



## **The fallopian tube as the origin of epithelial ovarian cancers**

Recent evidence suggests that many epithelial-type ovarian tumours may arise on the fimbriae of the fallopian tubes. We are establishing fallopian tube cell lines to investigate the molecular biology behind this phenomenon.

Serous epithelial ovarian tumours (EOC's) are the most common tumour type observed in ovarian cancer patients; however their molecular subtype and point of origin remain unclear. Recent evidence suggests that many aggressive EOC's may be classified as "type II", based on a common molecular p53 signature and similar characteristics in growth; furthermore, these type II EOC's may in fact originate on the fimbriae of the fallopian tubes and subsequently metastasize to the ovarian and peritoneal surfaces. By definition, these aggressive type II tumours are already late stage at their inception, thus it is essential to detect them early before they have metastasized.

In collaboration with Steroid Receptor Biology laboratory, we are attempting to establish both primary and immortalized fimbrial cell lines to investigate the molecular biology behind the predicted fimbrial precursor lesion that may give rise to many EOC's. This is of particular relevance for women with predisposing mutations, such as are found in the BRCA1/2 genes, who run a higher lifetime risk of developing ovarian tumours than the general population.

Once established these fimbrial cell lines will be used in a series of new projects aimed at the molecular analysis of ovarian tumour progression, and in the identification of early stage markers of type II tumour formation.



### **Team – Fallopian tube cells**

- Dr Andrew N. Stephens
- Dr Simon Chu
- Dr Adam Rainczuk
- Dr Katie Meehan
- Mrs Nicole Fairweather
- Ms Rebecca Crook

### **Collaborators - internal**

- Professor Peter Fuller, NHMRC Principal Senior Research Fellow, Head, Molecular Endocrinology Laboratory, Prince Henrys Institute, Head of Endocrinology, Southern Health

### **Collaborators - external**

- Professor Tom W. Jobling, Head, Department of Gynaecological Oncology, Monash Medical Centre



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