What is a whole body network simulator?

Predicting and preventing diseases through interpretation of networks among organs and tissues

Diseases such as cancer, dementia and diabetes can be treated much more effectively if detected in early or pre-symptomatic stages. Genetic testing has made it possible to assess the risk of developing these diseases, but many patients still develop them regardless of genetic factors. More recent studies have shown that signs of these diseases can appear decades before they develop, and since the organs throughout the body form a complex network, the signs are often found in organs other than those actually targeted by the diseases.

Therefore we are developing a whole body network simulator: a technology that uses data analysis and mathematical modeling to visualize the relationship between inter-organ and inter-tissue networks and diseases. By the year 2050 it will be common practice to predict and prevent diseases before they occur, by monitoring everyday physical condition and using a whole body network simulator to “disease forecast”.