**Investigation of gene therapy techniques for the lower urinary tract**

In this project, we will use ‘gene therapy’ to model a cure for a devastating bladder disease. This disease runs in families and makes children and adults unable to fully empty their bladders. Instead, urine builds up in the bladder and becomes infected, and this causes kidney failure. We have already identified the faulty genes in this illness and believe the disease affects nerves in the bladder. In this project will investigate whether we can use viruses to transfer genes into bladders of mice. We then hope to use this technology to cure mice that have the same genetic disease as the human condition. The successful outcome of our project will be a first step towards curing people born with severe bladder disease.