



ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY, INC.

SUITE 350
1200 NEW YORK AVENUE, NW
WASHINGTON, DC 20005
TEL: 202-483-2101
FAX: 202-483-2106
www.aura-astronomy.org

February 8, 2006

Dr. Roger Blandford, Chair
NSF Senior Review
Stanford University
M/S 75
2575 Sand Hill Rd.
Menlo Park, CA 94025

OPERATING FOR THE
NATIONAL SCIENCE FOUNDATION
GEMINI OBSERVATORY
LA SERENA, CHILI & HILO, HAWAII
NATIONAL OPTICAL ASTRONOMY OBSERVATORY:
CERRO TOLOLO INTER-AMERICAN OBSERVATORY
LA SERENA, CHILE
KITZ PEAK NATIONAL OBSERVATORY
TUCSON, ARIZONA
NATIONAL SOLAR OBSERVATORY
SUNSPOT, NEW MEXICO & TUCSON, ARIZONA

OPERATING FOR THE NATIONAL AERONAUTICS
AND SPACE ADMINISTRATION
SPACE TELESCOPE SCIENCE INSTITUTE
BALTIMORE, MARYLAND

MEMBERS/SINCE:

HARVARD UNIVERSITY 1957
INDIANA UNIVERSITY 1957
OHIO STATE UNIVERSITY 1957
UNIVERSITY OF CALIFORNIA 1957
UNIVERSITY OF CHICAGO 1957
UNIVERSITY OF MICHIGAN 1957
UNIVERSITY OF WISCONSIN 1957
YALE UNIVERSITY 1958
PRINCETON UNIVERSITY 1959
CALIFORNIA INSTITUTE OF TECHNOLOGY 1972
UNIVERSITY OF ARIZONA 1972
UNIVERSITY OF TEXAS AT AUSTIN 1972
UNIVERSITY OF COLORADO 1977
UNIVERSITY OF HAWAII 1978
UNIVERSITY OF ILLINOIS 1980
MASSACHUSETTS INSTITUTE OF TECHNOLOGY 1981
JOHNS HOPKINS UNIVERSITY 1982
STATE UNIVERSITY OF NEW YORK AT STONY BROOK 1986
UNIVERSITY OF MARYLAND 1986
UNIVERSITY OF WASHINGTON 1986
PENNSYLVANIA STATE UNIVERSITY 1990
IOWA STATE UNIVERSITY 1992
UNIVERSIDAD DE CHILE 1992
BOSTON UNIVERSITY 1993
UNIVERSITY OF MINNESOTA 1995
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL 1995
CARNEGIE INSTITUTION OF WASHINGTON 1997
MICHIGAN STATE UNIVERSITY 1997
PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE 1997
AUSTRALIAN NATIONAL UNIVERSITY 1999
NEW MEXICO STATE UNIVERSITY 1999
RUTGERS UNIVERSITY 1999
LEIDEN UNIVERSITY 2000
UNIVERSITY OF FLORIDA 2002
UNIVERSITY OF VIRGINIA 2003
UNIVERSITY OF TORONTO 2004
INSTITUTO DE ASTROFÍSICA DE CANARIAS 2005
KIEPENHEUER-INSTITUT FÜR SONNENPHYSIK 2005
MONTANA STATE UNIVERSITY 2005

Dear Dr. Blandford:

We write to reaffirm the support of the NOAO Observatory Council (OC) for NOAO's future plans as presented in the NOAO submission to the Senior Review. We believe that these plans represent a forward-looking yet realistic response to the challenges being examined by the Senior Review.

At each OC meeting, the OC carries out an in-depth examination of one of NOAO's divisions. At our most recent meeting (Jan 28-29, 2006) we focused on the current status and plans of the Cerro Tololo Inter-American Observatory (CTIO). In the course of our review, it seemed to us that one aspect of the CTIO's potential contribution to US ground-based astronomy may have been insufficiently appreciated, namely the complementarity between CTIO and ALMA.

The need to ensure funding for ALMA operations is, of course, one of the drivers of the Senior Review. But modern astronomical facilities typically require complementary observations in other wavelength regimes to exploit their full scientific potential; in the case of ALMA, this is particularly true for infrared observations. Such studies must necessarily be conducted in the southern hemisphere, while much of the US community's O/IR telescope aperture is in the north. So it seems to us worthwhile to point out that the CTIO telescopes have significant IR instrumentation, and that the Blanco 4-m telescope in particular will provide most of the US community's southern wide-field survey capability in optical and IR band passes during the ALMA era. In considering the future of CTIO, we urge that the Senior Review Committee take into account potential scientific synergies with ALMA.

Respectfully,

Observatory Council

Charles Alcock, Chair
Harvard-Smithsonian CfA
Charles Bailyn, Vice Chair
Yale University
You-Hua Chu
University of Illinois
Stanley Dermott
University of Florida
Richard Herman
University of Illinois
Karen Kwitter
Williams College

Robert Millis
Lowell Observatory
Hernan Quintana
Pontificia Universidad Catolica de Chile
Robert Rood
University of Virginia
William Smith, *ex officio*
AURA
Christopher Stubbs
Harvard University
Paula Szkody
University of Washington