

## "We have a very broad genetics program within the UK"

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- **Dr Paul Scotting**, senior lecturer in Genetics, Institute of Genetics, University of Nottingham.

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### top on research being done at your institute?

The Institute of Genetics is one of Nottingham University's acknowledged strengths in research. We excel in areas of biological research, from genes to genomes, from molecules to cells, from model organisms to humans. We have a very broad genetics program within the UK. One of the unusual features of our genetics department is that we maintain a range of genetics. So as such we have disciplines like developmental genetics which is my field, human genetics, and then we have a strong history in population evolution, fungal biology and genetics and we also have molecular microbiology and genome dynamics.

Basically our research interests lie in molecular neurogenesis and neuro-oncology and the techniques involved which includes in situ hybridization, in vivo electroporation, chick embryo and zebra fish manipulation.

Our group focuses on the eukaryotic gene expression and the genetics of vertebrate embryonic development. Our work on the control of gene expression address the machinery used by cells to achieve appropriate levels of functional transcripts. These studies include control of transcription and the mechanisms of RNA maturation.

My interests lie in the molecular basis of nervous system development in vertebrates, especially the role of transcription factors in neurogenesis and paediatric brain tumours.

**What do you feel about the potential applications of stem cells?**

In terms of newer therapeutic approaches, I feel the idea of using bone marrow cells for transplant is a very strong avenue. Also researchers need to explore both adult and embryonic stem cells as different diseases may benefit from treatment with different cell types. The adult stem cells have unique advantages. If they can be recruited to specific tissues, then this approach could be used to enlist the body to fight its own disease.

*Namratha Jagtap*