



Fiona Wood Foundation

## Fiona Wood Foundation and IBM unite to advance research for burn patients

Fiona Wood Foundation (FWF) is a not-for-profit organisation that conducts ground breaking scientific and clinical research to pioneer new treatments for healing burns and minimising scarring. Founder Fiona Wood's dedication to her patients has been integral to FWF's advancements in research.

### Business benefits

#### Domain Expertise

by reading millions of pages of life sciences literature

#### New Disease Pathways

by detecting hidden connections using cognitive

#### Accelerate Research

by using predictive modelling to prioritize findings



#### Business challenge

When an 8-year old died of cancer a few years after suffering from severe burn injuries, Professor Wood was driven to investigate. After rigorous research, her team found a positive association between burns and an increased rate of cancer. To find new ways of treating burn patients and reduce their risk of developing cancer, FWF needed to find hidden biological links between the two.



#### Transformation

Exploring the linkages required reviewing life sciences literature to extract all genetic relationships attributed to burns and to cancer. FWF enlisted IBM's Watson for Drug Discovery (WDD), a cognitive discovery solution. Studying millions of pages of literature, WDD could detect hidden connections between genes and diseases – that researchers may have never come across – provoking new hypotheses on disease origins and pathways. Using WDD's evidence-backed predictive models and dynamic visualization, promising hypotheses were quickly prioritized for further research, and then for testing. Tapping into the power of IBM Watson has enabled FWF to advance their research and commence testing novel treatment approaches for burn patients.



"We're essentially looking for a needle in a haystack. However, this time we had a seriously powerful magnet in using Watson to accelerate our discovery phase of the research."

**Professor Fiona Wood**