Course Aims

- Working knowledge of tumour biology and related mathematical research
- Appreciation of current and emerging research directions
- More general experience of, and familiarity with, mathematical modelling
- (Some) enjoyment!

Modelling Solid Tumour Growth:

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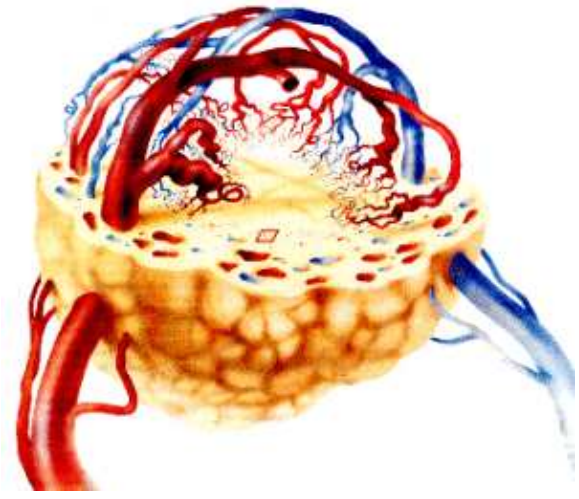
Course Structure

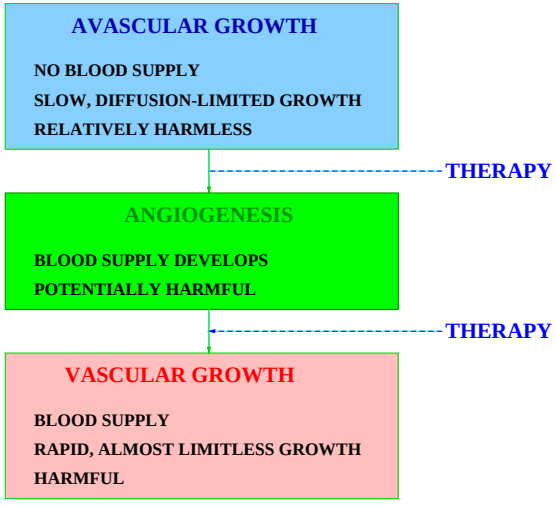
1. Spatially-averaged models of avascular and vascular tumour growth
   (ODE models)
2. One-dimensional, spatially-structured models of avascular tumour growth
   (moving boundary problems)
3. Angiogenesis models
   (discrete vs continuous; deterministic vs stochastic)
4. Course summary and future directions
   (tumour invasion; vascular tumour growth; emerging therapies)

Some Preliminaries

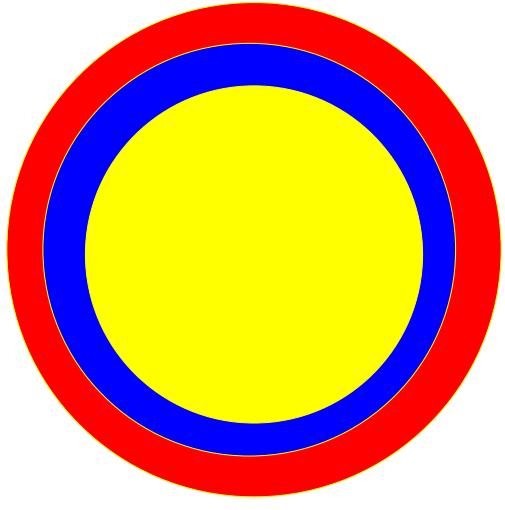
- Course Aims
- Course Structure
- Background Tumour Biology



Schematic Diagram of Vascularised Solid Tumour



Schematic Diagram of Solid Tumour Growth



Schematic Diagram of a Fully-Developed Avascular Tumour