Project Name: Surgical repair of the rib cage using 3D printing

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Summary: Lung cancer can sometimes invade the bones of the rib cage. The cancer can be removed using open surgery and the bones must also be removed. We are conducting a clinical study to use a combination of medical image analysis and 3D printing to replace the bones in these patients with anatomically correct synthetic parts. The aim of the project is to investigate the feasibility of this approach and to formulate a complete clinical workflow for the process.

Student Role: The student will acquire skills in medical image processing, data analysis, taking part in a clinical study, being in the operating room environment, working with clinicians, 3D printing.