

# SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION				FOR NSF USE ONLY			
<b>University of Alaska Fairbanks Campus</b>				PROPOSAL NO.		DURATION (months)	
						<div style="display: flex; justify-content: space-between;"> <span>Proposed</span> <span>Granted</span> </div>	
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Hajo Eicken</b>				AWARD NO.			
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-months		Funds Requested By proposer	
				CAL	ACAD	SUMR	Funds granted by NSF (if different)
1. <b>Executive Dir TBN - Sr. Personnel</b>				9.00	0.00	0.00	<b>96,809</b>
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				9.00	0.00	0.00	<b>96,809</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 0 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>0</b>
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>2,626</b>
6. ( 0 ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>99,435</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>27,751</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>127,186</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>16,012</b>
2. FOREIGN							<b>9,533</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 ( 0 ) TOTAL PARTICIPANT COSTS							<b>0</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>1,000</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>318,840</b>
6. OTHER							<b>4,000</b>
TOTAL OTHER DIRECT COSTS							<b>323,840</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>476,571</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>Facilities and Administration (Rate: 50.5000, Base: 257731)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>130,154</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>606,725</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>606,725</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Hajo Eicken</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

1 \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

# SUMMARY PROPOSAL BUDGET

YEAR **2**

ORGANIZATION <b>University of Alaska Fairbanks Campus</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Hajo Eicken</b>				PROPOSAL NO.		DURATION (months)	
						Proposed	Granted
				AWARD NO.			
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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Executive Dir TBN - Sr. Personnel</b>				12.00	0.00	0.00	<b>131,660</b>
2.							
3.							
4.							
5.							
6. ( <b>0</b> ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)				12.00	0.00	0.00	<b>131,660</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( <b>0</b> ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>0</b>
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( <b>0</b> ) GRADUATE STUDENTS							<b>0</b>
4. ( <b>0</b> ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( <b>1</b> ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>2,678</b>
6. ( <b>0</b> ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>134,338</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>37,359</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>171,697</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>16,606</b>
2. FOREIGN							<b>10,028</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>1,000</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>567,833</b>
6. OTHER							<b>4,200</b>
TOTAL OTHER DIRECT COSTS							<b>573,033</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>771,364</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>Facilities and Administration (Rate: 50.5000, Base: 203531)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>102,783</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>874,147</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>874,147</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Hajo Eicken</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

2 \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

# SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION <b>University of Alaska Fairbanks Campus</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Hajo Eicken</b>				PROPOSAL NO.		DURATION (months)	
				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-months		Funds Requested By proposer	
				CAL	ACAD	SUMR	Funds granted by NSF (if different)
1. <b>Executive Dir TBN - Sr. Personnel</b>				12.00	0.00	0.00	<b>134,293</b>
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				12.00	0.00	0.00	<b>134,293</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 0 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>0</b>
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>2,732</b>
6. ( 0 ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>137,025</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>38,106</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>175,131</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>17,259</b>
2. FOREIGN							<b>10,572</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 ( 0 ) TOTAL PARTICIPANT COSTS							<b>0</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>1,000</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>574,620</b>
6. OTHER							<b>4,400</b>
TOTAL OTHER DIRECT COSTS							<b>580,020</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>782,982</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>Facilities and Administration (Rate: 50.5000, Base: 208362)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>105,223</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>888,205</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>888,205</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Hajo Eicken</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

# SUMMARY PROPOSAL BUDGET

YEAR 4

ORGANIZATION <b>University of Alaska Fairbanks Campus</b>				FOR NSF USE ONLY					
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Hajo Eicken</b>				PROPOSAL NO.		DURATION (months)			
				Proposed		Granted			
AWARD NO.									
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-months		Funds Requested By proposer		Funds granted by NSF (if different)	
				CAL	ACAD	SUMR			
1. <b>Executive Dir TBN - Sr. Personnel</b>				12.00	0.00	0.00	<b>136,979</b>		
2.									
3.									
4.									
5.									
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>		
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				12.00	0.00	0.00	<b>136,979</b>		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)									
1. ( 0 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>0</b>		
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>		
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>		
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>		
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>2,787</b>		
6. ( 0 ) OTHER							<b>0</b>		
TOTAL SALARIES AND WAGES (A + B)							<b>139,766</b>		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>38,867</b>		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>178,633</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>17,979</b>		
2. FOREIGN							<b>11,170</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 ( 0 ) TOTAL PARTICIPANT COSTS							<b>0</b>		
G. OTHER DIRECT COSTS									
1. MATERIALS AND SUPPLIES							<b>1,000</b>		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>		
3. CONSULTANT SERVICES							<b>0</b>		
4. COMPUTER SERVICES							<b>0</b>		
5. SUBAWARDS							<b>676,500</b>		
6. OTHER							<b>4,600</b>		
TOTAL OTHER DIRECT COSTS							<b>682,100</b>		
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>889,882</b>		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>Facilities and Administration (Rate: 50.5000, Base: 213382)</b>									
TOTAL INDIRECT COSTS (F&A)							<b>107,758</b>		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>997,640</b>		
K. RESIDUAL FUNDS							<b>0</b>		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>997,640</b>		
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$					
PI/PD NAME <b>Hajo Eicken</b>				FOR NSF USE ONLY					
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION					
				Date Checked		Date Of Rate Sheet		Initials - ORG	

# SUMMARY PROPOSAL BUDGET

YEAR 5

ORGANIZATION <b>University of Alaska Fairbanks Campus</b>				FOR NSF USE ONLY				
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Hajo Eicken</b>				PROPOSAL NO.		DURATION (months)		
				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-months		Funds Requested By proposer		Funds granted by NSF (if different)
				CAL	ACAD	SUMR		
1. <b>Executive Dir TBN - Sr. Personnel</b>				12.00	0.00	0.00	<b>139,718</b>	
2.								
3.								
4.								
5.								
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>	
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				12.00	0.00	0.00	<b>139,718</b>	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)								
1. ( 0 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>0</b>	
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>	
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>	
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>	
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>2,842</b>	
6. ( 0 ) OTHER							<b>0</b>	
TOTAL SALARIES AND WAGES (A + B)							<b>142,560</b>	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>39,644</b>	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>182,204</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>18,768</b>	
2. FOREIGN							<b>11,831</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 ( 0 ) TOTAL PARTICIPANT COSTS							<b>0</b>	
G. OTHER DIRECT COSTS								
1. MATERIALS AND SUPPLIES							<b>1,000</b>	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>	
3. CONSULTANT SERVICES							<b>0</b>	
4. COMPUTER SERVICES							<b>0</b>	
5. SUBAWARDS							<b>509,941</b>	
6. OTHER							<b>4,800</b>	
TOTAL OTHER DIRECT COSTS							<b>515,741</b>	
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>728,544</b>	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>Facilities and Administration (Rate: 50.5000, Base: 218603)</b>								
TOTAL INDIRECT COSTS (F&A)							<b>110,395</b>	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>838,939</b>	
K. RESIDUAL FUNDS							<b>0</b>	
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>838,939</b>	
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$				
PI/PD NAME <b>Hajo Eicken</b>				FOR NSF USE ONLY				
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION				
				Date Checked	Date Of Rate Sheet	Initials - ORG		

## Cumulative

**C \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET**

As recommended and detailed below, the majority of items specifically targeted for removal in the review comments have been cut from the budget. In conjunction with further reductions specified below, the budget is now reduced by 23% relative to the original total request. The ARCUS portion of the budget was reduced by roughly \$0.200M to \$1.74M and the UAF portion by roughly \$1.55M to \$4.20M.

- AON Coordinator: This position is still central to link SEARCH research focused on understanding and predicting Arctic environmental change to observing activities. Currently, no other entity serves this important function. At a meeting organized by the Office of Science and Technology Policy (OSTP) in January 2014, this problem was recognized by the spectrum of agency leadership represented at the meeting. To address this shortcoming, the OSTP meeting concluded with the recommendation to create an interagency position residing within the Group on Earth Observations office within OSTP to fill at least part of this function.
- UAF Data Analyst: This position has been removed from the budget; ongoing conversations with ACADIS are meant to ensure that the data products generated by the planned activities are appropriately housed and disseminated.
- UAF Admin position: The scope of this position has been substantially reduced; however, two weeks of time per year has remained in the budget for support integral to the Executive Director (ED) position, including ED travel, communication and organization of meetings and activities in support of, but not covered by, Action Teams. The support requested here for this SEARCH position (direct support for the ED) is for duties beyond those covered by the funding derived from overhead, such as administering subawards.
- ED salary and 12-month coverage: For these types of positions it is customary to provide full support without the need to bring in additional salary for other activities, in particular since the latter would detract from the SEARCH goals and objectives. Hence, we retained full 12-month coverage (and salary commensurate with such a senior-level scientist). However, after two years the compensation level and in particular 12-month coverage will be reassessed as part of the annual review.
- ED Travel: Travel support for the ED and activities under the purview of the ED, such as meetings related to ED-led activities, remains within the UAF budget. After one year, this arrangement will be reviewed and reevaluated jointly with ARCUS as part of the annual review.
- Knowledge Exchange Fellowships: These fellowships, while never intended to be distributed to agency personnel, have been removed from the budget. We will seek alternate funding to support this effort.
- Action Team #4: As outlined in the detailed proposal review response, this Action Team has been cut from the budget and team activities and objectives have been integrated into the other three Action Teams.
- ARCUS budget: Cuts to travel support for initial kick-off meeting and annual meetings (representing an approximately 11% budget reduction).

Please note:

As stated in the attached memo from the Authorized Organizational Representative, IARC researchers are all soft-funded and thus must use research or other sources of funding for their salary support. Because our faculty have no hard-money funding on their contracts we specifically would like to request a waiver of the two months rule so that our faculty and other researchers may charge more than 2 months to NSF during any 12 month period. In this particular case and for this type of position (Executive Director), it is customary to provide full support without the need to bring in additional salary for other activities, in particular since the latter would detract from the SEARCH goals and objectives.

Also stated in the attached letter from the Authorized Organizational Representative, the faculty position budgeted for 12 months of salary includes no annual leave charge associated with that salary calculation.

As of July 1, 2014, revised F&A and benefits have been implemented. A copy of this letter is included for your reference.

The PostDoc mentoring plan supplied with the original submission of this proposal will be followed at the collaborating institutes where postdocs will be hired as part of the action teams.

Budgeted Domestic Travel Clarification:

*Domestic:* Funds are requested to support travel to 8 national level conferences per year for collaboration, outreach and to disseminate research results, locations are to be determined and origin and destination are placeholders. Travel for 4 trips is estimated from Fairbanks to Washington DC at \$1,100 for RT airfare and 4 trips are estimated from Boulder, CO to Washington DC at \$500 for RT airfare. Per Diem in Washington DC is estimated at \$71/day for meals, \$226/night for lodging, \$100/trip/person, for ground transportation.




Statewide Office of  
Cost Analysis  
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Date: June 24, 2014

To: Bill Spindle, Pat Pitney, Michael Ciri

From: Tanya Hollis 

Re: FY15 Fringe Benefit Rates

Please refer to the table below for the FY15 leave and staff benefit rates. The rates will be in effect until a final negotiated agreement is reached.

Note that the rates are not what was proposed for FY15. The Office of Naval Research is short-staffed and therefore unable to complete the university's rate negotiations prior to June 30<sup>th</sup>. Without a fully executed rate agreement in place, the university is limited to the FY14 rates, but must use the FY15 proposed rates, if lower, to prevent burdensome retroactive adjustments once the proposed rates are approved. I will communicate the final rates once they are fully negotiated.

E-Class	FY15	
	Leave Benefit Rates (1)	Staff Benefit Rates (2)
NR	22.40%	43.00%
CR	21.10%	47.60%
XR	20.60%	38.80%
EX, FR	15.60%	27.60%
FN	0.10%	27.60%
F9	1.40%	27.50%
AR, A9	1.20%	29.10%
FT, FW	0.00%	9.60%
CT, GT, NT, ST, XT	0.00%	8.20%
NX, XX	13.40%	22.80%
GN, SN	0.00%	0.00%

Please contact me with any questions.

- (1) Distribution base: Leave rates are applied to base salaries excluding overtime, miscellaneous pay, and paid leave.  
(2) Distribution base: Staff benefit rates are applied to base salaries plus overtime, miscellaneous pay, and leave accrual provisions.

cc: Ashok Roy, Myron Dosch, Nichole Pittman, Jim Lynch, Michelle Rizk, Erik Seastedt, Donald Smith, Helena Wisniewski, Mark Myers, Erika Van Flein, Karin Baldwin, Raaj Kurapati, Sandra Culver, Jason Theis, Kelly Thorngren, Barbara Hyde, Brad Lobland, Ron Kamahele, Tom Dienst, Gwen Gruenig, Debbie Carlson, Alesia Kruckenberg, Carolyn Weaver, Julie Vigil, Andrew Gray, Tana Myrstol, Wei Guo



Andrew M. Gray, CRA, CPRA  
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amgray@alaska.edu  
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## Office of Grants and Contracts Administration

P.O. Box 757880, Fairbanks, Alaska 99775-7880

June 27, 2014

Dr. Neil Swanberg  
Director, Arctic System Science Program  
Division of Polar Programs  
Geosciences Directorate  
National Science Foundation  
4201 Wilson Blvd.  
Arlington, VA 22230 USA

RE: SEARCH Proposal for Dr. Hajo Eicken – revised budget

Dear Dr Swanberg:

I am writing to clarify that for the faculty budgeted for 12 months of salary, no annual leave charge is associated with that salary calculation.

IARC researchers are all soft-funded and thus must use research or other sources of funding for their salary support. Because our faculty have no hard-money funding on their contracts we specifically would like to request a waiver of the two months rule so that our faculty and other researchers may charge more than 2 months to NSF during any 12 month period. In this particular case and for this type of position (Executive Director), it is customary to provide full support without the need to bring in additional salary for other activities, in particular since the latter would detract from the SEARCH goals and objectives.

Should you need any other information, please feel free to let my office know.

Sincerely,

A handwritten signature in blue ink, appearing to read 'AMG'.

Andrew M. Gray

# SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION <b>Northern Arizona University</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Ted Schuur</b>				PROPOSAL NO.	DURATION (months)		
				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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Ted Schuur - PI</b>				1.00	0.00	0.00	<b>14,474</b>
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				1.00	0.00	0.00	<b>14,474</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>27,500</b>
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>0</b>
6. ( 0 ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>41,974</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>7,874</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>49,848</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>6,087</b>
2. FOREIGN							<b>5,688</b>
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ <b>0</b>							
2. TRAVEL <b>0</b>							
3. SUBSISTENCE <b>11,835</b>							
4. OTHER <b>0</b>							
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS							<b>11,835</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>250</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>2,100</b>
TOTAL OTHER DIRECT COSTS							<b>2,350</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>75,808</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
<b>MTDC @ 52% (Rate: 52.0000, Base: 63972)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>33,265</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>109,073</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>109,073</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Ted Schuur</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

# SUMMARY PROPOSAL BUDGET

YEAR 2

ORGANIZATION <b>Northern Arizona University</b>				FOR NSF USE ONLY					
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Ted Schuur</b>				PROPOSAL NO.		DURATION (months)			
				Proposed		Granted			
AWARD NO.									
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-months		Funds Requested By proposer		Funds granted by NSF (if different)	
				CAL	ACAD	SUMR			
1. <b>Ted Schuur - PI</b>				0.00	0.00	0.00	<b>14,908</b>		
2.									
3.									
4.									
5.									
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>		
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00	<b>14,908</b>		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)									
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>56,650</b>		
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>		
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>		
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>		
5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>0</b>		
6. ( 0 ) OTHER							<b>0</b>		
TOTAL SALARIES AND WAGES (A + B)							<b>71,558</b>		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>14,058</b>		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>85,616</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>6,318</b>		
2. FOREIGN							<b>6,029</b>		
F. PARTICIPANT SUPPORT COSTS									
1. STIPENDS \$ _____				<b>0</b>					
2. TRAVEL _____				<b>0</b>					
3. SUBSISTENCE _____				<b>31,650</b>					
4. OTHER _____				<b>0</b>					
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS							<b>31,650</b>		
G. OTHER DIRECT COSTS									
1. MATERIALS AND SUPPLIES							<b>250</b>		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>		
3. CONSULTANT SERVICES							<b>0</b>		
4. COMPUTER SERVICES							<b>0</b>		
5. SUBAWARDS							<b>0</b>		
6. OTHER							<b>2,200</b>		
TOTAL OTHER DIRECT COSTS							<b>2,450</b>		
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>132,063</b>		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)									
<b>MTDC @ 52% (Rate: 52.0000, Base: 100413)</b>									
TOTAL INDIRECT COSTS (F&A)							<b>52,215</b>		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>184,278</b>		
K. RESIDUAL FUNDS							<b>0</b>		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>184,278</b>		
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$					
PI/PD NAME <b>Ted Schuur</b>				FOR NSF USE ONLY					
				INDIRECT COST RATE VERIFICATION					
ORG. REP. NAME* <b>Andrew Gray</b>				Date Checked		Date Of Rate Sheet		Initials - ORG	

2 \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

# SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION <b>Northern Arizona University</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Ted Schuur</b>				PROPOSAL NO.	DURATION (months)		
				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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Ted Schuur - PI</b>				0.00	0.00	0.00	<b>15,355</b>
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00	<b>15,355</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>58,350</b>
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>0</b>
6. ( 0 ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>73,705</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>14,480</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>88,185</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>6,572</b>
2. FOREIGN							<b>6,404</b>
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____							<b>0</b>
2. TRAVEL _____							<b>0</b>
3. SUBSISTENCE _____							<b>13,105</b>
4. OTHER _____							<b>0</b>
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS							<b>13,105</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>250</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>2,300</b>
TOTAL OTHER DIRECT COSTS							<b>2,550</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>116,816</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
<b>MTDC @ 52% (Rate: 52.0000, Base: 103711)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>53,930</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>170,746</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>170,746</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Ted Schuur</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

# SUMMARY PROPOSAL BUDGET

YEAR 4

ORGANIZATION				FOR NSF USE ONLY			
<b>Northern Arizona University</b>				PROPOSAL NO.		DURATION (months)	
						Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Ted Schuur</b>				AWARD NO.			
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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Ted Schuur - PI</b>				0.00	0.00	0.00	<b>15,816</b>
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00	<b>15,816</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>60,100</b>
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>0</b>
6. ( 0 ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>75,916</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>14,914</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>90,830</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>6,851</b>
2. FOREIGN							<b>6,816</b>
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____							<b>0</b>
2. TRAVEL _____							<b>0</b>
3. SUBSISTENCE _____							<b>37,175</b>
4. OTHER _____							<b>0</b>
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS							<b>37,175</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>250</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>2,400</b>
TOTAL OTHER DIRECT COSTS							<b>2,650</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>144,322</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
<b>MTDC @ 52% (Rate: 52.0000, Base: 107147)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>55,716</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>200,038</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>200,038</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Ted Schuur</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

# SUMMARY PROPOSAL BUDGET

YEAR 5

ORGANIZATION <b>Northern Arizona University</b>				FOR NSF USE ONLY					
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Ted Schuur</b>				PROPOSAL NO.		DURATION (months)			
				Proposed		Granted			
AWARD NO.									
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-months		Funds Requested By proposer		Funds granted by NSF (if different)	
				CAL	ACAD	SUMR			
1. <b>Ted Schuur - PI</b>				0.00	0.00	0.00	<b>16,290</b>		
2.									
3.									
4.									
5.									
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>		
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00	<b>16,290</b>		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)									
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>30,951</b>		
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>		
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>		
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>		
5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>0</b>		
6. ( 0 ) OTHER							<b>0</b>		
TOTAL SALARIES AND WAGES (A + B)							<b>47,241</b>		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>8,862</b>		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>56,103</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>7,159</b>		
2. FOREIGN							<b>7,271</b>		
F. PARTICIPANT SUPPORT COSTS									
1. STIPENDS \$ 0									
2. TRAVEL 0									
3. SUBSISTENCE 0									
4. OTHER 0									
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS							<b>0</b>		
G. OTHER DIRECT COSTS									
1. MATERIALS AND SUPPLIES							<b>250</b>		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>		
3. CONSULTANT SERVICES							<b>0</b>		
4. COMPUTER SERVICES							<b>0</b>		
5. SUBAWARDS							<b>0</b>		
6. OTHER							<b>2,500</b>		
TOTAL OTHER DIRECT COSTS							<b>2,750</b>		
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>73,283</b>		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)									
<b>MTDC @ 52% (Rate: 52.0000, Base: 73284)</b>									
TOTAL INDIRECT COSTS (F&A)							<b>38,108</b>		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>111,391</b>		
K. RESIDUAL FUNDS							<b>0</b>		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>111,391</b>		
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$					
PI/PD NAME <b>Ted Schuur</b>				FOR NSF USE ONLY					
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION					
				Date Checked		Date Of Rate Sheet		Initials - ORG	

5 \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

# SUMMARY PROPOSAL BUDGET

Cumulative

ORGANIZATION <b>Northern Arizona University</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Ted Schuur</b>				PROPOSAL NO.	DURATION (months)		
				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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Ted Schuur - PI</b>				1.00	0.00	0.00	<b>76,843</b>
2.							
3.							
4.							
5.							
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)				1.00	0.00	0.00	<b>76,843</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( <b>5</b> ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>233,551</b>
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( <b>0</b> ) GRADUATE STUDENTS							<b>0</b>
4. ( <b>0</b> ) UNDERGRADUATE STUDENTS							<b>0</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>310,394</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>60,188</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>370,582</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>32,987</b>
2. FOREIGN							<b>32,208</b>
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ <b>0</b>							
2. TRAVEL <b>0</b>							
3. SUBSISTENCE <b>93,765</b>							
4. OTHER <b>0</b>							
TOTAL NUMBER OF PARTICIPANTS ( <b>0</b> ) TOTAL PARTICIPANT COSTS							<b>93,765</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>1,250</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>11,500</b>
TOTAL OTHER DIRECT COSTS							<b>12,750</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>542,292</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							<b>233,234</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>775,526</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>775,526</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Ted Schuur</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

C \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET



# SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION <b>Rutgers University</b>				FOR NSF USE ONLY					
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jennifer Francis</b>				PROPOSAL NO.		DURATION (months)			
				Proposed		Granted			
AWARD NO.									
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-months		Funds Requested By proposer		Funds granted by NSF (if different)	
				CAL	ACAD	SUMR			
1. <b>Jennifer Francis - PI</b>				0.50	0.00	0.00	<b>5,014</b>		
2.									
3.									
4.									
5.									
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>		
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.50	0.00	0.00	<b>5,014</b>		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)									
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>38,849</b>		
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>		
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>		
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>		
5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>0</b>		
6. ( 0 ) OTHER							<b>0</b>		
TOTAL SALARIES AND WAGES (A + B)							<b>43,863</b>		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>16,896</b>		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>60,759</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>3,043</b>		
2. FOREIGN							<b>2,844</b>		
F. PARTICIPANT SUPPORT COSTS									
1. STIPENDS \$ _____				<b>0</b>					
2. TRAVEL _____				<b>0</b>					
3. SUBSISTENCE _____				<b>0</b>					
4. OTHER _____				<b>8,835</b>					
TOTAL NUMBER OF PARTICIPANTS ( 0 )				TOTAL PARTICIPANT COSTS		<b>8,835</b>			
G. OTHER DIRECT COSTS									
1. MATERIALS AND SUPPLIES							<b>250</b>		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>		
3. CONSULTANT SERVICES							<b>0</b>		
4. COMPUTER SERVICES							<b>0</b>		
5. SUBAWARDS							<b>0</b>		
6. OTHER							<b>17,891</b>		
TOTAL OTHER DIRECT COSTS							<b>18,141</b>		
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>93,622</b>		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)									
<b>MTDC @ 26.00% (Rate: 26.0000, Base: 84787)</b>									
TOTAL INDIRECT COSTS (F&A)							<b>22,045</b>		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>115,667</b>		
K. RESIDUAL FUNDS							<b>0</b>		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>115,667</b>		
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$					
PI/PD NAME <b>Jennifer Francis</b>				FOR NSF USE ONLY					
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION					
				Date Checked		Date Of Rate Sheet		Initials - ORG	

# SUMMARY PROPOSAL BUDGET

YEAR **2**

ORGANIZATION <b>Rutgers University</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jennifer Francis</b>				PROPOSAL NO.	DURATION (months)		
				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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Jennifer Francis - PI</b>				0.50	0.00	0.00	<b>5,159</b>
2.							
3.							
4.							
5.							
6. ( <b>0</b> ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)				0.50	0.00	0.00	<b>5,159</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( <b>1</b> ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>79,642</b>
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( <b>0</b> ) GRADUATE STUDENTS							<b>0</b>
4. ( <b>0</b> ) UNDERGRADUATE STUDENTS							<b>0</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>84,801</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>32,380</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>117,181</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>3,159</b>
2. FOREIGN							<b>3,015</b>
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ <b>0</b>							
2. TRAVEL <b>0</b>							
3. SUBSISTENCE <b>0</b>							
4. OTHER <b>10,650</b>							
TOTAL NUMBER OF PARTICIPANTS ( <b>0</b> ) TOTAL PARTICIPANT COSTS							<b>10,650</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>250</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>36,476</b>
TOTAL OTHER DIRECT COSTS							<b>36,726</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>170,731</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>MTDC @ 26.00% (Rate: 26.0000, Base: 156963)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>40,810</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>211,541</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>211,541</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Jennifer Francis</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

2 \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

# SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION <b>Rutgers University</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jennifer Francis</b>				PROPOSAL NO.	DURATION (months)		
				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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Jennifer Francis - PI</b>				0.50	0.00	0.00	<b>5,309</b>
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.50	0.00	0.00	<b>5,309</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>81,633</b>
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>0</b>
6. ( 0 ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>86,942</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>33,199</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>120,141</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>3,286</b>
2. FOREIGN							<b>3,202</b>
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ <b>0</b>							
2. TRAVEL <b>0</b>							
3. SUBSISTENCE <b>0</b>							
4. OTHER <b>10,105</b>							
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS							<b>10,105</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>250</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>19,098</b>
TOTAL OTHER DIRECT COSTS							<b>19,348</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>156,082</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>MTDC @ 26.00% (Rate: 26.0000, Base: 131078)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>34,080</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>190,162</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>190,162</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Jennifer Francis</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

# SUMMARY PROPOSAL BUDGET

YEAR 4

ORGANIZATION <b>Rutgers University</b>				FOR NSF USE ONLY		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jennifer Francis</b>				PROPOSAL NO.		DURATION (months)
				Proposed		Granted
AWARD NO.						
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-months		Funds Requested By proposer
				CAL	ACAD	SUMR
1. <b>Jennifer Francis - PI</b>				0.50	0.00	0.00
2.						
3.						
4.						
5.						
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.50	0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00
3. ( 0 ) GRADUATE STUDENTS						
4. ( 0 ) UNDERGRADUATE STUDENTS						
5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						
6. ( 0 ) OTHER						
TOTAL SALARIES AND WAGES (A + B)						
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)						
TOTAL EQUIPMENT						
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						
2. FOREIGN						
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$ 0						
2. TRAVEL 0						
3. SUBSISTENCE 0						
4. OTHER 12,175						
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS						
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES						
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						
3. CONSULTANT SERVICES						
4. COMPUTER SERVICES						
5. SUBAWARDS						
6. OTHER						
TOTAL OTHER DIRECT COSTS						
H. TOTAL DIRECT COSTS (A THROUGH G)						
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)						
MTDC @ 26.00% (Rate: 26.0000, Base: 156505)						
TOTAL INDIRECT COSTS (F&A)						
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						
K. RESIDUAL FUNDS						
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$		
PI/PD NAME <b>Jennifer Francis</b>				FOR NSF USE ONLY		
ORG. REP. NAME*				INDIRECT COST RATE VERIFICATION		
<b>Andrew Gray</b>				Date Checked	Date Of Rate Sheet	Initials - ORG

# SUMMARY PROPOSAL BUDGET

YEAR 5

ORGANIZATION <b>Rutgers University</b>				FOR NSF USE ONLY		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jennifer Francis</b>				PROPOSAL NO.		DURATION (months)
				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-months		Funds Requested By proposer
				CAL	ACAD	SUMR
1. <b>Jennifer Francis - PI</b>				0.50	0.00	0.00
2.						
3.						
4.						
5.						
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.50	0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00
3. ( 0 ) GRADUATE STUDENTS						
4. ( 0 ) UNDERGRADUATE STUDENTS						
5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						
6. ( 0 ) OTHER						
TOTAL SALARIES AND WAGES (A + B)						
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)						
TOTAL EQUIPMENT						
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						
2. FOREIGN						
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$ 0						
2. TRAVEL 0						
3. SUBSISTENCE 0						
4. OTHER 0						
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS						
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES						
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						
3. CONSULTANT SERVICES						
4. COMPUTER SERVICES						
5. SUBAWARDS						
6. OTHER						
TOTAL OTHER DIRECT COSTS						
H. TOTAL DIRECT COSTS (A THROUGH G)						
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>MTDC @ 26.00% (Rate: 26.0000, Base: 135048)</b>						
TOTAL INDIRECT COSTS (F&A)						
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						
K. RESIDUAL FUNDS						
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$		
PI/PD NAME <b>Jennifer Francis</b>				FOR NSF USE ONLY		
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION		
				Date Checked	Date Of Rate Sheet	Initials - ORG

5 \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

# SUMMARY PROPOSAL BUDGET

Cumulative

ORGANIZATION <b>Rutgers University</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Jennifer Francis</b>				PROPOSAL NO.	DURATION (months)		
				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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Jennifer Francis - PI</b>				2.50	0.00	0.00	<b>26,564</b>
2.							
3.							
4.							
5.							
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)				2.50	0.00	0.00	<b>26,564</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( <b>5</b> ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>369,562</b>
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( <b>0</b> ) GRADUATE STUDENTS							<b>0</b>
4. ( <b>0</b> ) UNDERGRADUATE STUDENTS							<b>0</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>396,126</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>151,410</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>547,536</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>16,493</b>
2. FOREIGN							<b>16,105</b>
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ <b>0</b>							
2. TRAVEL <b>0</b>							
3. SUBSISTENCE <b>0</b>							
4. OTHER <b>41,765</b>							
TOTAL NUMBER OF PARTICIPANTS ( <b>0</b> ) TOTAL PARTICIPANT COSTS							<b>41,765</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>1,250</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>132,674</b>
TOTAL OTHER DIRECT COSTS							<b>133,924</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>755,823</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							<b>172,738</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>928,561</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>928,561</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Jennifer Francis</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

C \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

# SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION <b>University of Colorado at Boulder</b>				FOR NSF USE ONLY					
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Theodore Scambos</b>				PROPOSAL NO.		DURATION (months)			
				Proposed		Granted			
AWARD NO.									
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-months		Funds Requested By proposer		Funds granted by NSF (if different)	
				CAL	ACAD	SUMR			
1. <b>Theodore Scambos - PI</b>				0.00	0.00	0.00	<b>13,622</b>		
2.									
3.									
4.									
5.									
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>		
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00	<b>13,622</b>		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)									
1. ( 0 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>0</b>		
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>		
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>		
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>		
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>1,298</b>		
6. ( 0 ) OTHER							<b>0</b>		
TOTAL SALARIES AND WAGES (A + B)							<b>14,920</b>		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>4,804</b>		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>19,724</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>4,620</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 ( 0 ) TOTAL PARTICIPANT COSTS							<b>0</b>		
G. OTHER DIRECT COSTS									
1. MATERIALS AND SUPPLIES							<b>50</b>		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>		
3. CONSULTANT SERVICES							<b>0</b>		
4. COMPUTER SERVICES							<b>500</b>		
5. SUBAWARDS							<b>0</b>		
6. OTHER							<b>100</b>		
TOTAL OTHER DIRECT COSTS							<b>650</b>		
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>24,994</b>		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>MTDC @ 52.5% 7/1/11-6/30/13, provisional thereafter (Rate: 52.5000, Base: 24994)</b>									
TOTAL INDIRECT COSTS (F&A)							<b>13,122</b>		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>38,116</b>		
K. RESIDUAL FUNDS							<b>0</b>		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>38,116</b>		
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$					
PI/PD NAME <b>Theodore Scambos</b>				FOR NSF USE ONLY					
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION					
				Date Checked		Date Of Rate Sheet		Initials - ORG	

# SUMMARY PROPOSAL BUDGET

YEAR 2

ORGANIZATION <b>University of Colorado at Boulder</b>				FOR NSF USE ONLY		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Theodore Scambos</b>				PROPOSAL NO.		DURATION (months)
				Proposed		Granted
				AWARD NO.		
A. SENIOR PERSONNEL: PI/PI, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer
				CAL	ACAD	SUMR
1. <b>Theodore Scambos - PI</b>				0.00	0.00	0.00
2.						
3.						
4.						
5.						
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00
3. ( 0 ) GRADUATE STUDENTS						
4. ( 0 ) UNDERGRADUATE STUDENTS						
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						
6. ( 0 ) OTHER						
TOTAL SALARIES AND WAGES (A + B)						
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)						
TOTAL EQUIPMENT						
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						
2. FOREIGN						
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$ _____ 0						
2. TRAVEL _____ 0						
3. SUBSISTENCE _____ 0						
4. OTHER _____ 0						
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS						
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES						
2. PUBLICATION COSTS/DOCUMENTATION/DISEMINATION						
3. CONSULTANT SERVICES						
4. COMPUTER SERVICES						
5. SUBAWARDS						
6. OTHER						
TOTAL OTHER DIRECT COSTS						
H. TOTAL DIRECT COSTS (A THROUGH G)						
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>MTDC @ 52.5% 7/1/11-6/30/13, provisional thereafter (Rate: 52.5000, Base: 66003)</b>						
TOTAL INDIRECT COSTS (F&A)						
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						
K. RESIDUAL FUNDS						
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$		
PI/PI NAME <b>Theodore Scambos</b>				FOR NSF USE ONLY		
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION		
				Date Checked	Date Of Rate Sheet	Initials - ORG

2 \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET



# SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION <b>University of Colorado at Boulder</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Theodore Scambos</b>				PROPOSAL NO.		DURATION (months)	
				Proposed		Granted	
AWARD NO.							
A. SENIOR PERSONNEL: PI/PI, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	
				CAL	ACAD	SUMR	Funds granted by NSF (if different)
1. <b>Theodore Scambos - PI</b>				0.00	0.00	0.00	5,781
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	0
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00	5,781
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	28,575
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	0
3. ( 0 ) GRADUATE STUDENTS							0
4. ( 0 ) UNDERGRADUATE STUDENTS							0
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							1,377
6. ( 0 ) OTHER							0
TOTAL SALARIES AND WAGES (A + B)							35,733
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							11,506
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							47,239
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							4,826
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ 0							
2. TRAVEL 0							
3. SUBSISTENCE 0							
4. OTHER 0							
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS							0
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							52
2. PUBLICATION COSTS/DOCUMENTATION/DISEMINATION							0
3. CONSULTANT SERVICES							0
4. COMPUTER SERVICES							522
5. SUBAWARDS							0
6. OTHER							104
TOTAL OTHER DIRECT COSTS							678
H. TOTAL DIRECT COSTS (A THROUGH G)							52,743
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
<b>MTDC @ 52.5% 7/1/11-6/30/13, provisional thereafter (Rate: 52.5000, Base: 52743)</b>							
TOTAL INDIRECT COSTS (F&A)							27,690
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							80,433
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							80,433
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Theodore Scambos</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
		Date Checked		Date Of Rate Sheet		Initials - ORG	

# SUMMARY PROPOSAL BUDGET

YEAR 4

ORGANIZATION				FOR NSF USE ONLY			
<b>University of Colorado at Boulder</b>				PROPOSAL NO.		DURATION (months)	
						Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Theodore Scambos</b>				AWARD NO.			
A. SENIOR PERSONNEL: PI/PI, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Theodore Scambos - PI</b>				0.00	0.00	0.00	5,954
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	0
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00	5,954
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	29,432
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	0
3. ( 0 ) GRADUATE STUDENTS							0
4. ( 0 ) UNDERGRADUATE STUDENTS							0
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							1,418
6. ( 0 ) OTHER							0
TOTAL SALARIES AND WAGES (A + B)							36,804
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							11,851
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							48,655
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							4,932
2. FOREIGN							5,050
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____ 0							
2. TRAVEL _____ 0							
3. SUBSISTENCE _____ 0							
4. OTHER _____ 0							
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS							0
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							53
2. PUBLICATION COSTS/DOCUMENTATION/DISEMINATION							0
3. CONSULTANT SERVICES							0
4. COMPUTER SERVICES							533
5. SUBAWARDS							0
6. OTHER							106
TOTAL OTHER DIRECT COSTS							692
H. TOTAL DIRECT COSTS (A THROUGH G)							59,329
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
<b>MTDC @ 52.5% 7/1/11-6/30/13, provisional thereafter (Rate: 52.5000, Base: 59329)</b>							
TOTAL INDIRECT COSTS (F&A)							31,148
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							90,477
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							90,477
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME				FOR NSF USE ONLY			
<b>Theodore Scambos</b>				INDIRECT COST RATE VERIFICATION			
ORG. REP. NAME*				Date Checked	Date Of Rate Sheet	Initials - ORG	
<b>Andrew Gray</b>							

# SUMMARY PROPOSAL BUDGET

YEAR 5

ORGANIZATION				FOR NSF USE ONLY			
<b>University of Colorado at Boulder</b>				PROPOSAL NO.		DURATION (months)	
						Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Theodore Scambos</b>				AWARD NO.			
A. SENIOR PERSONNEL: PI/PI, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Theodore Scambos - PI</b>				0.00	0.00	0.00	6,133
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	0
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00	6,133
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	30,315
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	0
3. ( 0 ) GRADUATE STUDENTS							0
4. ( 0 ) UNDERGRADUATE STUDENTS							0
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							1,461
6. ( 0 ) OTHER							0
TOTAL SALARIES AND WAGES (A + B)							37,909
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							12,207
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							50,116
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							5,041
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ 0							
2. TRAVEL 0							
3. SUBSISTENCE 0							
4. OTHER 0							
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS							0
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							54
2. PUBLICATION COSTS/DOCUMENTATION/DISEMINATION							0
3. CONSULTANT SERVICES							0
4. COMPUTER SERVICES							545
5. SUBAWARDS							0
6. OTHER							108
TOTAL OTHER DIRECT COSTS							707
H. TOTAL DIRECT COSTS (A THROUGH G)							55,864
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
<b>MTDC @ 52.5% 7/1/11-6/30/13, provisional thereafter (Rate: 52.5000, Base: 55864)</b>							
TOTAL INDIRECT COSTS (F&A)							29,329
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							85,193
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							85,193
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME				FOR NSF USE ONLY			
<b>Theodore Scambos</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	
ORG. REP. NAME*							
<b>Andrew Gray</b>							

5 \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

# SUMMARY PROPOSAL BUDGET

Cumulative

ORGANIZATION <b>University of Colorado at Boulder</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Theodore Scambos</b>				PROPOSAL NO.		DURATION (months)	
				Proposed		Granted	
AWARD NO.							
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-months		Funds Requested By proposer	
				CAL	ACAD	SUMR	Funds granted by NSF (if different)
1. <b>Theodore Scambos - PI</b>				0.00	0.00	0.00	42,714
2.							
3.							
4.							
5.							
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	0
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.00	0.00	42,714
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( <b>4</b> ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	116,065
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	0
3. ( <b>0</b> ) GRADUATE STUDENTS							0
4. ( <b>0</b> ) UNDERGRADUATE STUDENTS							0
5. ( <b>5</b> ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							6,891
6. ( <b>0</b> ) OTHER							0
TOTAL SALARIES AND WAGES (A + B)							165,670
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							53,346
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							219,016
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							24,141
2. FOREIGN							9,885
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____				0			
2. TRAVEL _____				0			
3. SUBSISTENCE _____				0			
4. OTHER _____				0			
TOTAL NUMBER OF PARTICIPANTS ( <b>0</b> ) TOTAL PARTICIPANT COSTS							0
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							2,760
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							0
3. CONSULTANT SERVICES							0
4. COMPUTER SERVICES							2,611
5. SUBAWARDS							0
6. OTHER							520
TOTAL OTHER DIRECT COSTS							5,891
H. TOTAL DIRECT COSTS (A THROUGH G)							258,933
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							135,941
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							394,874
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							394,874
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Theodore Scambos</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
		Date Checked		Date Of Rate Sheet		Initials - ORG	

C \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

# SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION				FOR NSF USE ONLY		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR				PROPOSAL NO.		DURATION (months)
AWARD NO.				Proposed		Granted
<b>Woods Hole Oceanographic Institution</b> <b>Fiammetta Straneo</b>						
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-months		Funds Requested By proposer
				CAL	ACAD	SUMR
1. <b>Fiammetta Straneo - PI</b>				1.00	0.00	0.00
2.						
3.						
4.						
5.						
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				1.00	0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. ( 0 ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00
3. ( 0 ) GRADUATE STUDENTS						
4. ( 0 ) UNDERGRADUATE STUDENTS						
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						
6. ( 0 ) OTHER						
TOTAL SALARIES AND WAGES (A + B)						
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)						
TOTAL EQUIPMENT						
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						
2. FOREIGN						
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$ _____ 0						
2. TRAVEL _____ 0						
3. SUBSISTENCE _____ 0						
4. OTHER _____ 0						
TOTAL NUMBER OF PARTICIPANTS ( 0 ) TOTAL PARTICIPANT COSTS						
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES						
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						
3. CONSULTANT SERVICES						
4. COMPUTER SERVICES						
5. SUBAWARDS						
6. OTHER						
TOTAL OTHER DIRECT COSTS						
H. TOTAL DIRECT COSTS (A THROUGH G)						
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)						
<b>General &amp; Administrative (Rate: 35.88) (Rate: 35.8800, Base: 17099) (Cont. on Comments Page)</b>						
TOTAL INDIRECT COSTS (F&A)						
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						
K. RESIDUAL FUNDS						
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$		
PI/PD NAME				FOR NSF USE ONLY		
ORG. REP. NAME*				INDIRECT COST RATE VERIFICATION		
Date Checked				Date Of Rate Sheet		Initials - ORG

## SUMMARY PROPOSAL BUDGET COMMENTS - Year 1

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**\*\* I- Indirect Costs**

**Laboratory Overhead (Rate: 54.69) (Rate: 54.6900, Base 17099)**

# SUMMARY PROPOSAL BUDGET

YEAR **2**

ORGANIZATION <b>Woods Hole Oceanographic Institution</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Fiammetta Straneo</b>				PROPOSAL NO.	DURATION (months)		
				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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Fiammetta Straneo - PI</b>				0.75	0.00	0.00	<b>8,666</b>
2.							
3.							
4.							
5.							
6. ( <b>0</b> ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)				0.75	0.00	0.00	<b>8,666</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( <b>0</b> ) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	<b>0</b>
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( <b>0</b> ) GRADUATE STUDENTS							<b>0</b>
4. ( <b>0</b> ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( <b>1</b> ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>984</b>
6. ( <b>0</b> ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>9,650</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>3,648</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>13,298</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>17,694</b>
2. FOREIGN							<b>4,872</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>0</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>23,450</b>
TOTAL OTHER DIRECT COSTS							<b>23,450</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>59,314</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>General &amp; Administrative (Rate: 35.88) (Rate: 35.8800, Base: 13298) (Cont. on Comments Page)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>12,044</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>71,358</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>71,358</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Fiammetta Straneo</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

2 \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

## SUMMARY PROPOSAL BUDGET COMMENTS - Year 2

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**\*\* I- Indirect Costs**

**Laboratory Overhead (Rate: 54.69) (Rate: 54.6900, Base 13298)**



# SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION <b>Woods Hole Oceanographic Institution</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Fiammetta Straneo</b>				PROPOSAL NO.	DURATION (months)		
				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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Fiammetta Straneo - PI</b>				0.62	0.00	0.00	<b>7,396</b>
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.62	0.00	0.00	<b>7,396</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS				6.00	0.00	0.00	<b>32,406</b>
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>808</b>
6. ( 0 ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>40,610</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>15,350</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>55,960</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>15,824</b>
2. FOREIGN							<b>5,263</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 ( 0 ) TOTAL PARTICIPANT COSTS							<b>0</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>0</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>5,550</b>
TOTAL OTHER DIRECT COSTS							<b>5,550</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>82,597</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>General &amp; Administrative (Rate: 35.88) (Rate: 35.8800, Base: 55960) (Cont. on Comments Page)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>50,683</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>133,280</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>133,280</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Fiammetta Straneo</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

## SUMMARY PROPOSAL BUDGET COMMENTS - Year 3

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**\*\* I- Indirect Costs**

**Laboratory Overhead (Rate: 54.69) (Rate: 54.6900, Base 55960)**

# SUMMARY PROPOSAL BUDGET

YEAR 4

ORGANIZATION <b>Woods Hole Oceanographic Institution</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Fiammetta Straneo</b>				PROPOSAL NO.		DURATION (months)	
				AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PI, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	
				CAL	ACAD	SUMR	Funds granted by NSF (if different)
1. <b>Fiammetta Straneo - PI</b>				0.61	0.00	0.00	<b>7,573</b>
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)				0.61	0.00	0.00	<b>7,573</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS				6.00	0.00	0.00	<b>33,542</b>
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( 0 ) GRADUATE STUDENTS							<b>0</b>
4. ( 0 ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>799</b>
6. ( 0 ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>41,914</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>15,844</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>57,758</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>18,340</b>
2. FOREIGN							<b>5,050</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 ( 0 ) TOTAL PARTICIPANT COSTS							<b>0</b>
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							<b>0</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>27,650</b>
TOTAL OTHER DIRECT COSTS							<b>27,650</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>108,798</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) <b>General &amp; Administrative (Rate: 35.88) (Rate: 35.8800, Base: 57758) (Cont. on Comments Page)</b>							
TOTAL INDIRECT COSTS (F&A)							<b>52,312</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>161,110</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>161,110</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PI NAME <b>Fiammetta Straneo</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
				Date Checked	Date Of Rate Sheet	Initials - ORG	

## SUMMARY PROPOSAL BUDGET COMMENTS - Year 4

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**\*\* I- Indirect Costs**

**Laboratory Overhead (Rate: 54.69) (Rate: 54.6900, Base 57758)**

# SUMMARY PROPOSAL BUDGET

YEAR 5

ORGANIZATION <b>Woods Hole Oceanographic Institution</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Fiammetta Straneo</b>				PROPOSAL NO.		DURATION (months)	
				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-months		Funds Requested By proposer	
	CAL	ACAD	SUMR			Funds granted by NSF (if different)	
1. <b>Fiammetta Straneo - PI</b>	0.61	0.00	0.00	<b>7,838</b>			
2.							
3.							
4.							
5.							
6. ( 0 ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00	<b>0</b>			
7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)	0.61	0.00	0.00	<b>7,838</b>			
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( 1 ) POST DOCTORAL SCHOLARS	6.00	0.00	0.00	<b>34,720</b>			
2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00	<b>0</b>			
3. ( 0 ) GRADUATE STUDENTS				<b>0</b>			
4. ( 0 ) UNDERGRADUATE STUDENTS				<b>0</b>			
5. ( 1 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				<b>827</b>			
6. ( 0 ) OTHER				<b>0</b>			
TOTAL SALARIES AND WAGES (A + B)				<b>43,385</b>			
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				<b>16,400</b>			
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				<b>59,785</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>4,920</b>			
2. FOREIGN				<b>5,441</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 ( 0 ) TOTAL PARTICIPANT COSTS				<b>0</b>			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES				<b>0</b>			
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				<b>0</b>			
3. CONSULTANT SERVICES				<b>0</b>			
4. COMPUTER SERVICES				<b>0</b>			
5. SUBAWARDS				<b>0</b>			
6. OTHER				<b>2,750</b>			
TOTAL OTHER DIRECT COSTS				<b>2,750</b>			
H. TOTAL DIRECT COSTS (A THROUGH G)				<b>72,896</b>			
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
<b>General &amp; Administrative (Rate: 35.88) (Rate: 35.8800, Base: 59785) (Cont. on Comments Page)</b>							
TOTAL INDIRECT COSTS (F&A)				<b>54,147</b>			
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				<b>127,043</b>			
K. RESIDUAL FUNDS				<b>0</b>			
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				<b>127,043</b>			
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Fiammetta Straneo</b>				FOR NSF USE ONLY			
ORG. REP. NAME* <b>Andrew Gray</b>				INDIRECT COST RATE VERIFICATION			
		Date Checked		Date Of Rate Sheet		Initials - ORG	

## SUMMARY PROPOSAL BUDGET COMMENTS - Year 5

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**\*\* I- Indirect Costs**

**Laboratory Overhead (Rate: 54.69) (Rate: 54.6900, Base 59785)**

# SUMMARY PROPOSAL BUDGET

Cumulative

ORGANIZATION <b>Woods Hole Oceanographic Institution</b>				FOR NSF USE ONLY			
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR <b>Fiammetta Straneo</b>				PROPOSAL NO.	DURATION (months)		
				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-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1. <b>Fiammetta Straneo - PI</b>				3.59	0.00	0.00	<b>42,636</b>
2.							
3.							
4.							
5.							
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	<b>0</b>
7. ( <b>1</b> ) TOTAL SENIOR PERSONNEL (1 - 6)				3.59	0.00	0.00	<b>42,636</b>
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. ( <b>3</b> ) POST DOCTORAL SCHOLARS				18.00	0.00	0.00	<b>100,668</b>
2. ( <b>0</b> ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	<b>0</b>
3. ( <b>0</b> ) GRADUATE STUDENTS							<b>0</b>
4. ( <b>0</b> ) UNDERGRADUATE STUDENTS							<b>0</b>
5. ( <b>5</b> ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							<b>4,663</b>
6. ( <b>0</b> ) OTHER							<b>0</b>
TOTAL SALARIES AND WAGES (A + B)							<b>147,967</b>
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							<b>55,933</b>
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							<b>203,900</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>70,342</b>
2. FOREIGN							<b>25,111</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>0</b>
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							<b>0</b>
3. CONSULTANT SERVICES							<b>0</b>
4. COMPUTER SERVICES							<b>0</b>
5. SUBAWARDS							<b>0</b>
6. OTHER							<b>64,750</b>
TOTAL OTHER DIRECT COSTS							<b>64,750</b>
H. TOTAL DIRECT COSTS (A THROUGH G)							<b>364,103</b>
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							<b>184,672</b>
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							<b>548,775</b>
K. RESIDUAL FUNDS							<b>0</b>
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							<b>548,775</b>
M. COST SHARING PROPOSED LEVEL \$ <b>0</b>				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME <b>Fiammetta Straneo</b>				FOR NSF USE ONLY			
ORG. REP. NAME*				INDIRECT COST RATE VERIFICATION			
<b>Andrew Gray</b>				Date Checked	Date Of Rate Sheet	Initials - ORG	

C \*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

## UNIVERSITY OF ALASKA FAIRBANKS

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