The new research programme of the European Union (EU) is called the 7th Framework Programme (FP7) for Research and Technological Development and runs from 2007 to 2013. It comes on top of national, regional, private or other funding for research and development (R&D) in Europe, and is managed by the European Commission (EC). FP7 has a total budget over 7 years of nearly 55 Billion Euros (about 72 billion US$ at current exchange rates). A general overview of FP7 will be given, with emphasis on health research (which gets about 6 billion €), with a particular focus on imaging. Opportunities for participation will be indicated (research projects, fellowships, etc.), as well as selection criteria, together with some advice. Research projects generally (with some new important exceptions) require a minimum of 3 participants from 3 different EU countries or Associated States. But participation is open to further participants from essentially all other countries in the world (called “3rd countries”), some of which (e.g. USA, Mexico, Canada, etc.) have bilateral agreements with the EU. There are currently 27 EU countries. Associated States are non-EU countries that also contribute financially to the FP to be allowed to participate at equal terms. A new initiative for supporting drug research, within FP7, will also be mentioned: the Innovative Medicine Initiative (IMI) which should be a public (EC) - private (pharmaceutical industry) partnership. Examples of on-going research projects supported within the previous 6th FP will be given.