

4. BUDGET JUSTIFICATIONS and Sample Calculations for the Initial Budget Period:

Sample completed PHS 398 Form for NIH Grants:

Principal Investigator/Program Director (Last, first, middle): <u>Replace With PI/PD Name</u>							
DETAILED BUDGET FOR INITIAL BUDGET PERIOD						FROM	THROUGH
DIRECT COSTS ONLY						00/00/00	00/00/00
PERSONNEL (Applicant organization only)					DOLLAR AMOUNT REQUESTED (omit cents)		
NAME	ROLE ON PROJECT	TYPE APPT. (months)	% EFFORT ON PROJ.	INST. BASE SALARY	SALARY REQUESTED	FRINGE BENEFITS	TOTALS
LaVerne Shuler	Principal Investigator	9	30%	123,456	37,037	8,810	45,847
LaVerne Shuler	PI	3	30%	41,152	12,346	2,358	14,704
John Smith	Investigator	9	15%	82,315	12,347	3,226	15,573
John Smith	Investigator	3	15%	27,438	4,116	786	4,902
Data Soong	Res. Asst.	12	10%	67,891	6,789	1,875	8,664
William Riker	Proj Coord	12	100%	40,000	40,000	13,425	53,425
TBN (x 6)	Grad. Assts.	12	100%	85,500	85,500	428	85,928
Subtotal from x-personnel sheet					0	0	0
SUBTOTALS →					198,135	30,908	229,043
CONSULTANT COSTS							
Tom Jones (4 days @ \$350 per day; also \$1,500 for travel, accommodations, and per diem) and Peter Rabbit (5 days @ \$250 per day)							4,450
See Detailed Budget Justification							
EQUIPMENT (Itemize)							
ACME Telemetry Portable Metabolic System, Model No. C09050-02-99 See Detailed Budget Justification							24,257
SUPPLIES (Itemize by category)							
Project-specific office supplies and postage: \$2,500				Data processing supplies: \$4,800			
Food supplies: \$3,500				Medical supplies: \$12,000			
Educational supplies: \$1,000				See Detailed Budget Justification			
							23,800
TRAVEL							
Local in-state travel: \$9,733		Out-of-state travel: \$4,500		See Detailed Budget Justification.			14,233
PATIENT CARE COSTS		INPATIENT					0
		OUTPATIENT					0
ALTERATIONS AND RENOVATIONS (Itemize by category)							
							0
OTHER EXPENSES (Itemize by category)							
Bulk printing: \$2,721		School Incentives: \$12,000		See Detailed Budget Justification			19,321
General Other: \$3,500		Participant Costs: \$1,100					
SUBTOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD						\$	315,104
CONSORTIUM/CONTRACTUAL COSTS		DIRECT COSTS				9,333	
		INDIRECT COSTS				2,333	
TOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD (Item 7a, Face Page) →						\$	326,770
PHS 398 (Rev.05/01) Page _____ Form Page 4							

a. PERSONNEL

i. Salary for faculty member with 9-month academic appointment:

PERSONNEL <i>(Applicant organization only)</i>		Type Appt	% Effort on Project	Institutional Base Salary	DOLLAR AMOUNT REQUESTED <i>(Omit cents)</i>		
Name	Role on Project				Salary Requested	Fringe Benefits	TOTALS
John Smith	Investigator	9	30%	123,456	37,037	8,810	45,847
John Smith	Investigator	3	30%	41,152	12,346	2,358	14,704

▪ **9-mo Salary Requested:**

- $\$123,456 \times 30\% = 37,037$

▪ **Summer Salary Requested:**

- $[(\$123,456 / 9 \text{ mo}) \times 3 \text{ mo}] \times 30\% = [41,152] \times 30\% = 12,346$

ii. Fringe Benefits for faculty member with 9-month academic appointment:

- 9-mo Academic Year: $(A+B+C+D) \times \text{Salary} + (E \times \% \text{ Effort})$
 $(19.10\%) \times 37,037 + (642.77 \times 9 \times 30\%) = 8,810$
- Summer: $(A+B+C+D) \times \text{Salary} = (19.10\%) \times 12,346 = 2,358$

Justification:

J. Smith – Investigator. Responsible for design and implementation of the intervention, development of the measurement protocols, supervision of research assistant, and interpretation of collected data. (30% effort; 30% salary requested in Years 01, 02, and 03)

b. CONSULTANT COSTS

CONSULTANT COSTS	
Tom Jones (4 days @ \$350 per day; also \$1,500 for travel, accommodations, and per diem) and Peter Rabbit (5 days @ \$250 per day)	4,450

Sample Calculation: $[4 \text{ days} \times \$350/\text{day} + \$1,500] + (5 \text{ days} \times \$250/\text{day}) = 4,450$

Justification:

Consultants – Two consultants, Tom Jones and Peter Rabbit, will assist with the project. Tom Jones will dedicate 2 days per year to the project (\$350 per day) to assist with the conceptualization of the study design, review preliminary and final analyses, and provide technical assistance on the preparation of manuscripts. Funds for travel, accommodations, and per diem expenses are estimated at \$1,500 per year for Years 01, 02, and 03. Peter Tanner will dedicate five days per year to

project (\$250 per day) to assist with the assessment of depression in study participants.

c. EQUIPMENT

EQUIPMENT	
ACME Telemetry Portable Metabolic System, Model No. C09050-02-99	24,257

Justification:

EQUIPMENT – Request \$24,257 in Year 01 for purchasing a ACME EN Telemetry Portable Metabolic System. The unit will be used to monitor cardiorespiratory function of study participants during physical activities performed in the laboratory as well as in the 12 field locations. Estimate is based on five written price quotes from qualified sources.

d. SUPPLIES

SUPPLIES	
Project-specific office supplies and postage: \$2,500; food supplies: \$3,500; educational supplies: \$1,000; data processing supplies: \$4,800; medical supplies: \$12,000. See detailed budget justification.	23,800

Justification:

Project-specific office supplies and postage: A total of \$1,000 is requested in Years 01 and 02 for project-specific supplies, such as project letterhead and envelopes for mailing consent forms and surveys to subject participants; training binders that will contain goals, objectives, lesson plans, and other resources.

Food Supplies: A total of \$3,000 per year is requested in Years 01 and 02 to purchase food supplies for 600 subjects who will participate in data collection activities after a mandatory 10-hour fast. Additionally, \$500 per year is requested for food that will be provided for trainers at the participating community agencies to participate in 1 all-day training workshop in Years 01 and 02. A total of \$3,500 is requested for food in Years 01 and 02.

Educational Supplies: A total of \$1,000 per year is requested for books, pamphlets, brochures, posters, and slides for training workshops in Years 01 and 02.

Medical Supplies: Study participants will wear the AM 7164 Actigraph activity monitors during the study. A total of \$12,000 is requested for 30 activity monitors @ \$400 each in Year 01.

Data Processing Supplies: One IBM-compatible desktop computer is required for downloading data from the AM 7164 Activity Monitors, entering survey data, and

analyzing data. Request \$1,500 for one personal computer in Year 01. Also, support is requested for one computer laptop to interface with the ACME EN Telemetry Metabolic System (\$2,200) and one Reader Interface Unit (\$450) for initializing and downloading data from the activity monitors to the desktop computer. A total of \$650 is requested for computer software. A total of \$4,800 is requested for data processing supplies in Year 01.

e. TRAVEL

TRAVEL Local in-state travel: \$9,733; Out-of-state travel: \$4,500. See detailed budget justification.	14,233
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Justification:

In-state Travel for Recruitment and Measurement Activities. Subject recruitment and measurement activities will take place in 12 schools over a 4-month period between February and May in Years 01 and 02. The average round trip mileage from the University is 169 miles. Vehicle rental costs for one 15-passenger van for transporting measurement equipment, supplies, and staff is estimated at \$9,733 [(\$19.60/day x 120 days) + (\$0.38/mile x 169 miles x 12 schools x 5 visits per school)] in Years 01 and 02.

Out-of-State Travel to Professional Meetings. Travel expenses for attendance at national meetings for the purpose of presenting abstracts and papers is requested for three investigators for Years 02 and 03. Estimated costs for airfare, accommodations, and per diem are \$1,500 per person: average airfare (\$750), accommodations (\$189/night x 3 nights); meals (\$32/day x 2 days + \$16) and parking/shuttle (\$103). The total estimated costs for three persons is \$4,500 in Years 02 and 03.

f. OTHER EXPENSES

OTHER EXPENSES Bulk printing: \$2,721; General Other: \$3,500; School Incentives: \$12,000; Participant Costs: \$1,100	\$19,321
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Justification:

Bulk printing of project-specific materials. Support is requested for bulk printing of project materials, to include surveys (600 subjects x 3 surveys x 9 pages x \$0.03/page = \$486), training manuals (20 manuals x 45 pages x \$0.03/page = \$27), consent forms (1,800 x 2 pages x 0.03/page = \$108, promotional brochures (1,200 x 2 pages x \$0.75 = \$1,800, and business reply envelopes (\$300). A total of \$19,321 is requested for bulk printing in Years 01 and 02.

General Other. Support is requested for one dedicated toll-free telephone line with voice mail for used by school personnel and subjects (\$750), long-distance telephone and voice mail (\$1,050), freight and express mail (\$300), and copier machine usage costs for general low-volume copying of project-specific material (\$450) in Years 01, 02, and 03. Cost of manuscripts and reprints is estimated at \$950 in Year 03.

School Incentives. As an incentive for implementation of the XYZ project, each of the 12 participating middle schools will receive a \$1,000 mini-grant in Years 01 and 02. Total cost for school incentives is estimated at \$12,000 in each of Years 01 and 02.

Participant Costs. A \$250 stipend is requested for two school personnel to attend a 2-day training workshop in Years 01 and 02 (\$500 per year). A \$600 honorarium is requested for one instructor in Years 01 and 02.

g. CONSORTIUM/SUBCONTRACT COSTS

NIH PHS 398 Example:

Consortium/ Subcontract Costs	Direct Costs	\$ 9,333
	Facilities and Administrative Costs*	\$ 2,333

*The approved F&A cost rate at subcontractor institution is only 25% in this example. The University's (i.e., USC) F&A rate will be applied to both the consortium/subcontractor Direct Costs and F&A Costs.

Justification

Jane Doe is a biostatistician who will have responsibilities for data reduction and computer-based statistical analysis using structural equation modeling and latent growth curve analysis of longitudinal data collected during the study. Those responsibilities will be carried out at ACME University. (10% effort; 10% salary requested in Years 01, 02, and 03)

h. NIH MODULAR BUDGET Example

BUDGET JUSTIFICATION PAGE MODULAR RESEARCH GRANT APPLICATION				
Initial Budget Period	Second Year of Support	Third Year of Support	Fourth Year of Support	Fifth Year of Support
\$ 99,876	\$	\$	\$	\$
Total Direct Costs Requested for Entire Project Period			\$ 99,876	

Personnel

ABC (Small Business Concern Personnel):

Alan Jones, Ph.D., Co-investigator, (25% effort) will be responsible for the feasibility determinations, design of the hardware and development of the instrumentation.

Jonathan Goodlatch, BSEE, (19% effort) will serve as a Project Engineer. Mr. Goodlatch will implement the algorithm design and implementation.

To be Appointed Technician, (25% effort) is responsible for the repair and maintenance of the equipment and will run a variety of system tests.

Research Institution Personnel:

Sandy L. Smith, Ph.D., Principal Investigator, (25% effort) is Chief of the Stress Unit at Boston Hospital and Professor at Boston University. She will supervise and coordinate all aspects of this project. She will specifically be involved in optic system design, modeling and simulation of sensor performance and data analysis. Having expertise in biomedical instrumentation and electromagnetics/optics makes her ideally suited to head this project.

Jonah Kostenbater, M.S. (10% effort) is an experienced statistician. He will be responsible for the statistical evaluation of the stress recordings from the treadmill.

Roger Davis, M.D., (10% effort) is Professor of Physical Therapy at Nouveau Aging Center. He will evaluate testing of arch stress in a clinical environment using equipment at the VCF.

Consortium

Contractual Costs. Approximately **\$54,000** Total Costs for Entire Period.

Marshall University (MU) Domestic Foreign

Marshall University, Iowa is the Research Institution partner on this STTR. MU will be subcontracted to test and evaluate the arch stress sensor array necessary for clinical studies. See the attached Research Institution Certification Page.

Consultant Costs

ABC Company. George Poole, Ph.D., (5% effort) will serve as a paid clinical consultant. Dr. Poole will aide ABC Company in ensuring that the XYZ system specifications are consistent with the needs of the clinical community. He will also be involved in evaluating the results of the Phase I studies. Dr. Poole will be available for three days at \$300/day (**\$900 total**).

Margaret Trimble, Ph.D., (10% effort) will serve as a paid consultant. She will specifically advise us in tissue preparation and data analysis. She will be available for 10 days at \$200/day (**\$2000 total**).

Fee (SBIR/STTR Only)

A fee of 4% of total costs (direct and indirect) is requested. This fee contributes to the growth of the ABC Company by allowing expansion of resources and personnel development. The fee is consistent with a normal profit margin provided for research and development work.