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   Nota di contenuto   Preface -- Workshop Organizers -- Workshop Program Committee -- Acknowledgements -- Novel Colon Wall Flattening Model for Computed Tomographic Colonography: Method and Validation, by Huafeng Wang, Lihong Li, Hao Han, Yunhong Wang, Weifeng Lv, Xianfeng Gu, Zhengrong Liang -- Biomechanical Simulation of Lung Deformation from One CT Scan, by Feng Li, Fatih Porikli -- 2D-3D Registration: A Step towards Image-Guided Ankle Fusion, by Ahmed Shalaby, Aly Farag, Eslam Mostafa, Todd Hockenbury -- A Graph Based Methodology for Volumetric Left Ventricle Segmentation, by S. P. Dakua, J. Abi Nahed, A. Al-Ansari -- Minimally Interactive MRI Segmentation for Subject-Specific Modelling of the Tongue, by Negar

M. Harandi, Rafeef Abugharbieh, Sidney Fels -- Real-time and Accurate Endoscope Electromagnetic Tracking via Marker-free Registration Based on Endoscope Tip Center, by Xiongbiao Luo, Kensaku Mori -- Evaluation of Image Guided Robot Assisted Surgical Training for Patient Specific Laparoscopic Surgery, by Tao Yang, Kyaw Kyar Toe, Chin Boon Chng, Chee Kong Chui, Jiang Liu, Stephan K.Y. Chang -- Proxemics Measurement during Social Anxiety Disorder Therapy using a RGBD Sensors Network, by Julien Leroy, François Rocca, Bernard Gosselin -- How Do Sex, Age and Osteoarthritis Affect Cartilage Thickness at the Thumb Carpometacarpal Joint? Insights from Subject-Specific Cartilage Modeling, by Eni Halilaj, David H Laidlaw, Douglas C Moore, Joseph J Crisco -- Patient Specific Modeling of Pectus Excavatum for the Nuss Procedure Simulation, by Krzysztof J. Rechowicz, Mohammad F. Obeid, Frederic D. McKenzie -- Formulating a Pedicle Screw Fastening Strength Surrogate via Patient-Specific Virtual Templating and Planning, by Cristian A. Linte, Jon J. Camp, Kurt Augustine, Paul M. Huddleston, Anthony A. Stans, David R. Holmes III, Richard A. Robb.

Sommario/riassunto	This book contains the full papers presented at the MICCAI 2013 workshop Bio-Imaging and Visualization for Patient-Customized Simulations (MWBIVPCS 2013). MWBIVPCS 2013 brought together researchers representing several fields, such as Biomechanics, Engineering, Medicine, Mathematics, Physics and Statistic. The contributions included in this book present and discuss new trends in those fields, using several methods and techniques, including the finite element method, similarity metrics, optimization processes, graphs, hidden Markov models, sensor calibration, fuzzy logic, data mining, cellular automation, active shape models, template matching and level sets. These serve as tools to address more efficiently different and timely applications involving signal and image acquisition, image processing and analysis, image segmentation, image registration and fusion, computer simulation, image based modelling, simulation and surgical planning, image guided robot assisted surgical and image based diagnosis. This book will appeal to researchers, PhD students, and graduate students with multidisciplinary interests related to the areas of medical imaging, image processing and analysis, computer vision, image segmentation, image registration and fusion, scientific data visualization, and image based modeling and simulation.