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Media Statement

## **EPIGENETICS: THE SCIENCE THAT'S CHANGING MEDICINE**

Perth is preparing to host a national conference that will turn the spotlight on the emerging field of epigenetics – the science that unravels the reasons why genes behave in a certain way.

Western Australian Institute for Medical Research (WAIMR) Professor David Ravine said epigenetics was a major new scientific frontier offering benefits for a huge range of disciplines and professions.

“Epigenetics looks at the effects of environmental changes on the behaviour of genes, so it has a large scope for application in industries including medicine, agriculture, horticulture, zoology and much more,” he said.

“Epigenetics can help us explain many biological phenomena from why spring flowers bloom earlier and better after a cold winter to why a small number of IVF babies are abnormally large at birth.

“It also allows us to understand what causes a gene to switch on or off at particular times and this can help us for example figure out how to ‘turn off’ harmful genes that cause abnormal cell growth in cancer.”

Professor Ravine said epigenetic changes altered the way inherited genes functioned, without altering the genetic code itself.

“Recent epigenetics research suggest that a person’s risk of developing diseases through their life is influenced before birth – and also that the changes controlling this can sometimes be passed down through the generations,” he said.

“Epigenetics opens up a whole new line of potential medical treatments we’ve never known about.

“It will also no doubt assist us to treat other conditions like high cholesterol, diabetes and heart disease.”

The Epigenetics 2007 Australian Scientific Conference, to be opened by WA Industry and Enterprise Minister Francis Logan, will feature a host of international experts from a range of scientific disciplines, who will present exciting new research findings.

**The Conference will be held at the Perth Convention and Exhibition Centre, from November 4 to 7. To be a part of the conference, please contact EventEdge at [info@eventedge.com.au](mailto:info@eventedge.com.au) or call (08) 9389 1488.**

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