

BUDGET

GF-99-1

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1. Institution NASA Goddard Space Flight Center				2. Investigator Dr. Richard Mushotzky		3. Date 02/16/2001		
4. Type of Submission		Proposal	X	5. Institution/Principal Investigator(if different from 1&2) Raytheon Technical Services Company Dr. Eliot Malumuth				
		Revision						
		Supplement						
Proposal/Grant Number		HST-AR-09210.03		6. Continuation Grant #		7. Proposal Type Archival Researcher		
Institution Identifying Number								
8. Proposal Title Using the HST Archive to Study the Optical Counterparts of Chandra X-ray Point Sources								
9. Budget Items		Period (Up to a 12 month period only)			Applicable Rate(s)			Total Loaded Project Costs
A. Salaries and Wages		From: To:						
1. Senior Personnel:		Monthly or Hourly Rate	No. of Months/Hours	Percent of Time	Amount Charged To Project	Fringe Benefits	Over-head	IDC/G&A/F&A
Principal Investigator and Co-Investigators		\$		%	\$	%	%	%
a.								
b.								
c.								
d.								
e.								
f.								
2. Other Personnel								
a.								
b.								
c.								
d.								
e.								
f.								
Total Salaries and Wages					0			0
B. Total Fringe Benefits					0	Added to the appropriate salaries above		
C. Travel Destinations		Transportation Costs	Lodging & Subsistence	Number of Days				
1. Domestic Travel		\$	\$					
a.								
b.								
c.								
d.								
e.								
f.								
2. Foreign Travel								
a.								
b.								
c.								
d.								
Total Travel - Domestic and Foreign					0			0
D. Supplies and Materials		Basis/Method of Cost Computation						
1.								
2.								
3.								
4.								
5.								
6.								
Total Supplies and Materials					0			0

BUDGET Continued

Institution NASA Goddard Space Flight Center			Investigator Dr. Richard Mushotzky		Proposal/Grant Number HST-AR-09210.03		
			Amount Charged To Project \$	Fringe Benefits %	Over- Head %	IDC/ G&A/ F&A/ %	Total Loaded Project Costs \$
E. Computer Services			Monthly Rate	No. of Months			
1.							
2.							
3.							
4.							
Total Computer Services							0
F. Publication Costs/Page Charges			No. of Pages	\$/Page			
1. ApJ Page Charges			16	130.00	2,080	0	2,080
2.							
3.							
Total Publication Costs					2,080		2,080
G. Equipment							
1. 32 GB hard drive					1,200	0	1,200
2. 32 GB hard drive					1,200	0	1,200
3.							
4.							
Total Equipment					2,400		2,400
H. Other							
1. GSFC Lab Tax					351	0	351
2.							
3.							
4.							
5.							
6.							
Total Other					351		351
I. Indirect Costs							Added to the
Total Overhead					0		appropriate
Total IDC/G&A/F&A					0		categories
Total Indirect Costs					0		above
10. Total Project Costs					4,831		4,831
11. Preparatory Grant			To be awarded prior to the receipt of observations.				0
12. Cost Sharing			Total costs funded by sources other than ST ScI (Described in Budget Narrative).				0
13. Cognizant Agency					Date of Negotiation Agreement		
14. Certifications and Assurances "X" in box signifies:							
A. Institutional compliance with the certifications concerning Civil Rights, Debarment and Suspension and Drug-Free Workplace, and Lobbying, the full text of which is contained in ST ScI Form GF-99-8.							X
B. Institutional assurance that only U.S. Scientists will be provided grant funds.							X
C. Institutional assurance that if Federal employees are working on this Program, the costs associated with their work are not available through their Federal Agency.							X
15. Submitted by:			NASA Goddard Space Flight Center				
Dr. Richard Mushotzky			Code 600				
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16. Authorizing Official:							
Dr. Jonathan Ormes							
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Project Summary:

We have an approved HST archive research program to study the optical counterparts of x-ray point sources discovered in Chandra images of the fields of four elliptical galaxies and one starburst galaxy.

Research Plan:

Principle Investigator Malumuth will obtain, re-process, and correct the WFPC2, WFPC, STIS, and NICMOS archival images.

Co-investigators Mushotzky, Weaver, Loewenstein will identify, locate, and analyze the x-ray sources in the Chandra images, and search for optical matches and correlations.

Co-investigator Budget Details:

Co-I funds are requested for Astrophysical Journal page charges and for two hard drives for data storage and analysis.