

## EDUCATION, SCIENCE AND TRAINING

### SENATE LEGISLATION COMMITTEE – QUESTIONS ON NOTICE 2003-2004 ADDITIONAL ESTIMATES HEARING

**Outcome:** 1  
**Output Group:** ARC

#### **DEST Question No. E705\_04**

Senator Harradine asked on 18 February 2004, EWRE Hansard pp. 34.

#### **Question:**

Mr HARPER – My understanding, pending receipt of the end-December report, which is due imminently, is that there are programs being supported in both embryonic and adult stem cell research probably at the first level of approximation in roughly equal proportion.

Senator HARRADINE – Could the committee have that information when it is available? Did you say it is likely to be available in the next month?

Mr HARPER – It would be available to the Commonwealth. We would need to take advice as to what extent the information could be made publicly available.

#### **Answer:**

*Proportions of research in embryonic and adult stem cells*

The ARC has provided the following response:

The priority of the NSCC is to fund research that will potentially lead to therapeutic outcomes, not to promote one particular area of science. Work is taking place within the NSCC on both embryonic and adult stem cells and integrated research between the disciplines is advocated wherever possible in order to best achieve clinically relevant results. The NSCC believes that research outcomes from fundamental embryonic stem cell research are potentially very valuable to the use of adult stem cells clinically.

The embryonic stem cell research in the NSCC includes work on non-human animal systems as well as human systems and much of the work being pursued in the embryonic stem cell research of the NSCC is actually being undertaken with mouse embryonic stem cells as well as with human embryonic stem cells. For example, important cardiac research will be undertaken using mouse embryonic stem cells at the Victor Chang Cardiac Research Institute, a stakeholder that does not condone research into human embryonic stem cells. The research outcomes from this work are potentially beneficial in the use of adult and human embryonic stem cells in future therapeutics and an understanding of a non-human cardiac model will provide a method of testing certain therapeutics pre-clinically.

The approximate breakdown of the percentage of research taking place on the different cell types within the prioritised NSCC projects, on a project-by-project percentage basis, is as follows:

	Human Embryonic Stem Cells	Mouse Embryonic Stem Cells	Adult Stem Cells
Project 1	25	25	50
Project 2	25	25	50
Project 3	0	50	50
Project 4	80	20	0
Project 5	40	60	0
Project 6	0	100	0
Project 7	20	80	0
Project 8	30	70	0
Projects 9 and 10*	50	50	0
Projects 11 and 12*	0	0	100
Project 13	0	0	100

\*These projects will be undertaken in a single laboratory

An estimate of the research activities taking place within the NSCC would include 25% research using human embryonic stem cells, 43% research using mouse embryonic stem cells, and 32% research using adult stem cells.

These percentages of work are based on proposed allocations of time to work on each of the cell types in each of the projects. Research will not begin until a final statement of work is agreed upon and ethics approvals obtained and documented with the Australian Government.