



Genetics Otago presents
CRISPR Workshop 2019

29th November 2019
9:00am – 5:30pm

**St David Lecture Theatre Complex,
Seminar Room A**

Thanks to our sponsors

ThermoFisher
S C I E N T I F I C

in vitro 
technologies

Friday, 29th November 2019

St David Lecture Theatre Complex, Seminar Room A

Session 1 – Introduction to CRISPR technology

9:00am – 9:30am History, development, applications, recent advancement and future of CRISPR technology Dr. Simon Jackson & Dr. Hannah Hampton, Otago.

Session 2 – CRISPR guide RNA design and delivery (hands-on session)

9:30am – 10:30am Guide RNA design for:
- CRISPRi/a
- CRISPR knockout/knockin
- CRISPR methylation
Megan O'Malley, Otago.
Rosie Sullivan, Otago.
Dr. Rob Weeks, Otago.

10:30am – 11:00am Tea/coffee break

11:00am – 12.00pm Methods of CRISPR delivery
Lentiviral transduction, RNP
electroporation/transfection, plasmid
transfection etc.
Sarada Ketharnathan, Otago.
Dr. Jenny Clarkson, Otago.
Dr. Andrew Das, Otago (Ch).
Dr. Natasa Polak, Thermo Fisher
Scientific

12:00pm – 1:00pm Lunch

Session 3 – CRISPR validation/analyses (hands-on session)

1:00pm – 3:00pm Validation/analyses of CRISPR editing for:
- CRISPRi/a
- CRISPR knockout/knockin
- CRISPR methylation
Dr. Greg Gimenez, Otago
Dr. Rob Weeks, Otago.

3:00pm – 3:30pm Tea/coffee break

Session 4 – CRISPR models, applications and ethics

3:30pm – 3:50pm Overview of different models, applications of
CRISPR technologies, CRISPR therapeutics
Prof. Matthew Porteus, Stanford
(via Zoom)

3:50pm – 4:10pm Overview of different models, applications of
CRISPR technologies, CRISPR therapeutics
Dr. Hilary Sheppard, Auckland

4:10pm – 4:30pm Royal Society Report on CRISPR gene editing
Prof. Peter Dearden

4:30pm – 5:30pm Open bar – Q & A session