

**Table 1. Membership of Participating Departments/Programs¹
(Alphabetically)**

Sample Table 1

Department/Program	Number of Faculty Members		Number of Trainees Predoctoral			Number of Trainees Postdoctoral		
	Total in Department or Program	Participating in this Application	Total in Department or Program	With Participating Faculty	Supported by this Training Grant Competing Continuations	Total in Department or Program	With Participating Faculty	Supported by this Training Grant Competing Continuation
Dept. of Biology	45	14	38	12 (6) ²	2	50	15 (7) ²	0
Neuroscience Program	32	20	31	14 (7) ²	4	40	23(10) ²	2
Dept. of Pharmacology (Medical School)	25	5	30	5 (4) ²	3	28	12 (6) ²	0

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006), Section IV. B.8. Research Training Program Plan, A. Background, paragraph 2, "In a Table (Table 1) provide the current number of faculty members in each unit..."

Instructions: Provide the total number of current faculty members, predoctoral trainees, and postdoctoral trainees in each department/program. Indicate how many of these faculty members are participating in this training grant application, the numbers of predoctoral and postdoctoral trainees with the participating faculty, and the number of these trainees who are training grant eligible. For competing continuation applications, include the number of trainees currently supported by the training grant.

Rationale: This table provides insight into the environment in which training will take place. It allows reviewers to assess whether the program has the "critical mass" (trainees, faculty and other research personnel, and representation/distribution of scientific disciplines) to be successful.

²Numbers in parenthesis are training grant eligible based on citizenship or permanent residency.

Table 2. Institutional Training Grant Support Available to Participating Faculty Members, Departments or Programs¹

Sample Table 2

Faculty Member or Department	Funding Source, Grant or Contract, No. and Title	Program Director	Project Period	No. of Positions Pre/Post	Awarded Direct Costs/Yr
Davies, J.	NIH T32DK12345 Training in Molec Biology	Holland, R.	06/02-07/07	0/6	\$205,000
George, B.	NIH T32AI32109 Training in Transplant Immunology	Series, H.	Pending	4/5	\$342,000
Department of Medicine	NIH T32HL43213 Training in Lung Health and Med.	Brand, J.	06/03-07/08	2/6	\$263,000

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006), section IV. B. 8. Research Training Program Plan, A. Background, paragraph 3, "In a table (Table 2) list all current and pending training grant support available..."

Instructions: List all other training grant support currently held by faculty members and departments participating in this training grant application. If none of the participating faculty or department(s) have other training support, this should be indicated.

Rationale: This information provides insight into the training environment in each preceptor's laboratory, as well as the demands on his or her time to interact with trainees.

Table 3. Participating Faculty Members¹

Sample Table 3

Name/ Degree	Rank	Primary (& Secondary) Appointment(s)	Research Interest	Role and % Effort
Holmes, J., Ph.D.	Prof.	Molecular Biology	Regulation of Vascular K-ATPase	Program Director, 10%
Terry, W., Ph.D.	Prof. & Chr	Biochemistry & Molecular Biophysics	Allograft Rejection	Mentor, 3%
Smythe, A., M.D.	Asst. Prof	Pharmacology (Biochemistry)	Cellular Mutagenesis	Mentor, 5%
Fisher, J., Ph.D.	Assoc. Prof	Physiology (Pharmacology)	Imaging of Regional Myocardial Perfusion	Mentor, 5%

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006), Section IV. B. 8. Research Training Program Plan, B.2. Program Faculty, paragraph 1, "List each training faculty member . . ."

Although this table is not requested in the PHS 398, its inclusion will assist the reviewers in evaluating the application.

Rationale: This information allows reviewers to assess the distribution of junior versus senior faculty and clinical versus basic scientists participating in the training program, as well as their distribution by department. The data concisely summarize the scientific areas of the training faculty.

**Table 4. Current and Pending Research Grant and Contract Support of the Training Faculty¹
(Alphabetically by Faculty Member)**

Sample Table 4

Faculty Member	Funding Source, Grant or Contract No., and Title	Awarded Direct Costs per Remaining Years²	Project Period
Gavett, M.	NIH 5 R01 HL32456 Platelet Factors in CV-04 Blood Flow	-03 \$ 52,378	02/05-01/10
		-04 54,473	
		-05 56,652	
Holmes, J.	American Heart Association Established Investigator Molecular Cloning of Heart K ⁺ Channels	-03 \$ 35,000	03/04-02/08
		-04 35,000	
	NIH 2 R01 HL46789 Regulation of Vascular K-A TPase	-06 \$ 198,250	04/06-03/11
		-07 203,200	
		-08 209,320	
		-09 214,933	
		-10 221,130	
Smythe, A.	NSF PCM 81-27741 Cellular Mutagenesis	-01 \$ 30,500	07/06-06/08
		-02 32,750	
Terry, W.	NIH 1 R01 AI12345 Immunological Reactivity and Allograft Response	-01 \$ 97,150	01/07-12/12 Pending
		-02 101,036	
		-03 105,077	
		-04 84,980	
		-05 88,380	
	Novartis Corporation Regulation of Endothelial Growth and Immunological Suppression of Myocardial Antigens	-04 \$ 80,000	06/04-05/09
		-05 80,000	

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006), Section IV. B. 8. Research Training Program Plan, B.2. Program Faculty, paragraph 2, "In a table (Table 3) for each participating faculty member, list active and pending . . ."

²Awarded figures for funded grants or contracts, or requested costs for pending applications.

Instructions: For each participating faculty member, list active and pending research grant and contract support from all sources (including Federal, non-Federal, and institutional research grant and contract support) that will provide the context for research training experiences, but excluding institutional training grants (these are in Table 2). If none, state "None". Include the source of support and grant number; title; status (active or pending) and dates of the entire project period; annual direct costs. This table should replace Item C.5. Research Support of the "Biographical Sketch Format Page" of the PHS 398 (Rev. 09/2004, Interim Rev. 04/2006) kit for each faculty member.

Rationale: One component of the overall strength and suitability of the training environment is the pool of active and pending research grant and contract support held by the preceptors.

Table 5a. Pre- and Postdoctoral Training Record of Participating Faculty for the Previous Ten Years¹
(Alphabetically by Faculty Member/Chronologically by Training Period)

Sample Table 5a

Faculty Member	Trainee (Predoc/ Postdoc)	Training Period	Institution Date & Type of Degree Awarded²	Title of Research Project	Current Position or Source of Support³
Holmes, J.					
<u>Past Trainees</u>					
	Safer, P. (Predoc)	92-96	UCSD,1990 B.S.	PKC Cardiac Protection	Postdoc Univ. Texas
	Spotter, R. (Postdoc)	97-99	Harvard, 1996, Ph.D.	Ca antagonists and preconditioning	Asst. Prof. Yale Univ.
<u>Current Trainees</u>					
	Browne, A. (Predoc)	97-	U. Tenn 1997, B.A.	Selective inhibition K-ATP-ase	T32HL3244
	Witmer, G. (Postdoc)	99-	JHU,1998 Ph.D.	Oxygen radicals in myocardial protection	F32HL4666
Stuart, G.					
<u>Past Trainees</u>	Raney, H. (Postdoc)	95-98	UCSF, 1992 M.D.	Collateral vessel Development and MI	Assoc. Prof. Baylor Coil. Med.
	Fillups, L. (Postdoc)	96-99	Boston U. 1992, MD/PhD	Growth factors in coronary vessel signaling	Asst. Prof. Univ. Penn.
<u>Current Trainees</u>					
	none				

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006) Section IV. B.8. Research Training Program Plan, B.2. Program Faculty, paragraph 3, "In a table (Table 4) for each participating faculty member, list all past and current students . . ."

²Prior to entering training.

³For former trainees, list current positions; for current trainees, list source of support.

Instructions: For each faculty member identified in this application, list all past and current students for whom he/she has served as thesis advisor or sponsor (past 10 years only). If a faculty member has not had predoctoral or postdoctoral students, state "None".

Rationale: The training experience success of a preceptor can be gauged by the number of previous trainees he/she has sponsored and their subsequent career paths.

Table 5b. Publications of Research Completed by Trainees (or Potential Trainees)¹
(List Pre/Postdoctoral and Past/Current Trainees Separately and Alphabetically in Each Group)

Sample Table 5b

Predoctoral Trainees:

Past Trainees:

Name of Trainee (Years in Program)	Mentor(s)	Publication (Authors, Year, Title, Journal)
Argos, H.** (1995-2000)	Smythe, A.	Argos, H. , Smythe, A., and Ralston, G., 1998, "Myocardial Mutants of Calmodulin", <i>Nature Medicine</i> 4:704-709. Argos, H. , Rubins, A., Hager, J., and Smythe, A., 1999, "Calcineurin Interaction with Calmodulin Mutants: Regulation by Calcium", <i>Circulation</i> 100:1 (abstract).
Browne, A.** (1994-1999)	Holmes, J.	Browne, A. and Holmes, J., 1997, Role of PKC Translocation in Mediating Cardiac Protection", <i>Circulation</i> 97:303-309.
Wand, D. (1996-2001)	Stuart, G.	No Publications.

Current Trainees:

Name of Trainee (Years in Program)	Current Mentor(s)	Publication (Authors, Year, Title, Journal)
Brown, G.** (2002-)	Velletri, T.	Brown, G. and Velletri, T., 2003, "Physiological Effects of Sodium Transport Inhibitors in the Kidney", <i>AJP:Renal</i> 276:F657-F662.
Smith, B.** (2002-)	George, B.	No Publications.
Spotter, R.* (2002-)	Holmes, J.	Spotter, R. , Goldman, J., and Holmes, J., 2003, "Calcium Transients During Ischemic Preconditioning", <i>Circ.Res.</i> 83:166-173.

Postdoctoral Trainees:

Past Trainees:

Name of Trainee (Years in Program)	Mentor(s)	Publication (Authors, Year, Title, Journal)
Buxton, D.** (2001-2003)	Adelstein, R.	Buxton, D. , Golomb, E., and Adelstein, R., 2003, "Induction of Nonmuscle Myosin Heavy Chain 11-C by Butyrate in RAW264.7 Mouse Macrophages", <i>J. Biol.Chem.</i> 278:15449-15455.
Denholm, E. * (2002-2005)	Phan, S.	Denholm, E. and Phan, S., 2003, "Bleomycin Binding Sites on Alveolar Macrophages", <i>J.Leuk.Biol.</i> 48:519-523. Denholm, E. , Wolber and Phan, S., 2006, "Secretion of Monocyte Chemotactic Activity by

		Alveolar Macrophages”, Amer. J. Pathology. 135:355-363.
Evans, F.** (2000-2003)	Balaban, R.	Bose, S., French, S., Evans, F. , and Balaban, R., 2003, “Metabolic Network Control of Oxidative Phosphorylation: Multiple Roles of Inorganic Phosphate”. J.Biol.Chem. 40:355-365.
Wand, D. (1999-2001)	Easygai, P.	No Publications.

Current Trainees:

Name of Trainee (Years in Program)	Current Mentor(s)	Publication (Authors, Year, Title, Journal)
Greenstuff, M.** (2003-)	Chew, J.	Greenstuff, M. , and Chew, J., 2003, “Non-digestible Fiber Influences Bioavailability of Vitamins”, J.Pharm Sci. (In Press).
Jones, W.** (2004-)	Newpeeye, T.	No Publications.

¹PHS 398 (Rev. 9/2004, Interim Rev. 04/2006), Section IV.B.8, Research Training Program Plan, under Program Faculty, paragraph 4 and 5, “For new applications, list representative recent publications of some of the above students or postdoctorates... In competing continuation applications, denote trainees who were or are supported by this training grant with an asterisk. Individuals who were trained at sites other than the applicant organization may be included but should be specifically identified. Publications of trainees should be listed in the Progress Report of this application (see instructions for Progress Report below).” **See Section IV. B. It is recommended that these data be presented in the form of a table and be presented in a similar format for both new and competing continuation applications.**

Instructions: List all publications of pre- and (or) postdoctoral trainees during and subsequent to their period of training in the faculty member’s laboratory for the past 10 years. List abstracts only if a more complete publication has not appeared and label these clearly as abstracts. Boldface the trainee’s name in the author list. For **Competing Continuation/Renewal** applications list all trainees currently or previously supported by the training grant for the past 10 years. For **New Applications** list representative recent publications of some of the trainees listed in Table 5a. Designate Kirschstein-NRSA training grant eligible trainees (based on citizenship or permanent residency status) by an asterisk (*). Designate those supported by the training grant with a double asterisk (**). Group predoctoral trainees separately from postdoctoral trainees. Group past trainees separately from current trainees. Sort entries within each group by year of entry and indicate in parenthesis years in program. Indicate the trainee’s mentor(s), then list trainee publications, followed by abstracts in chronological order.

Rationale: This information provides an indicator of trainee productivity, research quality, and priority of authorship; and the success of faculty members in facilitating trainee publication.

Table 6. Applicant Pool for Selection of Trainees for the Previous Five Years¹

Sample Table 6

Department of Medicine

Year	Type	No. Applications Received ²	No. of Positions Offered ²	No. Entering Training ²	No. Completed/ in Training	No. Leaving Program ³
1991	Pre	25	20	16	13	3
	Post	10 (2)	6 (2)	4	4	0
1992	Pre	36	20	13	12	1
	Post	14 (6)	8 (4)	7 (3)	7	0
1993	Pre	38	24	23	21	2 ⁴
	Post	18 (9)	10 (6)	9 (5)	8	1
1994	Pre	41	24	22	22	0
	Post	18 (12)	16 (10)	14 (8)	14	0
1995	Pre	37	26	22	21	1
	Post	20 (11)	18 (10)	17 (9)	15	2

Department of Physiology

Year	Type	No. Applications Received ²	No. of Positions Offered ²	No. Entering Training ²	No. Completed/ in Training	No. Leaving Program ³
1991	Pre	12	8	6	6	2
	Post	8 (2)	6 (2)	5 (1)	5	0
1992	Pre	15	12	10	10	0
	Post	10 (3)	8 (2)	6	5	1 ⁵
1993	Pre	22	15	14	12	2
	Post	12 (0)	8	8	7	1
1994	Pre	26	18	16	15	1
	Pre	13 (2)	9 (2)	8	8	0
1995	Pre	24	17	15	12	3
	Pre	16 (2)	12 (2)	10	9	1

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006) Section IV. B.8. Research Training Program Plan, B.6. Trainee Candidates, "Create a table(s) (Tables 5a, b, etc.) for each participating department/unit . . ."

²Indicate in parentheses number of M.D. applicants; count M.D./Ph.D. as M.D.

³Indicate if any fellows leaving the program have continued training elsewhere

⁴1 opted for an M.S. degree; 1 left to join training program in another Department

⁵1Left training program for private practice

Instructions: For each participating department/unit give the number of individuals who have: formally applied for training; been offered admission; entered training; completed or are in training; and left the program. If predoctoral or postdoctoral positions are not requested for this program, these data should not be included.

Rationale: These data permit evaluation of the participating departments/units abilities to recruit and retain pre- and postdoctoral students. These data are useful in determining the selectivity of the admissions process and the appropriate number of training positions to be awarded.

Table 7. Predoctoral Applicant Pool¹

Sample Table 7

Year/ Department or Program Applicant ^{2,3,4}	Previous Institution	GRE Scores V/Q ADV	GPA	Offered Admission (x)	Entered Program ⁴ (x)	US Citizen(US) Perm Res(PR)
2002/ Molecular Biology Program						
1	U. MI	555/695 690	3.70	x	x	US
2 ⁵⁺	Stanford	564/703 655	3.78	x		
2002/ Department of Pharmacology						
1	U. Texas	559/732 677	3.46	x	x	PR
2	U. Penn	589/776 702	3.80	x		

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006) Section IV. B. 8. Research Training Plan, B.5. Trainee Candidates, paragraph 3, "In a table (Table 6), anonymously indicate the credentials and applicant outcomes.

²Applicants may be identified by numbers, rather than by names, to safeguard privacy. Prioritize the applicants in each unit to list those accepted and matriculated first, then those accepted and not matriculated, and finally those not accepted.

³Provide date for all programs/departments that are relevant to this application.

⁴Designate applicants who are eligible for Kirschstein-NRSA training grant support (based on citizenship or permanent residency status) with an asterisk (*) and underrepresented minority applicants with a dagger (+).

⁵For those candidates who did not accept an offer, note where they actually matriculated, if known.

Instructions: Anonymously indicate the credentials and application outcomes of the predoctoral applicant pool for the most recent year for each of the participating departments/units.

Rationale: These data will permit an evaluation of the quality and depth of the predoctoral applicant pool. The data permit separate analyses for training grant eligible, underrepresented minority, and non-training grant eligible applicants. These data are useful in determining the selectivity of the admissions process, the competitiveness of the program, the success of the recruitment of underrepresented minority trainees, and the appropriate number of predoctoral training positions to be awarded.

Table 8. Postdoctoral Applicant Pool¹

Sample Table 8

Fellow²	Previous Institution	Degree & Year	Preceptor	Thesis Topic or Residency Training	Offered Admission (x)	Entered Program (x)
1	Ohio State U.	Ph.D. 2001	Holmes, J.	Neuronal K+ Currents	x	x
2*	Yale U.	M.D. 2000	Smith, A.	Washington U.	x	
3 ⁺	U. Maryland	Ph.D. 1999	Stuart, G.	Cardiac Metabolism	x	x
4	U. Wisconsin	M.D. 1998	Lech, J.	Harvard U.	x	x
5 ⁺	U. Notre Dame	Ph.D. 2002	Allen, D.	Lung Development	x	
6	St. Louis U.	Ph.D. 1998	Davies, J.	Vascular Biology	x	x

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006) Section IV. B.8. Research Training Plan, B.5. Trainee Candidates, paragraph 4, "In a table (Table 7), present the qualifications of prospective postdoctoral trainees . . ."

²Indicate the Kirschstein-NRSA training grant eligible fellows (based on citizenship or permanent residency status) with an asterisk (*) and underrepresented minority fellows with a dagger (+).

Instructions: Anonymously present the qualifications of prospective postdoctoral trainees in the most recent applicant pool.

Rationale: These data will permit an evaluation of the quality and depth of the postdoctoral applicant pool. The data permit separate analyses for training grant eligible, underrepresented minority, and non-training grant eligible applicants. These data are useful in determining the selectivity of the admissions process, the competitiveness of the program, the success of the recruitment of underrepresented minority trainees, and the appropriate number of postdoctoral training positions to be awarded.

Table 9. Underrepresented Minority Recruitment Achievements¹

Sample Table 9

Minority Trainee (List by Number) ²	Entering Year	Department/ Program	Source of Support ³	Status of those who entered the program			
				In Training	Completed Training	Left Without Completing Training	Current Status Career or Employment
1*	1999	Genetics	T32 HL045532		Y		Postdoc/UCSF
2	2002	Physiology	Research grant			Y	Mentor and student Both moved to another Institution
3	2003	Chemistry	T32 HL055567	Y			

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006), Section IV. B.8. Research Training Program Plan, C. Minority Recruitment and Retention Plan, Achievements, "In a Table (Table 8), summarize recruitment data for program and/or each of the participating departments or units . . ."

²Indicate Kirschstein-NRSA training grant eligible trainees with an asterisk (*).

³Bold grant number if for this training grant.

Rationale: The data provided in this table will permit evaluation of the success of the program in recruiting and retaining underrepresented minority trainees, and analysis of their support.

PROGRESS REPORT (Competing Continuation Application Only)

Table 10. Assignment of Awarded Trainee Positions¹

Sample Table 10

Year	Total # Positions Awarded	# Predoctoral Trainees Appointed (months of support)	# Postdoctoral Trainees Appointed (months of support)			PGY of Postdoc Trainees							# Positions Unfilled*		
			MD/PhD	MD	PhD	0	1	2	3	4	5	6		7	
01	6	2 (24)	1 (12)	2 (24)	1 (12)	1		1		2					0
02	6	2 (24)	1 (12)	2 (24)	1 (12)		1		1		2				0
03	6	2 (24)		2 (24)	2 (24)			2	2						0
04	6	2 (24)		2 (24)	2 (24)				2	2					0
05	6	2 (24)		1 (10)	2 (24)					1		2			1 ⁺

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006), Section IV. B.8. Research Training Program Plan, E. Progress Report, paragraph 1, "In a table (Table 9) for each year of the grant since the last competing application . . ."

* Explain any training positions that were not filled.

⁺Private Practice

Instructions: For each year of the grant since the last competing application, list the following: 1) total number of positions awarded in each training category used; 2) number of predoctoral trainees appointed and months of support; and 3) number of postdoctoral trainees appointed, with entering degrees, at what levels, and months of support used. If any trainee positions were not filled, explain the reason in a footnote.

Rationale: For competing continuation applications, the data provided in this table permits evaluation of the utilization of awarded training positions.

PROGRESS REPORT (Competing Continuation Applications Only)

Table 11. Training Supported by this Current Grant for the Previous Ten Years¹

Sample Table 11

Name	Year Entering Program, Prior Institution, Degree at Entry	Support for Each Year of Training	Mentor	Research Topic	Position Upon Leaving Training	Current Position, Institute	Grants Obtained²
Predoctoral Program							
Safer, P.	90; UCSD B.S.	92-96; this grant	Holmes, J.	PKC Cardiac Protection	Postdoc Univ. Texas	Asst. Prof., Baylor	AHA Award '94
Browne, A.	99; U Tenn; B.A.	00-present; this grant	Holmes, J.	Selective Inhibition of K-ATPase	Postdoc Rice Univ.	N/A	N/A
Argos, H.	00; Miami U., M.S.	01-present; this grant	Smythe, A.	Cellular Myocyte Mutagenesis	N/A		
Postdoctoral Program							
*Guerra, J.	90; Medical Sch., UC San Diego M.D.	90-92; all this grant	Herd, S.	Glucocorticoid Effects in Lung Interstitium	Asst. Prof. Univ. of Iowa	Associate Prof., Univ. of Iowa	NIH R01
Taylor, Z.	95; Boston U., Ph.D.	96; this grant 97-98; F32	Summers, P.	Insulin Receptor Defects in Myocardium	Scientist, Upjohn Co.	Scientist, Upjohn Co.	N/A
*Odams, S.	96; U. Oregon, M.D.	97-99; this grant	Terry, W.	Immunologic Response to Xenotransplants	Clin Fellow, Brigham & Wom Hosp	Asst. Prof., Yale	NIH K08
Spotter, R.	00; Harvard, Ph.D.	01-03; this grant	Holmes, J.	Ca Antagonists and Preconditioning	Asst. Prof., Yale Univ.	Asst. Prof., Yale Univ.	AHA Award
*Brown, G.	01; Harvard, M.D.	01-present; this grant	Velletri, T.	Na+ Transport in the Kidney	N/A		

¹PHS 398 (Rev. 09/2004, Interim Rev. 04/2006), Section IV. B.8. Research Training Plan, E. Progress Report, paragraph 2, "In a table (Table 10), list all trainees who were, or are, supported by this training grant . . ."

²Refers only to those trainees who have completed the training program. Although information on the funding sources of former trainees is often difficult to obtain, it is extremely useful in assessing the success of the program.

Instructions: List sequentially, by entering year, all trainees who were, or are, supported by this training grant (past 10 years only, if applicable). For each student provide: 1) name; 2) year of entry into training program; 3) prior institution and degree at entry; 4) source of support during each year of training, e.g., this training grant, another training grant (specify), research grant, university fellowship, individual fellowship (specify), etc.; 5) name of research mentor; 6) research topic; and 7) for trainees who have completed the program, their current positions, rank and/or title and institutional affiliations, and grants obtained. Enter all trainees who received support from this grant including those who did not complete the training program for any reason. **Use asterisks (*) to indicate trainees from underrepresented groups.**

Rationale: For competing continuation applications, this table provides detailed information about how predoctoral and postdoctoral training positions are used (i.e., distribution by mentor, year in program, years of support per trainee). The data also permits an evaluation of the success of the program in achieving the training objectives of the prior award period(s) for up to ten years.