cannot prove causation, only correlation.

- **CASE-CONTROL STUDIES (observational)**
  - Case control studies are retrospective, involving two groups of subjects, one with a particular condition or symptom, and one without. They then track back to determine an attribute or exposure that could have caused this. Again, these studies show correlation, but it is hard to prove causation.

- **COHORT STUDIES (observational)**
  - A cohort study is similar to a case-control study. It involves selection of a group of people sharing a certain characteristic or treatment (e.g. exposure to a chemical), and compares them over time to a group of people who do not have this characteristic or treatment, noting any difference in outcome.

- **RANDOMISED CONTROLLED TRIALS (experimental)**
  - Subjects are randomly assigned to a test group, which receives the treatment, or a control group, which commonly receives a placebo. In 'blind' trials, participants do not know which group they are in; in 'double blind' trials, the experimenters do not know either. Blinding trials helps remove bias.

- **SYSTEMATIC REVIEW**
  - Systematic reviews draw on multiple randomised controlled trials to draw their conclusions, and also take into consideration the quality of the studies included. Reviews can help mitigate bias in individual studies and give us a more complete picture, making them the best form of evidence.

Note that in certain cases, some of these types of evidence may not be possible to procure, for ethical or other reasons.
Newsroom workshops for journalists

“Spotting Bad Science” workshop
Fairfax Media, Wellington Oct 2016
“I often receive studies and research which prompt news stories but sometimes question the quality of the science beyond the headlines. I wanted to hear from the scientists themselves.”

“Information about the different levels of depth of research was great.”

“I considered myself fairly well informed already but I learned a lot.”
Summary – Media

- Journalists identify most popular SMC resources as:
  - SMC alerts – rounding up expert comment on breaking news
  - Responding to individual media queries
  - Highlighting embargoed research of interest to media through SMC picks email and Science Media Exchange (Scimex)

- Most respondents value our activities highly but use them only sporadically

- Largely positive attitudes to science and demand for more science-related content within newsrooms

- Environment, health and technology/innovation are largest areas of interest; high interest in science-related content overall
Summary - Scientists

- Scientists surveyed felt they were more effective and confident communicators, even after just 15 min of training (SAVVY Express)
- Participants in longer workshops improved attitude towards media, able to see things from media’s perspective
- Lasting effects – most surveyed 1 – 2 years post workshop
- Currently likely to respond to media queries, on a broad range of issues in area of expertise as well as own research
- Ongoing contact with media, most experiences positive (74%)
- Positive career impacts identified by many, including new research collaborations
Thank you!

Alexander Heyes
John Kerr
Rhian Salmon
Scientists

"Communicating research to the public is valued as an important activity for researchers within my organisation..."

Results broken down by employer type on next slides...
(Universityes compared with Crown Research Institutes, local government, private research orgs and other similar)
Scientists

...by my peers

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Scientists

...by my manager(s)

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Scientists

...by our media / comms / marketing staff

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Scientists

...by our executive leadership

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

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