

## BIOGRAPHICAL SKETCH

### Joellen L. Russell

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#### (a) Professional Preparation:

Harvard University	Earth and Planetary Sciences	A.B., 1993
Scripps Inst. of Oceanography	UCSD Oceanography	Ph.D., 1999
University of Washington	JISAO Postdoctoral Fellow	1999-2002
Princeton University	AOS Program Postdoctoral Fellow	2002-2006

#### (b) Appointments:

2006-Present Assistant Professor, Department of Geosciences, University of Arizona, Tucson, AZ.

#### Awards

**2011-2012** – American Association of Petroleum Geologists, Distinguished Lecturer  
**2010** – University of Arizona Provost's General Education Teaching Award  
**2009** – *Invited Plenary*, ASLO Aquatic Sciences Meeting, Nice, France  
**2008** – Nominated by the University of Arizona for the David and Lucille Packard Foundation Fellowship for Science and Engineering

#### (c) Publications Closely Related to Proposed Project:

**Russell, J.L.**, K.W. Dixon, A. Gnanadesikan, R.J. Stouffer, and J.R. Toggweiler, 2006: The Southern Hemisphere Westerlies in a Warming World: Propping Open the Door to the Southern Ocean. *J. Climate*, 19(24), 6382-6390, <http://dx.doi.org/10.1175/JCLI3984.1>.  
**Russell, J.L.**, R.J. Souffer, and K.W. Dixon (2006), Intercomparison of the Southern Ocean Circulations in the IPCC Coupled Model Control Simulations. *J. Climate*, 19(18), 4560-4575, <http://dx.doi.org/10.1175/JCLI3869.1>.  
Yin, J., J.T. Overpeck, S.M. Griffies, A. Hu, **J.L. Russell** and R.J. Stouffer, 2011: Different magnitudes of projected subsurface ocean warming around Greenland and Antarctica, *Nature Geoscience*, 4, 524–528, <http://dx.doi.org/10.1038/ngeo1189>.  
Toggweiler, J.R., and **J.L. Russell**, 2008: Ocean circulation in a warming climate. *Nature*, 451, 286-288, <http://dx.doi.org/10.1038/nature06590>.  
Delworth, T.L., **J.L. Russell** and 40 others, 2006: GFDL's CM2 Global Coupled Climate Models – Part 1: Formulation and Simulation Characteristics. *J. Climate*, 19(5), 643-674, <http://dx.doi.org/10.1175/JCLI3629.1>.

#### 5 Other Significant Publications:

Ainley, D., **J.L. Russell**, S. Jenouvrier, E. Woehler, P. O'B. Lyver, W.R. Fraser, and G.L. Kooyman, 2010: Antarctic Penguin Response to Habitat Changes as Earth's Troposphere Reaches 2°C Above Pre-Industrial Levels. *Ecological Monographs*, 80(1), 49–66, <http://dx.doi.org/10.1890/08-2289.1>.  
McAfee, S.A., P.J. Goodman and **J.L. Russell**, 2011: Evaluating IPCC AR4 Cool-Season Precipitation Simulations And Projections For Impacts Assessment Over North America, *Climate Dynamics*, <http://dx.doi.org/10.1007/s00382-011-1136-8>.  
Kapp, P., J.D. Pelletier, A. Rohrmann, R. Heermance, **J.L. Russell** and L. Ding, 2011: Wind erosion in the Qaidam Basin, Central Asia: Implications for tectonics, paleoclimate and the source of the Loess Plateau, *GSA Today*, **21(4/5)**, 4-10. <http://dx.doi.org/10.1130/GSATG99A.1>.

Toggweiler, J.R., **J.L. Russell**, and S.R. Carson, 2006: The Mid-Latitude Westerlies, Atmospheric CO<sub>2</sub>, and Climate Change During the Ice Ages. *Paleoceanography*, **21**, PA2005, <http://dx.doi.org/1029/2005PA001154>.

Woodhouse, C.A., **J.L. Russell** and E.R. Cook, 2009: Two Modes of North American Drought from Instrumental and Paleoclimatic Data. *J. Climate*, **22(16)**, 4336-4347, <http://dx.doi.org/10.1175/2009JCLI2705.1>.

#### **(d) Synergistic Activities:**

- **Member**, U.S. CLIVAR Office, Process Studies and Model Improvements Panel
- **Co-Convener**, New Frontiers in Southern Ocean Biogeochemistry and Ecosystem Research, Ocean Carbon and Biogeochemistry Scoping Workshop, Princeton, New Jersey
- **Principal Investigator**, NOAA's Climate Process Team in Ocean Biogeochemistry
- **Executive Committee member**, Climate Dynamics and Hydrometeorology Center
- **Distinguished Lecturer**, American Association of Petroleum Geologists (2011-2012)

#### **(e) Collaborators & Other Affiliations:**

**Collaborators outside of University of Arizona (Last 48 months):** Stephen Ackley (U. Texas, San Antonio), David Ainley (H.T. Harvey & Associates), Grant Ballard (PRBO Conservation Science), Tosca Ballerini (Old Dominion), Louise Blight (U. British Columbia), Alison Brooks (George Washington), Robert Brownell (NOAA), Christina Cheng (U. Illinois), Mariachiara Chiantore (Universita di Genova), Ed Cook (LDEO), Malcolm Coulter (Wetlands International), Paul Dayton (SIO), Thomas Delworth (GFDL), Curtis Deutsch (UCLA), Lin Ding (ITPR/CAS), Keith Dixon (GFDL), Scott Doney (WHOI), Robert Dunbar (Stanford), John Dunne (GFDL), Sylvia Earle (National Geographic Society), Joseph Eastman (Ohio), Steven Emslie (U. North Carolina), Clive Evans (U. Auckland), Richard Feely (PMEL), Mick Follows (MIT), William Fraser (Polar Oceans Research Group), Robert Garrott (Montana State), Anand Gnanadesikan (Johns Hopkins), Stephen Griffies (GFDL), Richard Heermance (California State, Northridge), Eileen Hoffman (Old Dominion), Aixue Hu (NCAR), Taka Ito (Colorado State), Stephanie Jenouvrier (WHOI/CNRS), Stacy Kim (MLML), Gerald Kooyman (SIO), Amélie Lescroël (Université de Rennes), Michael Lizotte (U. Wisconsin, Oshkosh), Nicole Lovenduski (U. Colorado), J. Lunine (Cornell), Philip Lyver (Landcare Research), Irina Marinov (U. Pennsylvania), Melanie Massaro (U. Canterbury), Stephanie McAfee (Wilderness Society), Silvia Olmastroni (U. Siena), Paul Ponganis (SIO), Anthony Rosati (GFDL), Jorge Sarmiento (Princeton), Donald Siniff (U. Minnesota), Walker Smith (VIMS), Brent Stewart (Hubbs-Seaworld Research Institute), Ian Stirling (U. Alberta), Ronald Stouffer (GFDL), Peter Strutton (U. Tasmania), Joel Thornton (U. Washington), Robbie Toggweiler (GFDL), Christian Tryon (NYU), Cynthia Tynan (WHOI), John M. Wallace (JISAO/U. Washington), Rik Wanninkhof (AOML), Robert Webb (ESRL), Jay Willis (HR Wallingford, Ltd.), Peter Wilson (Vector Limited), Eric Woehler (U. Tasmania)

**Graduate Advisor and Postdoctoral Sponsors:** Andrew G. Dickson (SIO/UCSD), Joris M. Gieskes (SIO/UCSD), Anand Gnanadesikan (Johns Hopkins), Joseph Reid (SIO/UCSD), Lynne D. Talley (SIO/UCSD), J. Robbie Toggweiler (NOAA/GFDL), John M. Wallace (JISAO/U. Washington), Ray F. Weiss (SIO/UCSD)

**Current and Former Graduate Students: (Total = 5)** Sarah Dasher (current), Alison Drain (ESRI, Redlands, CA), Sophie Everatt (current), Juan Lora (current), Stephanie McAfee (University of Alaska)