Department of Health and Human Services					LEAVE BLANK—For PHS use only.				
Ruth Kireche		c Health Service	。 earch Service Av	ward	Type Activity Number				
			Application	wai U	Review (	Group	Forme	erly	
	Follow in	structions caref			Meeting	Dates	Date	Received	
1. TITLE OF RESEARCH	TRAINING F	PROPOSAL (D	o not exceed 81 characte	rs, includ	ing space	s and punctuation.)	I		
2. LEVEL OF FELLOWSH	HP 3. RES	PONSE TO SP	ECIFIC REQUEST FOR	APPLICA	TIONS O	R PROGRAM ANNO	UNCEMEN	τ ΝΟ Υ	ES
		Yes," state nun							
4a. NAME OF APPLICAN	I IT (Last. First	t, Middle)	4b. ERA COMMO	NS USEF	RNAME			4c. HI GHEST DEG	REE(S)
		,,,							
4d. PRESENT MAILING ADDRESS (Street, City, State, Zip Code)						NENT MAILING ADD	RESS (Stre	et, City, State, Zip C	code)
				4f.	E-MAIL A	DDRESS:			
TELEPHONES AND FAX	(Area code,	1	,						
4g. OFFICE		4h. HOME		4i. PERN	IANENT		4j. FAX NL	JMBER	
4k. U.S. CITIZEN	I OR U.S. NC	NCITIZEN NA	TIONAL	PEF	RMANENT	RESIDENT OF U.S	. PENDING		
PERMANEN	T RESIDENT	OF U.S.		NOI	N-U.S. CI	TIZEN WITH TEMPC	RARY U.S.	VISA	
5. TRAINING UNDER P		WARD (See F	ields of Training)		6. PRIOR AND/OR CURRENT NRSA SUPPORT				
Discipline No.: Subcateg	jory Name:					(Individual or Institu NO YES (If	,	r to item 22, Form Pa	age 5)
7a. DATES OF PROPOS			PROPOSED AWARD DU	RATION		8. DEGREE SOL		NG PROPOSED AV	
From (MM/DD/YY): Three	ough <i>(MM/DE</i>	D/YY): (in m	nonths)			Degree:	Ex	xpected Completion	Date:
9. HUMAN SUBJECTS RESE ARCH No Yes	9b. Federalwi	de Assurance N	0.	10. \	/ERTEBR	ATE ANIMALS	No	Yes	
Indefinite	9c. Clinical Tr No		NIH-defined Phase III ical Trial No Ye		Animal W	Velfare Assurance No	).		
9a. Research Exempt If "Yes," Exemption No.	No	o Yes							
11. SPONSORING INST Name	ITUTION				13. OFFICIAL SIGNING FOR SPONSORING INSTITUTION Name				
				Title					
Address				Title					
				Addr	ess				
12a. ENTITY IDENTIFICATION NO. 12b. DUNS NO.			Tel:			Fax:	:		
				E-Ma	ul:				
14. APPLICANT ORGAN my knowledge, and I agre fictitious, or fraudulent sta	e to comply w	with the terms a	and conditions of award if	an award	is issued	as a result of this ap			
SIGNATURE OF OFFICI/ (In ink. "Per" signature no								DATE	
PHS 416-1 (Rev. 9/08) Face Pace Pace Pace Pace Pace Pace Pace P				Page				Form	n Page 1

OMB No. 0925-0002

Form Approved Through 09/30/2011

Kirschstein–NRSA Individual Fellowship Applic	NAME OF APPLICANT (Last, first, middle initial)			
(To be completed by applicant – follow PHS 416-1 instruction				
SPONSOR and	Co Sponsor lı	nformation		
15. NAME OF SPONSOR	16. NAME OF	F Co-SPONSOR (When applicable)		
15a. NAME AND DEGREE(S)	16a. NAME A	AND DEGREE(S)		
15b. ERA COMMONS USER NAME	16b. ERA CC	DMMONS USER NAME		
15c. DEPARTMENT, SERVICE, LABORATORY, OR EQUIVALENT	T 16c. DEPARTMENT, SERVICE, LABORATORY, OR EQUIVALENT			
15d. MAJOR SUBDIVISION	16d. MAJOR SUBDIVISION			
15e. Address:	16e. Address	:		
Telephone:	Telephone:			
Fax:	Fax:			
E-Mail: E-Mail:				
RESEAR	RCH PROPOS	AL		
17. DESCRIPTION: See instructions. State the application's broad, for relatedness of the project (i.e., relevance to the <b>mission of the agence</b> goals. Describe the rationale and techniques you will use to pursue the	y). Describe c			
The 1991 is the exchange of the investment of the second of the second terms of the second terms of the second of th				

In addition, in two or three sentences, describe in plain, lay language the relevance of this research to public health. If the application is funded, this description, as is, will become public information. Therefore, do not include proprietary/confidential information. DO NOT EXCEED THE SPACE PROVIDED.

	-NRSA Individual Fel		NAME OF APPLICANT (Last, fin	rst, middle initial)
18. GOALS FOR KIRS	SCHSTEIN-NRSA FELLOW	SHIP TRAINING AND CAREER		
19. ACTIVITIES PLAN				ntified below. (See instructions.)
Year	Research	Course Work	Teaching	Clinical
First				
Second				
Third		PREDOCTORAL FELLOW		
Fourth		PREDUCTORAL FELLOW	SHIPS ONLY	
Fifth				
		MD/PhD FELLOWSHIF	PS ONLY	
Sixth				
		elate them to the proposed resear		
	S) Is the Primary Training Sil information below for the Pr	te the same as the Sponsoring Institution in the same as the Sponsoring Institution in the second second second	stitution? Yes	No
Organizational Name:				
DUNS:				
Street 1:		Street 2	:	
City:		County:	Sta	ite:
Province:		Country:	Zip/Postal Coo	le:
21. HUMAN EMBRYC If the proposed projec http://stemcells.ni	t involves human embryonion h.gov/research/registry	No Yes c stem cells, list below the regist /eligibilityCriteria.asp. Use c	continuation pages as needed.	line(s) from the following list:
Cell Line	De reierended at this time, incl	lude a statement that one from the F	Tegistiy will de Useu.	

Dragram	Director/Drineir	o l lovo tigotor	(Loot	Lirot	Middle)
Program	Director/Princip	parinvestigator	(Lasi,	FIISI,	ivildale).

Use only if additional space is needed to list additional project/performance sites.

Additional Project/Performance Site Location							
Organizational Name:	Organizational Name:						
DUNS:							
Street 1:			Street 2:				
City:	<u> </u>	County:			State:		
Province:	Country:			Zip/Postal	Code:		
Project/Performance Site Congressional Districts:							
Additional Project/Performance Site Loca	ation						
Organizational Name:							
DUNS:							
Street 1:			Street 2:				
City:		County:			State:		
Province:	Country:			Zip/Postal	Code:		
Project/Performance Site Congressional Districts:	<u>,</u>						
Additional Project/Performance Site Loca	ation						
Organizational Name:							
DUNS:							
Street 1:			Street 2:				
City:	<u>.</u>	County:			State:		
Province:	Country:			Zip/Postal	Code:		
Project/Performance Site Congressional Districts:							
Additional Project/Performance Site Loca	ation						
Organizational Name:							
DUNS:							
Street 1:			Street 2:				
City:		County:			State:		
Province:	Country:			Zip/Postal	Code:		
Project/Performance Site Congressional Districts:	<u>.</u>						
Additional Project/Performance Site Location							
Organizational Name:							
DUNS:							
Street 1:			Street 2:				
City:	·	County:			State:		
Province:	Country:			Zip/Postal	Code:		
Project/Performance Site Congressional Districts:							

#### Page Numbers

(Number pages consecutively at the bottom throughout the application. Do not use suffixes such as 6a, 6b.)

Section I — Applicant/Fellow	the application. Do not use suffixes such as 6a, 6
Face Page	
Sponsor's Contact Information, Description (Form Page 2)	
Training & Career Goals, Activities Planned Under This Award, Train Human Embryonic Stem Cells (Form Page 3)	
Table of Contents (Form Page 4)	
Biographical Sketch – Applicant/Fellow (Not to exceed four pages)	
Previous Research Experience (Form Page 5)	
Research Training Plan	
1. Introduction to Resubmission Application (not to exceed 1 page)	
<ol> <li>Specific Aims</li></ol>	······ <b>[</b>
3. Background/Significance (Items 2-5 not to exceed	ed 10 pages)
<ol> <li>Preliminary Studies/Progress Report</li></ol>	
6. Inclusion Enrollment Report (for Renewal applications only)	
7. Progress Report Publication List (for Renewal applications only)	
8. Human Subjects (Required if Item 9 on the Face Page is marked "Yes")	
9. Clinical Trial	
10. Agency-Defined Phase III Clinical Trial	
11. Protection of Human Subjects (Required if Item 9 on the Face Page is	
12. Inclusion of Women and Minorities (Required if Item 9 on the Face Pa	
and is Clinical Research)	
13. Targeted/Planned Enrollment Table (for new and continuing clinical re	
14. Inclusion of Children (Required if Item 9 on the Face Page is marked ")	· · · · · · · · · · · · · · · · · · ·
15. Vertebrate Animals (Required if Item 10 on the Face Page is marked "Y	
16. Select Agent Research	
17. Bibliography and References Cited (formerly "Literature Cited")	
18. Resource Sharing	
19. Respective Contributions	
20. Selection of Sponsor and Institution	
21. Responsible Conduct of Research	······
Section II — Sponsor's/Co-Sponsor's Information	
Biographical SketchSponsor	
Research Support Available	
Previous Fellows/Trainees	
Training Plan, Environment, Research Facilities	
Number of Fellows/Trainees to be Supervised	
Applicant's Qualifications and Potential	
Checklist (Completed by Fellow/Applicant & Sponsoring Institution)	·····
Section III — Letters of Reference (Minimum of 3) (See instructions for submission of references.)	

List full name, institution, and department of individuals submitting reference letters.

Other Items (*list*): Personal Data Page for Fellowship Applicants

# Appendix

Appendix (Five identical CDs)

Kirschstein–NRSA Individual Fellowship Application
Previous Research Experience

(To be completed by applicant – follow PHS 416-1 instructions.)

22. PRIOR AND CURRENT KIRSCHSTEIN–NRSA SUPPORT. List type (individual and/or institutional), level (predoctoral or postdoctoral), dates, and grant or award numbers.

#### 23. APPLICATION(S) FOR CONCURRENT SUPPORT

NO	YES	Using format below, list all support (training, research, supplies, travel, etc.) applied for that would run concurrently with the period covered by this application. Include the type, dates, source, and amount.				
Туре:		Dates:				
Source:		Amount:				
Type:		Dates:				
Source:		Amount:				
Type:		Dates:				
Source:		Amount:				

24a. TITLE(S) OF THESIS/DISSERTATION(S) (Predoctoral and Senior Fellowships omit this section.)

24b. NAME OF DISSERTATION ADVISOR OR CHIEF OF SERVICE (If reference report not included, explain why not.)	TITLE, DEPARTMENT, AND INSTITUTION

# 25. DOCTORAL DISSERTATION AND OTHER RESEARCH EXPERIENCE

(See Instructions -- particularly Predoctoral and Senior Fellowships should follow special instructions for this section. Use continuation pages.) Do not exceed two pages.)

Т	o be c	ompleted by Applicant			ļ.			
Α.	TYP	E OF APPLICATION						
		NEW application (This app	plication is being	submitted to t	the PHS for the	first time.)		
		RESUBMISSION of applic	cation number					
		(This application repla	aces a prior unfu	nded version o	of a new or rene	wal application.)		
		RENEWAL of award numb	ber					
		(This application is to	extend a funded	award beyon	d its current awa	rd period.)		
		CHANGE of Sponsoring Ir	nstitution	Name of form Institution:	ner			
В.	ASS	URANCES/CERTIFICATIO	ONS					
<u> </u>	certif listed		ation instructions fy compliance, w	when applica here applicabl	able. Description le, provide an ex	s of individual ass	urances/o	the policies, assurances and/or certifications are provided in Part III, and this page.
	1.	PRESENT INSTITUTION	NAL BASE SALA	RY				
		Amount	Academic Perio	od/number of r	months			
	2.	STIPEND/SALARY DUR	NING FIRST YEA	R OF PROPC	SED FELLOWS	SHIP		
		a. Stipend requested fro	m PHS					
		Amount	Number of mor	nths				
		b. Supplementation from	n other sources					
		Amount	Number of mor	nths	Type (sabbatio	cal leave, salary, e	etc.)	Source

#### D. TUITION and FEES

Predoctoral applicants should list estimated combined costs of tuition and fees. Postdoctoral applicants should list the estimated costs for the tuition and fees for courses planned that support the research training experience. For postdoctoral applicants, those courses should be described under Section D. Research Design and Methods of the Research Training Plan. Health insurance for predoctoral and postdoctoral fellowships is now paid as part of the institutional allowance. Senior Fellowship applicants should omit this section.

None Requested

#### **Funds Requested:**

Year – 01	Year – 02	Year – 03	Year – 04	Year – 05	Year – 06 (when applicable)

Clip this form to the signed original of the application after the checklist. Do not duplicate.

The Public Health Service has a continuing commitment to monitor the operation of its review and award processes to detect—and deal appropriately with—any instances of real or apparent inequities with respect to age, sex, race, or ethnicity of the proposed applicant.

To provide the PHS with the information it needs for this important task, complete the form below and attach it to the signed original of the application after the Checklist. **Do not attach copies of this form to the duplicated copies of the application.** 

Upon receipt of the application by the PHS, this form will be separated from the application. This form will **not** be duplicated, and it will **not** be a part of the review process. Data will be confidential, and will be maintained in Privacy Act record system 09-25-0036, "Grants: IMPAC (Grant/Contract Information)." The PHS requests the last four digits of the Social Security Number for accurate identification, referral, and review of applications and for management of PHS grant programs. Although provision of this portion of the Social Security Number is voluntary, providing this information may improve both the accuracy and speed of processing the application. Please be aware that no individual will be denied any right, benefit, or privilege provided by law because of refusal to disclose this section of the Social Security Number. The PHS requests the last four digits of the Social Security Number under Sections 301(a) and 487 of the PHS Acts as amended (42 U.S.C 241a and U.S.C. 288). All analyses conducted on the date of birth, gender, race and/or ethnic origin data will report aggregate statistical findings only and will not identify individuals. If you decline to provide this information of your application. Your cooperation will be appreciated.

DATE OF BIRTH ( <i>MM/YY</i> )		SEX/GENDER		
SOCIAL SECURITY NUMBER (last 4 digits only)	XXX-XX-	Female	Male	

### ETHNICITY

1. Do you consider yourself to be Hispanic or Latino? (See definition below.) Select one.

*Hispanic or Latino.* A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."

Hispanic or Latino

Not Hispanic or Latino

## RACE

2. What race do you consider yourself to be? Select one or more of the following.

*American Indian or Alaska Native.* A person having origins in any of the original peoples of North, Central, or South America, and who maintains tribal affiliation or community attachment.

*Asian.* A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. (Note: Individuals from the Philippine Islands have been recorded as Pacific Islanders in previous data collection strategies.)

**Black or African American.** A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black" or African American."

*Native Hawaiian or Other Pacific Islander.* A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Check here if you do not wish to provide some or all of the above information.

# Targeted/Planned Enrollment Table

\_\_\_\_\_

# This report format should NOT be used for data collection from study participants.

# Study Title:

# Total Planned Enrollment:

TARGETED/PLANNED ENROLLMENT: Number of Subjects			
Ethnic Category	Females	Males	Total
Hispanic or Latino			
Not Hispanic or Latino			
Ethnic Category: Total of All Subjects *			
Racial Categories			
American Indian/Alaska Native			
Asian			
Native Hawaiian or Other Pacific Islander			
Black or African American			
White			
Racial Categories: Total of All Subjects *			

\* The "Ethnic Category: Total of All Subjects" must be equal to the "Racial Categories: Total of All Subjects."

# **Inclusion Enrollment Report**

# This report format should NOT be used for data collection from study participants.

Study Title:		
Total Enrollment:	Protocol Number:	
Grant Number:		

Ethnic Category	Females	Males	Sex/Gender Unknown or Not Reported	Total
Hispanic or Latino				**
Not Hispanic or Latino				
Unknown (individuals not reporting ethnicity)				
Ethnic Category: Total of All Subjects*				*
Racial Categories				
American Indian/Alaska Native				
Asian				
Native Hawaiian or Other Pacific Islander				
Black or African American				
White				
More Than One Race				
Unknown or Not Reported				
Racial Categories: Total of All Subjects*				*

Racial Categories	Females	Males	Sex/Gender Unknown or Not Reported	Total
American Indian or Alaska Native				
Asian				
Native Hawaiian or Other Pacific Islander				
Black or African American				
White				
More Than One Race				
Unknown or Not Reported				
Racial Categories: Total of Hispanics or Latinos**				**

\* These totals must agree.

\*\* These totals must agree.

# Applicant's Instructions for Submission of References

This notice explains the submission of references for Ruth L. Kirschstein National Research Service Award Individual Fellowship applicants. Applications will not be reviewed unless at least three (3) references are received with the application. Applicants are responsible for complete applications reaching the PHS on schedule.

Submission Process

Forward reference forms to referees with sufficient lead time so that the completed forms will be part of the application package. Fill out upper right corner before forwarding to referee. Referees should be provided with postage-paid return envelopes addressed to you with the following words in the front bottom left corner —DO NOT OPEN—PHS USE ONLY. Attach unopened references to the front of the original application and submit the entire package by the submission deadline.

# Note to Respondent

The applicant is applying for a competitive Ruth L. Kirschstein National Research Service Award Individual Fellowship from the Public Health Service (PHS) for research training in health-related areas. Your assessment of the applicant's potential for a research career is requested. The references will be used by PHS committees of consultants in assessing applicants.

At least three references must be submitted with the application or the application will be returned. *Please complete this form and return it to the applicant in sufficient time for the applicant to meet the deadline date.* 

Complete the form in English. The form should be typed if possible. If any part of the form is handwritten, use a black pen. The color blue does not reproduce. If the space provided is inadequate, use an  $8-1/2 \times 11^{\circ}$  sheet of paper and put the applicant's name in the upper right corner.

Although the Privacy Act of 1974 allows NSRA applicants to have access to personal information contained in their records, we have asked the applicant to provide you with a self-addressed envelope with — *DO NOT OPEN*—*PHS USE ONLY* — in the front bottom left corner. Applicants are asked not to open the references in order to protect the confidentiality of the process. Thank you for your assistance.

PHS estimates that it will take 45 minutes to complete this form. This includes time for reviewing the instructions, gathering needed information, and completing the form. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. If you have comments regarding this burden estimate or any other aspects of the collection of information, including suggestions for reducing this burden, send comments to NIH Project Clearance Office, 6705 Rockledge Drive MSC 7974, Bethesda, MD 20892-7974, Attention: PRA (0925-0002). **DO NOT RETURN THE COMPLETED FORM TO THIS ADDRESS.** 

Form Approved Through 09/30/2011	OMB No. 0925-0002		
Department of Health and Human Services	(Applicant completes this block.)		
Public Health Service	NAME OF APPLICANT (Last, first, middle initial)		
Reference			
Ruth L. Kirschstein National Research Service Award Individual Fellowship	PROPOSED SPONSORING INSTITUTION		
Compare the applicant with other individuals of similar training the following numerical scores, from 1 (best) to 5 (poorest). A and "NA" if no	Mark every block; insert "X" if insufficient knowledge to rate		
1 Comparable to the best individual in a current class or research laborator	••		
2 Upper 6 to 20% 4	Middle 41 to 60%		
<b>3</b> Upper 21 to 40% <b>5</b>	Lower 40%		
Use black ink.			
Research Ability and Potential	Originality		
Written and Verbal Communications	Accuracy		
Perseverance in Pursuing Goals	Scientific Background		
Self-Reliance and Independence	Familiarity with Research Literature		
Clinical Proficiency, if relevant	Ability to Organize Scientific Data		
Laboratory Skills and Techniques, if relevant			

Describe your association with the applicant. Comment on the above items, including other areas as appropriate, identifying the strengths and weaknesses that should be considered in evaluating the applicant's potential for a research career. (Use continuation pages as necessary.)

CAPACITY AT THAT TIME (Teacher, dissertation advisor, supervisor, or other) (Use continuation pages as necessary.)

RESPONDENT (Name, title, department, and institution)

TELEPHONE NUMBER	SIGNATURE	DATE
PHS 416 1 (Pov 0/09)	Boforence Bego	