

14:58:48

OCA PAD AMENDMENT - PROJECT HEADER INFORMATION

09/17/91

Active

Project #: G-32-623	Cost share #:	Rev #: 1
Center #: 10/24-6-R7323-0A0	Center shr #:	OCA file #:
Contract#: 1 S15 HL47726-01	Mod #: ADMIN 9/17/91	Work type: RES
Prime #:		Document: GRANT
		Contract entity: GTRC

Subprojects ? : N	CFDA:
Main project #:	PE #: N/A

Project unit:	BIOLOGY	Unit code: 02.010.134
Project director(s):		
WARTELL R M	BIOLOGY	(404)894-5247

Sponsor/division names: DHHS/PHS/NIH	/ NATL INSTITUTES OF HEALTH
Sponsor/division codes: 108	/ 001

Award period: 910901 to 920831 (performance) 921130 (reports)

Sponsor amount	New this change	Total to date
Contract value	0.00	23,450.00
Funded	0.00	23,450.00
Cost sharing amount		0.00

Does subcontracting plan apply?: N

Title: SMALL INSTRUMENTATION GRANT

PROJECT ADMINISTRATION DATA

OCA contact: Kathleen R. Ehlinger 894-4820

Sponsor technical contact

Sponsor issuing office

DR. HENRY ROSCOE  
(301)496-7416

MARGARET E. HEYDRICK  
(301)496-7255

DIVISION OF HEART AND VASCULAR DIS.  
NAT. HEART, BLOOD, & LUNG INST.  
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BETHESDA, MD. 20892

GRANTS OPERATIONS BRANCH  
DIVISION OF EXTRAMURAL AFFAIRS  
NAT. HEART, LUNG, & BLOOD INSTITUTE  
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BETHESDA, MD. 20892

Security class (U,C,S,TS) : U  
Defense priority rating : N/A  
Equipment title vests with: Sponsor

ONR resident rep. is ACO (Y/N):  
NIH supplemental sheet  
GIT X



Administrative comments -

ISSUED TO CHANGE PROJECT NUMBER FROM G-41-617 TO G-32-623 AND CENTER # FROM 10/24-6-R7322-0A0 TO 10/24-6-R7323-0A0.

GEORGIA INSTITUTE OF TECHNOLOGY  
OFFICE OF CONTRACT ADMINISTRATION

NOTICE OF PROJECT CLOSEOUT

Closeout Notice Date 03/19/93

Project No. G-32-623 \_\_\_\_\_ Center No. 10/24-6-R7323-OA0\_

Project Director WARTELL R M \_\_\_\_\_ School/Lab BIOLOGY \_\_\_\_\_

Sponsor DHHS/PHS/NIH/NATL INSTITUTES OF HEALTH \_\_\_\_\_

Contract/Grant No. 1 S15 HL47726-01 \_\_\_\_\_ Contract Entity GTRC

Prime Contract No. \_\_\_\_\_

Title SMALL INSTRUMENTATION GRANT \_\_\_\_\_

Effective Completion Date 920831 (Performance) 921130 (Reports)

Closeout Actions Required:	Y/N	Date Submitted
Final Invoice or Copy of Final Invoice	Y	921204
Final Report of Inventions and/or Subcontracts	Y	_____
Government Property Inventory & Related Certificate	N	_____
Classified Material Certificate	N	_____
Release and Assignment	N	_____
Other _____	N	_____

Comments EFFECTIVE DATE 9-1-91. CONTRACT VALUE \$23,450. \_\_\_\_\_  
SPONSOR PATENT FORM REQUIRED (DHHS 568) \_\_\_\_\_

Subproject Under Main Project No. \_\_\_\_\_

Continues Project No. \_\_\_\_\_

Distribution Required:

Project Director	Y
Administrative Network Representative	Y
GTRI Accounting/Grants and Contracts	Y
Procurement/Supply Services	Y
Research Property Management	Y
Research Security Services	N
Reports Coordinator (OCA)	Y
GTRC	Y
Project File	Y
Other HARRY VANN-FMD _____	Y
FRED CAIN-OOD _____	Y

NOTE: Final Patent Questionnaire sent to PDPI.



March 10, 1993


Beckie Chamberlin, Grants Administrator  
National Heart, Lung & Blood Institute  
5333 Westbard Ave, Room 4A12  
Bethesda, MD 20892

Dear Ms. Chamberlin:

Thank you for your reminder with regard to my late Final Progress Report on the Small Instrumentation Grant which expired August 31, 1992. I apologize for the delay. I was recently reminded by Georgia Tech officials that the report was late.

I have enclosed a one page report of the instrument purchased and some of the research to which it has been applied. If further information is required please let me know.

Sincerely yours,

  
Roger M. Wartell

cc: M. Gedney

FINAL PROGRESS REPORT

OF

NATIONAL INSTITUTES OF HEALTH

SMALL INSTRUMENTATION GRANT HL-47726-01

Period of Grant: September 1, 1991 to August 31, 1992

Principal Investigator

Roger M. Wartell  
School of Biology  
Georgia Institute of Technology  
Atlanta, GA 30332

March 10, 1993



## FINAL PROGRESS REPORT

The objective of this small instrument grant was to purchase a scintillation counter to be used for research and research training by faculty in the School of Biology and School of Chemistry and Biochemistry at Georgia Institute of Technology.

A Packard Instruments Co. model B1900 P5 scintillation counter was purchased in November 1991 and installed in the Emerson Building. The instrument replaced a non-functional scintillation counter that was 16 years old. The new instrument has contributed to the research of several N.I.H. funded investigators as well as other faculty in the department. It is used several times each week. The aim of the proposal has been achieved.

The instrument has been used for studies on the binding constant of cyclic adenosine monophosphate (cAMP) to the catabolite activator protein (CAP), a gene regulator protein in the *E. coli* bacteria. Tritium labeled cAMP was used in equilibrium dialysis experiments with normal and truncated versions of CAP. The instrument was also used to quantify the amount of  $^{32}\text{P}$  labeled DNA in polyacrylamide gel bands. The gel experiments were aimed at determining the effects of single mismatched bases on the stability of long DNAs by temperature gradient gel electrophoresis. These studies were carried out by Dr. Roger Wartell and collaborators.

The instrument was also used by Dr. Jung Choi to quantify oligonucleotide probes and proteins labeled with  $^{32}\text{P}$  in studies of development in plant cells; by Dr. Richard Ikeda and collaborators to measure the amount of radioactive RNA in gel bands synthesized during transcription from various DNA promoter sites, and by Dr. Sheldon May and colleagues to quantify levels of  $^{14}\text{C}$  labeled test compounds as enzyme inhibitors. A number of other faculty have used the instrument. These include studies on gene regulation of RNA retroviruses, and biodegradation of radioactively labeled polymers.

### Publications to date

1. R. Ikeda, G.S. Warshamana, and L.L. Chang, Biochemistry, 31, 9073-9080, 1992.
2. D. Koontz and J. Choi, Plant Physiol. Biochem. 31, 95-102, 1993
3. J. Bradbourne, H. Godfrey, J. Choi, and J. Mathis, Applied & Environmental Microbiology 59, XXXX, 1993.
4. G. S. Tan, Ph.D. thesis, "Raman Spectroscopy and other studies on the interaction of cAMP on CRP" Georgia Institute of Technology, October 1992.
5. S.H. Ke and R. M. Wartell, Biophysical J. 64, A339, 1993.