SUMMARY YEAR 1
PROPOSAL BUDGET FOR NSF USE ONLY

ORGANIZATION Syracuse University PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR						
		PRO	POSAL	NO.	DURATIO	ON (month
					Proposed	Grante
		ΑV	/ARD N	Ю.		
Edward D Lipson						
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates	N	SF Funde erson-mos	d		Funds	Funds
(List each separately with title, A.7. show number in brackets)				Red	quested By proposer	granted by N
· · · · · · · · · · · · · · · · · · ·		ACAD		+		`
1. Edward D Lipson - Professor		0.00			<u>16,777</u>	\$
2 Geoffrey C Fox - Professor		0.00			0	
3. Corinna E Lathan - none		0.00			0	
4. Gregg C Vanderheiden - none	0.00	0.00	0.00	١	0	
5. Erik Viirre - none	0.00	0.00	0.00	1	0	
6. (1) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	2.00	0.00	0.00		10,000	
7. (6) TOTAL SENIOR PERSONNEL (1 - 6)		0.00			26,777	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)		0.00				
1. (1) POST DOCTORAL ASSOCIATES	12.00	0.00	0.00		35,000	
2. (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	24.00				35,000	
	4.00	0.00	0.00			
3. (3) GRADUATE STUDENTS					44,109	
4. (2) UNDERGRADUATE STUDENTS					6,000	
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
6. (0) OTHER					0	
TOTAL SALARIES AND WAGES (A + B)					146,886	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					32,801	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)			•		179,687	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDIN	IG \$5.000	0.)				
equipment item 1	\$		0,000			
			-			
TOTAL FOLUBLISH					20.000	
TOTAL EQUIPMENT					30,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)					10,000	
2. FOREIGN						
					3,000	
F. PARTICIPANT SUPPORT COSTS						
F. PARTICIPANT SUPPORT COSTS 1 STIPENDS \$ 0				-		
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$						
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$						
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0						
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0					3,000	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$						
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$					3,000	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES					3,000 0 15,000	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$					3,000 0 15,000 5,000	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES					3,000 0 15,000	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					3,000 0 15,000 5,000	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES					3,000 0 15,000 5,000 12,000 0	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (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					3,000 15,000 5,000 12,000 0 195,377	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (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					3,000 15,000 5,000 12,000 0 195,377 8,325	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (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					3,000 15,000 5,000 12,000 0 195,377 8,325 235,702	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (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)					3,000 15,000 5,000 12,000 0 195,377 8,325	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (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)					3,000 0 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS 3. 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 (A THROUGH G)	000) (0	Cont. (on Co	mm	3,000 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389 ents Pag	e)
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	000) (0	Cont.	on Co	mm	3,000 0 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389	(e)
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	000) (C	Cont.	on Co	mm	3,000 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389 ents Pag	(e)
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$				mm	3,000 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389 ents Pag 164,580	(e)
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$				mm	3,000 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389 ents Pag 164,580 622,969 0	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (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) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) subawards (applied to \$25k of each) (Rate: 54.30, Base: 75 TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)	SEE GPO	6 II.D.7.j	.)	mm	3,000 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389 ents Pag 164,580 622,969	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SEE GPO	6 II.D.7.j	.) IT \$	mm (3,000 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389 ents Pag 164,580 622,969 0 622,969	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (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 OTHER DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) subawards (applied to \$25k of each) (Rate: 54.30, Base: 75 TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT PROTECTS DOTAL INDIRECT COSTS (PROPOSED LEVEL \$ 10 DATE 1 AGREED LEVENT P	SEE GPO	3 II.D.7.j	.) IT \$ FOR I	mm(s)	3,000 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389 ents Pag 164,580 622,969 0 622,969	\$
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SEE GPO	3 II.D.7.j	.) IT \$ FOR I	\$ NSF U	3,000 15,000 5,000 12,000 0 195,377 8,325 235,702 458,389 ents Pag 164,580 622,969 0 622,969	\$

Other Senior Personnel

** C- Fringe Benefits

17.1%(A1+A2)+35.3%(A3+B1+B2)+10.9%(B3)+6.9%(B4)

** E-2 Foreign Travel

Kuwait collaboration

** G-6 Other

tuition (\$555/cr hr)

** I- Indirect Costs

Comments go here

TDC-tuition-equipment-subawards (Rate: 54.30, Base 228095)

SUMMARY YEAR 2
PROPOSAL BUDGET FOR NSF USE ONLY

PROPOSAL BU		FO	R NSF	USE ONL	Υ	
ORGANIZATION		PRO	POSAL			ON (months)
Syracuse University					Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		A۱	VARD N	IO.		
Edward D Lipson						
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Assoc	iates	NSF Fund Person-m	ed os.	Dan	Funds	Funds
(List each separately with title, A.7. show number in brackets)	CA	AL ACAD		- Keq pi	uested By roposer	granted by NSI (if different)
1. Edward D Lipson - Professor	0.	00 0.00	2.00	\$	17,448	\$
2. Geoffrey C Fox - Professor		00 0.00			0	
3. Corinna E Lathan - none		00 0.00			0	
4. Gregg C Vanderheiden - none		00 0.00			0	
5. Erik Viirre - none		00 0.00			0	
6. ($f 1$) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION F		00 0.00			10,400	
7. (6) TOTAL SENIOR PERSONNEL (1 - 6)	2.	00 0.00	2.00		27,848	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. (1) POST DOCTORAL ASSOCIATES	12.	00 0.00	0.00		36,400	
2. (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ET		00 0.00			36,400	
3. (3) GRADUATE STUDENTS		<u> </u>			45,874	
4. (2) UNDERGRADUATE STUDENTS					6,240	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
6. (0) OTHER					0	
TOTAL SALARIES AND WAGES (A + B)				1	152,762	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					32,801	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				1	185,563	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EX	CEEDING \$5	(.000.)			202,202	
equipment item 1	- •-	± '	0,000			
- 1F		_	-,			
TOTAL EQUIPMENT					30,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSI	IONS)				10,000	
2. FOREIGN	,				3,000	
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$						
2. TRAVEL						
3. SUBSISTENCE — 0						
4. OTHER						
(0) TOTAL PARTICIPANT COSTS					0	
G. OTHER DIRECT COSTS					<u>_</u>	
1. MATERIALS AND SUPPLIES					15,000	
PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					5,000	
3. CONSULTANT SERVICES					12,480	
4. COMPUTER SERVICES					12,400	
				1	<u> </u>	
5. SUBAWARDS 6. OTHER						
					8,745	
TOTAL OTHER DIRECT COSTS					238,112	
H. TOTAL DIRECT COSTS (A THROUGH G)					<u>466,675</u>	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)						
(Rate: 0.00, Base: 0) (Cont. on Comments Page)				-	126 200	
TOTAL INDIRECT COSTS (F&A)					126,298 102,073	-
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)		onc		- 5	<u>592,973</u>	
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PRO	JECTS SEE	GPG II.D.7	.j.)		<u>0</u>	
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$ 5	592,973	\$
	ED LEVEL IF	DIFFERE				
	DATE		FOR	NSF US	SE ONLY	
Edward D Lipson					TE VERIFI	
ORG. REP. TYPED NAME & SIGNATURE*	DATE	Date Checked	Da	te Of Rat	e Sheet	Initials - ORG
NSF Form 1030 (10/97) Supersedes all previous editions 2*SIGN	ATURES REC	UIRED ON	LY FOR	REVISI	ED BUDGE	T (GPG

Other Senior Personnel

** C- Fringe Benefits

17.1%(A1+A2)+35.3%(A3+B1+B2)+10.9%(B3)+6.9%(B4)

** E-2 Foreign Travel

Kuwait collaboration

** G-6 Other

tuition (\$583/cr hr)

** I- Indirect Costs

Comments go here

TDC-tuition-equipment-subawards (Rate: 54.30, Base 232594)

SUMMARY YEAR 3
PROPOSAL BUDGET FOR NSF USE ONLY

PROPOSAL BU		F	OR NSF	USE ONL	Υ	
ORGANIZATION		PR	OPOSA	L NO.	DURATIO	ON (months)
Syracuse University					Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		А	WARD	NO.		
Edward D Lipson						
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associa	ates	NSF Fun Person-n	ded los.		Funds	Funds
(List each separately with title, A.7. show number in brackets)	C/	AL ACAI		R P	quested By proposer	granted by NSF (if different)
1. Edward D Lipson - Professor	0.	0.0	2.0	0 \$	18,146	\$
2. Geoffrey C Fox - Professor		0.0			0	
3. Corinna E Lathan - none		0.0			0	
4. Gregg C Vanderheiden - none		0.0			0	
5. Erik Viirre - none		0.0			0	
6. ($f 1$) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION P.		0.0			10,816	
7. (6) TOTAL SENIOR PERSONNEL (1 - 6)	2.	0.0	2.0	0	28,962	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. (1) POST DOCTORAL ASSOCIATES	12.	0.0	0.0	0	37,856	
2. (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETG		0.0			37,856	
3. (3) GRADUATE STUDENTS	<u> </u>	<u>'</u>	_		47,709	
4. (2) UNDERGRADUATE STUDENTS					6,490	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
6. (0) OTHER					0	
TOTAL SALARIES AND WAGES (A + B)					158,873	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					32,801	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					191,674	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXC	CEEDING \$5	5,000.)				
equipment item 1		± '	30,000	0		
TOTAL EQUIPMENT					30,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSION OF THE PROPERTY OF THE	ONS)				10,000	
2. FOREIGN	,				3,000	
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$						
2. TRAVEL 0						
3. SUBSISTENCE — 0						
4. OTHER0						
(0) TOTAL PARTICIPANT COSTS					0	
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES					15,000	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					5,000	
3. CONSULTANT SERVICES					12,979	
4. COMPUTER SERVICES					0	
5. SUBAWARDS					204,055	
6. OTHER					8,325	
TOTAL OTHER DIRECT COSTS					245,359	
H. TOTAL DIRECT COSTS (A THROUGH G)					480,033	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
(Rate: 0.00, Base: 0) (Cont. on Comments Page)						
TOTAL INDIRECT COSTS (F&A)					130,236	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					610,269	
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJ	JECTS SEF	GPG II.D	7.j.)		010,202	
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)		UD.	-1-/	\$	610,269	\$
· · · · · · · · · · · · · · · · · · ·	ED LEVEL IF	DIFFERE	NT \$	ΙΨ	U1U9#U/	1 4
·	ATE	DIL I LINE		NSFII	SE ONLY	
Edward D Lipson	^`' -	פוחואן			TE VERIFI	CATION
-	ATE	Date Checke		ate Of Ra		Initials - ORG
D. O. N.E THE ED INNIVIE & GIGNATURE	/\!L	JJ.		3		
NSF Form 1030 (10/97) Supersedes all previous editions 3*SIGN/	ATURES REG	NIIDED O	II V EO	DEVIC	ED BIIDO	T (GDC III P
NOT FORM 1000 CIDIBLE SUBSISSIONS AND DISCUSSIONS 3 "SIGNA	へいひたころ ドモし	といいこし ひし	ILI FU	ヘベビリン		uru III.L

Other Senior Personnel

** C- Fringe Benefits

17.1%(A1+A2)+35.3%(A3+B1+B2)+10.9%(B3)+6.9%(B4)

** E-2 Foreign Travel

Kuwait collaboration

** G-6 Other

tuition (\$612/cr hr)

** I- Indirect Costs

Comments go here

TDC-tuition-equipment-subawards (Rate: 54.30, Base 239847)

SUMMARY **Cumulative** PROPOSAL BUDGET FOR NSF USE ONLY ORGANIZATION PROPOSAL NO. **DURATION** (months) **Syracuse University** Proposed Granted PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR AWARD NO. Edward D Lipson Funds Requested By proposer Funds granted by NSF (if different) 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 0.00 0.00 6.00 \$ 1. Edward D Lipson - Professor 52,371 | \$ 2 Geoffrey C Fox - Professor 0.00 | 0.00 | 0.00 0 3 Corinna E Lathan - none 0.00 | 0.00 | 0.00 0 4. Gregg C Vanderheiden - none 0.00 | 0.00 | 0.00 0 5. Erik Viirre - none 0.00 0.00 0.00 0 6. (1) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE) 6.00 0.00 0.00 31,216 7. (**6**) TOTAL SENIOR PERSONNEL (1 - 6) 6.00 | 0.00 | 6.00 83,587 B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS) 1. (3) POST DOCTORAL ASSOCIATES 36.00 | 0.00 | 0.00 109,256 3) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) 72.00 0.00 0.00 109,256 9) GRADUATE STUDENTS 137,691 4. (6) UNDERGRADUATE STUDENTS 18,730 5. (**0**) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) 0 6. (**0**) OTHER 0 458,520 TOTAL SALARIES AND WAGES (A + B) C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) 98,403 TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C) 556,923 D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) 90,000 90,000 **TOTAL EQUIPMENT** E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 30,000 2. FOREIGN 9.000 F. PARTICIPANT SUPPORT COSTS 0 1. STIPENDS 0 2. TRAVEL 0 3 SUBSISTENCE 0 4. OTHER (**0**) TOTAL PARTICIPANT COSTS 0 G. OTHER DIRECT COSTS 45,000 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 15,000 37,459 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 0 596,319 5. SUBAWARDS 6. OTHER 25,395 TOTAL OTHER DIRECT COSTS 719,173 1,405,096 H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) 421,116 TOTAL INDIRECT COSTS (F&A) 1,826,212 J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.D.7.j.) 0 \$ 1,826,212 | \$ L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVEL IF DIFFERENT \$ PI / PD TYPED NAME & SIGNATURE* DATE FOR NSF USE ONLY **Edward D Lipson** INDIRECT COST RATE VERIFICATION ORG. REP. TYPED NAME & SIGNATURE* DATE Date Checked Date Of Rate Sheet Initials - ORG

SUMMARY YEAR 1
PROPOSAL BUDGET FOR NSF USE ONLY

ORGANIZATION	POSAL	NO.	DURATIO	ON (months)			
Catholic University of America						Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR			AW	ARD N	Ο.		
Corinna E Lathan							
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Ass	ociates	NSF Fu Person	unded n-mos	d	F	unds	Funds
(List each separately with title, A.7. show number in brackets)	С	AL AC	AD	SUMR	pro	lested By oposer	granted by NSF (if different)
1. Corinna E Lathan - Ph.D.	0	.00 0.0	00	0.60	\$	3,500	\$
2.							
3.							
4.							
5.							
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION	N PAGE) 0	.00 0.0	00	0.00		0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)		.00 0.0				3,500	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)		.00 0.	00	0.00		2,200	
1. (0) POST DOCTORAL ASSOCIATES	0	.00 0.0	ሰሰ	0.00		0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER,		.00 0.0				0	
	E10.) U	.00 0.	υυ	0.00		16,000	
· · · ·							
4. (0) UNDERGRADUATE STUDENTS						0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0	
6. (0) OTHER						10.500	
TOTAL SALARIES AND WAGES (A + B)						19,500	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						1,917	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						21,417	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM	EXCEEDING \$			_			
equipment item 1		\$		0			
TOTAL EQUIPMENT						0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSES	SSIONS)					3,000	
2. FOREIGN						0	
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER0							
(()) TOTAL PARTICIPANT COSTS						0	
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES						3,500	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						0	
3. CONSULTANT SERVICES						0	
4. COMPUTER SERVICES						0	
5. SUBAWARDS						0	
						0	
6. OTHER							
TOTAL OTHER DIRECT COSTS						3,500	
H. TOTAL DIRECT COSTS (A THROUGH G)						<u>27,917</u>	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
62% on salaries only (Rate: 62.00, Base: 19500)						14 000	
TOTAL INDIRECT COSTS (F&A)			12,090				
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)			40,007				
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PR	.)		0				
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$	40,007	\$
M. COST SHARING PROPOSED LEVEL \$ 17,000 AG	REED LEVEL IF	- DIFFER	REN	Т\$			
PI / PD TYPED NAME & SIGNATURE*	DATE	- DIFFER	REN		NSF US	E ONLY	
·		INDI	IREC	FOR N		E VERIFIC	
PI / PD TYPED NAME & SIGNATURE*			IREC	FOR I		E VERIFIC	



SUMMARY YEAR 2
PROPOSAL BUDGET FOR NSF USE ONLY

ORGANIZATION	POSAL	NO.	DURATIO	ON (months)			
Catholic University of America						Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR			ΑW	ARD N	Ο.		
Corinna E Lathan							
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Ass	sociates	NSF Per:	F Funde son-mos	d S.		unds Jested By	Funds
(List each separately with title, A.7. show number in brackets)	С	AL A	CAD	SUMR	pr	oposer	granted by NSF (if different)
1. Corinna E Lathan - Ph.D.	0	.00	0.00	0.60	\$	4,000	\$
2.							
3.							
4.							
5.							
6. ($oldsymbol{0}$) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATIO	N PAGE) 0	.00	0.00	0.00		0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)	0	.00	0.00	0.60		4,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL ASSOCIATES	0	.00	0.00	0.00		0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER,				0.00		0	
3. (1) GRADUATE STUDENTS	- , , ,	•••	0000	0.00		16,000	
4. (0) UNDERGRADUATE STUDENTS						0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0	
6. (0) OTHER						0	
TOTAL SALARIES AND WAGES (A + B)						20,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						2,016	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						22,016	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM	EXCEEDING \$	5 000	١			22,010	
equipment item 1	EXCEEDING \$	\$,000.)	0			
equipment item 1		Ψ		U			
TOTAL EQUIPMENT	00101107					2 000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSE	SSIONS)					3,000	
2. FOREIGN						0	
E DADTICIDANT CUIDDODT COCTO							
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$							
2. TRAVEL 0							
3. SUBSISTENCE							
4. OTHER						•	
(0) TOTAL PARTICIPANT COSTS						0	
G. OTHER DIRECT COSTS						2.500	
1. MATERIALS AND SUPPLIES						3,500	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						0	
3. CONSULTANT SERVICES						0	
4. COMPUTER SERVICES						0	
5. SUBAWARDS						0	
6. OTHER						0	
TOTAL OTHER DIRECT COSTS						<u>3,500</u>	
H. TOTAL DIRECT COSTS (A THROUGH G)						<u>28,516</u>	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
62% on salaries only (Rate: 62.00, Base: 20000)							
TOTAL INDIRECT COSTS (F&A)						12,400	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)			40,916				
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT P	ROJECTS SEE	GPG I	II.D.7.j	.)		0	
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$	40,916	\$
M. COST SHARING PROPOSED LEVEL \$ 17,000 AG	REED LEVEL II	F DIFF	EREN	Т\$			
PI / PD TYPED NAME & SIGNATURE*	DATE			FOR N	ISF US	SE ONLY	
Corinna E Lathan		IN	IDIRE			E VERIFIC	CATION
ORG. REP. TYPED NAME & SIGNATURE*	DATE	Date Cl			e Of Rate		Initials - ORG
		I					

SUMMARY YEAR 3
PROPOSAL BUDGET FOR NSF USE ONLY

ORGANIZATION	POSAL	NO.	DURATIO	ON (months)			
Catholic University of America						Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR			ΑW	/ARD N	Ο.		
Corinna E Lathan							
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior As	sociates	NS Per	F Funde	d S.		Funds uested By	Funds
(List each separately with title, A.7. show number in brackets)	С	AL A	ACAD	SUMR	pı	roposer	granted by NSF (if different)
1. Corinna E Lathan - Ph.D.	0	.00	0.00	0.60	\$	4,500	\$
2.						·	
3.							
4.							
5.							
6. ($m{0}$) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATIO	N PAGE) 0	.00	0.00	0.00		0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)	0	.00	0.00	0.60		4,500	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL ASSOCIATES	0	.00	0.00	0.00		0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER,				0.00		0	
3. (1) GRADUATE STUDENTS						16,000	
4. (0) UNDERGRADUATE STUDENTS						0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)			0				
6. (0) OTHER						0	
TOTAL SALARIES AND WAGES (A + B)						20,500	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						2,115	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						22,615	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM	EXCEEDING \$	5.000	.)			22,010	
equipment item 1	EXCEEDING OF	\$.,	0			
equipment item 1		•		U			
TOTAL EQUIPMENT						0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSE	SSIONS)					3,000	
2. FOREIGN	3310113)					<u> </u>	
Z. I OKLIGIN							
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$							
· · · · · · · · · · · · · · · · · · ·							
2. TRAVEL 3. SUBSISTENCE							
4. OTHER0							
						0	
(0) TOTAL PARTICIPANT COSTS							
G. OTHER DIRECT COSTS						2.500	
1. MATERIALS AND SUPPLIES						3,500	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						0	
3. CONSULTANT SERVICES						0	
4. COMPUTER SERVICES						0	
5. SUBAWARDS						0	
6. OTHER						0	
TOTAL OTHER DIRECT COSTS						3,500	
H. TOTAL DIRECT COSTS (A THROUGH G)						29,115	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
62% on salaries only (Rate: 62.00, Base: 20500)							
TOTAL INDIRECT COSTS (F&A)						12,710	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						41,825	
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT P	ROJECTS SEE	GPG	II.D.7.j	.)		0	
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$	41,825	\$
M. COST SHARING PROPOSED LEVEL \$ 17,000 AG	REED LEVEL I	F DIFF	FEREN	IT \$			
PI / PD TYPED NAME & SIGNATURE*	DATE			FOR N	ISF US	SE ONLY	
Corinna E Lathan		II.	NDIRE	CT COS	ST RAT	E VERIFIC	CATION
ORG. REP. TYPED NAME & SIGNATURE*	DATE	Date C	hecked	Dat	e Of Rat	e Sheet	Initials - ORG

SUMMARY **Cumulative** PROPOSAL BUDGET FOR NSF USE ONLY **ORGANIZATION** PROPOSAL NO. **DURATION** (months) Catholic University of America Proposed Granted PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR AWARD NO. Corinna E Lathan Funds Requested By proposer Funds granted by NSF (if different) A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates NSF Funded Person-mos. (List each separately with title, A.7. show number in brackets) CAL ACAD SUMR 0.00 0.00 1.80 \$ 1. Corinna E Lathan - Ph.D. 12,000 | \$ 3. 4. 5.) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE) 0.00 | 0.00 | 0.00 0 6. (7. (1) TOTAL SENIOR PERSONNEL (1 - 6) 0.00 | 0.00 | 1.80 12,000 B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS) 0.00 | 0.00 | 0.00 0 1. ($oldsymbol{0}$) POST DOCTORAL ASSOCIATES 0.00 | 0.00 | 0.00 0 (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) 48,000 3) GRADUATE STUDENTS 4. (**0**) UNDERGRADUATE STUDENTS 0 5. (**()**) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) 0 0 6. (**0**) OTHER 60,000 TOTAL SALARIES AND WAGES (A + B) C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) 6,048 TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C) 66,048 D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) \$ 0 **TOTAL EQUIPMENT** 0 E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 9,000 2. FOREIGN 0 F. PARTICIPANT SUPPORT COSTS 0 1. STIPENDS 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER (**0**) TOTAL PARTICIPANT COSTS 0 G. OTHER DIRECT COSTS 10.500 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 0 0 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 0 0 5. SUBAWARDS 0 6. OTHER 10,500 TOTAL OTHER DIRECT COSTS 85,548 H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) 37,200 TOTAL INDIRECT COSTS (F&A) 122,748 J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.D.7,j.) 0 \$ 122,748 \$ L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)

M. COST SHARING PROPOSED LEVEL \$ 51,000	AGREED LEVEL	IF DIFFERENT \$							
PI / PD TYPED NAME & SIGNATURE*	DATE	FOR NSF USE ONLY							
Corinna E Lathan		INDIRECT COST RATE VERIFICATIO							
ORG. REP. TYPED NAME & SIGNATURE*	DATE	Date Checked	Date Of Rate Sheet	Initials - ORG					

SUMMARY YEAR 1
PROPOSAL BUDGET FOR NSF USE ONLY

ORGANIZATION			PRO	POSAL	NO.	DURATIO	ON (months)
University of Washington						Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR			AW	ARD N	Ο.		
Erik S Viirre							
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Ass	sociates	NS Pe	F Funde	d S.	F	Funds	Funds
(List each separately with title, A.7. show number in brackets)	С	AL .	ACAD	SUMR	pr	uested By oposer	granted by NSF (if different)
1. Erik S Viirre - M.D. Ph.D.	3	.00	0.00	0.00	\$	22,063	\$
2.							
3.							
4.							
5.							
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION	N PAGE) 0	.00.	0.00	0.00		0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)				0.00		22,063	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)		.00	0.00	0.00		22,000	
1. (0) POST DOCTORAL ASSOCIATES	0	<u> </u>	0 00	0.00		0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER,	ETC) 0	00	0.00	0.00		0	
	E10.) U	.UU_	0.00	0.00		0	
3. (0) GRADUATE STUDENTS							
4. (0) UNDERGRADUATE STUDENTS						0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0	
6. (0) OTHER						0	
TOTAL SALARIES AND WAGES (A + B)						22,063	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						4,859	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						26,922	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM	EXCEEDING \$	5,000					
PC Workstation with Video Capture card		\$	5	5,000			
_							
TOTAL EQUIPMENT						5,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSES	SSIONS)					2,500	
2. FOREIGN	,					0	
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$0							
2. TRAVEL0							
3. SUBSISTENCE							
lack							
4. OTHER						Λ	
(0) TOTAL PARTICIPANT COSTS						0	
G. OTHER DIRECT COSTS						4.000	
1. MATERIALS AND SUPPLIES						4,000	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						0	
3. CONSULTANT SERVICES						0	
4. COMPUTER SERVICES						0	
5. SUBAWARDS						0	
6. OTHER						0	
TOTAL OTHER DIRECT COSTS						4,000	
H. TOTAL DIRECT COSTS (A THROUGH G)						38,422	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
Salary and Benefits (Rate: 51.00, Base: 26922) (Con	nt, on Com	men	ts Pa	ge)			
TOTAL INDIRECT COSTS (F&A)				0 -/		17,045	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						55,467	
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PI	.)		0				
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)		J. J		.,	\$	55,467	\$
	REED LEVEL II	F DIF	FEREN	T \$	Ψ	22,407	*
PI / PD TYPED NAME & SIGNATURE*	DATE	ווט	LIXLIN		ISE III	SE ONLY	
Erik S Viirre	DAIL	— ,	NDIDE			E VERIFIC	CATION
	DATE		Checked		e Of Rate		Initials - ORG
ORG. REP. TYPED NAME & SIGNATURE*	DATE	Date C	>1100VGU	Dali	o i ivali	JIIOOL	miliais - ONG

** I- Indirect Costs

Travel and Other Direct (Rate: 51.00, Base 6500) Comments go here

SUMMARY YEAR 2
PROPOSAL BUDGET FOR NSF USE ONLY

ORGANIZATION			PROF	POSAL	NO.	DURATIO	ON (months)										
University of Washington						Proposed	Granted										
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR			AW	ARD N	Ο.												
Erik S Viirre																	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Ass	ociates	NSF	SF Funded		NSF Funded		NSF Funded		NSF Funded		SF Funded		ISF Funded Person-mos.		F	Funds	Funds
(List each separately with title, A.7. show number in brackets)				SUMR	Requ	uested By roposer	granted by NSF (if different)										
1. Erik S Viirre - M.D. Ph.D.		.00 0				22,945	, ,										
2.		.00 0	J.UU	0.00	Ψ	44,770	Φ										
			-														
3.		_	\rightarrow														
4.																	
5.		20 0	2 20	Δ ΔΔ													
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION		00 0				0											
7. ($oldsymbol{1}$) TOTAL SENIOR PERSONNEL (1 - 6)	5	.00 0).00	0.00		22,945											
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)																	
1. ($oldsymbol{0}$) POST DOCTORAL ASSOCIATES		.00 0				0											
2. ($oldsymbol{0}$) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, I	ETC.) 0	.00 0	0.00	0.00		0											
3. (0) GRADUATE STUDENTS						0											
4. (0) UNDERGRADUATE STUDENTS						0											
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0											
6. (0) OTHER				-		0											
TOTAL SALARIES AND WAGES (A + B)						22,945											
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						4,949											
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						27,894											
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM I	EXCEEDING \$	5,000.)															
		\$		0													
TOTAL EQUIPMENT						0											
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSES	SSIONS)					2,500											
2. FOREIGN	, , , , , , , , , , , , , , , , , , , ,					0											
E DARTICIDANT CURRORT COCTO																	
F. PARTICIPANT SUPPORT COSTS 1 STIPENIDS © 0																	
1. STIFENDS \$																	
Z. IRAVEL O																	
3. SUBSISTENCE																	
4. OTHER																	
(0) TOTAL PARTICIPANT COSTS						0											
G. OTHER DIRECT COSTS																	
1. MATERIALS AND SUPPLIES						4,000											
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						0											
3. CONSULTANT SERVICES						0											
4. COMPUTER SERVICES						0											
5. SUBAWARDS						0											
6. OTHER						0											
TOTAL OTHER DIRECT COSTS						4,000											
H. TOTAL DIRECT COSTS (A THROUGH G)						34,394											
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)	~		_														
Salary and Benefits (Rate: 51.00, Base: 27894) (Cor	nt. on Com	ments	s Pa	ge)													
TOTAL INDIRECT COSTS (F&A)						17,540	_										
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						51,934											
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PF	ROJECTS SEE	GPG II	I.D.7.j.	.)		0											
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$	51,934	\$										
	REED LEVEL IF	E DIFFE	FRFN	T \$													
PI / PD TYPED NAME & SIGNATURE*	DATE				JSF II	SE ONLY											
Erik S Viirre	DAIL	INII	DIDEC			TE VERIFIC											
	DATE	Date Che			e Of Rate		Initials - ORG										
ORG. REP. TYPED NAME & SIGNATURE*	DATE	Date Che	eckeu	Dale	e Oi Kali	3 SHEEL	IIIIIIais - ORG										
		i															

SUMMARY YEAR 3
PROPOSAL BUDGET FOR NSF USE ONLY

ORGANIZATION					NO.	DURATIO	ON (months)
University of Washington						Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR			AW	ARD N	O.		
Erik S Viirre							
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Ass	sociates	NS	SF Funde	d	F	unds	Funds
(List each separately with title, A.7. show number in brackets)			ACAD		Requ	uested By oposer	granted by NSF (if different)
1. Erik S Viirre - M.D. Ph.D.				0.00		23,863	, ,
2.	3	.00	0.00	0.00	φ	23,003	J.
3.							
4.							
5.			0.00	0.00			
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATIO				0.00		0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)	3	.00	0.00	0.00		23,863	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL ASSOCIATES	0	.00	0.00	0.00		0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER,				0.00		0	
3. (0) GRADUATE STUDENTS						0	
4. (0) UNDERGRADUATE STUDENTS						0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0	
6. (0) OTHER						0	
TOTAL SALARIES AND WAGES (A + B)						23,863	
\ /							
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						5,250	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						29,113	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM	EXCEEDING \$	5,000).)	_			
		\$		0			
TOTAL EQUIPMENT						0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSE	SSIONS)					2,500	
2. FOREIGN	,					0	
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$							
n							
2. TRAVEL 0							
3. SUBSISTENCE							
4. OTHER							
(0) TOTAL PARTICIPANT COSTS						0	
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES						4,000	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						0	
3. CONSULTANT SERVICES						0	
4. COMPUTER SERVICES						0	
5. SUBAWARDS						0	
6. OTHER							
TOTAL OTHER DIRECT COSTS						4,000	
						35,613	
H. TOTAL DIRECT COSTS (A THROUGH G)						35,013	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)	, 0		4 B	`			
Salary and Benefits (Rate: 52.00, Base: 29113) (Co	nt. on Com	men	its Pa	ge)		10.710	
TOTAL INDIRECT COSTS (F&A)						18,518	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)			54,131				
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT P	.)		0				
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)		\$	54,131	\$			
M. COST SHARING PROPOSED LEVEL \$ 0 AG	REED LEVEL II	F DIF	FEREN	Т\$			
PI / PD TYPED NAME & SIGNATURE*	DATE			FOR N	ISF US	SE ONLY	
Erik S Viirre		ı	NDIRF			E VERIFIC	CATION
ORG. REP. TYPED NAME & SIGNATURE*	DATE		Checked		e Of Rate		Initials - ORG

** I- Indirect Costs

Travel and Other Direct (Rate: 52.00, Base 6500) Comments go here

SUMMARY **Cumulative** PROPOSAL BUDGET FOR NSF USE ONLY **ORGANIZATION** PROPOSAL NO. **DURATION** (months) **University of Washington** Proposed Granted PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR AWARD NO. Erik S Viirre Funds Requested By proposer Funds granted by NSF (if different) A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates NSF Funded Person-mos. (List each separately with title, A.7. show number in brackets) CAL ACAD SUMR 9.00 0.00 0.00 \$ 1. Erik S Viirre - M.D. Ph.D. **68,871** | \$ 3. 4. 5. 0.00 | 0.00 | 0.00) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE) 0 6. (7. (1) TOTAL SENIOR PERSONNEL (1 - 6) 9.00 | 0.00 | 0.00 68,871 B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS) 0.00 | 0.00 | 0.00 0 1. ($oldsymbol{0}$) POST DOCTORAL ASSOCIATES (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) 0.00 0.00 0.00 0 0 (1) GRADUATE STUDENTS 0 4. (**0**) UNDERGRADUATE STUDENTS 5. (**()**) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) 0 0 6. (**0**) OTHER 68,871 TOTAL SALARIES AND WAGES (A + B) C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) 15,058 TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C) 83,929 D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) \$ 5,000 5,000 **TOTAL EQUIPMENT** E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 7,500 2. FOREIGN 0 F. PARTICIPANT SUPPORT COSTS 0 1. STIPENDS 0 2. TRAVEL 0 3 SUBSISTENCE 0 4. OTHER (**0**) TOTAL PARTICIPANT COSTS 0 G. OTHER DIRECT COSTS 12,000 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 0 0 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 0 0 5. SUBAWARDS 6. OTHER 0 12,000 TOTAL OTHER DIRECT COSTS 108,429 H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) 53,104 TOTAL INDIRECT COSTS (F&A) 161,533 J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.D.7.j.) 0 161,533 | \$ L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) \$ M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVEL IF DIFFERENT \$ PI / PD TYPED NAME & SIGNATURE* DATE FOR NSF USE ONLY

ORG. REP. TYPED NAME & SIGNATURE*

Erik S Viirre

Date Checked

DATE

INDIRECT COST RATE VERIFICATION

Date Of Rate Sheet

Initials - ORG

Budget Justification Page

Budget Justification

HITL Sub Contract

Dr. Viirre is an expert on eye movement measurement technology and research from the University of Washington, Human Interface Technology Laboratory. He will consult with the I Cubed developers on construction of an eye movement hardware and software interface for Neat Tools.

Equipment. A portable PC computer with 200 MHZ Pentium II processor with a National Instrucments Video Processing Card will be required. This will be the platform that the Neat Tools eyetracking interface will be developed on. Portability will allow this system to be brought to Syracuse where the development team can work with it and to the sites for users with disabilities

Travel. Dr. Viirre will need to travel to Syracuse twice a year in order to work directly with the developers and technologists for the eye tracker interface development. Supplies. A variety of CCD Cameras will be required for testing with the Neat Tools interface to determine useability. Some software will be necessary including the National Instruments video processor support and the development environments. Other video capture cards and software interfaces will be tested for compatibility and expense.

SUMMARY YEAR 1
PROPOSAL BUDGET FOR NSF USE ONLY

PROPUSAL BUDGE	. 1				USE ONL	
ORGANIZATION		PRO	POSAL	NO.		ON (month
University of Wisconsin-Madison					Proposed	d Grante
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		AW	/ARD N	Ο.		
Gregg C Vanderheiden	N	SE Eundo	d			<u> </u>
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)		SF Funde erson-mos		Red	Funds quested By	Funds granted by N
		ACAD			proposer	(if different
1. Gregg C Vanderheiden - Ph.D.	1.00	0.00	0.00	\$	11,674	\$
2.						
3.						
4.						
5.	0.00	0.00	0.00			
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)		0.00			0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)	1.00	0.00	0.00		11,674	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. (0) POST DOCTORAL ASSOCIATES		0.00			0	
2. (3) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	3.60	0.00	0.00		11,452	
3. (1) GRADUATE STUDENTS					10,421	
4. (1) UNDERGRADUATE STUDENTS					685	
5. (1) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					3,163	
6. (0) OTHER					0	
TOTAL SALARIES AND WAGES (A + B)					37,395	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					10,362	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					47,757	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDIN	NG \$5,000).)				
equipment item 1	\$		0			
TOTAL EQUIPMENT					0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)					4,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS					4,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0					4,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 0					4,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 0 0 0 0 0					4,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 0 0 0 0 0 0 0 0 0 0 0 0 0					4,000	
1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS					4,000	
1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS					4,000	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER (①) TOTAL PARTICIPANT COSTS 1. MATERIALS AND SUPPLIES					4,000 0 0 5,450	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS					4,000 0 0 5,450 2,950	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER (①) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES					4,000 0 5,450 2,950 13,500	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					4,000 0 5,450 2,950 13,500 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER (①) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES					4,000 0 5,450 2,950 13,500 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES					4,000 0 5,450 2,950 13,500 0 7,832	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS 3. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS					4,000 0 5,450 2,950 13,500 0 7,832 29,732	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS 3. 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					4,000 0 5,450 2,950 13,500 0 7,832	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT 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)					4,000 0 5,450 2,950 13,500 0 7,832 29,732	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (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)					4,000 0 5,450 2,950 13,500 0 7,832 29,732	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS 3. 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 4. TOTAL DIRECT COSTS (A THROUGH G) INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) FirstIndirectCostItem (Rate: 25.00, Base: 73657)					4,000 0 5,450 2,950 13,500 0 7,832 29,732	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS 4. TOTAL DIRECT COSTS (A THROUGH G) INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) FirstIndirectCostItem (Rate: 25.00, Base: 73657) TOTAL INDIRECT COSTS (F&A)					4,000 0 5,450 2,950 13,500 0 7,832 29,732 81,489	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (SEE GPC	6 II.D.7.	.)		4,000 0 5,450 2,950 13,500 0 7,832 29,732 81,489	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (SEE GPC	6 II.D.7.j	.)	\$	4,000 0 5,450 2,950 13,500 0 7,832 29,732 81,489 18,414 99,903 0	\$
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER (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) FirstIndirectCostItem (Rate: 25.00, Base: 73657) TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$	4,000 0 5,450 2,950 13,500 0 7,832 29,732 81,489 18,414 99,903	\$
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER (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) FirstIndirectCostItem (Rate: 25.00, Base: 73657) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEV			IT\$		4,000 0 5,450 2,950 13,500 0 7,832 29,732 81,489 18,414 99,903 0	\$
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER (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) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) FirstIndirectCostItem (Rate: 25.00, Base: 73657) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVEL PI/PD TYPED NAME & SIGNATURE* DATE	EL IF DIF	FEREN	T \$ FOR I	NSF U	4,000 0 5,450 2,950 13,500 0 7,832 29,732 81,489 18,414 99,903 0 99,903	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER (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) FirstIndirectCostItem (Rate: 25.00, Base: 73657) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEV	EL IF DIF	FEREN	T \$ FOR I	NSF U ST RA	4,000 0 5,450 2,950 13,500 0 7,832 29,732 81,489 18,414 99,903 0 99,903	

** B-3 Graduate Students
0.5

** B-4 Undergraduate Students
Aide to Blind Team member

** B-5 Secretarial - Clerical
10% total FTE

** G-3 Consultant Services
\$12,500 Consultant + \$1,000 Subject Fees

** G-6 Other
Space Rental & Network/Phone connection

SUMMARY YEAR 2
PROPOSAL BUDGET FOR NSF USE ONLY

ORGANIZATION	POSAL	NO.	DURATIO	ON (months)			
University of Wisconsin-Madison						Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR			ΑW	ARD N	Ο.		
Gregg C Vanderheiden							
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Ass	ociates	NSF I Perso	Funde	d s.		Funds Lested By	Funds
(List each separately with title, A.7. show number in brackets)				SUMR	pr	oposer	granted by NSF (if different)
1. Gregg C Vanderheiden - Ph.D.	1	.00 0	0.00	0.00	\$	12,141	\$
2.							
3.							
4.							
5.							
6. ($oldsymbol{0}$) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION	N PAGE) 0	.00 0	0.00	0.00		0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)	1	.00 0	0.00	0.00		12,141	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL ASSOCIATES	0	.00 0	0.00	0.00		0	
2. (3) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER,		.60 0				12,534	
3. (1) GRADUATE STUDENTS	, ,					10,837	
4. (1) UNDERGRADUATE STUDENTS						712	
5. (1) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)			3,290				
6. (0) OTHER			0				
TOTAL SALARIES AND WAGES (A + B)						39,514	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						11,375	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						50,889	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM	EXCEEDING \$	5 000)				20,007	
equipment item 1	EXCEEDING W	\$		0			
equipment item 1		Ψ		U			
TOTAL FOLUDATAT						Δ.	
TOTAL EQUIPMENT	CCIONIC)					$\frac{0}{4,000}$	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSES 2. FOREIGN	5510115)					<u>4,000</u>	
						U	
E DADTICIDANT CLIDDODT COCTO							
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$							
Z. IRAVEL							
3. SUBSISTENCE							
4. OTHER							
(0) TOTAL PARTICIPANT COSTS						0	
G. OTHER DIRECT COSTS						6.200	
1. MATERIALS AND SUPPLIES						6,200	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						2,200	
3. CONSULTANT SERVICES						13,500	
4. COMPUTER SERVICES						0	
5. SUBAWARDS						0	
6. OTHER						8,050	
TOTAL OTHER DIRECT COSTS						29,950	
H. TOTAL DIRECT COSTS (A THROUGH G)						84,839	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
FirstIndirectCostItem (Rate: 25.00, Base: 76789)							
TOTAL INDIRECT COSTS (F&A)			19,197				
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)		1	04,036				
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT P	.)		0				
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$ 1	04,036	\$
M. COST SHARING PROPOSED LEVEL \$ 0 AG	REED LEVEL I	F DIFFE	EREN	T \$			
PI / PD TYPED NAME & SIGNATURE*	DATE			FOR N	ISF US	SE ONLY	
Gregg C Vanderheiden		INE	DIRE	CT COS	ST RAT	E VERIFIC	CATION
ORG. REP. TYPED NAME & SIGNATURE*	DATE	Date Che	ecked	Date	e Of Rate	e Sheet	Initials - ORG
		l					

** B-3 Graduate Students
0.5

** B-4 Undergraduate Students
Aide to Blind Team member

** B-5 Secretarial - Clerical
10% total FTE

** G-3 Consultant Services
\$12,500 Consultant + \$1,000 Subject Fees

** G-6 Other
Space Rental & Network/Phone connection

SUMMARY YEAR 3
PROPOSAL BUDGET FOR NSF USE ONLY

ORGANIZATION			PROI	POSAL	NO. DURATIC		ON (months)
University of Wisconsin-Madison					Proposed		Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR AWARE				ARD N	O.		
Gregg C Vanderheiden							
			SF Funded erson-mos.		Funds Requested By		Funds
(List each separately with title, A.7. show number in brackets)	С	AL	ACAD	SUMR	pr	oposer	granted by NSF (if different)
1. Gregg C Vanderheiden - Ph.D.	1	.00	0.00	0.00	\$	12,500	\$
2.							
3.							
4.							
5.							
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)		.00	0.00	0.00		0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)				0.00		12,500	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL ASSOCIATES	0	.00.	0.00	0.00		0	
2. (3) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) 3.60 0.00 0.00					13,034		
3. (1) GRADUATE STUDENTS						11,271	
4. (1) UNDERGRADUATE STUDENTS						738	
5. (1) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						3,421	
6. (0) OTHER							
TOTAL SALARIES AND WAGES (A + B)						40,964	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						12,195	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						53,159	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)						33,137	
,	EVCEEDING 2:	5,000. ©	.)	Λ			
equipment item 1 \$ 0							
TOTAL EQUIPMENT						<u> </u>	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)						5,500	
2. FOREIGN						0	
E. DADTICIDANT CURRENT COCTO							
F. PARTICIPANT SUPPORT COSTS 1 STIDENIDS © 0							
1. STIFENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER ————							
(0) TOTAL PARTICIPANT COSTS						0	
G. OTHER DIRECT COSTS						6.200	
1. MATERIALS AND SUPPLIES						6,200	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						3,600	
3. CONSULTANT SERVICES						13,900	
4. COMPUTER SERVICES						0	
5. SUBAWARDS						0	
6. OTHER						8,274	
TOTAL OTHER DIRECT COSTS						31,974	
H. TOTAL DIRECT COSTS (A THROUGH G)						90,633	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
FirstIndirectCostItem (Rate: 25.00, Base: 69859)							
TOTAL INDIRECT COSTS (F&A)						17,464	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					1	108,097	
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PI	ROJECTS SEE	GPG	II.D.7.j	.)		0	
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$ 1	108,097	\$
M. COST SHARING PROPOSED LEVEL \$ () AGREED LEVEL IF DIFFERENT \$							
					ISF US	SE ONLY	
Gregg C Vanderheiden INDIRECT COS							CATION
ORG. REP. TYPED NAME & SIGNATURE*	DATE		Checked		e Of Rat		Initials - ORG
		L					

** B-3 Graduate Students

0.5

** B-4 Undergraduate Students

Aide to Blind Team member

** B-5 Secretarial - Clerical

10% total FTE

** G-3 Consultant Services

\$12,500 Consultant + **\$1,400** Subject Fees

** G-6 Other

Space Rental & Network/Phone connection

** I- Indirect Costs

Consultant not subject to overhead this year (only first \$25,000)

SUMMARY **Cumulative** PROPOSAL BUDGET FOR NSF USE ONLY **ORGANIZATION** PROPOSAL NO. **DURATION** (months) **University of Wisconsin-Madison** Proposed Granted PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR AWARD NO. Gregg C Vanderheiden Funds Requested By proposer Funds granted by NSF (if different) A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates NSF Funded Person-mos. (List each separately with title, A.7. show number in brackets) CAL ACAD SUMR 1. Gregg C Vanderheiden - Ph.D. 3.00 | 0.00 | 0.00 | \$ 36,315 | \$ 2. 3. 4 5. 0.00 | 0.00 | 0.00) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE) 0 6. (7. (1) TOTAL SENIOR PERSONNEL (1 - 6) 3.00 | 0.00 | 0.00 36,315 B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS) 0.00 | 0.00 | 0.00 0 1. ($oldsymbol{0}$) POST DOCTORAL ASSOCIATES 9) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) 10.80 0.00 0.00 37,020 32,529 3) GRADUATE STUDENTS 2,135 4. (3) UNDERGRADUATE STUDENTS 5. (3) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) 9,874 6. (**0**) OTHER 0 117,873 TOTAL SALARIES AND WAGES (A + B) C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) 33,932 TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C) 151,805 D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) \$ 0 **TOTAL EQUIPMENT** 0 13,500 E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 2. FOREIGN 0 F. PARTICIPANT SUPPORT COSTS 0 1. STIPENDS 0 2. TRAVEL 0 3 SUBSISTENCE 0 4. OTHER (**0**) TOTAL PARTICIPANT COSTS 0 G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 17.850 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 8,750 40,900 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 0 0 5. SUBAWARDS 6. OTHER 24,156 91,656 TOTAL OTHER DIRECT COSTS 256,961 H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) 55,076 TOTAL INDIRECT COSTS (F&A) 312,037 J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.D.7.j.) 0 312,037 | \$ L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVEL IF DIFFERENT \$ PI / PD TYPED NAME & SIGNATURE* DATE FOR NSF USE ONLY

Gregg C Vanderheiden

ORG. REP. TYPED NAME & SIGNATURE*

Date Checked

DATE

INDIRECT COST RATE VERIFICATION

Date Of Rate Sheet

Initials - ORG

Budget Justification

University of Wisconsin - Madison Gregg C. Vanderheiden Ph.D. PI

Personnel

3 staff members, will each be spending 1.2 person months per year on this project one an expert on Web and a co-author of the W3C Web Accessibility guidelines,

one an expert on blindness and the use of screen readers.

1 halftime graduate student involved in our design and human disability and aging program is budgeted to both

Center.

1 student who acts as an aide and reader for the staff member who is blind is budgeted for 5% of their time.

arrangements, transportation arrangements for subjects with disabilities and communications for the project.

Fringe

Fringe is at the standard rates negotiated by the University. Year 2 and 3 rates are estimates made by the

Travel

Two types of travel are budgeted. \$2,000 is budgeted for Staff Travel to a conference (2 people) to report and

organizations. Travel costs are constant in year 2 but are raised in year 3 when we expect increased travel and increased travel costs.

Costs are based on similar projects and include computers, supplies, interface adaptations, electronic parts, publications, and voice synthesizer. Costs go up slightly in years 2 and 3 when we are making adaptations for

Publication, documentation, and dissemination

\$2,900 is budgeted in year 1 for this

shipping costs. The costs are lower in year 2 during data collection but rise in year 3 with the dissemination of draft materials for review and printed final materials.

\$1,000 per year in years 1 and 2 and \$1,400 in year three are budgeted for subject fees paid to people who participate in the project. Subjects are paid \$7.00 per hour. In addition, transportation costs are covered for Gilman, who acts as a virtual team member at

Gilman who is located in Arlington Va approx 60% for the Trace Center and the remainder is spent on the work of the W3C Web Accessibility Initiative where he chairs the formats and protocols Gilman will devote 12% of his time or 1.44 months effort to the project.

The costs listed under Other for each year represent the cost for space rental and network and communication

cost distribution across grants as per Federal guidelines. Costs are based on actual rental costs for the three years plus an estimate of the communication costs for each year based on year one costs. Year one rental