

<b>DETAILED BUDGET FOR INITIAL BUDGET PERIOD DIRECT COSTS ONLY</b>					FROM 04/01/05	THROUGH 10/30/05	
PERSONNEL ( <i>Applicant organization only</i> )		TYPE APPT. ( <i>months</i> )	% EFFORT ON PROJ.	INST. BASE SALARY	DOLLAR AMOUNT REQUESTED ( <i>omit cents</i> )		
NAME	ROLE ON PROJECT				SALARY REQUESTED	FRINGE BENEFITS	TOTAL
Sandy L. Smith	Principal Investigator	12	25	100,000	12,500		12,500
Alan Jones	Res. Assoc.	12	50	85,000	21,250		21,250
Rachel Lato	Sr. Res. Assoc	12	100	50,000	25,000		25,000
Res. Assist, Cell culture	Res. Assist	12	100	40,000	20,000		20,000
Frank Rodgers	Co-Invest	12	5	125,000	3,125		3,125
<b>SUBTOTALS</b> →							<b>81,875</b>
CONSULTANT COSTS Susan G. Simmons							21,675
EQUIPMENT ( <i>Itemize</i> ) Thermocycler (\$1,000) and HPLC Fraction Collector (\$1,700)							2,700
SUPPLIES ( <i>Itemize by category</i> ) Tissue culture: \$3,000 Antibodies and reagents: \$3500							6,500
TRAVEL One trip for PI to attend SBIR conference							1,500
PATIENT CARE COSTS		INPATIENT					0
		OUTPATIENT					0
ALTERATIONS AND RENOVATIONS ( <i>Itemize by category</i> )							0
OTHER EXPENSES ( <i>Itemize by category</i> ) Karyotyping services: \$1000 Animals and care: \$2500							3,500
CONSORTIUM/CONTRACTUAL COSTS				DIRECT COSTS			10,000
<b>SUBTOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD</b> ( <i>Item 7a, Face Page</i> )							<b>\$ 127,750</b>
CONSORTIUM/CONTRACTUAL COSTS				FACILITIES AND ADMINISTRATIVE COSTS			2,500
<b>TOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD</b>							<b>\$ 130,250</b>
<b>SBIR/STTR Only: FEE REQUESTED</b>							<b>6,512</b>

## BUDGET FOR ENTIRE PROPOSED PROJECT PERIOD DIRECT COSTS ONLY

BUDGET CATEGORY TOTALS		INITIAL BUDGET PERIOD <i>(from Form Page 4)</i>	ADDITIONAL YEARS OF SUPPORT REQUESTED			
			2nd	3rd	4th	5th
PERSONNEL: <i>Salary and fringe benefits. Applicant organization only.</i>		81,875				
CONSULTANT COSTS		21,675				
EQUIPMENT		2,700				
SUPPLIES		6,500				
TRAVEL		1,500				
PATIENT CARE COSTS	INPATIENT	0				
	OUTPATIENT	0				
ALTERATIONS AND RENOVATIONS		0				
OTHER EXPENSES		3,500				
CONSORTIUM/ CONTRACTUAL COSTS	DIRECT	10,000				
<b>SUBTOTAL DIRECT COSTS</b> <i>(Sum = Item 8a, Face Page)</i>		127,750				
CONSORTIUM/ CONTRACTUAL COSTS	F&A	2,500				
<b>TOTAL DIRECT COSTS</b>		130,250				
<b>TOTAL DIRECT COSTS FOR ENTIRE PROPOSED PROJECT PERIOD</b>						<b>\$ 130,250</b>
<b>SBIR/STTR Only Fee Requested</b>		6,512				
<b>SBIR/STTR Only: Total Fee Requested for Entire Proposed Project Period</b> <small>(Add Total Fee amount to "Total direct costs for entire proposed project period" above and Total F&amp;A/indirect costs from Checklist Form Page, and enter these as "Costs Requested for Proposed Period of Support on Face Page, Item 8b.)</small>						<b>\$ 6,512</b>

JUSTIFICATION. Follow the budget justification instructions exactly. Use continuation pages as needed.

**Personnel:**

Sandy Smith, M.D., Principal Investigator, (25% effort) will be responsible for morphological and immunohistochemical characterization of eye, brain, and other tumors arising in transgenic retinoblastomas and uveal melanomas as well as the study of cell death in the HPV E6 and E7 models. She will oversee all aspects of the research.

Alan Jones, Ph.D., Co-investigator, (50% effort) will develop the HPV E6 and E7 models of transgenic retinoblastoma mice and will determine the cellular genes responsible for the retinoblastoma in animal models.

See continuation pages.

## BUDGET JUSTIFICATION (cont.)

Ms. Rachel Lato, M.S., Research Associate, (100% effort) is responsible for the Xh-Tip mouse colony under the direction of the PI. She will maintain a breeding program to ensure adequate numbers of transgene-bearing animals. She will perform DNA extractions and PCR.

The research assistant requested will be responsible for the tissue culture rooms and equipment, and will design and carry out cell culture experiments on the human cells. The Research Assistant will work under the direction of the Senior Research Associate, and will make media and other reagents, order supplies, care for cultures and maintain equipment. Both of these technical staff will work full time for this project, and their salaries are requested.

Frank Rogers is co-investigator on this project. He has experience in neurobiology and in cellular therapy for ocular-degenerative and dermatological diseases and has worked with cells from CNS and skin. He will be responsible for research and development for the company, and will devote 5% of his time to this project. Five percent of his salary is requested.

**Consultant costs: \$21,675** Total Costs for entire period.

Susan Simmons is a consultant to the project. She will be responsible for production and molecular biological characterization of transgenic mice expressing N-myc proto-oncogene in photoreceptor cells. She will provide lines of transgenic mice developing melanoma due to targeted expression of SV40-T antigen. She will devote 25% of her time to this project.

**Equipment:** Purchase of a Thermocycler (\$1,000) and leasing costs HPLC Fraction Collector (\$1,700) is requested during the first year. The requested equipment is necessary for this project and will be used extensively to analyze IV9-HLA-A\*0201 complex.

**Supplies:** For tissue culture and cell biology, \$15,000 is budgeted for each of the two main technical staff. Any additional supplies required will be provided by ABC Company.

**Travel:** Funds are requested for the PI to attend the NIH Annual SBIR conference.

**Other expenses:** Karyotyping Service: Molecular Karyotyping, Inc. Estimated cost is \$1000.

**Animals and care:** Animal care (\$2500 per year) is provided by Bunny and Varmint Diagnostics Associates, under contract to ABC Company. The facility is 1.5 miles from ABC at 22678 Oak Valley Road, Birmingham, AL.

**Consortium Costs. \$12,500** Total Costs for Entire Period

Consortium with the University of Virginia    {X} Domestic    { } Foreign

James Livingston, Ph.D., will devote 10%. Dr. Livingston will be responsible for establishing CTL clones from HIV-infected subjects, and propagating previously isolated CTL clones. Dr. Livingston will also be responsible for planning and overseeing all functional cell assays.

Norman Cross, 50% Research Technologist will perform all CTL assays, proliferation assays, ELISA assays and assays designed to measure inhibition of HIV-1 replication by virus-specific CTL clones.

**Sum of Consortium/Contractual and Consultant Costs: \$34,175** Total Costs for entire period.

Principal Investigator/Program Director (Last, First, Middle): Smith, Sandy L.

**Fee.** A fee of 4% of total costs (direct and indirect) is requested (\$6,512). This fee contributes to the growth of the small business concern by allowing expansion of resources and personnel development. The fee is consistent with a normal profit margin provided for research and development work.