

**PROSTATE CANCER AWARENESS MONTH STORY OPPORTUNITY**

**Sydney researchers establish new prostate cancer model**

## MEDIA RELEASE

### **New cancer cell line could help explain the spread of prostate cancer to bones**

**Monday 7<sup>th</sup> September 2009:** Sydney researchers led by Dr Carl Power have successfully established a prostate cancer cell line in mice which is being used to study what drives the growth of secondary prostate cancer cells in the bone.

The cancer cell line is derived from mice and has a high propensity to spread (metastasise) to bone when injected into the arterial circulation of recipient mice,

This bony metastases model is unique, allowing cellular interactions between tumour cells and normal cells from the same species, a “syngeneic” system. Because of this breakthrough, research on bone metastasis of prostate cancer no longer relies on using human cancer cells grown in mice with depleted immune systems which do not allow all the potential interactions between cancer and normal cells to occur.

Studies of bony metastasis in a “syngeneic” system offer promise for further research to understand what drives the secondary growth of prostate cancer cells in bones and for trialling new drugs and therapeutic combinations.

The research being conducted at the Prince of Wales Clinical School, University of New South Wales has been assisted by partial funding from the Prostate Cancer Foundation of Australia (PCFA) and has recently been published in the international journal *The Prostate*.

Professor Pamela Russell, from the Oncology Research Centre at Prince of Wales Clinical School, says the new model will allow researchers to gain more understanding of the occurrence of prostate cancer bony metastasis.

“Most studies of prostate cancer use human prostate cancer cells in mice with depleted immune systems. Due to the unique way tumour cells interact with normal host cells of the same species, this doesn’t allow for all the normal cellular interactions to occur, which really limits our understanding about why prostate cancer cells migrate to the bones,” said Professor Russell.

“We have created a new model where mouse prostate cancer cells metastasise to bone in normal mice, causing multiple bone tumours in 95% of mice injected with the cells and forming lesions that mimic those in men with prostate cancer. This now gives us a model which can really help us in developing future treatments,” said Professor Russell.

The research developments into bony metastases from prostate cancer have been announced at the start of Prostate Cancer Awareness Month in September. The Prostate Cancer Foundation of Australia has launched a new campaign themed “The Difference is You” to remind people of the significant difference they can make in reducing the impact of prostate cancer by helping to support ongoing research into new treatments.

Andrew Giles, CEO of the Prostate Cancer Foundation of Australia, is proud to support Professor Russell’s research and hopes that donors’ generosity can allow them to continue funding in the future.

“Researchers like Professor Russell are paving the way for more adequate treatments and diagnostic strategies for prostate cancer. That is why PCFA has a Research Grants Program which funds medical research annually. We rely on the generosity of the general public and corporate Australia to continue our research support program and we hope that Prostate Cancer Awareness Month reminds people how they can help us keep our research program active,” said Mr Giles.

**Ends**

For more information please contact Martin Palin (0418 419 258) or Karina Candia (0402 307 056) at Palin Communications on 02 9412 2255

For further information about prostate cancer, talk to your doctor or contact the Prostate Cancer Foundation of Australia on free-call 1800 22 00 99, or visit [www.prostate.org.au](http://www.prostate.org.au)