100 years of X-ray crystallography – the continuing Bragg legacy

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It was, with no small pleasure, that I realised early in my doctorate that my supervisor twice-removed was William Henry Bragg himself. The short lineage goes W H Bragg, Kathleen Lonsdale, Mike Glazer and then me. A small amount of research shows that this close link to either W H or W L Bragg is not an uncommon occurrence amongst many crystallographers and British crystallographers in particular. The award of the Nobel Prize in Physics in 1915 to W H and W L Bragg was a unique father and son family affair. In this talk, I will continue the family theme and consider the scientific lineage and broad crystallographic reach of the Braggs, from the generation of Lonsdale and Bernal through to present-day crystallography. While the discovery of the DNA double-helix and the subsequent tours-de-force solutions of numerous protein and virus crystal structures represent the most visibly successful legacies of the Bragg scientific lineage, I will follow a different emphasis and trace two family trees that focus on highlights in the areas of physical and chemical crystallography. I will finish with some thoughts about the future shape of crystallography – I hope that both W H and W L Bragg would approve!