OUR MISSION

THE CCRC ACTIVELY ENGAGES IN WORLD-CLASS RESEARCH FOCUSED ON CLIMATE SYSTEM SCIENCE TO HELP BETTER UNDERSTAND, PREDICT, AND ADAPT TO CLIMATE VARIABILITY AND CLIMATE CHANGE. WE ALSO EDUCATE UNSW STUDENTS, SUPPORT STEM, ENGAGE IN PUBLIC OUTREACH, AND ADVISE THE GOVERNMENT AND PRIVATE SECTORS ON CLIMATE-RELATED SCIENCE AND THE CAUSES AND CONSEQUENCES OF GLOBAL WARMING. WE ARE THE FOUNDATION FOR THE ARC CENTRE OF EXCELLENCE FOR CLIMATE EXTREMES.

RESEARCH HIGHLIGHTS

- Australian wildfires will occur earlier in the year in the future: 10.1029/2019GL083699
- The most vulnerable experience the highest levels of air pollution: 10.1088/1748-9326/ab486a
- ENSO diversity is critical for managing Australia’s future climate risks: 10.1175/BAMS-D-18-0057.1
- Plants do not decrease transpiration during heat extremes: 10.5194/bg-16-903-2019
- A new role for the indirect effect of aerosols: 10.1038/s41612-019-0089-1
- Varied observations help constrain climate projections: 10.1007/s00382-019-04690-8
- Rainfall metrics help identify biases in extremes: 10.1088/1748-9326/ab51b6
- Humans helped cause the recent Tasman Sea marine heat wave: 10.1175/BAMS-D-18-0116.1

AWARDS & HONOURS

- Andy Pitman: Order of Australia (AO) for distinguished service as a leading researcher
- John Church: BBVA Foundation Frontiers of Knowledge Award in Climate Change
- Lisa Alexander: Royal Meteorological Society’s 2018 Gordon Marley Weather Prize
- Laurie Menviel: Steering Committee, Cycles of Sea-Ice Dynamics in the Earth system Working Group (C-SIDE) PAGES
- John Church: Chair, Transient Tracer-based Investigation of Circulation & Thermal Ocean Change (TICTOC) Advisory Committee
- Sarah Perkins-Kirkpatrick: Co-lead, WMO Commission for Climatology Expert Panel on Communication & Outreach
- Donna Green: Expert, Advisory for Governing Plastic, Institute for Advanced Studies, Switzerland
- Andy Pitman: American Geophysical Union (AGU) International Committee for International Participation
- Alex Sintetista: Climate & Ocean Variability Predictability and Change (CLIVAR), North Western Pacific Ocean Circulation & Climate Experiment (NWPeC) Committee
- Andrea Taschetto: CLIVAR Tropical Basin Interactions Working Group
- Gab Abernethy, Global Land & Atmosphere System Study, WCRP

RESEARCH OUTPUTS

Six reports and two book sections
132 journal articles:
- 40% in top 10% most cited, 87% in SJR’s top 10%
- 17 publications with student first authors
- 9 publications in Nature family journals
EDITORIAL ROLES
- Lisa Alexander: Editor-in-Chief, Weather and Climate Extremes
- Laurie Menviel: Co-Editor-in-Chief, Climate of the Past
- Jason Evans: Editor, Journal of Climate
- Andy Pitman: Associate Editor, International Journal of Climatology
- Sarah Perkins-Kirkpatrick: Associate Editor, Scientific Reports
- Donna Green, Katrin Meissner: Executive Editorial Board, Environmental Research Letters
- Steve Sherwood: Editorial Board, Environmental Research Letters
- Martin De Kauwe: Associate Editor, Biogeoscience
- Martin De Kauwe: Editor, Global Change Biology
- Martin De Kauwe: Editorial Board, New Phytologist
- Agus Santoso: Editor, AGU Monograph ‘El Nino Southern Oscillation in a Changing Climate’
- Alex Sen Gupta: Guest Editor, Oceanography 2019, special issue on ‘Ocean Warming’
- Andrea Taschetto: Guest Editor of Atmosphere on Weather and Climate Extremes.
- Andrea Taschetto: Associate Editor of the Journal of Southern Hemisphere Earth Systems Science
- Gab Abramowitz: Associate Editor for Journal of Hydrometeorology

PROMOTIONS
- Gab Abramowitz: Associate Professor
- Lisa Alexander: Professor
- Martin De Kauwe: Senior Lecturer
- Giovanni Di Virgilio: Lecturer

VISITORS
- Stephen Griffies (GFDL)
- Ed Hawkins (University of Reading, UK)
- Michael Mann (Director, Penn State ESSC)
- Hugh Morrison (US NCAR)
- Dan Or (ETH Zürich)
- Gavin Schmidt (Director, NASA GISS)
- Joe Scott-Phillips, Secretariat of the Pacific Community
- Caroline Unverschiller (WHIO)

PHILANTHROPY
$300,000 AUD donated by John Church for 2019/2020, matched by the Faculty of Science.

GRADUATIONS
PHD STUDENTS
- Jiawei Bao
- Arden Burrell
- Steefan Contractor
- James Goldie
- Mia Gross
- Ned Houghton
- Sarada Hobeichi
- Mathew Lipson
- Sarah Perry

HONOURS STUDENTS
- Sebastian McKenna
- Ritwika Mora

MEDIA HIGHLIGHTS
- 21 stories in ABC outlets (radio/television/online)
- 5 stories in The Conversation
- 7 stories in The Guardian
- 14 stories in Fairfax Metro Media
- Lost and Found - Toxic, ABC Radio National Blueprint. 10/08. Donna Green
- Australia’s hellish heat wave and wildfires, explained Vox. 30/12. Sarah Perkins-Kirkpatrick

ARC GRANTS & FELLOWSHIPS COMMENCING IN 2019

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OUR VISION

THE CCRC IS A WORLD-LEADING RESEARCH CENTRE IN PHYSICAL AND BIOGEOCHEMICAL CLIMATE SCIENCE, EDUCATING THE AUSTRALIAN AND GLOBAL COMMUNITY ABOUT RISKS ASSOCIATED WITH CLIMATE VARIABILITY AND CHANGE.