Adapter Allocation Scheme Recipients – Q1 2023

The NCI Adapter Allocation Scheme is a merit-based scheme to allocate supercomputing, cloud and data storage resources to meritorious researchers around Australia. The Scheme, running quarterly, provides flexible access to relatively small allocations to support new and varied workloads across the scientific disciplines.

This table outlines the successful Adapter Scheme recipients for allocations in Q1 2023. The allocated resources are measured in thousands of Service Units (KSU). One KSU on the Gadi supercomputer is equivalent to 500 core hours, 1 KSU on the Nirin Cloud is equivalent to occupancy of 0.36 virtual cores for one quarter and 1 KSU of storage is equivalent to 0.16 Terabytes of storage for one quarter.

Lead CI, Institution	Project Title	Gadi allocation (KSU)	Nirin Cloud allocation (KSU)	Storage allocation (KSU)
Postdoctoral Fellow Dr Alberto Meucci, The University of Melbourne	21st century global projections of ocean wave climate – Extension to the Australian CMIP6 wind-wave climate ensemble	240	0	0
Professor Buyung Kosasih, University of Wollongong	Jet Wiping of Liquid Metal Coatings	250	0	0
Postdoctoral Research Fellow Dr Che Zhang, University of Melbourne	Molecular dynamics simulation of cold spray	75	25	25
Professor Chengwang Lei, The University of Sydney	Large eddy simulation of flow past circular cylinders covered with grooves and riblets	250	0	0
Senior Research Fellow Dr Cheong Xin Chan, University of Queensland	Adaptive evolution of coral algal symbionts	250	0	0
Postdoctoral Research Associate Dr Daochang Liu, University of Sydney	Image Generation for the Colour Vision Impaired	225	0	25
Senior Postdoctoral Researcher Dr Emma M. Rath, Victor Chang Cardiac Research Institute	Expanding the molecular diagnostic field for finding the causal gene in congenital heart disease patients	200	0	50
Professor Eric Alan Stone, Australian National University	Statistical models for the integration of compositional data into genetic models	180	0	30

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Postdoctoral Researcher Dr Jamie-Lee Thompson, Victor Chang Cardiac Research Institute	Identifying digenic and polygenic causes of Congenital Heart Disease	228	0	7
Research Associate Dr Junbo Chen, University of Wollongong	Accelerating the discovery of solution phase reaction mechanisms in ab initio molecular dynamics	250	0	0
Professor Lei Wang, University of Wollongong	Learning Geometrically Aligned Visual Features for Image Retrieval	240	0	10
Associate Professor Matthew Cleary, The University of Sydney	Direct Numerical Simulation of KHI-induced reacting transitional flows under a range of Damkohler Numbers	250	0	0
Dr Min Hong, University of Southern Queensland	Computationally driven high-performance thermoelectric materials and devices	230	0	20
Postdoctoral Research Fellow Dr Mohammad Shakil Ahmmed, The University of Queensland	Computational Fluid Dynamics for Investigating Greenhouse Gas Emission in Wastewater Treatment Plants	250	20	50
Postdoctoral Research Fellow Dr Nehad Elsalamouny, University of Wollongong	Molecular modelling studies of the amiloride-based inhibitors binding to the human sodium hydrogen exchanger isoform 1 (hNHE1)	250	0	0
Postdoctoral Research Fellow Dr Nicholas Wilson, The Australian National University	Modelling ignition risk with weather and fuel moisture data	100	0	1
Senior Lecturer Dr Pan Hu, Western Sydney University	Bearing capacity analysis of offshore spudcan foundations	200	25	25
Research Fellow Dr Qiang Sun, RMIT University	Dynamics and stability of optically trapped eccentric core-shell nanoparticles	242	0	8

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Postdoctoral Research Fellow Dr Ravi Chandra Dutta, The University of Queensland	Prediction of CO2 sorption in Ionic Liquids through Multiscale simulation technique	250	0	0
Senior Lecturer Dr Ravichandar Babarao, RMIT University	Investigation of solvent effect in electrochemical hydrogen evolution and storage through QM/MM simulations	230	0	0
Postdoctoral Research Fellow Dr Ruitao Jin, The Australian National University	Computational design of orthogonal regulator for geranylgeranyl diphosphate synthesis	250	0	0
Associate Professor Salman Durrani, Australian National University	Security and Privacy for Low Power Communication Devices for the Internet of Things	100	0	5
Postdoctoral Research Fellow Dr Sherif Abdulkader Tawfik Abbas, Deakin University	Energy Materials for a Circular Economy: Modelling Disorder in Spent Batteries	250	0	0
Research Fellow Dr Thor Tepper-García, The University of Sydney	The formation of bars in interacting discs at high redshift	168	0	0
Dr Timothy Hugh Raupach, UNSW Sydney	Investigating the Burketown hail hotspot	230	0	20
Research Fellow Dr Travis Mitchell, The University of Queensland	Towards a more sustainable water-energy nexus	227	0	0
Research Fellow Dr Yongsop Hwang, The University of South Australia	Topologically protected lasers emitted with desired photon spins	100	0	10
Research Fellow Dr Yuefeng Yin, Monash University	Exploring new approaches of modeling defects in materials	250	0	0
Postdoctoral Fellow Dr Zhouzun Xie, University of New South Wales	High-fidelity multi-resolution modelling of tumour penetration behaviour of nanoparticles	160	0	50

Lead CI, Institution	Project Title	Gadi allocation (KSU)	Nirin Cloud allocation (KSU)	Storage allocation (KSU)
Dr Ben Hui, The Kirby Institute	Model the potential impact of different gonococcal vaccine formulations and different target populations	100	0	0
Senior Lecturer Dr Kapil Chauhan, The University of Sydney	Direct Numerical Simulations of Natural Convection in Nearshore Regions	100	0	0
Associate Professor Ming Zhao, Western Sydney University	Developing a three-dimensional numerical model for wave-energy harvesting OWC (oscillating water column) devices	100	0	0
Senior Lecturer Dr Mingming Gong, The University of Melbourne	Neural Radiance Fields from Motion Blurry Images	100	0	0
Associate Professor Zongyou Yin, The Australian National University	Effect of the defects on photocatalyst for ambient redox reactions based on DFT calculations	100	0	0