	YEAR 1		\$94,450.00
1)	Personnel Costs:	TOTAL:	\$18,111.00
	(a) PI		\$8,889.00
	(b) Fringe Benefits (@ 25% of a)		\$2,222.00
	(c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S	Summer)	\$7,000.00
2)	Materials and Supplies:	TOTAL:	\$11,000.00
3)	Major Equipment Costs:	TOTAL:	\$45,500.00
	(a) Computer Hardware		\$6,000.00
	(b) Vacuum, magnet upgrades		\$21,500.00
	(c) Laser diagnostics		\$5,000.00
	(d) Optical equipment		\$3,000.00
	(e) Data acquisition		\$5,000.00
	(f) Camera system		\$5,000.00
4)	Travel Costs (PI - 3 @ \$1,000; student - 3 @ \$650)	TOTAL:	\$4,950.00
5)	Publication Charges (@ \$1000/PI)	TOTAL:	\$1,000.00
6)	Summer Program	TOTAL:	\$9,000.00
7)	Indirect Costs [55% of (1a) - approved by DHHS]	TOTAL:	\$4,889.00
	YEAR 2		\$95,249.00
1)	Personnel Costs:	TOTAL:	\$18,666.00
1)			
1)	(a) PI		\$9,333.00
1)	(a) PI(b) Fringe Benefits (@ 25% of a)		
-)		Summer)	\$2,333.00
	(b) Fringe Benefits (@ 25% of a)	Summer) TOTAL:	\$2,333.00 \$7,000.00
2)	(b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S		\$2,333.00 \$7,000.00
2)	(b) Fringe Benefits (@ 25% of a)(c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S)Materials and Supplies:	TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00
2)	(b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs:	TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00 \$35,000.00
2)	 (b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs: (a) Computer Hardware 	TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00 \$35,000.00
2)	 (b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs: (a) Computer Hardware (b) PIV system 	TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00 \$35,000.00 \$4,500.00
2) 3)	 (b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs: (a) Computer Hardware (b) PIV system (c) Optics 	TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00 \$35,000.00 \$4,500.00
2) 3)	(b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs: (a) Computer Hardware (b) PIV system (c) Optics Travel Costs (PI - 3 @ \$1,000; student - 3 @ \$650)	TOTAL: TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00 \$35,000.00 \$4,500.00 \$1,000.00
2)3)4)5)	(b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs: (a) Computer Hardware (b) PIV system (c) Optics Travel Costs (PI - 3 @ \$1,000; student - 3 @ \$650) Publication Charges (@ \$1000/PI)	TOTAL: TOTAL: TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00 \$35,000.00 \$4,500.00 \$1,000.00 \$9,000.00
2) 3) 4) 5) 6)	(b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs: (a) Computer Hardware (b) PIV system (c) Optics Travel Costs (PI - 3 @ \$1,000; student - 3 @ \$650) Publication Charges (@ \$1000/PI) Summer Program	TOTAL: TOTAL: TOTAL: TOTAL: TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00 \$35,000.00 \$4,500.00 \$1,000.00 \$9,000.00 \$5,133.00
2) 3) 4) 5) 6) 7)	(b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs: (a) Computer Hardware (b) PIV system (c) Optics Travel Costs (PI - 3 @ \$1,000; student - 3 @ \$650) Publication Charges (@ \$1000/PI) Summer Program Indirect Costs [55% of (1a) - approved by DHHS]	TOTAL: TOTAL: TOTAL: TOTAL: TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00 \$35,000.00 \$4,500.00 \$1,000.00 \$9,000.00 \$5,133.00
2) 3) 4) 5) 6) 7)	(b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs: (a) Computer Hardware (b) PIV system (c) Optics Travel Costs (PI - 3 @ \$1,000; student - 3 @ \$650) Publication Charges (@ \$1000/PI) Summer Program Indirect Costs [55% of (1a) - approved by DHHS] YEAR 3	TOTAL: TOTAL: TOTAL: TOTAL: TOTAL: TOTAL:	\$11,000.00
2) 3) 4) 5) 6) 7)	(b) Fringe Benefits (@ 25% of a) (c) Undergraduate Res. Asst. (\$2,500 A.Y. + \$4,500 S) Materials and Supplies: Major Equipment Costs: (a) Computer Hardware (b) PIV system (c) Optics Travel Costs (PI - 3 @ \$1,000; student - 3 @ \$650) Publication Charges (@ \$1000/PI) Summer Program Indirect Costs [55% of (1a) - approved by DHHS] YEAR 3 Personnel Costs:	TOTAL: TOTAL: TOTAL: TOTAL: TOTAL: TOTAL:	\$2,333.00 \$7,000.00 \$11,000.00 \$45,500.00 \$6,000.00 \$35,000.00 \$4,500.00 \$1,000.00 \$9,000.00 \$5,133.00 \$91,090.00