

# SUMMARY PROPOSAL BUDGET

## YEAR 1

ORGANIZATION <b>Trinity University</b>				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jane Doe</b>				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-mos.		Funds Requested By proposer	Funds granted by NSF (if different)
	CAL	ACAD	SUMR				
1. <b>Jane Doe - PI</b>	<b>0.00</b>	<b>0.00</b>	<b>2.00</b>	<b>\$ 12,822</b>			
2.							
3.							
4.							
5.							
6. ( <b>0</b> ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>			
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)	<b>0.00</b>	<b>0.00</b>	<b>2.00</b>	<b>12,822</b>			
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( <b>0</b> ) POST DOCTORAL ASSOCIATES	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>			
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>			
3. ( <b>0</b> ) GRADUATE STUDENTS				<b>0</b>			
4. ( <b>2</b> ) UNDERGRADUATE STUDENTS				<b>6,000</b>			
5. ( <b>0</b> ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				<b>0</b>			
6. ( <b>0</b> ) OTHER				<b>0</b>			
TOTAL SALARIES AND WAGES (A + B)				<b>18,822</b>			
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				<b>2,722</b>			
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				<b>21,544</b>			
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
<b>Nikon Inverted Microscope with Video Camera</b>				<b>\$ 15,907</b>			
TOTAL EQUIPMENT				<b>15,907</b>			
E. TRAVEL							
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)				<b>800</b>			
2. FOREIGN				<b>0</b>			
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____				<b>0</b>			
2. TRAVEL _____				<b>0</b>			
3. SUBSISTENCE _____				<b>0</b>			
4. OTHER _____				<b>0</b>			
TOTAL NUMBER OF PARTICIPANTS ( <b>0</b> )							
TOTAL PARTICIPANT COSTS				<b>0</b>			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES				<b>800</b>			
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				<b>900</b>			
3. CONSULTANT SERVICES				<b>0</b>			
4. COMPUTER SERVICES				<b>0</b>			
5. SUBAWARDS				<b>0</b>			
6. OTHER				<b>3,493</b>			
TOTAL OTHER DIRECT COSTS				<b>5,193</b>			
H. TOTAL DIRECT COSTS (A THROUGH G)				<b>43,444</b>			
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
<b>Salary and Wages (Rate: 62.0000, Base: 18822)</b>							
TOTAL INDIRECT COSTS (F&A)				<b>11,670</b>			
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				<b>55,114</b>			
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.D.7.j.)				<b>0</b>			
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				<b>\$ 55,114</b>			
M. COST SHARING PROPOSED LEVEL \$ <b>14,425</b>				AGREED LEVEL IF DIFFERENT \$			
PI / PD TYPED NAME & SIGNATURE*			DATE	FOR NSF USE ONLY			
<b>Jane Doe</b>				INDIRECT COST RATE VERIFICATION			
ORG. REP. TYPED NAME & SIGNATURE*			DATE	Date Checked	Date Of Rate Sheet	Initials - ORG	

# SUMMARY PROPOSAL BUDGET

## YEAR 2

ORGANIZATION <b>Trinity University</b>				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jane Doe</b>				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-mos.		Funds Requested By proposer	Funds granted by NSF (if different)
	CAL	ACAD	SUMR				
1. <b>Jane Doe- PI</b>	<b>0.00</b>	<b>0.00</b>	<b>2.00</b>	<b>\$ 13,399</b>			
2.							
3.							
4.							
5.							
6. ( <b>0</b> ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>			
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)	<b>0.00</b>	<b>0.00</b>	<b>2.00</b>	<b>13,399</b>			
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( <b>0</b> ) POST DOCTORAL ASSOCIATES	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>			
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>			
3. ( <b>0</b> ) GRADUATE STUDENTS				<b>0</b>			
4. ( <b>2</b> ) UNDERGRADUATE STUDENTS				<b>6,000</b>			
5. ( <b>0</b> ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				<b>0</b>			
6. ( <b>0</b> ) OTHER				<b>0</b>			
TOTAL SALARIES AND WAGES (A + B)				<b>19,399</b>			
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				<b>2,824</b>			
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT					<b>0</b>		
E. TRAVEL							
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)					<b>800</b>		
2. FOREIGN					<b>0</b>		
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____				<b>0</b>			
2. TRAVEL _____				<b>0</b>			
3. SUBSISTENCE _____				<b>0</b>			
4. OTHER _____				<b>0</b>			
TOTAL NUMBER OF PARTICIPANTS ( <b>0</b> )				TOTAL PARTICIPANT COSTS	<b>0</b>		
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES				<b>800</b>			
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				<b>900</b>			
3. CONSULTANT SERVICES				<b>0</b>			
4. COMPUTER SERVICES				<b>0</b>			
5. SUBAWARDS				<b>0</b>			
6. OTHER				<b>0</b>			
TOTAL OTHER DIRECT COSTS				<b>1,700</b>			
H. TOTAL DIRECT COSTS (A THROUGH G)					<b>24,723</b>		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
<b>Salary and Wages (Rate: 62.0000, Base: 19399)</b>							
TOTAL INDIRECT COSTS (F&A)					<b>12,027</b>		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					<b>36,750</b>		
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.D.7.j.)					<b>0</b>		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					<b>\$ 36,750</b>	<b>\$</b>	
M. COST SHARING PROPOSED LEVEL \$ <b>15,074</b>				AGREED LEVEL IF DIFFERENT \$			
PI / PD TYPED NAME & SIGNATURE*			DATE	FOR NSF USE ONLY			
<b>Jane Doe</b>				INDIRECT COST RATE VERIFICATION			
ORG. REP. TYPED NAME & SIGNATURE*			DATE	Date Checked	Date Of Rate Sheet	Initials - ORG	

# SUMMARY PROPOSAL BUDGET YEAR 3

ORGANIZATION <b>Trinity University</b>				FOR NSF USE ONLY		
				PROPOSAL NO.	DURATION (months)	
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jane Doe</b>				AWARD NO.	Proposed	Granted
				NSF Funded Person-mos.		
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				CAL	ACAD	SUMR
1. <b>Jane Doe- PI</b>				<b>0.00</b>	<b>0.00</b>	<b>2.00</b>
2.						
3.						
4.						
5.						
6. ( <b>0</b> ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)				<b>0.00</b>	<b>0.00</b>	<b>2.00</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. ( <b>0</b> ) POST DOCTORAL ASSOCIATES				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
3. ( <b>0</b> ) GRADUATE STUDENTS						<b>0</b>
4. ( <b>2</b> ) UNDERGRADUATE STUDENTS						<b>6,000</b>
5. ( <b>0</b> ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						<b>0</b>
6. ( <b>0</b> ) OTHER						<b>0</b>
TOTAL SALARIES AND WAGES (A + B)						<b>20,002</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						<b>2,930</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						<b>22,932</b>
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)						
TOTAL EQUIPMENT						<b>0</b>
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						<b>800</b>
2. FOREIGN						<b>0</b>
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$ _____				<b>0</b>		
2. TRAVEL _____				<b>0</b>		
3. SUBSISTENCE _____				<b>0</b>		
4. OTHER _____				<b>0</b>		
TOTAL NUMBER OF PARTICIPANTS ( <b>0</b> ) TOTAL PARTICIPANT COSTS						<b>0</b>
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES						<b>800</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						<b>900</b>
3. CONSULTANT SERVICES						<b>0</b>
4. COMPUTER SERVICES						<b>0</b>
5. SUBAWARDS						<b>0</b>
6. OTHER						<b>0</b>
TOTAL OTHER DIRECT COSTS						<b>1,700</b>
H. TOTAL DIRECT COSTS (A THROUGH G)						<b>25,432</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>Salary and Wages (Rate: 62.0000, Base: 20002)</b>						
TOTAL INDIRECT COSTS (F&A)						<b>12,401</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						<b>37,833</b>
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.D.7.j.)						<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						<b>\$ 37,833</b>
M. COST SHARING PROPOSED LEVEL \$ <b>15,752</b>				AGREED LEVEL IF DIFFERENT \$		
PI / PD TYPED NAME & SIGNATURE*			DATE	FOR NSF USE ONLY		
<b>Jane Doe</b>				INDIRECT COST RATE VERIFICATION		
ORG. REP. TYPED NAME & SIGNATURE*			DATE	Date Checked	Date Of Rate Sheet	Initials - ORG

# SUMMARY PROPOSAL BUDGET Cumulative

ORGANIZATION <b>Trinity University</b>				FOR NSF USE ONLY		
				PROPOSAL NO.	DURATION (months)	
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jane Doe</b>				AWARD NO.	Proposed	Granted
					NSF Funded Person-mos.	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				CAL	ACAD	SUMR
1. <b>Jane Doe- PI</b>				<b>0.00</b>	<b>0.00</b>	<b>6.00</b>
2.						
3.						
4.						
5.						
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)				<b>0.00</b>	<b>0.00</b>	<b>6.00</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. ( <b>0</b> ) POST DOCTORAL ASSOCIATES				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
3. ( <b>0</b> ) GRADUATE STUDENTS						<b>0</b>
4. ( <b>6</b> ) UNDERGRADUATE STUDENTS						<b>18,000</b>
5. ( <b>0</b> ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						<b>0</b>
6. ( <b>0</b> ) OTHER						<b>0</b>
TOTAL SALARIES AND WAGES (A + B)						<b>58,223</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						<b>8,476</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						<b>66,699</b>
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)						
\$ <b>15,907</b>						
TOTAL EQUIPMENT						<b>15,907</b>
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						<b>2,400</b>
2. FOREIGN						<b>0</b>
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$ _____				<b>0</b>		
2. TRAVEL _____				<b>0</b>		
3. SUBSISTENCE _____				<b>0</b>		
4. OTHER _____				<b>0</b>		
TOTAL NUMBER OF PARTICIPANTS ( <b>0</b> ) TOTAL PARTICIPANT COSTS						<b>0</b>
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES						<b>2,400</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						<b>2,700</b>
3. CONSULTANT SERVICES						<b>0</b>
4. COMPUTER SERVICES						<b>0</b>
5. SUBAWARDS						<b>0</b>
6. OTHER						<b>3,493</b>
TOTAL OTHER DIRECT COSTS						<b>8,593</b>
H. TOTAL DIRECT COSTS (A THROUGH G)						<b>93,599</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)						
TOTAL INDIRECT COSTS (F&A)						<b>36,098</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						<b>129,697</b>
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.D.7.j.)						<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						<b>\$ 129,697</b>
M. COST SHARING PROPOSED LEVEL \$ <b>45,251</b>				AGREED LEVEL IF DIFFERENT \$		
PI / PD TYPED NAME & SIGNATURE*			DATE	FOR NSF USE ONLY		
<b>Jane Doe</b>				INDIRECT COST RATE VERIFICATION		
ORG. REP. TYPED NAME & SIGNATURE*			DATE	Date Checked	Date Of Rate Sheet	Initials - ORG

## **SECTION F: BUDGET JUSTIFICATION**

### **A. Salary for the P.I.**

Principal investigator salary is requested for the summers of 2002, 2003, and 2004, during which the P.I. will work full-time on the project. The 2002 salary is calculated as 2/9 of the 2000-01 salary; the 2003 and 2004 salaries assume a 4.5% annual increment.

### **B. Salary for undergraduate students**

Funding for two student research assistantships is requested for each of the summers of 2002, 2003, and 2004. During each of these summers, both students will devote full time to the project for ten weeks.

### **C. Fringe benefits**

Fringe benefits for the P.I. are calculated as 7.65% and 10% for Social Security and TIAA-CREF, respectively. Fringe benefits for students are calculated at 7.65% for Social Security.

### **D. Equipment** (*All prices current as of December 2000*).

*Microscope:* We recommend the purchase of the Nikon Eclipse TE200 inverted microscope equipped with a high-resolution 12 FS digital camera. The 200 x 200 mm fixed stage on the recommended model permits a large working area to facilitate beam alignment and the placement of the ovens. The cost of the complete system is \$15,907.

### **E. Travel**

The requested travel funds will allow the P.I. to attend an APS national meeting to present the results of the project during each of the three years. The round figure of \$800 per meeting (\$2400 total) reflects anticipated air fare and other costs such as registration fees.

## **G. Other direct costs**

1. Materials and supplies: A figure of \$800 per year (\$2400 total) is requested for the purchase of samples, organic solvents, and chemistry glassware.

2. Publication costs: The publication costs (\$900 per year, \$2700 total) are round numbers based on typical page and reprint charges in AIP/APS journals, assuming a publication rate of 12 pages per year.

6. Other: Construction of the temperature gradient stage. We will build a temperature gradient microscope stage that allows entrance and exit of the pump and probe laser beams. The requested funds will permit the purchase of a stepping motor, a fine-thread screw drive, bulk copper for the construction of the ovens, temperature control (in addition to the Neslab water-flow control already on hand), optics for beam alignment near the stage, small parts, and required electronics. Estimated cost of the temperature-gradient stage construction: \$3493.

## **I. Indirect costs**

Following standard policy at Trinity University, 62% of the base salary of the P.I. and students (A+B) is included as indirect costs.

## **M. Cost sharing**

The P.I. will dedicate 25% of her time to the project during the school year. Therefore, the matching funds listed are 25% of the P.I.'s annual nine-month salary, assuming 4.5% annual increments.