

# What is the CSIRO and Its Role in Australia?

## What is the CSIRO? – the Commonwealth Scientific and Industrial Research Organisation

- The *Commonwealth Industrial Research Organisation (CSIRO)* is Australia's Primary National Science Agency
- It operates from numerous sites around Australia and employs several thousand scientists and support staff.

## Under the *Science and Industry Research Act* CSIRO is tasked to:

- "Carry out research aimed at assisting Australian industry and furthering the interests of the Australian community"
- "Encourage the application and utilization of such research".

[Science and Industry Research Act, Section 9](#)

## The public expectations of CSIRO are summarised by Terry McCrann, newspaper columnist, to be:

- CSIRO is the "most trusted" institution in Australia
- **"From CSIRO we need, very simply, good science"**
- **As CSIROs own strategic plan puts it, "we are committed to scientific excellence and working ethically and with integrity in everything we do"**
- **"If we can't trust CSIRO to give us good and even honest science..... - we are adrift in a sea of irrationality"**

["Treasury and CSIRO Both have Breached Trust", The Australian 29 May 2010](#)

# Public Perceptions of a Management Culture of Intimidation, Bullying and Harassment at CSIRO – 1

## A Brief History of the Concerns

Starting in 2002, there have been growing criticisms of CSIRO's management, most of which involved the perceived development of a culture of intimidation, bullying, and harassment at the organisation. These concerns have been repeatedly voiced in the media and by senior staff at the CSIRO. Here are some examples.

Max Whitten, ex CSIRO Division Chief summarised what was happening as follows:

- “In this general climate of intimidation, it is not surprising that we see no public debate from within CSIRO”
- “CSIRO is in deep trouble”
- **“something is terribly wrong at CSIRO”**
- **“...a common thread emerges – intolerance by senior management to alternative viewpoints”**
- “Urgent need to review CSIRO's board structure”

[“Don't Cry for me Australia”, Australasian Science, 1 July 2002](#)  
[The CSIRO is in Deep Trouble, The Age, 15 Feb 2006](#)

*Max Whitten was Professor of Genetics at the University of Melbourne, and Chief of CSIRO's Division of Entomology from 1981-95. He is a Fellow of the Australian Academies of Science and Technological Sciences & Engineering and an expert on blowflies.*

Norman Abjorensen, respected journalist, said:

- **“If integrity, honesty, and openness are fundamental to the way we [CSIRO] operates, then why are they so lacking? Trust is also conspicuous by its absence”**
- **CSIRO is not “built on cooperation and knowledge generation” but “an environment where winks and nods prevail”**

[“Troubled Times at CSIRO Inc”, Sydney, Morning Herald 2005](#)  
[“Insider Unloads on Chaos in CSIRO”, Australasian Science, 2005](#)

*Abjorensen worked at CSIRO Head Office from 2004. He is a former national editor of the Sydney Morning Herald and has held senior positions at the Age, Sunday Herald Sun, the Canberra Times, and is a former News Director of SBS.*

Michael Borgas of the CSIRO staff association said:

- **“A culture of fear builds at CSIRO”**
- **“...the message in [the CSIRO] policy is understood by staff as: don't step out of line” ...**
- **“...a culture among CSIRO staff of keeping's one's head down ... and doing the science ‘at night’”**

[“A Culture of Fear Builds at the CSIRO”, The Age, 21 Feb 2006](#)

- “Dr Michael Borgas ... harshly criticized the [CSIRO’s] censorious approach”
- **“...even the appearance of a compliant, unquestioning, propaganda-driven organisation is not an acceptable strategy for CSIRO”**  
[“Science Agency Staff Criticise Spin Strategy”, Australasian Science, Jan/Feb 2006](#)
- “We ended up with a centralised command and control model , which is really very Soviet era-minded”  
[“Culture Wars at CSIRO”, ABC Background Briefing, 15 August 2010](#)
- **“Figures from DEST show that administration now consumes 46.5% of ...expenditure on research and development, up from 28.5% in 1989.** Between June 1998 and June 2004, CSIRO more than doubled its corporate management positions and also lost 316 people from research”  
[“A Culture of Fear Builds at the CSIRO”, The Age, 21 Feb 2006](#)

Rosslyn Beeby, columnist at the Canberra Times said of CSIRO:

- **“Here in Australia we’ve seen intimidation, exclusion, ... political ridicule and censorship of scientists”**
- **“...a climate of fear operates ...”**  
[“Climate of Fear Silencing Scientists when they must be Heard”, Canberra Times, 4 Jan 2007](#)

Senator Christine Milne said:

(To Dr Sandland, Deputy Head, CSIRO):

**“Are you aware of media reports and other discussion about there being a culture of fear and intimidation in the organisation, particularly for people who work in the area of renewable energy and climate science”?**

(Answer from Dr Sandland):

**“I have certainly heard those rumours”**

[Hansard, Senate Estimates Hearings, 14 February 2007](#)

Julian Cribb, Science journalist said:

- **“...there’s been an alarming tendency ... for scientists working for public institutions to be ... controlled”**

[“Culture Wars at CSIRO”, ABC Background Briefing, 15 August 2010](#)

Anonymous scientists at CSIRO (“DavidGcc”) said:

- **“The most despairing observations during my 29 years of employment at CSIRO have been the decline in the integrity of CSIRO as a result of executive decisions”**

[“Culture Wars at CSIRO”, ABC Background Briefing, 15 August 2010](#)

Sam Popovski of the CSIRO staff association said:

- **“We need substantial change. Its no longer to talk about issues being addressed, its time for action, and the CSIRO board needs to understand the urgency that’s required”.**

[“CSIRO staff burned out by bureaucracy, survey reveals” Canberra Times, 16 Sep 2010](#)

### The Shadow Minister of Science, Sophie Mirabella, said:

- “At a Senate Estimates hearing in Canberra today, senior officials from CSIRO admitted under questioning from Tasmanian Senator Richard Colbeck that they were unaware of action taken by at least 7 former scientists from the agency to request an investigation of allegations of systemic workplace bullying and harassment.
- **The agency’s Chief Executive, Megan Clark, was also careful to avoid answering claims that, in 2010, she had referred a private and confidential complaint from an aggrieved employee directly to the officer against whom the complaint was made.**
- **“It is unacceptable that government officials at the most senior level are, at best, unaware of serious complaints of workplace bullying in their own agencies,”** said Sophie Mirabella, Shadow Minister for Science, today.
- “If the government is serious about tackling workplace bullying, it must urgently review systems within its own agencies, because clearly they are not working,” Mrs Mirabella concluded.

[“CSIRO Fails on Workplace Bullying, Press Release, Sophie Mirabella, Shadow Minister of Science, 28 May 2012](#)

### Art Raiche, ex-Chief Research Scientist at CSIRO, says:

- **“It is my strong belief that CSIRO has passed its use-by date”**
- “Sadly, over the last decade, CSIRO has transformed itself from a once-respected research institute into a highly centralised, government enterprise (oxymoron?), replete with intersecting layers of expensive management, focused on continual reorganisation. Scientific independence has been lost...”
- For this reason CSIRO no longer attracts top young scientists except as an employer of last resort... It employs a much higher percentage of second and third rate people than was the case two decades ago.
- “It is anachronistic to have a single organisation operating across so many sectors with sector funding allocations left in the hands of CSIROs incompetent management”

[“CSIRO heavy: don’t trust CSIRO scares”, Andrew Bolt, Herald Sun, 27 July 2008](#)

### Kevin Hooper, Australian Industrialist, said:

- **“... there needs to be some high level review of how they [CSIRO] do their business”**
- “CSIRO should stick to the thing its good at: research”

[“Culture Wars at CSIRO”, ABC Background Briefing, 15 August 2010](#)

### The CSIRO staff association said:

- **“Scientists at CSIRO love their work, but say they are becoming more confused, frustrated, unhappy and burned out by battles with management bureaucracy, according to a new report.** A survey of more than 2100 staff found 62% thought CSIROs top-heavy management structure created conflict over research goals and 50 percent believed it hampered their career”
- **“”the most recent survey revealed a marked change in staff morale toward the negative end of the spectrum”**
- **“CSIRO staff felt a high level of neglect and disengagement”**

- “Those surveys also showed ... **many employees “feel trapped in their jobs and continue to work for CSIRO but without feeling committed to the organisation”**”
- “Staff feel there is a deepening rift between those who do the science and those who theorize about the best way to manage science”

[“CSIRO staff burned out by bureaucracy, survey reveals” Canberra Times, 16 Sep 2010](#)

# Public Perceptions of a Management Culture of Intimidation, Bullying and Harassment at CSIRO – 2

## Censorship of the Professional Views of Scientists

### A Brief Overview of the Concerns:

Censorship and gagging can take the form of intimidation, harassment and bullying. The highly charged environment within which (natural and social) science and research is conducted today has led to increasing concerns over the freedom of scientists to speak in the public interest.

### Clive Spash, ex-CSIRO science leader, said:

- [In regard to CSIROs gagging of climate scientists] Spash ... [says]: "The scientists, if they were allowed to speak freely, would be able to inform the Australian public fully. The scientists are basically trustworthy. There is contested evidence and contested truths here, therefore you need open discussion and debate. **The CSIRO is pretending there is one truth most of the time and that truth is being controlled by senior management.**"

["CSIRO in bed with big coal", Brisbane Times & Sydney Morning Herald, 3 Jul 2010](#)

### The case of the retired scientists:

- "A group of retired CSIRO scientists has been formally gagged by management and formally cautioned against making public comment about the national research organisation"
- "A group spokesman said the honorary fellows had been 'rapped over the knuckles' and told to 'shut up'"

[Rosslyn Beeby, Canberra Times, 14 May 2005](#)

*The 'rap over the knuckles' was given by Andrew Johnson (CSIRO Sustainable Ecosystems). In the 14 February 2007 Senate Estimates hearings, then shadow Science Minister Kim Carr noted that Johnson had already been taken to the Industrial Relations Tribunal twice by staff.*

[Hansard, Senate Estimates Hearings, 14 February 2007](#)

### Brian Martin, commentator, said:

- [In relation to CSIRO]: "Censorship is alive and well in Australia. In all my studies, the thing that stands out is that ... for every one [prominent case], there at least 10, maybe 100 other cases, that never receive publicity

["Censorship 'just tip of the iceberg'", ABC Science Online, 14 Feb 2006](#)

### Peter Pockley, editor of Australasian Science said:

- "...staff should be very wary of leaking information ..."

["CSIRO denies backing whistle-blower warning" ABC News 25 June 2006](#)

["Gagging Row Rattles CSIRO Executives", Australasian Science, April 2006](#)

Senator Ian Campbell, Federal Environmental Minister, said:

- “If a bureaucrat is giving directions to a scientist not to say something, then its not something that is sanctioned by me”

[ABC Four Corners – 13/02/2006: Program transcript](#)

# Public Perceptions of a Management Culture of Intimidation, Bullying and Harassment at CSIRO – 3

## A New Chief Executive in 2009

### Many Scientists Hoped for a Change in the Management Culture when Megan Clark Became Chief Executive

#### The Background:

The CEO of CSIRO until 2008 was Geoff Garrett who had been forced to review internal procedure for freedom of speech in light of some of the cases that are discussed elsewhere. A new CEO was appointed in 2009, Megan Clark, who was formerly Vice President Technology and Vice President, Health, Safety, Environment, Community and Sustainability, with mining giant BHP Billiton. Clark came to CSIRO with expertise in, and plans for a strong commitment to workplace health and safety. She initiated a “Zero-Harm” policy against workplace bullying.

#### Soon the new Chief Executive faced a ‘Freedom-of-Speech’ Test ...

- “A group of CSIRO senior climate scientists have defied a gag order by their organisation to speak out on Australia’s proposed greenhouse reduction targets”
- The four high-profile scientists, **Michael Raupach, John Church, Pep Canadell, and James Risby, have broken ranks with CSIRO to make personal submissions to a senate enquiry”**
- **“A CSIRO source said they could risk censure and possible career repercussions by taking a public stand”**

[“CSIRO Climate experts defiant”, Rosslyn Beeby, Canberra Times, 15 April 2009](#)

#### But, shortly thereafter ...

- **“CSIRO has sought to secretly close a loophole that allows scientists to publish research and comment in their private capacity”**
- **“While CSIRO has denied it has reviewed or changed its public comment policy, a confidential memo ... revealed the policy has been reviewed at the highest levels”**

[“CSIRO moves to put gag on scientists”, The Australian, 9 Nov 2009](#)

#### Ian Enting, former CSIRO employee, said:

- “There is no practical way of any employer preventing someone from making a submission [to the Senate]. However, while retaliation by the employer may also be contempt of the Senate, proving it is effectively impossible”

[“Culture Wars at CSIRO”, ABC Background Briefing, 15 August 2010](#)

# Public Perceptions of a Management Culture of Intimidation, Bullying and Harassment at CSIRO – 4

## Involuntary Separation: Case Studies of 14 Senior Scientists

### Numerous Respected Scientists have been Forcibly Retrenched or Resigned under Duress from CSIRO

#### A Brief Overview of Concerns

To date, we are aware of the stories of over 60 CSIRO employees who claim to have, in one way or another, experienced management bullying and harassment while employed by CSIRO. These are people whose lives have often been destroyed or seriously damaged by their experiences. Many are from low and junior ranks in the organisation, where they would be particularly vulnerable to management abuse. Most have been involuntarily separated from CSIRO, either by retrenchment or resignation under duress.

#### “A Few Grumpy Scientists”

Senator Kim Carr said (To Dr Sandland, Deputy Head, CSIRO):

“Could I ask you Dr Sandland about the recent publicity concerning loss of senior staff. Dr Chris Strauss, Dr Colin Ward, Dr Graeme Pearman, Dr Fred Prata, Dr Annabelle Duncan, and Dr Tony Schlink are just a few. It would appear that there has been an increase in the rate of attrition amongst senior CSIRO scientists. Is that the case?” ...

“When I raised these issues with you, I think, four years ago, you said to me it was essentially the work of a few grumpy ex-scientists ...” ... “I have paraphrased you”

[Hansard, Senate Estimates Hearings, 14 February 2007](#)

#### Our Experience:

Sixty stories, many from junior staff, are more than “a few grumpy scientists” ...

#### We invite you to leave your story (anonymously if necessary):

We invite you to add your story to our database. Anonymous postings are welcome.

#### 14 High Profile Cases from Amongst 60 or More

Below are listed 14 of the more high-profile stories that have appeared in the media:

##### (1) The case of Ruth Hall:

Hall was a leading expert in antibiotic resistance who was involuntarily retrenched from CSIRO in 2003. In 2005 she was elected to the Australian Academy of Science. In 2011 she won the McFarlane Burnet Medal of the Australian Academy of Science. According to newspaper articles at the time:

- **The Industrial Relations Commission stated that the forced redundancy of Ruth Hall “smacked of real harshness and injustice”. It “raised real issues of public interest”**

**(These issues of public interest were never aired because CSIRO made a confidential settlement with Hall)**

- “A colleague said the sacking of Ruth Hall was like the Australian Institute of Sport deciding that it didn’t have sufficient funds to contest the 1500 metres event and making Ian Thorpe redundant”
- “Dr Air, an Australian, said the scientific community was “mystified as to why CSIRO considers this research irrelevant”. She said: “There are labs overseas working hard to catch up with Ruth”.
- According to a leading flu researcher: “Dr Hall’s problems are insignificant compared to those of CSIRO”.

[“No CSIRO Place for Top Biologist”, The Age, 27 Jul 2003](#)

## (2) The case of Roger Francey:

- **Francey won a Federation Fellowship in 2003 – the most prestigious and lucrative fellowship award made by the Australian Research Council**
- **But, he was forced to hand it back after CSIRO changed its mind. He was retired in Jan 2004** after 31 years in CSIRO, during which he was promoted to Chief Research Scientist level.

[“Discarded Scientists Fail to Grasp CSIRO Logic”, The Age, 11 Feb 2006](#)

Francey won the Victoria Prize Award in 2001 and is an honorary fellow at CSIRO Aspendale

## (3)-(5) The cases of Graeme Pearman, Barrie Pittock, and Barney Foran:

In 2006, ABC Four Corners exposed the gagging of CSIRO environmental scientists about the dangers of global warming:

*Graeme Pearman:*

Q. Did you feel you were compromised?

A. **I was definitely compromised and it was probably only because I was in the later stages of my career that I could handle it. I could see that a young person placed in this position ... would probably have to roll over.**

Q. Why do you believe you were made redundant at CSIRO? **Could they have found a job for you if they really wanted?**

A. **I think they could have, yes.**

[ABC Four Corners – 13/02/2006: Interview – Dr Graeme Pearman](#)

- **“He [Pearman] was concerned about increasing pressure on researchers whose work or professional opinions were not in line with ... [CSIROs]”**

[“Scientists bitter over interference” The Age 13 February 2006](#)

*Barney Foran:*

JANINE COHEN: **Barney Foran says if scientists fight too hard ... there will be no funding. Is that true?**

STEVE MORTON, CSIRO EXECUTIVE: **Of course not**

JANINE COHEN: **Four Corners spoke to several scientists off-camera, who claimed they’d been censored but weren’t willing to go public for fear of losing their jobs or funding.**

Barrie Pittock:

“I was expressly told not to talk about ... how you might reduce greenhouse gases”

[ABC Four Corners – 13/02/2006: Program transcript](#)

*Pearman was Chief of CSIRO Atmospheric Research from 1992-2002. He received the CSIRO Medal in 1988, UNEP Global 500 Award in 1989. He was elected a Fellow of the Australian Academy of Science in 1989 and Fellow of the Royal Society of Victoria in 1997. He received a Medal of the Order of Australia in 1999 and a Federation Medal in 2003.*

*CSIROs policy boiled down to CSIROs senior executives deciding what is “the truth” for public consumption. Today climate warming and remediation measure are perhaps the major public policy debate in Australia*

### (6) The case of Colin Ward:

- Three time winner of CSIROs highest honour, the Chairman’s Medal
- Hailed as a potential Nobel Prize winner
- The CSIRO Chairperson praised his work as “reflecting the quality of science being delivered by CSIRO”
- **He was involuntarily retired by CSIRO in 2006, within weeks of winning the CSIRO Chairman’s medal yet again**
- His work was instrumental in the discovery of the first universal flue drug, *Relenza*<sup>TM</sup>, and the establishment of the ASX-listed company, *Biota*. (Market capitalisation at the time: \$200 million).

[“CSIRO Dumps Landmark Team”, Rosslyn Beeby, Canberra Times, 18 Nov 2006](#)

*In 2007, Ward was recipient of the Lemberg Medal, the highest award of the Australian Academy of Science. Ward is in the top 15 most highly published and cited CSIRO scientists of all time. Biota is one of the most successful Australian spin-off companies ever*

### (7) The case of Chris Strauss:

- Strauss was a scientist at the forefront of his research field, using microwaves to carry out organic chemical synthesis. He designed and built one of the first microwave reactors and is considered a “father” of microwave chemistry internationally.
- **Strauss received numerous awards for his ground-breaking work, including the 2005 Birch Medal, which is the highest award that the Royal Australian Chemical Institute (RACI) can bestow, and the RACI Inaugural Green Chemistry Award. He was the first (and only) CSIRO scientist to ever win the Birch Medal. That was in 2005.**
- **In 2006 he was made involuntarily redundant by CSIRO.**
- Microwave reactions are today a major new field in synthetic chemistry.

*After his redundancy, Strauss took up a chair professorship at the Queens University in Belfast, Northern Ireland*

### (8) The case of Tony Schlink:

Schlink was made redundant in 2007:

- **“The CSIRO has dumped Australia’s top wool scientist, claiming his internationally acknowledged expertise is now irrelevant”**

- **“The CSIRO Staff Association described Dr Schlink’s redundancy as a tragedy for Australian Science”**
- “Senator Kim Carr described his departure as ‘yet another in a disturbingly long line of highly successful scientists whose research has been abruptly terminated”
- “Senator Rachel Sienert said ... ‘sent a clear message that scientists are not being valued any more”

[Rosslyn Beeby, Canberra Times, 11 Jan 2007](#)

- **“A number of senior agricultural scientists have criticized the decision to sack Dr Schlink. The Dean of Agriculture at the University of Western Australia described [CSIRO] management as engaging in weasel words.”**
- “He was definitely working in consumer oriented wool research – that is, wool shrinkage, dye, fabrics, and the like – two years ago, **and you made the decision to move him**”. ... **“Then you sacked him for not being in the area in which he had a particular world-leading expertise – isn’t that the case?”**

[Senator Kim Carr, Hansard, Senate Estimates Hearings, 14 February 2007](#)

*Schlink went on to join the Western Australian Department of Agriculture and Food*

### (9) The case of Maarten Stapper:

ABCs *Australian Story* aired a program on 1 June 2009 about Maarten Stapper, who worked for CSIRO for 23 years and was then retrenched (- watch the story here:

<http://www.abc.net.au/austory/specials/stapper/default.htm>). Stapper was a CSIRO soil scientist who argued passionately for organic farming. He has been well supported by the farming community. Large parts of the Australian agricultural industry have converted to organic farming. In the program several farmers with whom he worked on organic farming project, hailed his vision and said that Stapper had been a boon to Australian farming.

- **“CSIRO management bullied and harassed him and tried to gag his criticisms of GM (Genetically Modified) crops. He left ... after his position was made redundant”**  
[“CSIRO dumps anti-GM expert”, The Sunday Age, 27 May 2007](#)
- “The Chief of CSIRO Plant Industries Division ... confirmed that Dr Stapper had ... filed complaints alleging ... bullying and harassment”. But these had been “appropriately dealt with and dismissed”.
- “In emails obtained by the Canberra Times, Dr Stapper wrote to a colleague that he had been “isolated” by CSIRO management and there was no support for his area of research”  
[Rosslyn Beeby, Canberra Times, 21 March 2007](#)
- Later CSIRO Plant Industry Deputy Head, T. J. Higgins, undertook a letter-writing campaign urging Australian farmers not to boycott GM products. The campaign allegedly “backfired badly”. “Dr Higgins is ... CSIROs co-inventor of the GM Field Pea, abandoned because toxicologists found it caused immune problems and lung damage in mice”.  
[“CSIRO scientists GM letter campaign backfires” Crickey weekender 21 July 2008](#)

*Stapper currently runs his own private consulting business in Canberra, catering to Australian agriculture. He travels the country educating farmers on how to use less chemicals in their soil and on their crops.*

### (10) The case of Fred Prata:

- Prata discovered a thermal imaging method that could allow aircraft to detect volcanic ash
- Without his approval, CSIRO decided to turn the invention into a spin-off company and appointed a commercial manager to commercialize his discovery.
- Prata complained that the commercialization was premature, - the science was not yet ready
- The manager lined up *Tenix* as a potential client and wanted Prata to “create” a patent before the data needed for it was available.
- Prata refused because the science was not settled and needed more testing.
- **Prata claims to have been pressured and intimidated to sign off on a patent concerning his invention that had been drawn up and lodged without his knowledge or consent, and with which he did not agree.**
- Prata was then made redundant by CSIRO

[“CSIRO Innovation Goes Up in Smoke”, Australasian Science Jan/Feb 2007](#)

- In 2007, Senator Kim Carr asked Dr Steele of CSIRO at the Senate Estimates:  
 “Why was he (Prata) made redundant then?”  
 Answer: “He was made redundant because the project had got to the end of the research phase.” (i.e. because CSIRO believed the research was complete and the technology needed to be commercialized .... )

[Hansard, Senate Estimates Hearings, 14 February 2007](#)

- In effect, the Hansard record appears to indicate that Prata was made redundant for failing to obey a CSIRO directive that directly contradicted his personal scientific judgement, as the expert and the inventor in this case. Effectively it appears that CSIRO demanded he sign off on an invention disclosure that he considered false and, when he refused, they deemed him redundant.

- In 2010 a volcanic eruption in Iceland halted all air traffic over Europe for a week and created worldwide chaos. Prata’s invention could have kept all of those planes flying. A CSIRO spokesman (Bruce Mapsten) said that **CSIRO had “no regrets” about retrenching Prata**

[“Volcano chaos could have been avoided”, ABC 7:30 Report, 29 April 2010](#)

- “There's also a strong message for Australia's matrix management-obsessed science bureaucrats in the career trajectory of atmospheric physicist Fred Prata. Four years ago, he was made redundant by CSIRO and told the invention he'd been working on - an airborne device to detect volcanic ash clouds - was not "value for money". Demoralised and disheartened, he was offered work with the Norwegian Institute for Air Research, who encouraged him to keep working on the technology. Now, one of the world's biggest aircraft manufacturers is testing the wing-mounted radar device, and it's set to become mandatory aviation safety equipment. ... Once the technology becomes commercially available, Australia's loss will be Norway's gain.”

[“Making Science Redundant”, Canberra Times, 29 Dec 2011](#)

*Prata is today a professor at the Norwegian Institute for Air Research (NLU) in Oslo. Several other scientists have alleged to colleagues that they were involuntarily forced to turn their work into spin-off companies. Invariably, such scientists ended up having their careers at CSIRO ruined as a result.*

## (11) The case of Clive Spash:

- Spash wrote a paper raising a series of fundamental problems with carbon trading schemes. The paper was approved by internal reviewers at the CSIRO and sent to a journal with the approval of management. After revision the paper was accepted for publication by the prestigious economics journal, *New Political Economy*.
- Spash was then instructed by CSIRO management to withdraw the paper on grounds of its political sensitivity. Later he was given a list of amendments and changes to the article which he was to accept without questioning, despite these changing the substance and meaning of the article.
- **Considerable pressure was placed upon Spash and his co-author. His CSIRO co-author then withdrew from authorship of the paper**
- **In the media Spash was reported as having been harassed and is reported as stating– “Inappropriate mention of disciplinary action and implied dismissal were cited”.**
- In a letter to Senator Carr, reported in *Nature*, an editor from the journal *New Political Economy* stated they refused to publish the CSIRO-amended version of the paper.
- Spash refused to change the paper and resigned under duress in 2009.
- **On resigning the media reported him as stating: “I have been treated extremely poorly”. “I have been to the doctor under extreme stress”**
- Spash's case and Censorship at the CSIRO was debated in the Senate and his case has been raised repeatedly in Senate Estimates.
- Spash has called for a Senate Enquiry into CSIRO management practices.
  - [“CSIRO scientist resigns, calls for Senate inquiry”, Business Spectator, 3 Dec 2009](#)
  - [“CSIRO in denial over policy debate” news.com.au, 11 Feb 2010](#)
  - [“Scientist quits CSIRO amid censorship claim” Sydney Morning Herald, 4 Dec 2009](#)
- “Clive Spash, an economics professor, quit late last year after CSIRO stopped him publishing a paper critical of the proposed emissions trading scheme. Playing dirty pool, the Minister for Science, Kim Carr, later smeared Spash's reputation under parliamentary privilege, attacking the poor quality of his work. Spash, who now has academic posts in Norway and (soon) Austria, says ... Carr's conduct was "unbelievable" and the quality of his work was only questioned after the dispute went public. "Not only is it a blatant lie - because the paper was accepted for publication in what the Australian Research Council ranks as an A-class journal - but the minister is arguing that he, as a high school teacher, is able to be a better judge of quality than the scientific peer review community and the ARC, in a field in which he has no knowledge at all."
  - [“CSIRO in bed with big coal”, Brisbane Times & Sydney Morning Herald, 3 Jul 2010](#)
- Senator Christine Milne asked the following question of Dr Sandland, Deputy Head of CSIRO in the Senate Estimates of 14 February 2007:
 

“So, there has never been an occasion where a scientific paper has been suppressed or doctored because it may have implications for government policy?”

Sandland answered:

“To the best of my knowledge, a scientific paper has not been doctored or suppressed because of its potential implications for policy. We do, in fact, have an internal review process for our scientific publications”.

  - [Hansard, Senate Estimates Hearings, 14 February 2007](#)

*In 2011, it came to light that the CSIRO CEO held an undeclared interest in a company that was allegedly set to benefit from carbon trading.*

*Spash is currently a professor at the Vienna University of Economics and Business in Austria. More information on his case is available on his personal website is <http://www.clivespash.org/>*

### (12) The case of Warwick Raverty:

Raverty claims to have been subjected to intimidation and bullying while working in a senior position at CSIRO. He resigned from CSIRO in 2009 in protest at his treatment. In his letter of resignation circulated to many staff at the time, he said:

- **“A steady stream of Insight Surveys over the last 5 years has highlighted an ever-widening gap between ... scientists and ... [the] extraordinarily large number of CSIRO administrators who seem to me ... to be a very long way from ... the finest in the land”**
- “any organisation that loses the ability to retain its best and brightest is in serious trouble”
- **“CSIRO has become so bureaucratic ... so dysfunctional, that I no longer see my employment as ... an effective solution to the problems of Australia”**

### (13) The case of Sylwester Chyb:

- **“An award-winning entomologist headhunted from Britain is taking the CSIRO to Federal Court alleging he was harassed, bullied and unlawfully terminated”.**
- “Sylwester Chyb -- an expert in insect neurobiology -- also claims the national research body violated its own misconduct policy by failing to investigate his grievances and tolerating the bullying”.
- “He also alleges in his statement of claim that CSIRO misrepresented details of his employment and failed to meet its contractual obligations”.
- "This is more than a personal dispute," argued Dr Chyb, previously with Imperial College London, where he set up the Laboratory of Molecular Physiology. Dr Chyb claimed international scientists could be put off by his experience and the apparent clash of scientific cultures.”
- Chyb is suing CSIRO in Federal Court. His court date is expected to be in late 2012.  
[“Scientist takes CSIRO to court for bullying”, The Australian 28 June 2011](#)

### (14) The case of Trevor McDougal:

- **“CSIRO Headliner in July, Sacked in November”**
- McDougal was a CSIRO Fellow and member of the Australian Academy of Science. He was a world leader in his field of oceanography and winner of 2011 Prince Albert I Medal, an award given once every two years.
- He was made redundant on Dec 2012 after CSIRO said it could no longer support “fundamental science”. However allegations were immediately levelled that McDougal was punished for speaking out against deeply flawed scientific decisions by management.
- Sources within CSIRO have described Dr McDougall as "a brilliant scientist and critically independent thinker" who openly challenged executive management decisions to move away from fundamental research on world ocean circulation and chemistry. They told *The Canberra Times* they believed that as a consequence of speaking out, Dr McDougall had a

string of research proposals rejected by management review committees, despite gaining support from top international scientists for his work.

- ***The Canberra Times* obtained copies of two internal reports which reveal an independent expert science review panel recommended CSIRO boost and continue support for Dr McDougall's research, praising it as impressive and world-renowned.**
- The redundancy promoted a backlash of criticism from some of the world's top climate scientists, who accused CSIRO of dumping "unique and pioneering" climate research that "was pushing the field ahead in a huge range of areas".
- **More than 160 of the world's top oceans and climate scientists signed a letter emailed to CSIRO chief executive Megan Clark, protesting Dr McDougall's dismissal. In anything but diplomatic terminology the letter said that CSIRO is "relinquishing its responsibility" to global climate science and is "taking definitive steps towards mediocrity" by abandoning "high-impact research".**
- Since Ms Beeby wrote her account in the *The Canberra Times*, *the-funneled-web.com* received an email from a UK reader noting that a second letter carrying over 150 signatures has been sent and which included the newly appointed Minister for Research Senator Chris Evans as a recipient.
- Four months after been made redundant by CSIRO, McDougal was made a Fellow of the Royal Society of London
  - ["CSIRO Headliner in July, Sacked in November". The Funneled Web, Canberra Times, December 25, 2011](#)
  - ["Top Honour for Dumped Researcher", Canberra Times, 21 April 2012](#)
  - ["CSIRO, top scientist could not 'align' their interests", Canberra Times, 15 Feb 2012](#)

# Public Perceptions of a Management Culture of Intimidation, Bullying and Harassment at CSIRO – 5

## Case Study of a CSIRO Division

**The CSIRO Division of Molecular and Health Technologies in 2001-2009**  
**45%-55% of highly-cited scientists involuntarily separated**  
**<9% of other scientists involuntarily separated**

The Institute of Scientific Information's *Citation Index* database, which provides information on the number of times scientific publications have been cited by other scientists in their publications, showed that, over the period of 1998-2009, almost 50% of the group leaders of the most highly cited research groups in the CSIRO Molecular Science Division (Chemistry and Biochemistry) were apparently involuntarily separated from the organization in one way or another. Within the scientific community, the *Citation Index* is widely considered to give a good measure of the importance and impact of the work done by an individual scientist. The more citations a publication attracts, the more significant it is generally considered to be. In several countries, citation statistics are used to determine and justify the public funding afforded scientists.

According to the above database, during 1998-2009, there were 44 scientific publications which attracted 100 or more citations and whose most senior author had the CSIRO Division of Molecular Science as their primary affiliation. These publications came from the research groups of 13 different scientific group leaders.

While few scientific units in Australia could boast such a record of achievement, of the abovementioned 13 group leaders:

- 5 or 6 were, apparently, subsequently involuntarily separated from the organization. That is, they were made formally redundant or placed in allegedly untenable situations which left them with no alternative but to resign. All 5-6 group leaders left after 2001.
- 4 or 5 left voluntarily to take up senior executive positions elsewhere (including as a University Pro-Vice Chancellor, a Company Vice-President, a Company CTO, and as a prestigious Research Fellow). Two of these left during or before 2001; two left after 2001.
- 3 remain in the Division. One of these complained generally to staff about alleged management harassment in the period 2001-2004.

**Thus, the attrition rate due to involuntary separation during 1998-2009, amongst the most highly-cited scientific group leaders in the Division, appears to have been 38%-46% in the period 1998-2009 and 45%-55% in 2001-2009 (5 or 6 out of 11 in 2001-2009 and out of 13 in 1998-2009). Only 23% of the highly-cited scientific group leaders have been retained since 1998 and were still with the Division in early 2009.**

By contrast, apparently only a handful of other scientists were made involuntarily redundant by the Division during 1998-2009. To the best of our knowledge, there was only one round of redundancies for scientists at the Division in the above period, and that was voluntary. On that occasion, it is believed that about 20 scientists and support staff (out of approximately 250 in the

Division) volunteered to become redundant. This equates to <9%. At least some of those were support staff, not scientists.

**The rate of involuntary separation amongst the body of scientists in the Division therefore appears to have been negligible and, certainly, very significantly lower than that amongst the top most cited scientific group leaders.**

This record is, by any measure, extraordinary. Details of the study are given below.

-----  
RESEARCH GROUP LEADERS LISTED ON PAPERS PUBLISHED DURING 1998-2009, WHICH HAD ATTRACTED MORE THAN 100 SCIENTIFIC CITATIONS

(FOR THE *CSIRO DIVISION OF MOLECULAR AND HEALTH TECHNOLOGIES* (2005-2009) AND ITS PREDECESSOR, *THE DIVISION OF MOLECULAR SCIENCE* (1998-2005))

1. Neil Furlong  
(1 publication)            Dr Furlong resigned from the Division in 1999 to become Pro-Vice Chancellor at RMIT.
  
2. Calum Drummond  
(1 publication)        Dr Drummond was seconded from the Division in 2001 to become Vice-President Research at a spin-off company, Cap-XX. He subsequently returned to CSIRO to become Chief of the Division of Materials Science and Engineering.
  
3. Liming Dai  
(6 publications)        Dr Liming Dai and his group discovered how to synthesize carbon nanotubes in aligned arrays. He published numerous ground-breaking and high profile papers in this respect. In 2001, his research group was allegedly turned into a "virtual" company without his knowledge, input, or approval. Dr Dai was allegedly placed in an untenable position and resigned. He is presently a distinguished professor at Case Western Reserve University in the USA.
  
4. Hans Griesser  
(2 publications)        Dr Hans Griesser left the Division suddenly in 2001/2 after a new Division Chief, Dr Annabelle Duncan, was appointed. Dr Griesser is now Deputy Director of the Ian Wark Institute at the University of South Australia.
  
5. Ezio Rizzardo  
(18 publications)        Dr Rizzardo is a CSIRO Fellow and a highly regarded scientist at CSIRO and in Australia. Rizzardo remains in the Division and is one of the most cited CSIRO scientists of all time.
  
6. Graeme Moad  
(1 publication)  
(Rizzardo not an author)        Dr Moad remains in the Division.
  
7. Ruth Hall  
(2 publications)        Dr Hall was retrenched from the Division in 2003 under controversial circumstances. Within two years she was elected to the Australian Academy of Sciences. She is currently a professor at Sydney University.

8. Susan Clark  
(4 publications) Dr Clark was based in the Sydney laboratories of the Division and left to join the prestigious Garvan Institute as an NHMRC Research Fellow.
9. Chris Strauss  
(2 publications) Dr Straus is internationally considered a “father” of microwave chemistry. He was the recipient of numerous awards. In 2005, he won the prestigious Birch Medal, awarded by the *Royal Australian Chemical Institute*. He was the first-ever CSIRO recipient of the medal. In 2006, he was allegedly involuntarily separated by the Division. Dr Strauss currently holds a chair position at Queens University in Belfast, Northern Ireland.
10. Colin Ward  
(2 publications) Dr Ward was allegedly separated from the Division under controversial circumstances within weeks of winning the CSIRO Chairman’s medal in 2006. Dr Ward has since won numerous awards, including, in 2007, the prestigious Lemberg Fellowship of the Australian Academy of Science. Dr Ward is currently a Fellow at the Walter and Eliza Hall Institute of Medical Research.
11. Tim Adams  
(1 publication) Dr Adams remains in the Division working on, amongst others, the Insulin EGF receptor family that Dr Ward pioneered.
12. Peter Hudson  
(2 publications) Dr Hudson is believed to have left CSIRO (in 2007/8) to become CSO at a spin-off company, AviPep.
13. Gerhard Swiegers  
(2 publications) Dr Swiegers was allegedly involuntarily retrenched in 2009 after complaining about bullying/harassment and commercial impropriety.

(Total: 44 highly-cited publications)

(Note: there were 2 other publications in which individual CSIRO scientists were listed as minor authors which received more than 100 citations)

---

# The “Culture Clash” Between CSIRO Management and Scientists

## – “Guaranteed to Damage Successful Commercialisation”

It is often said that there is a culture clash at CSIRO: between management and scientists.

We don't believe that the culture clash arises from the need for commercialisation in CSIRO. Most scientists are keen to commercialize their work.

Rather, in our opinion, it arises because of a management culture of endemic intimidation, bullying, and harassment of scientists. This is borne out, in our opinion, by the fact that some scientists whose professional careers have been solely focussed on commercialisation have claimed intimidation at the hands of CSIRO management.

In our opinion, this management culture makes it impossible to do anything other than have a “culture clash” with the scientists.

We further believe that it is impossible for CSIRO to ever be a successful commercialisation agent if its managers are abusive toward the scientists, who make the discoveries and inventions. Managers and scientists need to work together to commercialise products. A failure to do so is guaranteed to damage commercialisation efforts.

### Ian Townsend said:

- “That restructuring [toward an overly hierarchical and bureaucratic management structure] has triggered a cultural clash inside the organisation, between the scientists and the management”

[“Culture Wars at CSIRO”, ABC Background Briefing, 15 August 2010](#)

### Hugh Tyndale-Biscoe said:

- “CSIRO is not a company and was never supposed to be”
- “Under its current leadership ... its senior officers carry management ... titles and use the language of business” [even though they are often scientists elevated to management]

[“CSIRO: Research for science or corporate profit?”, Green Left Weekly, 29 March 2006](#)

### Julian Cribb says:

- “Australia (and CSIRO has got it wrong when it comes to commercializing science. No other country [does it] ... like we do, and we are a notable failure in that regard”
- **“We’re closing things down”**
- **“We’re not sharing the knowledge. We’re not getting as taxpayers the benefit ... that we [should]”**

[“Culture Wars at CSIRO”, ABC Background Briefing, 15 August 2010](#)

# CSIROs Official Response to Claims of Management Bullying, Intimidation, and Harassment

## Official CSIRO Position:

- **“CSIRO does not gag its scientists”**

[CSIRO Media release 13 February 2006, updated 14 October 2011](#)

See also: [Sydney Morning Herald, 16 Feb 2006](#)

## Geoff Garrett, Chief of CSIRO, until 2009 said:

- **“CSIRO has always trusted its staff to be “front line” communicators”**
- **“CSIRO’s reputation will be damaged if all levels of leadership ... do not continually reaffirm this trust”**
- **“We are proud of our science and our scientists”**

[Email to all CSIRO staff by Geoff Garrett 13 June 2006:](#)

- **“We have strengthened the rigour and transparency of ... [our science investment process] (that is, deciding what research to do)**
- **“Our decisions are based on a comprehensive analysis of economic, social, and industry data ... and our capabilities and record”**

[“CSIROs priorities are informed and intelligent”, Letter to the Canberra Times, 3 Feb 2006.](#)

## Megan Clark, Chief of CSIRO, from 2009 said:

**“Senator, we do not have a serious problem with the issue [workplace bullying].** But making sure that our workplaces are the right environment for innovation and making sure that we have an environment of trust and respect across our workplaces is something that is imperative to us and something where we look to make sure that has improved.”

- **“In terms of the complaints that we have had in the year to date, we have only had a couple of cases [of workplace bullying].** In terms of my involvement, I certainly make sure we have the right team involved in them. I make sure, particularly in complex issues, that we have the right expertise. So I do ensure that the right team is working on these programs.”

[Megan Clark, Hansard, Senate Estimates, 28 May 2012](#)

# Shortcomings in CSIROs Legal Environment – 1

## Existing Laws Appear to Leave CSIRO Staff Unprotected From Even Very Serious OH&S Issues, Including Death

The death of Set Van Nguyen offers an example:

- Set Van Nguyen, a CSIRO scientist, died in an industrial accident on a CSIRO site
- In 2006, a Victorian Safety inspector told a Coroner:
  - **“CSIRO should have been prosecuted [for the death]”. “I would have recommended prosecution”, but “CSIRO cannot be charged because the agency was protected from prosecution ... under the ‘shield of the crown’**  
[“CSIRO should have been prosecuted”, The Age, 8 June 2006](#)
- **“A troubling report ... suggests that certain government agencies cannot be prosecuted for systematic occupational health and safety breaches that kill workers”**  
<http://solidarity.redrag.net/2006/06/08/csiro>
- **“The ‘shield of the crown’ should protect employees, not workplace killers”**  
[“Where was Set Van Nguyen’s Shield?”, Solidarity, 8 June 2006](#)

## Shortcomings in CSIROs Legal Environment – 2

### CSIRO Appears to Fall Outside of Normal Judicial Oversight in Many Aspects

Existing laws appear to leave CSIRO outside of normal judicial oversight of commercial and other dealings. Where there is oversight, it appears to be political, not judicial. This has proved totally inadequate, especially as CSIRO has increasingly involved itself in formal commercial activities.

- [Corporations Act](#)
  - Every company in Australia must adhere to this Act in the course of carrying out business, but not public authorities like CSIRO – even when it is engaging in commerce (e.g. when setting up and running spin-off companies).
  - CSIRO Directors are not subject to this Act, only to the relevant minister in the government of the day.
  - In cases of alleged breaches of directors duties by the CSIRO Directors, the minister will make a political decision about the alleged breach, not a legal one. The Directors of every other commercial entity in Australia are subject to legal decisions as to their conduct
  
- [Commonwealth Authorities and Companies Act](#)
  - This Act covers the conduct of “officers” of Commonwealth Authorities, which are defined as “senior managers that make decisions which affect the whole of the Authority”.
  - In so doing, the Act may exclude the commercial conduct of managers at Divisional level, where most of the CSIRO commercialization transactions are carried out
  - Only the Finance minister can initiate a prosecution under this Act – this will again be a political and not a legal decision. In the case of wrongdoing by a CSIRO commercialisation manager, the minister would, arguably, be in a conflict-of-interest position in wanting to protect the Commonwealth from a possible liability to a wronged commercial partner of CSIRO.
  
- [The Science and Industry Research Act](#)
  - This Act leaves the conduct of CSIRO commercial staff entirely to the chief of CSIRO
  - But the CSIRO Chief arguably would have a conflict-of-interest position in the event of commercial wrongdoing by a staff member against a commercial partner. The Chief would want to protect CSIRO from a possible liability and would be under no obligation to do anything about the misconduct – indeed, they would have an incentive to deny it and stop anything being done about it.