

## Paris Skourides

Lecturer

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### Personal Profile

When I first went into research at the university, I wanted to study the molecular biology of cancer.

Unfortunately, the professor I applied to decided to leave New York to go back to Japan. I had to start looking for other labs and I ended up in this lab which does research on frogs.

### Research Profile

Developmental biology is the study of the growth of multicellular organisms; the way we end up with an integrated organism starting with a fertilized egg.

This is a complex procedure and to study it we use the *Xenopus*, a kind of frog from Africa.

The goal of our research group is to understand the cellular and molecular mechanisms involved in generating the three dimensional organization of tissues in vertebrate animals and the overall process by which the basic body plan of embryos is established. The initial spherical cell is divided until it becomes a ball of cells. These cells move around to gradually give

### Relevant Links or info

For further information about  
<http://www.ucy.ac.cy/~skourip.aspx>



shape to the embryo. They create the head, the left side, right side etc.

One of the main problems in studying embryos like the one of the *Xenopus* is the fact that it is opaque; we cannot see what's going on inside it.

In this lab we develop new imaging technologies which will make it possible to see through the embryo the movement of these cells.

This kind of technology is known as nanobiotechnology and we use quantum dots, tiny crystals which fluoresce. This fluorescence we are able to view under the microscope. By importing these crystals on certain cells, we are able to observe them inside the embryo. We therefore make the embryo transparent

Paris' research please view