SpecimenTrak: an RFID system for tagging and tracking anatomical specimens

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Radio Frequency Identification (RFID) is a non-line-of-sight, automatic data collection and management system, which can impart unique identification to objects, assets, and personnel, and facilitate tracking and tracing in real-time whenever and wherever the tagged objects are located or moving about in the designated application or geographic domain. SpecimenTrak is an ongoing research program at UCLA – WINMEC RFID Lab and will depict a Low Frequency RFID technology, its features and characteristics, and highlight those features, which will perform reliably in an anatomical services environment. The discussion will cover the architecture, different modules and features of the current version of the system. We will also discuss how SpecimenTrak system ensures automatic, accurate and real-time information tracking and management, which is being utilized in cataloging, tracking throughout the lifecycle, maintaining chain of custody, data error mitigation and verification, location assignment and identification, activity and event logs, improving accountability and productivity, security and anti-pilferage measures, and regulatory and protocol compliance monitoring in anatomical services. Some of the initial pilot study planning and results will be presented. In conclusion our own experiences on developing this RFID based solution and the potential of extending it to other healthcare needs will be shared.

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