Event title	WEBINAR:Establishing Gen3 to enable better human genome data sharing in Australia
Event type	Webinar
Date of event	16/02/2022
Time of event	12-1pm AEDT
Topic description	Australian human genome initiatives are generating vast amounts of human genome data. There is a desire and need to share data with collaborators but researchers face significant infrastructural, technical and administrative barriers in achieving this. To efficiently share and distribute their genome data they need scalable services and infrastructure that: is easily administered; allows for the efficient data management; enables sharing and interoperability; and is aligned with global standards for human genome data sharing. Australian BioCommons has brought together a team from Zero Childhood Cancer (Zero), the University of Melbourne Centre for Cancer Research (UMCCR) and Australian Access Federation to explore the use of Gen3 technology. Establishing systems for easier management and sharing of their human genome data holdings is no simple task, and the group wants to ensure that other Australian providers and Institutions can benefit from their experience and easily deploy the same solution in the future. Gen3 is an open source software suite that makes use of private and public clouds to tackle the challenges of data management, interoperability, data sharing and analysis. It has been used in several very large NIH-funded projects that collectively house and describe data derived from hundreds of thousands of human samples (e.g. NCI Genomic Data Commons, BioData Catalyst, BloodPAC, BrainCommons, Kids First Data Commons). In this webinar you'll hear from UMCCR and Zero about their experiences and progress towards establishing Gen3 instances to better enable better human genome data sharing in Australia. They will outline the challenges and

	opportunities that have arisen through this Australian BioCommons project and demonstrate the capabilities of Gen3 for human genome research.
Format description	Webinar presentation followed by a brief question and answer session
Identifier(s)/URL	https://www.biocommons.org.au/events/gen3-webinar
Licence	Materials are shared under a Creative Commons Attribution 4.0 International agreement unless otherwise stated on the materials
Keywords	Genomics http://edamontology.org/topic_0622 Bioinformatics http://edamontology.org/topic_0091 Database management http://edamontology.org/topic_3489 Data sharing Gen3 Human genomics Digital infrastructure Clinical genomics
Contact	Melissa Burke melissa@biocommons.org.au
Audience	Anyone with an interest in solutions for managing and sharing human genomics data at scale in a clinical setting.
Prerequisites	None
Technical requirements	None
Learning outcomes	• Outline the need for infrastructure solutions for human genomics data sharing • Outline the workflows used for processing, sharing and reporting on human genomics • List features of Gen3 that support

	sharing and management of data • Discuss advantages and challenges of using Gen3 at UMCCR and CCIA
Presenters	Associate Professor Bernie Pope, Australian BioCommons / Melbourne Bioinformatics Professor Oliver Hofmann, University of Melbourne Center for Cancer Research Mr Kamile Taouk, Children's Cancer Institute Dr Marie Wong-Erasmus, Children's Cancer Institute
Related work	None