ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

AGENCY/DEPARTMENT:

DEPARTMENT OF INDUSTRY, TOURISM AND RESOURCES

OUTCOME/OUTPUT:

Outcome 2, Outputs 2.1 and 2.2

TOPIC:

NATIONAL STEM CELL CENTRE

REFERENCE:

HANSARD 1/6/04, PAGES E27-38

#### **QUESTION No.48**

(Hansard 1/6/04, p.E27)

## Senator Harradine asked about:

When did the government first advise you of the extra money going to the National Stem Cell Centre?

#### **ANSWER**

The Government first formally advised the Department of Industry, Tourism and Resources (DITR) of the extra money going to the National Stem Cell Centre (NSCC) on 6 May 2004.

#### **QUESTION No.49**

(Hansard 1/6/04, p.E28)

#### Senator Harradine asked about:

Where is the statement made by the minister? [Minister made a determination on what could be released and what could not be released based on Commercial in Confidence].

Has the minister consulted the other ministers involved?

#### **ANSWER**

Minister Macfarlane wrote to Senator George Brandis on 1 June 2004, confirming that the redacted information in the NSCC Business Plan (provided to Senator Harradine in response to Senate Estimates on 5 November 2003) was removed as the Minister deemed the information to be commercial in confidence, release of which would prejudice the NSCC. The Minister's correspondence was tabled in the Senate Economics Legislation Committee on 2 June 2004.

DITR consulted the Minister for Industry, Tourism and Resources regarding the release of the NSCC's Annual Report in December 2003 in response to 5 November 2003 Senate Estimates. The Minister indicated that the commercially-sensitive information contained in NSCC Annual Report should not be released. DITR has previously provided a redacted copy of the NSCC's Annual Report with the commercially sensitive parts of the document removed. The NSCC's quarterly reports also contain commercially-sensitive information.

Minister Macfarlane has consulted Minister Nelson.

# ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

# **QUESTION No.50**

(Hansard 1/6/04, p.E29)

## Senator Harradine asked about:

Do you have copies of the last two quarterly reports and also the annual reports? Could you provide the committee with copies?

#### **ANSWER**

The NSCC has provided DITR and the Australian Research Council (ARC) with quarterly reports covering the September to December quarter 2003 and the March quarter 2004 as well as an annual report for 2002-03, in accordance with the reporting requirements under the Centre of Excellence Deed of Agreement between the Commonwealth and the NSCC. These reports outline the strategic, commercial and research priorities of the NSCC as well as the prioritisation of NSCC activities, patenting intentions, commercialisation strategies, potential collaborators, research areas and therapeutic targets. Disclosure of NSCC reports would undermine the NSCC's commercial interest and prejudice its ability to deliver against its objectives in the Deed.

DITR consulted the Minister for Industry, Tourism and Resources regarding the release of the NSCC's Annual Report in December 2003 in response to 5 November 2003 Senate Estimates. The Minister indicated that the commercially-sensitive information contained in NSCC Annual Report should not be released. DITR has previously provided a redacted copy of the NSCC's Annual Report with the commercially sensitive parts of the document removed. The NSCC's quarterly reports also contain commercially-sensitive information.

The reports are not disclosed.

#### **QUESTION No.51**

(Hansard 1/6/04, pp.E29, 30)

#### Senator Harradine asked about:

Are there any clinical trials around the world currently under way exploring the use of embryonic stem cells for human treatment?

#### **ANSWER**

We are aware that at least one clinical trial is underway which is exploring the use of embryonic stem cell treatment for sufferers of Parkinson's Disease. The results of this trial are reported in the journal *Archives of Neurology*, Volume 61, page 858.

# ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

## **OUESTION No.52**

(Hansard 1/6/04, p.E30)

## Senator Harradine asked about:

You are not giving us all the milestones. Have you not ascertained that information from the National Stem Cell Centre?

#### ANSWER

One of the mechanisms that the Commonwealth employs to assess the performance of the NSCC in delivering on its Deed Objectives, is the use of Key Performance Indicators (KPIs). KPIs form part of the Business Plan and set out targets for the financial years 2003/04, 2004/05 and 2005/06. KPIs are reviewed annually. Payment of DITR and ARC funds to the NSCC are based on satisfactory performance of the NSCC as measured by the KPIs.

The specific KPIs agreed between the NSCC and Commonwealth have been designed to address the range of Objectives that the NSCC is required to achieve. A summary of the categories of KPIs are as follows:

#### Research productivity

KPIs in this category measures the quality and originality of research through journal publications, conference presentations and patent applications filed. They also measure the NSCC's effectiveness in managing research activities through achievement of milestones.

## Commercialisation

KPIs in this category measure the commercial potential of research through the number and type of agreements entered into by NSCC.

## Promotion, Education and Linkages

KPIs in this area require the NSCC to host an annual conference that is internationally recognised. They measure the ability of the NSCC to attract experienced international scientists, the level of interaction with leading international research groups and the degree to which scientists are invited speakers at international conferences. KPIs in this area also measure the NSCC's ability to promote its activities at conferences, through the media and via the internet to the broader community. Furthermore, specific KPIs measure the number of students working and graduating with the NSCC and the degree to which NSCC scientists participate in academic teaching and NSCC provided training sessions.

## Progress to Financial Independence

KPIs in this area measure the degree to which the NSCC leverages the Commonwealth grant with funding from a range of sources.

# Compliance with Law, Ethics and Biological Standards

KPIs in this area require the NSCC to confirm compliance with laws, ethical standards and good corporate governance.

# ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

#### **MNRF**

KPIs in this area measure the level of activity of the MNRF and satisfaction of users.

Details of the following KPIs were provided to Senator Harradine in the redacted business plan following the November 2003 Senate Estimates Hearing:

- Leadership and Achievement of Vision through International Recognition;
- Research Productivity;
- Education and Communication;
- Governance and Standards; and
- MNRF Specific Indicators.

## **QUESTION No.53**

(Hansard 1/6/04, p.E31)

## Senator Harradine asked about:

How much money is being spent on embryonic stem cell research? How much is earmarked for such research?

#### **ANSWER**

The NSCC expenditure forecasts for 2003-04 predict that approximately \$2.28 million will be spent on mouse embryonic stem cell research, approximately \$1.53 million will be spent on human embryonic stem cell research and approximately \$1.92 million on adult stem cell research.

Funding for embryonic stem cell research in future years has not been determined as the NSCC has not finalised its research program.

## **QUESTION No.54**

(Hansard 1/6/04, p.E31)

## Senator Harradine asked about:

Would you provide the committee with that response [referring to up-to-date financial details in respect of the National Stem Cell Centre]?

#### **ANSWER**

| Income and Expenditure Statement From incorporation to 31 March 2004 | DITR<br>Funds<br>\$ | ARC<br>Funds<br>\$ | TOTAL<br>\$ |  |  |
|--|---------------------|--------------------|-------------|--|--|
| Income   |                     |                    | 12 500 524  |  |  |
| Australian Government grant income                                   | 7,000,000           | 6,598,524          | 13,598,524  |  |  |
| Interest income  | 98,197              | 173,756            | 271,953     |  |  |
| Total income   | 7,098,197           | 6,772,280          | 13,870,477  |  |  |
| Expenditure  |                     |                    | 2.500.525   |  |  |
| Centre establishment, research management and                        | 3,599,525           | -                  | 3,599,525   |  |  |
| business development   | 646,260             | -                  | 646,260     |  |  |
| Education and promotion expenses                                     | 1,533,338           | 995,181            | 2,528,519   |  |  |
| Expenditure in respect of research programs                          |                     | 995,181            | 6,774,304   |  |  |
| Total expenditure  | 5,779,123           |                    |             |  |  |
| Net unexpended funds   | 1,319,074           | 5,777,099          | 7,096,173   |  |  |

# ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

## **QUESTION No.55**

(Hansard 1/6/04, p.E32)

## Senator Harradine asked about:

How much money is being spent on adult stem cell research by the National Stem Cell Centre?

#### **ANSWER**

The NSCC expenditure forecasts for 2003-04 predicts that approximately \$1.92 million will be spent on adult stem cell research.

#### **OUESTION No.56**

(Hansard 1/6/04, p.E32)

## Senator Harradine asked about:

Would you provide names and details of those members of the [scientific] committee?

#### **ANSWER**

The National Stem Cell Centre has two committees which provide scientific advice to the Executive Management team. They are the Scientific Management Advisory Committee and the Executive Scientific Operations Committee.

The Executive Scientific Operations Committee oversees the *implementation* of the research activities of the NSCC Ltd. It is comprised of Directors of Research and Senior Scientists of the NSCC Ltd including:

- Associate Professor Martin Pera
- Dr Andrew Elefanty
- Prof Peter Rathjen
- Associate Professor Paul Simmons
- Dr Stephen Livesey
- Associate Professor Richard Boyd
- Professor Richard Harvey
- Professor Alan Trounson

The Scientific Management Advisory Committee advises the Executive Management of the NSCC Ltd on other research related matters. The composition of this committee is being finalised.

# ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

# **QUESTION No.57** (Hansard 1/6/04, p.E34)

## Senator Harradine asked about:

I have asked specifically how much money has been spent on embryonic stem cell research by the National Stem Cell Centre and how much money has been spent on adult stem cell research by the National Stem Cell Centre.

Will that include details of projects 1 to 13, plus whatever projects have been included since the last estimates committee?

#### **ANSWER**

The NSCC research expenditure forecasts for 2003-04 predicts that approximately \$1.92 million will be spent on adult stem cell research.

The NSCC expenditure forecasts for 2003-04 predicts that approximately \$2.28 million will be spent on mouse embryonic stem cell research and approximately \$1.53 million will be spent on human embryonic stem cell research.

Details of expenditure for individual projects are provided below which includes projects 1-13.

#### National Stem Cell Centre Project Allocation by Technology Forecast year ended 30 June 2004

|                          | Adult      | Percentage Allocation<br>Human embryonic | Mouse embryonic<br>Stem Cells |  |  |
|--------------------------|------------|--|-------------------------------|--|--|
| Project                  | Stem Cells | Stem Cells                               |                               |  |  |
| Project 01               | 50%        | 25%                                      | 25%                           |  |  |
| Project 02               | 50%        | 25%                                      | 25%                           |  |  |
| Project 03               | 0%         | 50%                                      | 50%                           |  |  |
| Project 04               | 0%         | 80%                                      | 20%                           |  |  |
| Project 05               | 0%         | 50%                                      | 50%                           |  |  |
| Project 06               | 0%         | 0%                                       | 100%                          |  |  |
| Project 07               | 0%         | 20%                                      | 80%                           |  |  |
| Project 08               | 0%         | 20%                                      | 80%                           |  |  |
|                          | 0%         | 30%                                      | 70%                           |  |  |
| Project 09<br>Project 10 | 0%         | 30%                                      | 70%                           |  |  |
| •                        | 95%        | 0%                                       | 5%                            |  |  |
| Project 11               | 100%       | 0%                                       | 0%                            |  |  |
| Project 12               | 95%        | 0%                                       | 5%                            |  |  |
| Project 13               | 70%        | 10%                                      | 20%                           |  |  |
| Project 14               | 100%       | 0%                                       | 0%                            |  |  |
| Project 15               | 100%       | 0%                                       | 0%                            |  |  |
| Project 16               | 0%         | 20%                                      | 80%                           |  |  |
| Project 17               | 0%         | 30%                                      | 70%                           |  |  |
| Project 18<br>Project 19 | 100%       | 0%                                       | 09                            |  |  |

# Senate Economics Legislation Committee ANSWERS TO QUESTIONS ON NOTICE Industry, Tourism and Resources Portfolio Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

National Stem Cell Centre Analysis of Expenditure by Project Forecast year ended 30 June 2004

|                      |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                   | 33 60/                                | 26.2%            | 39.7%                      | :                          |                   |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------------|---------------------------------------|------------------|----------------------------|----------------------------|-------------------|
| Funding to 30-Jun-04 |            | 480,000    | 570,069    | 647,398    | 150,000    | 195,000    | 253,733    | 812,708    | 358,958    | 963,514    | •          | 315,000    | 80.304     | 11 950     | 020 007    | 490,970    | 000,001    | 86,800     | 150,687    | 5,727,091         | 000 7                                 | 1,924,400        | 1,521,011                  | 2,5,5,5,5                  | 180,121,0         |
|                      |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                   |                                       | 26.2%            | 25.4%                      | 40.470                     |                   |
| Funding to 31-Mar-04 | 1 1        | 100,000    | 100,000    | 100,000    | 150,000    |            | 100,000    | 100,000    | 50,000     | 152,927    | ı          | 50,000     | 80 304     | 44.050     | 008,11     |            | 1          | i          |            | 995,181           | !                                     | 260,943          | 253,030                    | 401,201                    | 995,181           |
|                      |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                   | Analysis of Expenditure by Technology |                  | ells                       | ells                       |                   |
| Project              |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | iture             | f Expenditu                           | ells             | yonic Stem Ce              | onic Stem Ce               | liture            |
|                      | Project 01 | Project 02 | Project 03 | Project 04 | Project 05 | Project 00 | Project 07 | Project 00 | Project 03 | Project 10 | Project 11 | Project 12 | Project 13 | Project 14 | Project 15 | Project 16 | Project 17 | Project 18 | Project 19 | Total expenditure | Analysis of                           | Adult Stem Cells | Human Embryonic Stem Cells | Mouse Embryonic Stem Cells | Total expenditure |

# ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

## **QUESTION No.58**

(Hansard 1/6/04, p.E35)

# Senator Harradine asked about:

Would you provide the committee with all of the grantees through the National Stem Cell Centre?

#### **ANSWER**

NSCC grantees include:

- Peter MacCallum Cancer Centre
- Monash University
- Victor Chang Cardiac Research Institute
- University of Adelaide
- University of Queensland
- University of New South Wales
- Murdoch Children's Research Institute
- University of Western Australia
- University of Sydney
- Mater Medical Research Centre

Some of these institutions have received funding for research projects, while others have received funding of students through the NSCC scholarship program.

#### **QUESTION No.59**

(Hansard 1/6/04, p.E36)

#### Senator Harradine asked about:

When did meetings take place between the National Stem Cell Centre and you or ministers?

#### **ANSWER**

Meetings between the NSCC, DITR, ARC and DEST take place on a regular basis to ensure the Australian Government representatives are kept fully informed of the NSCC's progress. At these meetings the NSCC has indicated that long term Government funding is essential to ensure the NSCC is able to deliver against its objectives under the Deed of Agreement.

# ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

## **QUESTION No.60**

(Hansard 1/6/04, p.E37)

## Senator Harradine asked about:

Would you be able to provide the committee with details of those researchers and institutions that are conducting that [adult stem cell] research?

#### **ANSWER**

Research involving adult stem cells will be undertaken by teams of scientists at the Peter MacCallum Cancer Centre, Monash University, the Murdoch Children's Research Institute, the Victor Chang Cardiac Research Institute and the University of NSW. This will include teams headed by Associate Professor Paul Simmons from the Peter MacCallum Cancer Centre and Professor Richard Harvey from the Victor Chang Cardiac Research Institute.

#### **OUESTION No.61**

(Hansard 1/6/04, p.E37)

#### Senator Harradine asked about:

Could you provide a copy of that [what was agreed and put forward in the original documentation that went to the expert group that made a judgment in respect of the Biotechnology Centre of Excellence]?

#### **ANSWER**

This document was requested at 5 November 2003 Senate Estimates. DITR's response remains the same.

In April 2002, the Chairman of the Biotechnology Centre of Excellence Panel of Experts, Dr Peter Jonson, wrote to members of the Biotechnology Ministerial Council outlining the recommendations of the Panel of Experts on the Biotechnology Centre of Excellence. The document contains sensitive information which, if disclosed, will be damaging to those applicants who were not recommended for selection. The document is also an internal ministerial deliberative document in which the Panel of Experts discussed certain confidential and commercially-sensitive information of the applicants for deliberation by Ministers.

DITR consulted the Minister for Industry, Tourism and Resources. The Minister indicated that this document should not be released given the confidential nature of the document.

# ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

#### **OUESTION No.62** (Hansard 1/6/04, p.E38)

## Senator Harradine asked about:

In relation to the National Stem Cell Centre ... what is meant when they refer to the integration of adult stem cell and embryonic stem cell research? All I want to know is what is meant by 'integrate'?

#### **ANSWER**

The NSCC has informed us that in this context integration means identifying and utilising synergies or crossover between embryonic stem cell research and adult stem cell research. For example, recognition of embryonic stem cells as they form specialised tissues can be used to identify adult stem cells in various organs or tissues. Alternatively, factors which control adult stem cells, for example Bone Morphogenic Protein, which stimulates the formation of bone in the adult, also controls the differentiation of embryonic stem cells. Therefore knowledge gained in one system can be applied in the other - increasing the fundamental understanding of stem cell biology.

Researchers that are funded by the National Stem Cell Centre may specialise in adult stem cells, human embryonic stem cells or mouse embryonic stem cells or choose to specialise in multiple stem cell technologies. The National Stem Cell Centre accommodates scientists that do not wish to or are precluded from participating in embryonic stem cell research. For example, while the Victor Chang Cardiac Research Institute is one of the eight NSCC stakeholder institutes, researchers at the Victor Chang Cardiac Research Institute do not undertake any research involving human embryonic stem cells.