# Biographical Sketch: Richard Grotjahn

.

Department of L.A.W.R, University of California (530) 752-2246; fax: 752-1793

One Shields Avenue e-mail grotjahn @ucdavis.edu

Davis, CA 95616 website: http://grotjahn.ucdavis.edu//

#### **Education:**

University of Washington, Seattle, Washington: Atmospheric Science (B.S. cum laude, 1973) Florida State University, Tallahassee, Florida: Meteorology (M.S. 1975; Ph.D. 1979)

# **Prior Work Experience:**

Professor, UCD 7/92-6/12, Upper Level Professor, 7/12-present

Visiting Scientist, LASG (Beijing, China) 5/10-6/10

Visiting Scientist, NCAR CGD. (Boulder, CO) 10/94-4/95, and 01/02-06/02

Associate Professor, UCD 7/85-6/92

Visiting Scientist, BMRC forecast model development group (Melbourne, Australia) 9/87-8/88

Assistant Professor, UCD 1/82-6/85

Visiting Fellow, CIRES (Boulder, CO) 7/81-12/81

Postdoctoral Fellow, NCAR Advanced Study Prog. 6/79-6/81

Graduate Research Assistant - FSU: 8/73-5/79

#### **Present Position:**

Professor (upper level) of Atmospheric Science and Climate Dynamicist in the U.C. Agricultural Experiment Station, Dept of Land, Air, and Water Resources, University of California, Davis.

#### **Professional Collaborations:**

PI collaborators (alphabetical): W. Bourke (BMRC, Australia); G. Branstator (NCAR, USA); F. D'Andrea (LMD, France), K. Fraedrich (FUB, Germany); J. Frederiksen (CSIRO, Australia); Jianping Li (LASG, China); Richard Swinbank (UKMO, UK)J. Tribbia (NCAR, USA); Hans Volkert (DLR, IPA, Germany) Guoxiong Wu (LASG, China) PI's degree advisors: J. O'Brien (FSU, USA) and C. Leith (LLNL, USA)

PI's former students(Alphabetical, LKA): B. Bachmann (USNavy, CA), C. Castello (Google, CA), M. Chen (Rutgers Univ., NJ); G. Faure\* (Meteo-France, Reunion Is.); D.Hodyss (NPGS, CA); S. Lai (SSA Inc., MD); M. Osman (NCSU, NC), R. Pedersen (Quantum Consulting, CA); A. Valade (LSCE, France); C. Wang (Hewlett-Packard, CA). (\*U.S. research project supervisor)

#### **Professional Affiliations/Activities:**

American Meteorological Society (member: 1974-present);

Community Alliance with Family Farmers; Owner of: Rich Fields Farm (Davis CA)

**Publications:** Refereed Pubs: 55+; Reports and Minor Publications: 35+; Computer Films: 27

## **5 Recent refereed publications** relevant to proposal

- Grotjahn, R., and G. Faure. 2008: Composite Predictor Maps of Extraordinary Weather Events in the Sacramento California Region. *Wea. and Forecasting*. **23**: 313-335. doi:10.1175/2007WAF2006055.1
- Grotjahn, R., 2011. Identifying extreme hottest days from large scale upper air data: a pilot scheme to find California Central Valley summertime maximum surface temperatures *Climate Dyn.*, 37:587–604 DOI 10.1007/s00382-011-0999-z
- Grotjahn, R., 2013. Ability of CCSM4 to simulate California extreme heat conditions from evaluating simulations of the associated large scale upper air pattern *Climate Dyn.* **41**, 1187-1197. DOI: 10.1007/s00382-013-1668-1
- Katz, R, Grotjahn, R., 2014. Statistical methods for relating temperature extremes to large-scale meteorological patterns. (US CLIVAR) *Variations* 12 (1): 4-7.
- Grotjahn, R, 2015. Western North American extreme heat, associated large scale synoptic-dynamics, and performance by a climate model. In: *Dynamics and Predictability of Global and Regional High-Impact Weather and Climate Events*, Cambridge Univ. Press.

## 10 Recent "Synergistic Activities" related to agriculture or extremes

- 1. Member & lead author for Chapter 6: Agriculture of The National Climate Assessment (2013)
- 2. Member of US CLIVAR Predictability, Predictions, and Applications Interface (2010-2012)
- **3**. Chair: US CLIVAR Working Group on Extremes (Chair, 2011-present)
- **4**. Chair, organizing committee, US CLIVAR workshop on: Analyses, Dynamics, and Modeling of Large Scale Meteorological Patterns Associated with Extreme Temperature and Precipitation Events, Berkeley (8/2013)
- **5.** Member, organizing committee for the US CLIVAR/NCAR ASP Researcher Colloquium: Statistical Assessment of Extreme Weather Phenomena under Climate Change, Boulder (6/2011)
- **6**. International Commission on Dynamic Meteorology, IAMAS (member: 2005-present, Secretary: 2011-2015, co-convener of extremes sessions: 2007, 2009, 2011, 2013, 2015)
- 7. co-Editor of the book: Dynamics and Predictability of Global and Regional High-Impact Weather and Climate Events, Cambridge Univ. Press.
- **8**. Author, 'Extremes' chapter in multiple-award winning book: *The Encyclopedia of Weather and Climate Change*. (2012; UC Press)
- **9**. Member of Advisory Board for the Canadian Network for Regional Climate and Weather Processes (5/2014-present)
- **10**. Author of >100 web pages on: extreme weather, course materials, agricultural information. Instructor of course: Severe and Unusual Weather.