

11:48:23

OCA PAD INITIATION - PROJECT HEADER INFORMATION

07/25/88

Project #: G-42-515  
Center #: 05861-OA0

Cost share #: G-42-211  
Center shr #: E5861-OA0

Active  
Rev #: 0  
OCA file #:  
Work type : INST  
Document : GRANT  
Contract entity: GTRC

Contract#: 1 T32 AG00175-01  
Prime #:

Mod #:

Subprojects ? : N  
Main project #:

Project unit: PSYCH Unit code: 02.010.154  
Project director(s):  
SMITH A D PSYCH

Sponsor/division names: DHHS/PHS/NIH  
Sponsor/division codes: 108

NATL INSTITUTES OF HEALTH  
001

Award period: 880701 to 890630 (performance) 890930 (reports)

Sponsor amount	New this change	Total to date
Contract value	88,701.00	88,701.00
Funded	88,701.00	88,701.00
Cost sharing amount		4,800.00

Does subcontracting plan apply ? : N

Title: RESEARCH TRAINING IN COGNITIVE ~~TRAINING~~ AGING

PROJECT ADMINISTRATION DATA

OCA contact: E. Faith Gleason 894-4820

Sponsor technical contact

Sponsor issuing office

MATILDA W. RILEY, D.SC.  
(301)496-3136  
ASSOCIATE DIRECTOR, BEHAVIORAL AND  
SOCIAL RESEARCH PROGRAM, NIH/NIA  
BETHESDA, MD 20892

JOANNE COLBERT  
(301)496-1472  
NATIONAL INSTITUTE ON AGING, BLDG 31  
RM 5C-07, 9000 ROCKVILLE PIKE  
BETHESDA, MD 20892

Security class (U,C,S,TS) :  
Defense priority rating :  
Equipment title vests with: Sponsor  
NONE AUTHORIZED

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

Administrative comments -

INITIATION. THIS IS THE 1ST YEAR OF A NATIONAL RESEARCH SERVICE AWARD WHICH  
HAS BEEN RECOMMENDED FOR SUPPORT FOR 5 YEARS.



PROJECT SUMMARY  
CLOSEOUT COMPLETE

Closeout Complete Date 06/29/90

Project No. G-42-515

Center No. 05861-OA0

Project Director SMITH A D

School/Lab PSYCH

Sponsor DHHS/PHS/NIH/NATL INSTITUTES OF HEALTH

Contract/Grant No. 1 T32 AG00175-01 Contract Entity GTRC

Prime Contract No.

Title RESEARCH TRAINING IN COGNITIVE <sup>AGING</sup> ~~TRAINING~~

Effective Completion Date 890630 (Performance) 890930 (Reports)

Closeout Actions:	Y/N	Date Submitted
Final Invoice or Copy of Final Invoice	Y	900307
Final Report of Inventions and/or Subcontracts	N	
Government Property Inventory & Related Certificate	N	
Classified Material Certificate	N	
Release and Assignment	N	
Other-	N	

Comments

Subproject Under Main Project No.

Continues Project No.

Distribution:

Project Director	Y
Administrative Network Representative	Y
GTRI Accounting/Grants and Contracts	Y
Procurement/Supply Services	Y
Research Property Managment	Y
Research Security Services	N
Reports Coordinator (OCA)	Y
GTRC	X
Project File	Y
Other	N
	N

SECTION IV PROGRESS REPORT SUMMARY		GRANT NUMBER AG00175-02	
PRINCIPAL INVESTIGATOR OR PROGRAM DIRECTOR Anderson D. Smith		PERIOD COVERED BY THIS REPORT	
APPLICANT ORGANIZATION Georgia Institute of Technology		FROM 7/1/88	THROUGH 6/30/89
TITLE OF PROJECT (Repeat title shown in item 1 on first page) RESEARCH TRAINING IN COGNITIVE AGING			
(SEE INSTRUCTIONS)			

## PROGRESS REPORT

### 1. PROGRAM GOALS AND PROGRESS

The goal of the training program is to provide the appropriate academic context for training pre- and post-doctoral students in Cognitive Aging. The training program, consisting of three pre-doctoral fellowships and one post-doctoral fellowship is currently in its first year of funding. All three pre-doctoral fellowships were filled during the first year, but the post-doctoral fellowship was not filled because the award was not made until the summer and too late for recruiting a post-doctoral fellow. The three pre-doctoral fellows have completed the curriculum requirements of the program without any problems. Since the original application, two further faculty members have been added as "consultant faculty". Dr. Dorrit Billman, a cognitive psychologist interested in concept learning, and Dr. Richard Catrambone, another cognitive psychologist interested in learning from example and instruction, have joined the faculty in the School of Psychology. This increases the consultant faculty from nine to eleven.

### 2. TRAINING RELATED EXPENSE BUDGET

The Training-Related Expenses budget enhanced the program in several ways. First, the funds were used to pay expenses for a visiting scientist as a part of the Cognitive Aging seminar series. Dr. Fergus I. M. Craik from the University of Toronto was the first visitor in our planned series of outside speakers. Dr. Craik gave a public lecture on Cognitive Aging, interacted with the trainees in informal presentations of research, and consulted with the core faculty on training issues in Cognitive Aging. Second, the funds were also used to send recruitment letters and brochures to other academic institutions. This was important given the fact that the program is new. The funds were also used to pay incidental research expenses for the trainees. In one project, for example, a large mail survey was used. Funds covered the printing and postage expenses for this survey.

### 3. PRE-DOCTORAL TRAINEES

**A. Renee L. Babcock** - Ms. Babcock had received her B.A. in Psychology from Hope College and a M.A. degree in Applied Research and Evaluation in Psychology from Hofstra University. During this first year of her trainee appointment, Ms. Babcock was awarded a M.S. degree in Experimental Psychology from Georgia Tech working with core faculty member Timothy A. Salthouse and is currently a doctoral candidate in Cognitive Aging.

**B. Kathryn L. Berkovsky** - Ms. Berkovsky received her B.A. degree in Psychology from Duke University and a M.Ed. from the University of Virginia prior to her appointment as NIA trainee at Georgia Tech. She is a doctoral student and expects to complete her M.S. degree at Georgia Tech early this summer working with core faculty member Anderson D. Smith.

**C. Wendy A. Rogers** - Ms. Rogers received her B. A. degree in Psychology from Southeastern Massachusetts University. During the first year of her appointment as a NIA trainee, she was awarded the M.S. degree in Experimental Psychology from Georgia Tech working with core faculty member Arthur D. Fisk and is currently a doctoral candidate in Cognitive Aging.

#### **4. RESEARCH PROJECTS OF TRAINEES AND 5. PUBLICATIONS**

##### **A. Renee L. Babcock (Research supervisor: Dr. Timothy A. Salthouse)**

Ms. Babcock primary interest is in the area of working memory. She is specifically interested in examining age differences in tasks that involve little or no processing requirements versus age differences in tasks that involve increased processing requirements. It is hypothesized that tasks consisting of greater processing requirements would reveal a larger age difference than tasks with few processing requirements. She is also involved in several other projects with Timothy Salthouse, in which possible factors that contribute to age differences in memory and spatial ability are being examined.

##### **Journal articles:**

Salthouse, T.A., Mitchell, D.R.D., Skovronek, E., & Babcock, R. L. (In press). Effects of adult age and working memory on reasoning and spatial abilities. *Journal of Experimental Psychology: Learning, Memory, and Cognition*.

Salthouse, T.A., Babcock, R.L., (Submitted and under review) Skovronek, E., Mitchell, D.R.D., & Palmon, R. Age and experience effects in spatial visualization. *Developmental Psychology*.

Salthouse, T.A., Babcock, R.L., Michell, D.R.D., Palmon, R., & Skovronek, E. (Submitted and under review). Sources of individual differences in spatial visualization ability. *Intelligence*.

##### **Conference presentations:**

Babcock, R.L., & Salthouse, T.A. (1988). Age effects in primary and working memory. Paper presented at the meeting of the Gerontological Society, San Francisco, CA.

##### **Unpublished thesis:**

Babcock, R.L. Working memory as a general-purpose processor: Effects of processing load on the relations between verbal and spatial memory. Unpublished Masters thesis, Georgia Institute of Technology.

##### **B. Kathryn A. Berkovsky (Research supervisor: Dr. Anderson D. Smith)**

In addition to working with Dr. Smith on studies of visual memory, Ms. Berkovsky is conducting her Masters thesis research on age differences in social cognition. She is interested in age differences in impression formation. In one study



she has collected behavioral descriptions in two age groups. She is performing a comparative factor analysis of the cognitive dimensions underlying older and younger adults' personality ratings. A second study will test memory for behavioral description in the two adult age groups.

#### **Journal articles:**

Smith, A.D., Park, D.C., Cherry, K., & Berkovsky, K. (Submitted and under journal review). Age differences in memory for pictures. *Journal of Gerontology*.

#### **Conference presentations:**

Berkovsky, K. (1988). Age differences in social cognition. Paper presented to the meeting of the Georgia Gerontological Society, Augusta, GA.

#### **C. Wendy A. Rogers (Research supervisor: Dr. Arthur D. Fisk)**

Ms. Rogers' primary research interests include attention, the effects of aging on cognitive performance, and skill acquisition. More specifically, her recent research has been aimed at investigating age-related differences in automatic and controlled processing. Her work with Dr. Fisk has involved the study of the acquisition of new automatic processes as well as the performance of well-learned (prior to senescence) automatic processes. She is also investigating age differences in focused attention and future plans include the study of divided attention differences (or lack thereof) between young and old adults.

#### **Journal articles:**

Fisk, A.D., & Rogers, W.A. (1988). The role of situational context in the development of high-performance skills. *Human Factors*, 30, 703-712.

Fisk, A.D., Rogers, W.A., & Giambra, L.M. (Submitted and under review). Age-related influence of response set on perceptual learning in consistent and varied search. *Journal of Gerontology*.

#### **Book chapters:**

Fisk, A.D., & Rogers, W.A. (In preparation). Development of skilled performance: An age-related perspective. In D. Damos (Ed.), *Dual-task Performance*.

#### **Proceedings:**

Rogers, W.A., & Fisk, A.D. (1988). Age dependent skills training: Theory, data, and guidelines. *Proceedings of the Fourth Mid-Central Ergonomics/Human Factors Conference*, Urbana, Ill.

Fisk, A.D. & Rogers, W.A. (1988). A connectionist interpretation of age differences in memory/visual search. *Proceedings of the 10th Cognitive Science Meeting*, Hillsdale, N.J.: Lawrence Erlbaum.

Rogers, W.A. & Fisk, A.D. (1988). Age related effects of stimulus-specific context on perceptual learning. *Proceedings of the Human Factors Society*. Santa Monica, CA: Human Factors Society.

#### **Conference Presentations:**

Rogers, W.A. (1988). Target and distractor learning in visual search: Age related differences. Paper presented at the National Institute on Aging, Francis S. Key Medical Center, Baltimore, MD.

Rogers, W.A., & Fisk, A.D. (1988). Can stimulus-set context mediate the development of automatic detection. Paper presented at the American Psychological Association, Atlanta, GA.

Fisk, A.D., & Rogers, W.A. (1988). Age-dependent influences of memory and visual load in perceptual learning. Paper presented at the American Psychological Association, Atlanta, GA.

Fisk, A.D., & Rogers, W.A. (1988). A connectionist interpretation of age differences in memory/visual search. Paper presented at the Cognitive Science Meeting, Montreal, Canada.

Rogers, W.A. & Fisk, A.D. (1988). Age related effects of stimulus-specific context on perceptual learning. Paper presented at the Human Factors Society, Anaheim, CA.

Fisk, A.D., & Rogers, W.A. (1988). Priority learning mediates age-related differences in visual search. Paper presented at the meeting of the Psychonomics Society, Chicago, IL.

Rogers, W.A. (1988). Target and distractor learning in visual search: Age-related differences. Paper presented at the meeting of the Gerontological Society, San Francisco, CA.

#### **Unpublished thesis:**

Rogers, W.A. (1988). Target and distractor learning in visual search: Age-related differences, Unpublished Masters thesis, Georgia Institute of Technology..

### **6. OTHER SUPPORT**

The program used no other training support from federal funds. State (institutional) funds (\$131/month) are used to supplement the fellowship stipend to bring the stipend amount up to a level competitive with teaching and research assistantships in the School.

### **7. OBJECTIVES**

There are no anticipated changes in the training staff for the remainder of the current budget period or the next period. We do expect to expand the research facilities available to core faculty and students in Cognitive Aging next September as Psychology moves into new space. The new space will provide expanded laboratory