

School of Biological Sciences Staff member	Organisation	Academic Group	Project Size e.g. 120pt	Title/Area
Phylogeny and Evolution				
Alexei Drummond	SBS	EEB	45/60/90/120	Computational models for single-cell sequencing and tumour evolution
Alexei Drummond	SBS	EEB	45/120	Statistical geometry of phylogenetic tree space
Nicholas Matzke	SBS	EEB	45/60/90/120	Phylogenetic biogeography: methods and application
Nicholas Matzke	SBS	EEB	45/60/90/120	Phylogenetic history of bacterial flagellum proteins and relatives
Nicholas Matzke	SBS	EEB	45/60/90/120	Phylogenetic history of bacterial flagellum proteins and relatives - evolution of FliG, MgtE, and relatives
Nicholas Matzke	SBS	EEB	45/60/90/120	Phylogenetic history of bacterial flagellum proteins and relatives - evolution of FliM, FliN+CheC, and relatives
Nicholas Matzke	SBS	EEB	45/60/90/120	Phylogenetic history of bacterial flagellum proteins and relatives - evolution of FliA and related sigma factors
Nicholas Matzke	SBS	EEB	45/60/90/120	Phylogenetic history of bacterial flagellum proteins and relatives - evolution of FliPQR
Nicholas Matzke	SBS	EEB	45/60/90/120	Phylogenetic history of bacterial flagellum proteins and relatives - evolution of FliF
Nicholas Matzke	SBS	EEB	45/60/90/120	Phylogenetic history of bacterial flagellum proteins and relatives - evolution of axial proteins
Allen Rodrigo	SBS	EEB	60	Constructing consensus phylogenies when tips are unlabelled
Caroline Puente-Lelièvre	SBS	EEB	45/60/90/120	Phylogenetic history of bacterial flagellum proteins and relatives
Simon Greenhill	SBS	EEB	45/60/90/120	A phylogenetic analysis of the languages of New Guinea
Simon Greenhill	SBS	EEB	45/60/90/120	Quantifying the rate of language evolution
Teng Li	SBS	EEB	45/60	Evaluation and optimization of variation in 16S microbiome studies
Thomas Buckley	SBS/LCR	EEB	120	Evolution of parthenogenesis in NZ stick insects
Matthew Fullmer	SBS	EEB	60/120	How types of public goods mediate microbial cooperation

Marine/Freshwater Projects				
Alice Della Penna	IMS/SBS	EEB	60/90/120	Can oceanic eddies trap mesopelagic fish? A modelling study
Andrew Jeffs	IMS/SBS	EEB	120	Do mussels benefit from growing with seaweed?
Emma Carroll	SBS	EEB	120	Southern right whale immune system genetics
Emma Carroll	SBS	EEB	60/90/120	Beaked whale population genetics
Louis Tremblay	SBS/Cawthron	EEB	60/120	Comparative ecotox sensitivity between 2 freshwater algal species
Maren Wellenreuther	SBS/PFR	EEB	120	Image-based phenomics: using AI to quantify growth in snapper
Maren Wellenreuther	SBS/PFR	EEB	120	Marine water microbiomes and fish diseases
Mary Sewell	SBS	EEB	120	Early lipid use in the Antarctic sea urchin, <i>Sterechinus neumayeri</i>
Mary Sewell	SBS	EEB	120	Spatial patterns in the zooplankton of Rangitahua (Kermadecs)
Wendy Nelson	SBS/NIWA	EEB	60/90	Interrogating baseline data to document changes in macroalgal communities over the past 75 yea
Wendy Nelson	SBS/NIWA	EEB	60/90	Using herbarium collections to investigate reproductive phenology of habitat forming macroalgae
Wendy Nelson	SBS/NIWA	EEB	120	Analysis of the brown algal genus <i>Scytosiphon</i> in New Zealand
Wendy Nelson	SBS/NIWA	EEB	60/90/120	Response to invasive species of the green seaweed <i>Caulerpa</i> in northern NZ
Rochelle Constantine	SBS/IMS	EEB	120	Body size and diet in a capital breeder
Kim Handley	SBS	EEB	45/60/90/120	Aquatic microbiomes
Zoology/Behaviour/Biodiversity Projects				
Anna Santure	SBS	EEB	45/60/90/120	Invasive genomics of the introduced common myna
Anna Santure	SBS	EEB	45/60/90/120	Recombination rate variation in the threatened hihi (stitchbird) genome
Anna Santure	SBS	EEB	45/60/90/120	Historic population size of the threatened hihi (stitchbird) using genomic data
Anne Gaskett	SBS	EEB	45/60/90/120	Plastic ingestion by seabirds and seabird sensory ecology
Brendon Dunphy	SBS/IMS	EEB	45/60/120	Heavy metal pollutants in seabird populations

Darren Ward	SBS	EEB	90/120	Comparing biodiversity records from citizen scientists and museum collections
David Pattemore	SBS/PFR	EEB	45/60	Factors correlated with successful occupation of artificial nest sites by bumble bees
David Pattemore	SBS/PFR	EEB	45/60/90	Effects of new motorways on bird and bat activity
David Pattemore	SBS/PFR	EEB	45/60	How well are five minute bird counts and automated classification of bird call recordings correlated?
David Pattemore	SBS/PFR	EEB	45/60/90	Can community gardens provide both desired produce and support pollinator populations? - case study
David Seldon	SBS	EEB	120	Revision of the endemic ground beetle genus <i>Zeopoecilus</i>
David Seldon	SBS	EEB	60/90/120	Does parasitoid wasp activity follow the maramataka
Greg Holwell	SBS	EEB	45/60/90/120	Flexibility in web building behaviour in spiders
Greg Holwell	SBS	EEB	45/60/90/120	Adaptive significance of camouflage in spiders
James Russell	SBS/Stats	EEB	60	Attitudes to pest management in China
Kristal Cain	SBS	EEB	45/60/90/120	Avian vocalisation changes in response to captivity
Kristal Cain	SBS	EEB	45/60/90/120	Avian behaviour changes in response to sleep disturbance
Kristal Cain	SBS	EEB	45/60/90/120	Common myna vocal repertoire
Plant and Other Terrestrial Projects				
Bruce Burns	SBS	EEB	60/120	Meta-analysis of fern ecology in the Chinese literature & comparison with NZ fern ecology
Allen Rodrigo	SBS	EEB	45/60	Somatic mutation rates in trees. This is a pilot project.
Allen Rodrigo	SBS	EEB	45/60	Microbiomes of built-up spaces
Cate Macinnis-Ng	SBS	EEB	60	Calculating the carbon flux net biome exchange using historical forest data
Cate Macinnis-Ng	SBS	EEB	60	Tree water deficit under varying climatic conditions
Cate Macinnis-Ng	SBS	EEB	120	Assessing drought impacts on kauri from tree rings (this project requires fieldwork)

Gavin Lear	SBS	EEB	60/90/120	Soil microbiology and ecosystem health
Gillian Lewis	SBS	EEB	45/60/90/120	Inferred functionality in biofilm bacterial communities in native forest, urban and agricultural catchments.
Gillian Lewis	SBS	EEB	45/60/90/120	Microbial carbon sequestration in different types of wetland
James Brock	SBS	EEB	120	Tree fern epiphytism: competition and stress
James Brock	SBS	EEB	60/120	Tree fern epiphytes: bryophyte - angiosperm interactions
ZhiQiang Zhang	SBS/LCR	EEB	120	Unseen forces in forests: effects of mites on tree health
ZhiQiang Zhang	SBS/LCR	EEB	120	Behaviour and ecology of insect-mite interactions on trees
ZhiQiang Zhang	SBS/LCR	EEB	120	Native and naturalised nematode fauna of <i>Pinus radiata</i> in New Zealand
Sarah Knight	SBS	EEB	60/90/120	Influence of increasing temperatures on microbes associated with vines and wines
Nari Williams	SBS/PFR	EEB	45/60/90/120	Investigating the persistence of <i>Phytophthora</i> species in forest soils
Peter Bellingham	SBS/LCR	EEB	120	Plant-insect interactions on Rangitāhua
Shane Wright	SBS	EEB	45/60/90	Comparative colour in the Genus <i>Myrsine</i>
Biomedical and Human Biology				
Anna Brooks	SBS	BHB	45/120	Long Covid and SARS-COV2 research
Anthony Phillips	SBS	BHB	120	Lymphatic modulation
Billy Sheppard	SBS	BHB	120	Gene editing for fragile skin conditions
Catherine Angel	SBS	BHB	45	Analysis of NanoString data assessing phenotype of Glioblastoma cultures, with a focus on immune regulatory molecules.
Christopher Walker	SBS	BHB	120	Understanding GPCR regulation and signalling
Emma Scotter	SBS	BHB	90/120	RNA processing defects in motor neuron disease
Garth Cooper	SBS	BHB	120	"Role of altered cerebral proteolysis in the pathogenesis of sporadic Alzheimer's disease"
Ivana Sequeira	SBS	BHB	120	Low energy diets for rapid weight loss in diabetes prevention

Jennifer Miles-Chan	SBS	BHB	120	Acute effects of a dairy protein (whey) hydrolysate on postprandial metabolism in healthy adults
Jessie Jacobsen	SBS	BHB	120	Modelling human genetic disorders using CRSIPR-Cas9
Jessie Jacobsen	SBS	BHB	120	Understanding rare disorders of neurodevelopmental: reserach-clinical interface
John Taylor	SBS	BHB	45/60/90/120	Screening natural and synthetic molecules for antiviral activity
Juliet Gerrard	SBS	BHB		The interface between science and science policy
Kerry Loomes	SBS	BHB	45	Malic enzyme and cancer: structure-activity relationships
Klaus Lehnert	SBS	BHB	120	Modelling human genetic disorders using CRSIPR-Cas9
Mike Taylor	SBS	BHB	45/60/90/120	Bird microbiomes
Paul Harris	SBS	BHB	120	Novel polymyxins to treat Gram negative pathogens
Paul Young	SBS	BHB	90/120	Engineering self-assembling proteinaceous insecticides
Russell Snell	SBS	BHB	120	Modelling human genetic disorders using CRSIPR-Cas9
Cellular, Molecular and Physiological Biology				
Andrew Allan	SBS/PFR	CMPB	120	Encouraging sugar over-accumulation in kiwifruit
Anthony Poole	SBS	CMPB	90/120	Building phylogenies from protein structures
Augusto Barbosa	SBS	CMPB		Improving gene knockdown using RNA interference
Chris Carrie	SBS	CMPB	45/60/90/120	Developing a cell type specific CRISPR system in Arabidopsis
Chris Carrie	SBS	CMPB	45/60/90/120	Organelle biogenesis in ressurection plants
Chris Carrie	SBS	CMPB	45/60/90/120	Plant mitochondrial genome evolution: How long does it take to loose a functional gene?
Christopher Squire	SBS	CMPB	45/60/90/120	Discovering new molecular superglues OR the ubiquity of the Ig domain
Christopher Squire	SBS	CMPB	45/60/90	How do polymyxin analogues disrupt membranes?
Christopher Squire	SBS	CMPB	45/60/90/120	Simulating molecular superglue dynamics - is my glue too floppy?
Craig Millar	SBS	CMPB	60	A circadian and cirannual framework for the coming ethomics era

Craig Millar	SBS	CMPB	90/120	Developing methods to sequence the complete mtDNA of avian species using nanopore technology
Craig Millar	SBS	CMPB	60/90	Population genetic analysis of the endangered Chatham Island Taiko
David Goldstone	SBS	CMPB	45/60/90/120	Can we design a binding assay to explore recognition of the HIV-1 capsid by the post-entry restriction factor Trim5alpha?
David Goldstone	SBS	CMPB	45/60/90/120	How do capsid targeting drugs recognise the HIV-1 capsid.
Esther Bulloch	SBS	CMPB	60/90/120	Developing antivirals to treat flavivirus infection.
Ghader Bashiri	SBS	CMPB	60/90/120	Molecular technologies for methane mitigation in livestock
Ghader Bashiri	SBS	CMPB	60/90/120	Novel protein targets against tuberculosis
Ghader Bashiri	SBS	CMPB	60/90/120	Understanding regulatory mechanisms in proteins
Ghazanfar Khan	SBS	CMPB	45/60/90/120	Uncovering molecular mechanisms to increase nutrient-use-efficiency in plants
Iain Hay	SBS	CMPB	45/60/90/120	Characterising a novel phage derived pore forming antibacterial toxin
Iain Hay	SBS	CMPB	60/90/120	Bacteria Type II secretion system assembly
Iain Hay	SBS	CMPB	45/60	Phage discovery
Iain Hay	SBS	CMPB	60/90/120	Tailocin receptor binding protein engineering (customisable bacteriocins)
Jane Allison	SBS	CMPB	90/120	Characterising the novel 'elevator with an operator' mechanism of bacterial TRAP transporters
Jane Allison	SBS	CMPB	45/60/90/120	Computer simulation of the interaction of antimicrobial peptides with model cell membranes
Jane Allison	SBS	CMPB	45/60/90/120	Preventing blood clotting caused by biomedical devices
Joanna Putterill	SBS	CMPB	120	CRISPR-Cas9 editing of fruit development genes in kiwifruit
Joanna Putterill	SBS	CMPB	45/120	CRISPR-Cas9 editing of flowering genes in the model legume Medicago
Kendall Clements	SBS	CMPB		The relationship between pharyngeal structure and diet in parrotfishes
Matthew Templeton	SBS/PFR	CMPB	60/120	Plant pathogen evolution, role of effector proteins, biocontrol

Nobuto Takeuchi	SBS	CMPB	45/90/120	Mathematical or computational modelling of microbial evolution
Paul Harris	SBS	CMPB	120	Synthesis of Daptomycin antibiotics
Rebecca Deed	Chemical Sciences/SBS	CMPB	45/90/120	Impact of grape solids on the yeast-mediated production of volatile sulfur compounds in Chardonnay
Rebecca Deed	Chemical Sciences/SBS	CMPB	45/90/120	Influence of flocculating yeast on rosé wine colour
Rebecca Deed	Chemical Sciences/SBS	CMPB	45/90/120	Origins of volatile phenols in Goji berry wine
Richard Kingston	SBS	CMPB		Inhibition of viral polymerases by nucleoside analogs
Robert Schaffer	SBS/PFR	CMPB	120	Molecular control of fruit quality traits
Robin MacDiarmid	SBS/PFR	CMPB	120	Biological impacts of changes in suppressor of silencing proteins encoded by a grape virus
Robin MacDiarmid	SBS/PFR	CMPB	120	Impact of viruses infecting Phytophthora species
Tony Hickey	SBS	CMPB	60/90/121	Bird red cell mitochondria
Tony Hickey	SBS	CMPB	60/90/120	Free radical detection in breath