

Brief Bio

Donald N. B. Hall

Degrees Earned

University of Sydney, Physics, B.Sc. (Hons 1), 1966,
Harvard University, Astronomy, Ph.D., 1970,

Appointments

Astronomer with Tenure, University of Hawaii, 1997 to present
Director, Institute for Astronomy, University of Hawaii, 1984-1997
Deputy Director, Space Science Telescope Institute, 1982-1984 Astronomer with
Tenure, Kitt Peak National Observatory, 1976-1981
Associate Astronomer with Tenure, Kitt Peak National Observatory, 1975-1976
Associate Astronomer, Kitt Peak National Observatory, 1972-1975
Research Associate, Kitt Peak National Observatory, 1970 - 1972
Teaching Fellow in Astronomy, Harvard University, 1968

Professional Boards, Committees, etc.

Member, Space Science Board, National Academy of Sciences, 1984-1988
Member, Board of Directors, Association of Universities for Research in Astronomy,
1984 - 1997
Member, Hubble Space Telescope Science Working Group, 1986-1988
Member, Hubble Space Telescope NICMOS Science Team, 1989 - 1996
Member, Next Generation Space Telescope Ad Hoc Science Working Group, 1996 -
1999
Member, Hubble Space Telescope Wide Field Camera 3 Science Oversight Committee
and Chair, Infrared Subcommittee, 1998 - 2010
Member, James Webb Space Telescope NIRCAM Science Team, 2004 – present
Member, James Webb Space Telescope Detector Degradation Failure Review Board,
2011

Prizes and Awards.

Slade Prize for Practical Physics, University of Sydney, 1964
Newton Lacey Pierce Prize in Astronomy, American Astronomical Society, 1978
NASA Congressional Space Act Award, PI for development of detectors for JWST, 2004
Collaborator of the Year Award, Rockwell Scientific Company, 2005
Joseph Weber Award for Astronomical Instrumentation, American Astronomical Society,
2010

Publications in Refereed Journals Pre 2000 Relevant to Current Research.

Hall, D.N.B., and Aitkens, R. S., Joyce, R., and McCurnin, T. W. 1975. **Johnson Noise Limited Operation of Photovoltaic InSb Detectors.** *Applied Optics* 14:450-459.
Iwamuro, F., Maihara, T., Oya, S., Tsukamoto, H., Hall, D.N.B., Cowie, L.L., Tokunaga, A.T., and Pickles, A.J. 1994. **Development of an OH-Airglow Suppressor Spectrograph.** *PASJ* 46:515-521.
Hodapp, K.W., Hora, J.L., Hall, D.N.B., Cowie, L.L., Metzger, M., Irwin, E., Vural, K., Kozłowski, L.J., Cabelli, S.A., Chen, C.Y., Cooper, D.E., Bostrup, G.L., Bailey, R.B., and Kleinmans, W.E. 1996. **The HAWAII Infrared Detector Arrays:**

testing and astronomical characterization of prototype and science-grade devices. *New Astron.* 1: 177-196.

Other Significant Publications.

Hall, D.N.B. 1973. **An Atlas of Infrared Spectra of the Solar Photosphere and of Sunspot Umbrae in the Spectral Intervals 4040 - 5095 cm^{-1} , 5550 - 6700 cm^{-1} and 7400 - 8790 cm^{-1} .** Published by Kitt Peak National Observatory, Tucson, Arizona.

Beckman, J., Begot, J., Charvin, P. Hall, D.N.B., Léna, P., Soufflot, A., Liebenberg, D., and Wraight, P. 1973. **Eclipse Flight of Concorde 001.** *Nature.* 246: 72-74.

Hall, D.N.B. 1977. **What High Resolution Infrared Spectroscopy Is Telling Us About Sources such as the Becklin Neugebauer Object and IRC + 10°216.** Newton Lacey Pierce Prize Lecture presented at the 151st Meeting of the AAS, January 8-11, 1978, Austin, Texas. *B.A.A.S.* 9:604.

Hall, D.N.B., and Ridgway, S.T. 1978. **Circumstellar Methane in the Infrared Spectrum of IRC + 10°216.** *Nature.* 273: 281.

Extramural Awards (as PI) Active from CY 2001 through 2010.

NASA HQ Purchase Order S-96280-Z Mods 1 – 3 **“Scientific Research for Design Reference Mission for Next Generation Space Telescope(NGST) – Evaluation of Evaluation of Candidate 1 – 5 Micron Detector Technology”.** October 20, 1997 through April14, 2001, \$24,480.

NASA Ames Research Center Contract NAS 2-98077 **“Development of Advanced Near Infrared Focal Plane Technology for Origins / Next Generation Space Telescope”.** August 1, 1998 through September 22, 2003, \$6,090,000.

NASA Goddard Space Flight Center Purchase Order S-65910-G **“Next Generation Space Telescope (NGST) Detector to NGST Focal Plane Electronics Interface Development”.** June 1, 2002 through September 30, 2002, \$99,049.

Rockwell Scientific Company LLC Purchase Order Y404829 and B4U524392 **“James Webb Space Telescope (JWST) Near Infrared Camera (NIRCam) Focal Plane Array Testing”.** December 5, 2003 through October 28, 2005, \$215,000.

University of Arizona Purchase Order Y403002 **“James Webb Space Telescope (JWST) Near Infrared Camera (NIRCam) Science Team Co-Investigator Support”.** April 15, 2004 through April 14, 2009, \$255,590.

NASA HQ Grant NNX08AE07G **“Characterization of HgCdTe Avalanche Photo Diode Arrays: A Path to an Infrared Photon Counting Array”.** December 12, 2007 through December 11, 2010, \$990,936.

NSF Advanced Technology and Instrumentation **“Development of the H4RG-15 A Low Cost, High Performance 4096×4096 Pixel Array for Infrared Astronomy and the Building Block for Very Large IR Mosaic Focal Planes”.** October 1, 2009 through September 30, 2013, \$6,953, 993.