Progress in understanding the role of the tumour microenvironment in cancer was the specialised joint meeting hosted by the EACR/IACR in September 2012 in Dublin. This conference was a great success with 130 participants including Ph.D.s, Postdoctoral fellows, Principle Investigators and medical doctors. This conference hosted international experts in the field of tumour microenvironment which included Christopher Logothetis (Texas), Ken Pienta (Michigan), James Quigley (San Diego) and Mary Helen Barcellos-Hoff (New York).

One of the meeting highlights discussed the important clinical concept of being able to therapeutically target the microenvironment to improve patient outcome. Owen Sansom (Glasgow) specifically discussed this in relation to pancreatic cancer, David Waugh (Belfast) in relation to the use of CXC chemokines as attractive therapeutic targets in prostate cancer and Kristian Pietras (Stockholm) discussed the potential of targeting the pro-angiogenic tumour stroma in cancer patients. Andrew Reynolds (London) spoke about the importance of the tumour microenvironment in determining response to resistance to anti-angiogenic therapy. The importance of the level of hypoxia in the microenvironment was discussed in detail by Goran Landberg (Manchester) where he showed that hypoxia nature of breast tumours plays a very important role in breast cancer stem cell hierarchy. From the talks presented in this area, it was clear that the Tumour Microenvironment is revolutionising drug development and industry is now focusing a lot of their efforts on angiogenesis, hypoxia and targeting other factors in the microenvironment.

The session on immune cell contribution to tumour development and progression highlighted the complex cross talk between different immune cell subtypes in the microenvironment. The clinical importance of numerating the amount of T cells in the environment as a diagnostic test was discussed by Jerome Galon (Paris) and Antonio Sica (Milan) discussed exciting developments on the importance of macrophage plasticity in driving cancer growth. We also learned that factors secreted from the tumour microenvironment from metastatic cancer patients can alter dendritic cell function and the level of this dysfunction can predict a patient’s response to targeted therapy (Jacintha O’Sullivan, Dublin).

There was great interaction and discussion amongst the conference attendees at the formal poster sessions and in the specialised workshops on ‘Imaging Cell Motility and Tumour Invasion’ and ‘Pathology of the Tumour Microenvironment.’

Five young investigators were awarded EACR meeting bursaries: Dinesh Kumar, Louisa Windus, Natalie Nuebert, Amani Osman and Brijesh Patel. The posters were presented to a very high standard and the winners of the EACR poster prizes were Nicole Sodir, Agnieszka Martowicz and Sabine Jagle.

Overall, the focussed conference was a great success and the EACR and IACR look forward to holding future joint meetings together.

Dr. Jacintha O’Sullivan
Honorary Secretary of IACR