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Titolo Perspectives on digital pathology: results of the Cost Action IC0604

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Sommario/riassunto

Multimedia information and digital images are increasingly important in the field of healthcare, but establishing an adequate technological framework for their management, and workable international standards to ensure compatibility and interoperability, are crucial if they are to be employed effectively. This book presents the main research efforts of EURO-TELEPATH, an initiative of the European Corporation in Science and Technology (COST) Action, IC0604. This program began in November 2007, and ran until November 2011. Its aim was to develop the standards and solutions necessary to represent, interpret, browse and retrieve digital medical images, while preserving their diagnostic quality for clinical purposes, education and research. At the end of the project, the most relevant researchers in the field of digital pathology many of whom had been active members of EURO-TELEPATH - were asked to contribute to a book which would compile the main research efforts of the European COST Action consortium. The book is divided into six parts. The first is an introduction to the instruments and activities of COST. This is followed by sections dealing with: the stateof-the-art in pathology; pathology business modeling; standards and specifications in pathology; the analysis, processing, retrieval and management of images; technology and automation in pathology; and strategic developments and emerging research. As well as being a comprehensive overview of the IC0604 COST program, the book includes a selection of papers from American and Japanese researchers working in the same field.