PhD Studentship in Mathematical Biology

A PhD Studentship (3.5 years) is available in Mathematical Biology, in the Division of Mathematics at University of Dundee.

**Title:** Modeling and investigation of collective cell movement

**Project description:** A large number of fundamental processes in development and various diseases (e.g., cancer growth and invasion, morphogenesis) are the result of coordinated cell movement. Despite recent advances in identifying the communication mechanisms involved in individual cell movement, there are still many open questions regarding the mechanisms involved in collective cell movement (where cells stay connected as they move). This project will use mathematical modeling and analysis to formulate hypotheses regarding the interplay between multiple cell-cell communication mechanisms and its effects on collective cell movement.

The successful candidate will work under the supervision of Dr. Eftimie. The candidate will also interact directly with a Postdoctoral Fellow in Mathematics and researchers in the College of Life Sciences.

To be considered for this PhD Studentship, the candidate will have to have at least a 2:1 honours degree in Mathematics (or in a cognate discipline, i.e., Physics, Engineering). Because of EPSRC restrictions, the full Studentship will be available only to UK residents. Interested EU students, please contact Dr. Eftimie. (For complete information on students eligibility, please consult the EPSRC website http://www.epsrc.ac.uk/skills/students/help/Pages/eligibility.aspx).

For more info on the university campus and the city of Dundee, please see [http://www.dundee.ac.uk/postgraduate/research/campus_city.htm](http://www.dundee.ac.uk/postgraduate/research/campus_city.htm)

Informal enquiries and applications (CV detailing the undergraduate courses taken and the grades obtained, as well as a Letter of Motivation/Personal Statement) should be emailed to Dr. R. Eftimie (reftimie@maths.dundee.ac.uk). Formal applications also have to be made through [http://www.dundee.ac.uk/postgraduate/research/interests/mathematics.htm](http://www.dundee.ac.uk/postgraduate/research/interests/mathematics.htm)