#### **Attachment C – Protocol for ECD Contact**

Based on our experience in a methodological study and the Pilot Early Career Doctorates Survey (ECDS), four contact protocols are designed for this follow-up survey: High Authority (HA), HA Opt-out, HA Opt-in, and NSF protocols. In the methodological study and Pilot ECDS, respondents in the HA treatment group were more likely to respond and respond more quickly than those in other treatment groups. Therefore the HA protocol is our preferred contact protocol, and each institution will begin the survey in this protocol. All individuals in this protocol will receive an initial pre-notification e-mail from the HA and, when possible, nonrespondents will receive a letter of support from the HA in the mail reminder sent later in data collection.

We know, based on the methodological study and Pilot ECDS, however, that not all HAs will agree to send a pre-notification e-mail. Some institutions, for example, have policies prohibiting a university president from sending e-mails to solicit help on the behalf of others. In these situations, we will negotiate with the HA to ensure the best possible option given the unique circumstances of the case. For example, if an institution HA does not send e-mails, we will request that another authority figure within the institution send the e-mail. If no HA from an institution can or will send the e-mail pre-notification, the institution will be reassigned to the NSF protocol. Sample members in the NSF protocol will be sent the pre-notification from NSF in one of three ways depending on their experimental treatment group: hard copy letter sent via regular first-class mail, hard copy letter sent via priority mail (i.e., FedEx or USPS priority mail), or e-mail. In this situation, we will request letters of support from the HA to include in communications from NSF (see Attachment B.10).

We also know from the methodological study and Pilot ECDS that some institutions have policies that forbid sharing of personal or contact information without the consent of the individual. In these cases, we will sample respondents based on an anonymous listing provided by the List Coordinator (LC), and an HA from the institution will send them a modified pre-notification asking the sampled respondent to opt-out or opt-in, depending on the institutional policies. Based on the results of the methodological study and Pilot ECDS, the "Opt-out" treatment is substantially preferred to the "Opt-in" method.

A summary of the contact materials and timing of the notifications are provided in Table 1.

Table 1. List of Notifications to ECD

	Contact number and timing of events <sup>1</sup>												
	1	2a	2b	2c	2d	3	4	5	6	7	8	9	10
Protocol and contact description		*	+1	+3	+5	+3	+5	+5	+10	+10	+5	+202	Post- complete
ECD - High Authority Protocol <sup>3</sup>													
Pre-notification e-mail from High Authority (includes link to survey website and brochure)	C.1a												
Login credential e-mail			C.2										
ECD – High Authority Opt-out Protocol													
Opt-out pre-notification e-mail from HA													
Login credential e-mail <sup>4</sup>			C.2										
ECD – High Authority Opt-in Protocol													
Opt-in pre-notification e-mail from HA													
Opt-in prompting e-mail from HA <sup>5</sup>		C.1c.2											
Login credential e-mail <sup>5</sup>		C.2											
ECD - NSF Protocol 16													
Pre-notification letter from NSF via first-class mail, enclosing ECD Dbrochure and letter of support from HA	C.1d												
Login credential e-mail					C.2								
ECD – NSF Protocol 2 <sup>6</sup>													
Pre-notification letter from NSF via priority mail, enclosing ECD brochure and letter of support from HA	C.1d												
Login credential e-mail				C.2									
ECD – NSF Protocol 3 <sup>6</sup>													
Pre-notification e-mail from NSF (includes link to survey website and brochure)	C.1e												
ECD brochure and letter of support from HA via priority mail	C.1e.2												
Login credential e-mail				C.2									

<sup>&</sup>lt;sup>1</sup> The timing of each event is represented by the number of business days from the preceding event.

<sup>&</sup>lt;sup>2</sup> The time between the reminder phone call #2 and the final e-mail reminder is contingent on the result of the reminder call and the proximity of the close of data collection.

<sup>&</sup>lt;sup>3</sup> HA group means the institutional high authority sends the first contact to the ECD and provides a letter of support for a mail reminder. All other contacts come from NSF.

<sup>&</sup>lt;sup>4</sup> Login credential e-mails for the Opt-out protocol will be sent within 1 day of receiving a list of ECD who have not opted-out of the survey.

<sup>&</sup>lt;sup>5</sup> Opt-in institutions will be asked to send a nonresponse prompt email 2 and 4 weeks after the initial email to improve opt-in rates. Login credential e-mails will be sent out as soon as possible after RTI receives notification that a sample member would like to participate (within a few minutes if contacted directly by the sample member).

<sup>&</sup>lt;sup>6</sup> NSF protocol means that the NSF contractor sends all contacts to the ECD.

#### Attachment C: ECD Contact Materials

	Contact number and timing of events <sup>7</sup>												
	1	2a	2b	2c	2d	3	4	5	6	7	8	9	10
Protocol and contact description	Begin Date	*	+1	+3	+5	+3	+5	+5	+10	+10	+5	+208	Post- complete
All Protocols													
Reminder e-mail # 1						C.3							
Reminder e-mail # 2							C.4						
Reminder phone call #1								C.5					
Reminder e-mail # 3									C.6				
Mail reminder with ECD brochure and letter of support from HA										C.7			
Reminder phone call #2 (includes CATI)											C.8		
Final e-mail reminder												C.9	
Thank you e-mail													C.10

<sup>&</sup>lt;sup>7</sup> The timing of each event is represented by the number of business days from the preceding event.

<sup>8</sup> The time between the reminder phone call #2 and the final e-mail reminder is contingent on the result of the reminder call and the proximity of the close of data collection.

#### Attachment C.1a – ECD Contact Pre-Notification E-mail to ECD – HA Protocol

TO: <<ECD e-mail address>>

FROM: << Institution High Authority Figure>>

CC: ECDS@rti.org

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. <<Respondent Last Name>>:

In the next few days, you will be receiving a request to participate in the Early Career Doctorates Survey, a survey conducted by the National Science Foundation (NSF) and co-sponsored by the National Institutes of Health. On behalf of<<Institution Name>>, I am writing to urge you to complete this survey by <<th>ethe last working day of the month which gives respondents ~2 months to respond or the last day of data collection should the pre-notification go out within 2 months of that date>>.

In this survey, you will be asked to provide information on your current and past work experiences, training, and career plans. This survey will provide NSF and other agencies with key information—not available from any other data source—regarding the work experiences and research opportunities open to recent doctorate recipients. All individuals who earned a doctoral level degree in any discipline (Ph.D., M.D., Ed.D., DPT, etc.) in the past 10 years are eligible for this survey. Responding to this survey is a service to your peers and to the academic community.

Please know that your responses are confidential; neither I nor any other employee of this <<university (for GSS institution) | organization (for FFRDCs and NIH IRP)>> will know how you answered the questions. NSF has retained RTI International, a nonprofit research institute, to collect and protect your data.

Your participation is completely voluntary, but extremely important. If you have any questions about participation, please contact the survey staff at 1-800-848-4075 or <a href="mailto:ECDS@rti.org">ECDS@rti.org</a> and reference Survey ID << number>>>.

Thank you in advance for your participation.

Sincerely,

<<Institution High Authority Name>>

<<Title>>

<<Institution>>

#### Attachment C.1b – ECD Contact Pre-Notification E-mail to ECD – HA Opt-out Protocol

TO: <<ECD e-mail address>>

FROM: << Institutional High Authority >>

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. << ECD respondent>>,

This year <<our institution>> is participating in the Early Career Doctorates Survey, a survey conducted by the National Science Foundation (NSF) and co-sponsored by the National Institutes of Health. This survey focuses on individuals who earned a doctoral level degree in any discipline (Ph.D., M.D., Ed.D., DPT, etc.) in the past 10 years. You were selected to be one of a limited number of survey participants from <<our institution>>.

In this survey, you will be asked to provide information on your current and past work experiences, training, and career plans. Please know that your responses will be confidential; neither I nor any other employee of this <<university (for GSS institution) | organization (for FFRDCs and NIH IRP)>> will know how you answered the questions. NSF has retained RTI International, a nonprofit research institute, to collect and protect your data.

Your participation is completely voluntary, but extremely important. If you wish to participate, there is no need to respond to this e-mail. You will be contacted directly by RTI International, NSF's survey contractor, after <<insert date>> with a secure link to the survey. If you do not want to participate, please reply to this e-mail by <<insert date>> and I will remove you from the survey.

I hope you will consider participating in this survey. The Early Career Doctorates Survey is unique in scope and will provide NSF and other agencies with key information—not available from any other data source—regarding the work experiences and research opportunities open to recent doctorate recipients. Responding to this survey is a service to your peers and to the academic community. For more information about the survey, you may visit <a href="https://www.earlycareerdoctoratessurvey.org">www.earlycareerdoctoratessurvey.org</a> or contact the survey staff at 1-800-848-4075 or <a href="mailto:ECDS@rti.org">ECDS@rti.org</a>.

Thank you in advance for your participation.

Sincerely, <<Name>>

#### Attachment C.1c – ECD Contact Pre-Notification E-mail to ECD – HA Opt-in Protocol

TO: <<ECD e-mail address>>

FROM: << Institutional High Authority >>

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. << ECD respondent>>,

This year <<our institution>> is participating in the Early Career Doctorates Survey, a survey conducted by the National Science Foundation (NSF) and co-sponsored by the National Institutes of Health. This survey focuses on individuals who earned a doctoral level degree in any discipline (Ph.D., M.D., Ed.D., DPT, etc.) within the past 10 years. You were selected to be one of a limited number of survey participants from <<our institution>>. As you may know, it is against our policy to share our employees' personal information without their permission. Therefore, I am asking you to opt-in to this important survey by forwarding this e-mail to <a href="ECDS@rti.org">ECDS@rti.org</a>, calling the survey staff at 1-800-848-4075, or letting me know that I can provide your name and address to NSF. If you opt-in, you will receive an e-mail from RTI International, NSF's survey contractor, with a secure link to the survey.

Your participation is completely voluntary and extremely important. Only a small number of doctorate recipients have been sampled, so your participation is critical to ensure the validity of the survey. Your responses are also completely confidential; no one at <<our institution>> will ever know how you answered the questions. If you have any questions about participation or would like to participate, please contact the survey staff at 1-800-848-4075 or ECDS@rti.org.

I urge you to opt-in and complete this survey at your earliest convenience. The Early Career Doctorates Survey is unique in scope and will provide NSF and other agencies with key information—not available from any other data source—regarding the work experiences and research opportunities open to recent doctorate recipients. For more information about the survey, you may visit <a href="https://www.earlycareerdoctoratessurvey.org">www.earlycareerdoctoratessurvey.org</a>.

Thank you in advance for your participation.

Sincerely, <<Name>>

#### Attachment C.1c.2– ECD Contact Nonresponse Prompt E-mail to ECD – HA Opt-in Protocol

TO: <<ECD e-mail address>>

FROM: <<Institutional High Authority >>

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. << ECD respondent>>,

A few weeks ago, I notified you that you were selected to participate in the Early Career Doctorates Survey. If you have already completed the survey, thank you and please ignore the rest of this message. If you have not yet completed the survey, I am asking you to please consider doing so today.

Sponsored by the National Science Foundation (NSF) and the National Institutes of Health, this survey is unique in scope and will provide NSF and other agencies with key information—not available from any other data source—regarding the work experiences and research opportunities open to recent doctorate recipients (see <a href="https://www.earlycareerdoctoratessurvey.org">www.earlycareerdoctoratessurvey.org</a> for more information).

To participate, you will need to opt-in by forwarding this e-mail to <a href="ECDS@rti.org">ECDS@rti.org</a>, calling the survey staff at 1-800-848-4075, or letting me know that I can provide your work contact information to NSF. It is against our policy to share our employees' personal information without their permission.

Sincerely, <<Name>>

# Attachment C.1d – ECD Contact Pre-Notification Letter from NSF – NSF Protocol 1 and 2

<Date>

Dear Dr. << Respondent Last Name>>,

On behalf of the National Science Foundation (NSF), I am writing to let you know that you have been selected to participate in the Early Career Doctorates Survey. This survey, co-sponsored by the National Institutes of Health, focuses on individuals who earned a doctoral degree (Ph.D., M.D., Ed.D., or equivalent) in any discipline within the past 10 years. It will provide NSF and other agencies with key information regarding the career paths and research opportunities open to doctorates early in their careers and will inform future decisions regarding the best ways to support the work done by this important segment of the U.S. workforce.

The research enterprise in the United States is continually evolving: postdoctoral training has become more prevalent, the global labor markets for researchers, scientists, and engineers have expanded, and interdisciplinary research continues to grow. The Early Career Doctorates Survey is unique in scope, as it includes doctorates from a wide variety of disciplines and includes those who earned their degrees both in and outside of the United States. In this survey, you will be asked to provide information on your current and past work experiences, the research and training you have completed, and your future career plans.

Please know that your responses are confidential – no one at <<institution name>> will ever know how you answered the questions. NSF has retained RTI International to collect and protect these data. In a few days, RTI will send you an e-mail with a secure link to the survey.

Your participation is completely voluntary, but extremely important. Only a small number of doctorate recipients have been selected to participate in the survey, so your participation is critical to ensure the validity of this survey. <<[If letter of support from HA is available] Enclosed, please find a letter of support from << HA name & title>> as well as the survey brochure that provides more information about the survey. [Else] Enclosed, please find the survey brochure that provides more information about the survey.>>

Responding to this survey is a service to your peers, to NSF, and to the academic community. If you have questions about participation, please contact the data collection team at 1-800-848-4075 or <a href="mailto:ECDS@rti.org">ECDS@rti.org</a> and reference Survey ID <<number>>.

Thank you in advance for your time and for your help with this survey.

Sincerely,

<Signature>

John G. Gawalt Director National Center for Science and Engineering Statistics National Science Foundation

**Enclosures** 

#### Attachment C.1e – ECD Contact Pre-Notification Email from NSF – NSF Protocol 3

Subject Line: NSF Early Career Doctorates Survey

Dear Dr. << Respondent Last Name>>,

On behalf of the National Science Foundation (NSF), I am writing to let you know that you have been selected to participate in the Early Career Doctorates Survey. This survey, co-sponsored by the National Institutes of Health, focuses on individuals who earned a doctoral degree (Ph.D., M.D., Ed.D., or equivalent) in any discipline within the past 10 years. It will provide NSF and other agencies with key information regarding the career paths and research opportunities open to doctorates early in their careers and will inform future decisions regarding the best ways to support the work done by this important segment of the U.S. workforce.

The research enterprise in the United States is continually evolving: postdoctoral training has become more prevalent, the global labor markets for researchers, scientists, and engineers have expanded, and interdisciplinary research continues to grow. The Early Career Doctorates Survey is unique in scope, as it includes doctorates from a wide variety of disciplines and includes those who earned their degrees both in and outside of the United States. In this survey, you will be asked to provide information on your current and past work experiences, the research and training you have completed, and your future career plans.

Please know that your responses are confidential – no one at <<institution name>> will ever know how you answered the questions. NSF has retained RTI International to collect and protect these data. In a few days, RTI will send you an e-mail with a secure link to the survey.

Your participation is completely voluntary, but extremely important. Only a small number of doctorate recipients have been selected to participate in the survey, so your participation is critical to ensure the validity of this survey. <<[If letter of support from HA is available] In a few days, check your mail for a letter of support from <<HA name & title>>; the letter will be accompanied by the survey brochure that provides more information about the survey. [Else] To learn more about the survey, please <u>click here</u> to review the survey brochure.>>

Responding to this survey is a service to your peers, to NSF, and to the academic community. If you have questions about participation, please contact the data collection team at 1-800-848-4075 or <a href="mailto:ECDS@rti.org">ECDS@rti.org</a> and reference Survey ID <<number>>.

Thank you in advance for your time and for your help with this survey.

Sincerely,

<Signature>

John G. Gawalt Director National Center for Science and Engineering Statistics National Science Foundation

### Attachment C.1d and C.1e2 – ECD Contact Institutional High Authority Letter of Support – NSF Protocol

See Attachment B.10 – HA Pre-notification Letter of Support Template.

# Attachment C.1d and C.1e2 – ECD Contact Early Career Doctorates Survey Brochure – NSF Protocol

See separate pdf file for Early Career Doctorates Survey Brochure.

#### Attachment C.2 – ECD Contact Login Credentials – HA Protocol (email)

TO: <<ECD e-mail address>>

FROM: Phou, Kelly S. < <u>kphou@nsf.gov</u>>

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. << ECD respondent>>,

Within the past few days, you received an e-mail that notified you about the Early Career Doctorates Survey (ECDS), which is being conducted by the National Science Foundation (NSF) and is co-sponsored by the National Institutes of Health. You are one of a small number of doctoral degree recipients in the United States who have been selected to participate in this survey. As a result, your response is very important. Findings from the survey will be used by NSF to help inform policymakers and others about the career paths, research opportunities, and work experiences of individuals who received any doctoral level degree in the past 10 years.

The ECDS is<<IF SDR respondent: a new survey and not the same as the Survey of Doctorate Recipients (SDR). This survey collects greater detail about work life and future plans and is >> intended to examine the experiences of a broad array of doctoral recipients in the first years after earning their degree. Therefore, individuals selected for the survey may come from any discipline, may have any type of doctorate or doctorate-equivalent degree (Ph.D., M.D., Ed.D., DPT, etc.), and hold any type of position. *You are eligible if you earned any doctoral level degree since January 1, 2007.* <<IF SDR respondent: If you have been sampled for both the ECDS and the SDR, we greatly appreciate your participation in both surveys. >>

Participating is easy; just click the link below to access the survey. To maintain the confidentiality of your responses, a secure username and password were generated for you and are embedded in the link below.

#### Secure Link to ECDS

This survey should take about 30 minutes to complete, and you can complete the survey in multiple sessions if you like. Clicking the link above after you have started the survey will bring you back to the survey wherever you left off.

Once again, thank you for your time and assistance with this survey. If you have any questions, please e-mail the survey contractor, RTI International, at ECDS@rti.org or call toll-free at 1-800-848-4075.

Sincerely,

<Signature>

Kelly S. Phou, Project Officer Early Career Doctorates Survey National Center for Science and Engineering Statistics National Science Foundation

Please visit <u>www.earlycareerdoctoratessurvey.org</u> to learn more about the ECDS!

#### Attachment C.2 – ECD Contact Login Credentials E-mail – NSF Protocol 1, 2, and 3

TO: <<ECD e-mail address>>

FROM: Phou, Kelly S. < <a href="mailto:kphou@nsf.gov">kphou@nsf.gov</a>>
SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. << ECD respondent>>.

A few days ago, you received [If NSF protocol 1 or 2: a letter, if NSF protocol 3: an e-mail] from Mr. John Gawalt, Director of the National Center for Science and Engineering Statistics, notifying you that you were randomly selected to participate in the Early Career Doctorates Survey (ECDS). This survey is sponsored by the National Science Foundation (NSF) and the National Institutes of Health [[if approval letter from HA] and endorsed by << Institutional HA>>]. You are one of a small number of doctoral degree recipients who have been asked to participate in this survey, so your response is very important. Findings from the survey will be used by NSF to help inform policymakers and others about the career paths, research opportunities, and work experiences of individuals who received any doctoral level degree in the past 10 years.

The ECDS is<<IF SDR respondent: a new survey and not the same as the Survey of Doctorate Recipients (SDR). This survey collects greater detail about work life and future plans and is >> intended to examine the experiences of a broad array of doctoral recipients in the first years after earning their degree. Therefore, individuals selected for the survey may come from any discipline, may have any type of doctorate or doctorate-equivalent degree (Ph.D., M.D., Ed.D., DPT, etc.), and hold any type of position. *You are eligible if you earned any doctoral level degree since January 1, 2007.* <<IF SDR respondent: If you have been sampled for both the ECDS and the SDR, we greatly appreciate your participation in both surveys. >>

Participating is easy; just click the link below to access the survey. To maintain the confidentiality of your responses, a secure username and password were generated for you and are embedded in the link below.

#### Secure Link to ECDS

This survey should take about 30 minutes to complete, and you can complete the survey in multiple sessions if you like. Clicking the link above after you have started the survey will bring you back to the survey wherever you left off.

Once again, thank you for your time and assistance with this survey. If you have any questions, please e-mail the survey contractor, RTI International, at <a href="mailto:ECDS@rti.org">ECDS@rti.org</a> or call toll-free at 1-800-848-4075.

Sincerely,

<Signature>

Kelly S. Phou, Project Officer Early Career Doctorates Survey National Center for Science and Engineering Statistics National Science Foundation

Please visit www.earlycareerdoctoratessurvey.org to learn more about the ECDS!

#### Attachment C.3 – ECD Contact Reminder E-mail #1 – HA Protocol

TO: <<ECD e-mail address>>

FROM: Phou, Kelly S. < <u>kphou@nsf.gov</u>>

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. << ECD respondent>>,

Approximately one week ago << Institutional HA Name & Title>> sent you an e-mail requesting your participation in the Early Career Doctorates Survey (ECDS). If you already completed the survey, thank you very much and please ignore this reminder.

Your answers to this survey are critical to NSF's understanding of the opportunities and challenges facing individuals like you who completed their doctoral degree (Ph.D., M.D., Ed.D., etc.) in 2007 or later.

You can access the survey by clicking the link below. To maintain the confidentiality of your responses, a secure username and password were generated for you and are embedded in this link. You are the only person who has access to it. Please retain this e-mail. You can use the link below to start where you left off should you need to complete the survey in more than one session. We expect that the survey should take about 30 minutes to complete.

#### Secure Link to ECDS

Once again, thank you for your time and assistance with this survey. If you have any questions or believe that you might not be eligible to participate, please e-mail the survey contractor, RTI International, at <a href="mailto:ECDS@rti.org">ECDS@rti.org</a> or call toll-free at 1-800-848-4075.

Thank you for your assistance with this survey.

Sincerely.

<Signature>

Kelly S. Phou, Project Officer Early Career Doctorates Survey National Center for Science and Engineering Statistics National Science Foundation

Please visit www.earlycareerdoctoratessurvey.org to learn more about the ECDS!

#### Attachment C.3 – ECD Contact Reminder E-mail #1 – NSF Protocol

TO: <<ECD e-mail address>>

FROM: Phou, Kelly S. < <u>kphou@nsf.gov</u>>

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. << ECD respondent>>,

A few days ago, I sent you an e-mail requesting your participation in the Early Career Doctorates Survey (ECDS). This survey is sponsored by the National Science Foundation (NSF) and the National Institutes of Health, and endorsed by your organization. If you already completed the survey, thank you very much and please ignore this reminder.

If you have not yet completed the survey, we hope you will take a few minutes soon to participate. From the time you click on the below link, it should only take about 30 minutes to complete. If needed, the survey can be completed over multiple sessions.

Your answers to this survey are critical to NSF's understanding of the opportunities and challenges facing individuals like you who completed their first doctoral degree (Ph.D., M.D., Ed.D., etc.) in 2007 or later.

You can access the survey by clicking the link below. To maintain the confidentiality of your responses, a secure username and password were generated for you and are embedded in this link. You are the only person who has access to it. Please retain this e-mail. You can use the link below to start where you left off should you need to complete the survey in more than one session. We expect that the survey should take about 30 minutes to complete.

#### Secure Link to ECDS

Once again, we thank you for your time and assistance with this survey. If you have any questions, please e-mail the survey contractor, RTI International, at ECDS@rti.org or call toll-free at 1-800-848-4075.

Thank you for your assistance with this survey.

Sincerely,

<Signature>

Kelly S. Phou, Project Officer Early Career Doctorates Survey National Center for Science and Engineering Statistics National Science Foundation

Please visit www.earlycareerdoctoratessurvey.org to learn more about the ECDS!

#### Attachment C.4 – ECD Contact Reminder E-mail #2 – All ECD

TO: <<ECD e-mail address>>

FROM: Phou, Kelly S. < <u>kphou@nsf.gov</u>>

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. <<ECD respondent>>,

Over the last couple of weeks you should have received two e-mails from me inviting you to participate in the Early Career Doctorates Survey (ECDS) on the web. Our records indicate you have not submitted it. We understand that you have many competing demands for your time, but we hope you will take some time over the next few days to complete the survey. Your input is vital to the success of this effort.

There is currently a gap in knowledge about the experiences of early career doctorates. For this survey, an early career doctorate is defined as anyone who has received a doctoral degree (Ph.D., M.D., Ed.D., etc.) in 2007 or later, regardless of how long they have been in the workforce. The purpose of this survey is to fill this knowledge gap and share, in aggregate form only, this information with academic researchers and policymakers.

You can access the survey by clicking the link below. To maintain the confidentiality of your responses, a secure username and password were generated for you and are embedded in this link. You are the only person who has access to it. Please retain this e-mail. You can use the link below to start where you left off should you need to complete the survey in more than one session. We expect that the survey should take about 30 minutes to complete.

#### Secure Link to ECDS

If you have any questions or believe that you might not be eligible to participate, please e-mail the survey contractor, RTI International, at <a href="mailto:ECDS@rti.org">ECDS@rti.org</a> or call toll-free at 1-800-848-4075.

Thank you for your assistance with this survey.

Sincerely,

<Signature>

Kelly S. Phou, Project Officer Early Career Doctorates Survey National Center for Science and Engineering Statistics

Please visit www.earlycareerdoctoratessurvey.org to learn more about the ECDS!

#### Attachment C.5 – ECD Contact – Suggested Interviewer Scripts Reminder phone call to ECD – All ECD

#### **WEBSTATUS**

#### PROGRAMMER:

IF WEB SURVEY HAS BEEN ACCESSED THEN WEBSTATUS=1; IF WEB SURVEY HAS NEVER BEEN ACCESS THEN WEBSTATUS=0;

#### **VOICEMAIL MESSAGE**

Hi, this is [name] calling from RTI International on behalf of the National Science Foundation about your participation in the Early Career Doctorates Survey.

[IF WEBSTATUS=0] Our records indicate you have not yet completed the survey. We hope you will find time to complete it soon.

[IF WEBSTATUS=1] Our records indicate you have started, but not yet completed the survey., we hope you will find time to do so soon.

If you did not receive the invitation, or if you have any other questions about your participation, please contact us at 1-800-848-4075; or E-C-D-S at R-T-I dot O-R-G.

Thank you!

1. CONTINUE (CODE AS REMINDER LEFT ON VOICEMAIL)

#### **REMINTRO**

Hi, this is [name] calling from RTI International on behalf of NSF, the National Science Foundation.

(READ IF NECESSARY: Have I reached <sample member's name>?)

IF THE PERSON ON THE PHONE HAS QUESTIONS USE POINTS BELOW AS NECESSARY:

- We are a nonprofit research institute calling on behalf of the NSF to conduct a survey
- The survey is called the Early Career Doctorates Survey
- We got contact information from an institutional point of contact approved by <HA name>
- <fill HA name if available> has supported this survey on behalf of <institution name> (if received HA approval form)
- 1. CONTINUE → GO TO INTRO2A
- 2. REACHED GATEKEEPER (ONLY IF CAN'T GET TO R) → GO TO GATEKEEPER
- 3. NOT RESPONDENT NOR GATEKEEPER →GO TO VERIFYPHONE

#### **VERIFYPHONE**

Let me verify that I have dialed the correct number, that is <FILL RL PHONE NUMBER>?

- 1. CORRECT NUMBER →ASSIGN 120 NEED DIRECTORY ASSISTANCE
- 2. NUMBER NOT DIALED CORRECTLY/NOTVERIFIED →GO TO DIAL2A

#### DIAL2A

#### TI: PLEASE RE-DIAL THE NUMBER < ROSTER NUMBER>

#### WHAT IS THE RESULT OF THE CALL?

- 1 A PERSON ANSWERED THE PHONE (NOT OPERATOR)
- 11 RING NO ANSWER
- 12 BUSY SIGNAL/ALL CIRCUITS BUSY
- 13 ANSWERING MACHINE
- 19 MOBILE CELLULAR PHONE
- 20 COMPUTER MODEM/FAX MACHINE
- 21 LINE TROUBLE
- 23 BEEPER/PAGER
- 24 BLOCKED LINE/# DOES NOT ACCEPT INCOMING CALLS
- 25 PRIVACY MANAGER
- 27 PHONE COMPANY RECORDING GIVES A NEW NUMBER
- 44 TDD (TELEPHONE DEVICE FOR THE DEAF) OR TYY (SOUND LIKE LITTLE BELLS)
- 99 DISCONNECTED NUMBER / CANNOT COMPLETE AS DIALED

#### **GATEKEEPER**

Hi, I was trying to reach <<ECD TITLE, FIRST & LAST NAME>> to talk about a survey being conducted for the National Science Foundation. Could you take a message?

#### **COVER THESE POINTS:**

- About a month ago we sent << ECD TITLE & LAST NAME>> an invitation e-mail to complete the Early Career Doctorates Survey.
- Our records indicate [he/she] has not yet completed it.
- We were calling to see if there were any questions we could answer.
- The survey is very important as it will help in policymakers and others decide how to support the research enterprise in the United States. At present, no comparable data exist to guide these decisions.
- If <<ECD TITLE & LAST NAME>> did not receive the invitation or if [he/she] has any other questions, [he/she] can call us toll-free at 1-800-848-4075 or e-mail us at ECDS@rti.org.

Thank you, goodbye.

1. CONTINUE (CODE AS REMINDER MESSAGE LEFT WITH GATEKEEPER)

#### INTRO2A

[IF WEBSTATUS=0] About a month ago we sent you an invitation to participate in a survey that the NSF is conducting called the Early Career Doctorates Survey. Our records indicate you have not yet started the survey.

I'm calling today to see if you received an e-mail from us with the link to the survey, and to see if you have any questions about the survey that I can answer.

[INTERVIEWER: ANSWER ANY QUESTIONS RESPONDENT HAS BEFORE PROCEEDING]

- 1. YES, STILL HAS IT  $\rightarrow$  GO TO HASIT
- 2. YES RECEIVED, BUT NO LONGER HAS IT → GO TO OFFERSEND
- 3. NO, DID NOT RECEIVE E-MAILOR R NOT SURE → GO TO OFFERSEND2

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#### **INTRO2B**

[IF WEBSTATUS=1] About a month ago we sent you an invitation to participate in a survey that the NSF is conducting called the Early Career Doctorates Survey. Our records indicate that you have started the web survey, but have not yet had the chance to finish it.

I'm calling today to see if you have any questions about the survey that I can answer or if you experienced any issues that prevented you from being able to complete the survey.

[INTERVIEWER: CHECK WITH RESPONDENT TO SEE IF THEY STILL HAVE E-MAIL WITH LOGIN HYPERLINK AND ANSWER ANY QUESTIONS RESPONDENT HAS BEFORE PROCEEDING]

- 1. YES, STILL HAS IT  $\rightarrow$  GO TO HASIT
- 2. YES RECEIVED, BUT NO LONGER HAS IT → GO TO OFFERSEND
- 3. DOES NOT RECALL RECEIVING/STARTING → GO TO OFFERSEND
- 4. EXPERIENCED PROBLEM, COULDN'T FINISH → PROBLEMS

#### **PROBLEMS**

I'm sorry to hear that you experienced a problem. Could you tell me a little bit about the problem? CHECK ALL THAT APPLY

[INTERVIEWER: AFTER

- 1. SURVEY/SCREEN FROZE
- 2. TOOK TOO LONG BETWEEN SCREENS
- 3. QUESTIONS DIDN'T APPLY TO ME GENERAL
- 4. OUESTIONS DIDN'T APPLY TO ME WRONG PATH AFTER ANSWERING O INCORRECTLY
- 5. QUESTIONS DIDN'T APPLY TO ME FINISHED DOCTORATE MORE THAN 10 YEARS AGO
- 6. ANSWERED A QUESTION INCORRECTLY AND COULDN'T FIX IT
- 7. OTHER

#### GO TO PROBLEMTEXT

#### **PROBLEMTEXT**

[INTERVIEWER: RECORD ANY RELEVANT INFORMATION THAT WILL HELP SURVEY TEAM FIX PROBLEM.]

I will have someone review your case to see if we can address the problem, and we will call you back when you can resume your survey.

- 1. YES, SEND INVITE AFTER ISSUE RESOLVED → GO TO OFFERSEND3
- 2. NO, DO NOT CONTACT ME FURTHER → CODE HARD REFUSAL

#### **HASIT**

Great. You can complete the survey using the link in that e-mail at your convenience, or if you prefer we can complete it now over the phone.

[INTERVIEWER: GENTLY ATTEMPT TO DETERMINE R's INTENTIONS IF THEY DO NOT VOLUNTEER INFORMATION]

- 1. RESPONDENT NEEDS INVITATION SENT AGAIN → GO TO OFFERSEND
- 2. RESPONDENT SAID THEY WOULD COMPLETE BY WEB → GO TO THANKYOU
- 3. RESPONDENT SAID THEY MAY COMPLETE BY WEB → GO TO THANKYOU2
- 4. RESPONDENT SAID THEY WILL NOT COMPLETE → GO TO CODE AS REFUSAL; GO TO REASONS
- 5. RESPONDENT SAID THEY WANT TO COMPLETE NOW BY PHONE → GO TO BEGIN [IN CATI SPECIFICATIONS]
- 6. RESPONDENT SAID THEY WANT APPOINTMENT TO COMPLETE BY PHONE → GO TO APPTBEGIN [IN CATI SPECIFICATIONS]

#### **OFFERSEND**

I would be happy to send the invitation to you again. I would like to confirm the e-mail address to which we should send it. I have your e-mail address as << ECD E-MAIL ADDRESS>>. Is that correct? INTERVIEWER SENDS EMAIL VIA CASE TOOLS AND ASKS RESPONDENT TO VEIFY RECEIPT.

\_\_\_\_\_ (PROGRAMMER ALLOW UP TO 50 CHARACTERS)

#### **THANKYOU**

Thank you for your time today. Do you have any other questions before we end this call?

[ANSWER ANY QUESTIONS]

[INTERVIEWER SAY ONLY IF YOU HAVE NOT PROVIDED ALREADY] If you need to reach us for any reason, please call us at 1-800-848-4075 or e-mail us at <a href="mailto:ECDS@rti.org">ECDS@rti.org</a>.

[INTERVIEWER: END CALL]

#### **THANKYOU2**

Thank you for your time today. We hope you will consider completing the survey. Your participation is critical to the success of this survey. If there are any questions that I have not been able to answer for you today that would help in your decision of whether or not to participate, please contact our data collection team at 1-800-848-4075 or e-mail us at <a href="ECDS@rti.org">ECDS@rti.org</a>.

[INTERVIEWER: END CALL]

1. CONTINUE → GO TO REASONS

#### REASONS

INTERVIEWER: THIS SCREEN TO BE COMPLETE AFTER ENDING CALL WITH R

INTERVIEWER: WHAT WERE THE REASONS THE R DID NOT WANT TO PARTICIPATE OR WAS RELUCTANT TO PARTICIPATE? CHECK ALL THAT APPLY.

- 1. TOO BUSY
- 2. DOES NOT PARTICIPATE IN RESEARCH
- 3. CONCERNED ABOUT PRIVACY/CONFIDENTIALITY
- 4. CONCERNED ABOUT WHAT HAPPENS WITH DATA

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- 5. QUESTIONS/CONCERNS ABOUT RTI INTERNATIONAL
- 6. QUESTIONS/CONCERNS ABOUT NATIONAL SCIENCE FOUNDATION
- 7. QUESTIONS IMPORTANCE OF SURVEY
- 8. OTHER \_\_\_\_\_\_(50 CHARACTERS)

#### Attachment C.6 – ECD Contact Reminder E-mail #3 to ECD – All ECD

TO: <<ECD e-mail address>>

FROM: Phou, Kelly S. < <u>kphou@nsf.gov</u>>

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. << ECD respondent>>,

About a month ago, I sent you an invitation to participate in the Early Career Doctorates Survey (ECDS), a NSF-NIH survey about the work experiences of individuals who earned their doctoral degree (Ph.D., M.D., Ed.D., etc.) in 2007 or later. Our records indicate that you have not completed the survey. Please take time today to do so. If you are currently working on the survey, thank you for taking the time to provide us with this critical information!

Many early career doctorates have already participated in the survey and have provided valuable information regarding their careers, research activities, and current and future goals and opportunities. This survey will provide extremely important information to NSF, other agencies, and policymakers. The results will be most representative of the population if we have the participation of a large proportion of those invited, including you.

You can access the survey by clicking the link below. To maintain the confidentiality of your responses, a secure username and password were generated for you and are embedded in this link. You are the only person who has access to it. Please retain this e-mail. You can use the link below to start where you left off should you need to complete the survey in more than one session. We expect that the survey should take about 30 minutes to complete.

#### Secure Link to ECDS

Thank you for your time and cooperation. Please e-mail the survey contractor, RTI International, at <u>ECDS@rti.org</u> or call toll-free at 1-800-848-4075 if you have any questions.

Sincerely,

<Signature>

Kelly S. Phou, Project Officer Early Career Doctorates Survey National Center for Science and Engineering Statistics National Science Foundation

Please visit www.earlycareerdoctoratessurvey.org to learn more about the ECDS!

#### Attachment C.7 – ECD Contact Final Appeal FedEx Reminder Letter – HA Protocol

Dear Dr. << Respondent Name>>:

During the last few months, you have been sent several e-mails about the Early Career Doctorates Survey (ECDS). This survey is being conducted by the National Science Foundation (NSF) with RTI International serving as the data collection contractor. [If HA letter of support available: It has been supported by <<HA name & title>>, who wrote the enclosed letter to all individuals from your institution.] (We are currently reaching out to individuals whom our records show as having not completed the survey, but no one at <<Institution>> knows who is receiving this letter.)

The survey will help the NSF answer important questions for which there is no current data source. Questions are asked on topics such as your educational background, the professional activities you are involved in, your work-personal life balance, and your career plans over the next 10 years. This information will help NSF and other funding agencies make decisions about how to best support the work and development of early career doctorates.

You are one of just a few people who have not yet responded to the survey. In order for our survey results to be as representative of this diverse population as possible, we hope to hear from everyone who was selected to participate, including you. By completing this survey, you will be advancing knowledge about the research environment in the United States and will therefore be performing a great service for yourself and the research community in general. However, the time to do so is running out.

To participate in this 30-minute survey, log in using the username and password provided below. You are the only person who has access to these login credentials. Please keep this letter in a secure place to ensure your privacy.

www.earlycareerdoctoratessurvey.org/login.aspx

Username: <<username>> Password: <<password>>

If you have any questions about participation, please contact us at 1-800-848-4075 or e-mail us at ECDS@rti.org.

We want to express our sincere appreciation for your willingness to consider this request. This effort to better understand the opportunities and experiences of early career doctorates is part of an ongoing effort at the NSF and will help in providing critical data to policymakers. Thank you very much.

Sincerely,

<Signature>

John R. Gawalt Director National Center for Science and Engineering Statistics National Science Foundation

# Attachment C.7 – ECD Contact Institutional High Authority Letter of Support #2 – NSF Protocol

See Attachment B.10 – HA Reminder Letter of Support Template

#### Attachment C.7 – ECD Contact Final Appeal FedEx Reminder Letter – NSF Protocol

Dear Dr. <<Respondent Name>>:

During the last couple of months, we have sent you several e-mails and mailings about the Early Career Doctorates Survey (ECDS), an important survey conducted by the National Science Foundation (NSF). You are one of just a few people who were randomly selected to participate who have not yet responded. In order for our survey results to be as representative of this diverse population as possible, we hope to hear from everyone who was selected to participate, including you. By completing this survey, you will be advancing knowledge about the research environment in the United States and will therefore be performing a great service for yourself and the research community in general. However, the time to do so is running out.

The purpose of the survey is to help the NSF answer important questions for which there is no current data source. Questions are asked on topics such as your educational background, the professional activities you are involved in, your work-personal life balance, and your career plans over the next 10 years. This information will help NSF and other funding agencies make decisions about how to best support the work and development of early career doctorates.

To participate in this 30-minute survey, log in using the username and password provided below. You are the only person who has access to these login credentials. Please keep this letter in a secure place to ensure your privacy.

#### www.earlycareerdoctoratessurvey.org/login.aspx

Username: <<username>> Password: <<password>>

If you have any questions about participation, please contact us at 1-800-848-4075 or ECDS@rti.org.

In closing, we want to express our sincere appreciation for your willingness to consider this request. This effort to better understand the opportunities and experiences of early career doctorates is part of an ongoing effort at the NSF and will help in providing critical data to policymakers. Thank you very much.

Sincerely,

<Signature>

John R. Gawalt Director National Center for Science and Engineering Statistics National Science Foundation

# Attachment C.8 – ECD Contact Reminder call #2 with offer of Computer-assisted Telephone Interview (CATI) – All ECD

#### **WEBSTATUS**

#### PROGRAMMER:

IF WEB SURVEY HAS BEEN ACCESSED THEN WEBSTATUS=1; IF WEB SURVEY HAS NEVER BEEN ACCESS THEN WEBSTATUS=0;

#### VOICEMAIL MESSAGE

Hi, this is [name] calling from RTI International on behalf of the National Science Foundation, about the Early Career Doctorates Survey. Our records indicate that you have not yet completed the survey. The survey is ending soon, and we really need your help.

If you prefer to complete the survey over the phone, please call 1-800-848-4075 and reference case number << FILL CASE NUMBER>>. You can e-mail us at <a href="mailto:ECDS@rti.org">ECDS@rti.org</a>. Please mention your case in your e-mail.

#### Thank you!

1. CONTINUE (END CALL; CODE AS VOICEMAIL MESSAGE LEFT; AUTOMATICALLY SCHEDULE CALL BACK FOR 3 DAYS (NOTE: A MESSAGE WILL ONLY BE LEFT ONE TIME PER WEEK))

#### **CATIINTRO**

Hi, this is [name] calling/calling back from RTI International on behalf of the National Science Foundation, the NSF.

(READ IF NECESSARY: Have I reached <sample member's name>?)

IF THE PERSON ON THE PHONE HAS QUESTIONS USE POINTS BELOW AS NECESSARY:

- We are a nonprofit research institute calling on behalf of the NSF to conduct a survey
- The survey is called the Early Career Doctorates Survey
- We got contact information from an institutional point of contact approved by <HA name>
- <fill HA name if available> has supported this survey on behalf of <institution name>
- 1. CONTINUE → GO TO CATIINTRO2A
- 2. REACHED GATEKEEPER (ONLY IF CAN'T GET TO R OR Rs VOICEMAIL) → GO TO CATIGATE
- 3. NOT RESPONDENT NOR GATEKEEPER →GO TO CATIVERIFY
- 4. IF CALLING BACK FOR APPOINTMENT →GO TO APPTBEGIN

#### **VERIFYPHONE**

Let me verify that I have dialed the correct number, that is <FILL RL PHONE NUMBER>?

- 3. CORRECT NUMBER → ASSIGN 120 NEED DIRECTORY ASSISTANCE
- 4. NUMBER NOT DIALED CORRECTLY/NOTVERIFIED →GO TO DIAL2A

#### DIAL2A

#### TI: PLEASE RE-DIAL THE NUMBER < ROSTER NUMBER>

#### WHAT IS THE RESULT OF THE CALL?

- 2 A PERSON ANSWERED THE PHONE (NOT OPERATOR)
- 11 RING NO ANSWER
- 12 BUSY SIGNAL/ALL CIRCUITS BUSY
- 13 ANSWERING MACHINE
- 19 MOBILE CELLULAR PHONE
- 20 COMPUTER MODEM/FAX MACHINE
- 21 LINE TROUBLE
- 23 BEEPER/PAGER
- 24 BLOCKED LINE/# DOES NOT ACCEPT INCOMING CALLS
- 25 PRIVACY MANAGER
- 27 PHONE COMPANY RECORDING GIVES A NEW NUMBER
- 44 TDD (TELEPHONE DEVICE FOR THE DEAF) OR TYY (SOUND LIKE LITTLE BELLS)
- 99 DISCONNECTED NUMBER / CANNOT COMPLETE AS DIALED

#### **CATIGATE**

I was trying to reach << ECD TITLE, FIRST & LAST NAME>> to talk about a survey being conducted for the National Science Foundation. Could you take a message?

#### **COVER THESE POINTS:**

- About two months ago we sent << ECD TITLE & LAST NAME>> an invitation e-mail to complete the Early Career Doctorates Survey.
- Our records indicate [he/she] has **not** yet completed it.
- We were calling to schedule an interview with << ECD TITLE & LAST NAME>>
- The survey is very important as it will help in policymakers and others decide how to support the research enterprise in the United States. Currently, no comparable data exist to guide these decisions.
- Please have << ECD TITLE & LAST NAME>> call us toll-free at 1-800-848-4075 or e-mail us at ECDS@rti.org to arrange an interview.

Thank you, goodbye.

1. CONTINUE (CODE AS MESSAGE LEFT WITH GATEKEEPER; AUTOMATICALLY CALLBACK AFTER 3 DAYS (NOTE: A MESSAGE WILL ONLY BE LEFT ONE TIME PER WEEK))

#### **CATIINTRO2A**

About two months ago we sent you an invitation to participate in the Early Career Doctorates Survey conducted by NSF. Did you receive the invitation?

IF YES: Great! Did you have any questions about your participation, or would you like to complete the survey over the phone today?

IF NO: Ok. This survey will provide policymakers, researchers, and the NSF and other U.S. agencies with information about individuals, such as you, who have completed their doctorate in the last 10 years. It will help answer questions about the experiences of, opportunities for, and challenges faced by researcher. No data source currently exists to answer these questions and the information will be critical for informing decisions about how best

#### Attachment C: ECD Contact Materials

to support the U.S. research enterprise in the future. The survey is coming to an end soon, and we really need your help.

[IF WEBSTATUS=0] I'm calling today to see if we can conduct the interview now over the phone or schedule a time that works for you.

[IF WEBSTATUS=1] I'm calling today to see if we can complete the interview now over the phone or schedule a time that works for you. We can continue from where you left off the last time you logged in.

[INTERVIEWER: ANSWER ANY QUESTIONS RESPONDENT HAS BEFORE PROCEEDING]

- 1. BEGIN INTERVIEW → GO TO BEGIN
- 2. SCHEDULE INTERVIEW → SCHEDULE APPT (GO TO CATIINTRO)
- 3. RESPONDENT SAID MAY COMPLETE BY WEB → GO TO THANKYOU2
- 4. RESPONDENT SAID WILL COMPLETE BY WEB (HAS LINK) → GO TO THANKYOU3
- 5. RESPONDENT SAID WILL COMPLETE BY WEB (NEEDS LINK) →GO TO OFFERSEND
- 6. RESPONDENT SAID WILL COMPLETE BY WEB (NEVER GOT OTHER E-MAILS) → GO TO OFFERSEND2
- 7. RESPONDENT SAID THEY WILL NOT COMPLETE → GO TO CODE AS REFUSAL; GO TO REASONS
- 8. R INDICATED THERE WAS A PROBLEM WHEN ATTEMPTING TO COMPLETE → GO TO PROBLEMS

#### **PROBLEMS**

I'm sorry to hear that you experienced a problem. Could you tell me a little bit about the problem? CHECK ALL THAT APPLY

[INTERVIEWER: AFTER

- 1. SURVEY/SCREEN FROZE
- 2. TOOK TOO LONG BETWEEN SCREENS
- 3. QUESTIONS DIDN'T APPLY TO ME GENERAL
- 4. OUESTIONS DIDN'T APPLY TO ME WRONG PATH AFTER ANSWERING O INCORRECTLY
- 5. QUESTIONS DIDN'T APPLY TO ME FINISHED DOCTORATE MORE THAN 10 YEARS AGO
- 6. ANSWERED A QUESTION INCORRECTLY AND COULDN'T FIX IT
- 7. OTHER

#### GO TO PROBLEMTEXT

#### **PROBLEMTEXT**

[INTERVIEWER: RECORD ANY RELEVANT INFORMATION THAT WILL HELP SURVEY TEAM FIX PROBLEM.]

I will have someone review your case to see if we can address the problem. After your case has been reviewed we could either call you back or send you another e-mail with a link to complete the survey. Would that be alright with you?

- 1. YES, CALL BACK TO COMPLETE CATI INTERIVEW WHEN RESOLVED → GO TO THANKYOU4
- 2. YES, SEND INVITE AFTER ISSUE RESOLVED → GO TO THANKYOU4
- 3. NO, DO NOT CONTACT ME FURTHER → CODE HARD REFUSAL

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#### **OFFERSEND**

I would be happy to have the invitation sent to you again. I would like to confirm the e-mail address to which we should send it. I have your e-mail address as << ECD E-MAIL ADDRESS>>. Is that correct?

- 1. YES  $\rightarrow$  GO TO RESEND
- 2. NO  $\rightarrow$  GO TO NEWE-MAIL

#### **OFFERSEND2**

I'm sorry you did not receive our invitation. We sent the e-mail invitation to << FILL ECD E-MAIL>>. Is that the correct e-mail address?

INTERVIEWER: IF R SAYS THERE IS A BETTER E-MAIL ADDRESS SELECT 'NO'

- 1. YES  $\rightarrow$  GO TO RESEND
- 2. NO  $\rightarrow$  GO TO NEWE-MAIL

#### **RESEND**

Thank you, I will have the invitation resent to you. It should be sent in the next <<INSERT TIME PERIOD>>. If you do not receive it in your e-mail inbox please check any spam folder you have. If you do not receive the e-mail please give us a call at 1-800-848-4075 or e-mail us at <a href="https://example.com/ECDS@rti.org">ECDS@rti.org</a> and we will be happy to resend it.

1. CONTINUE → GO TO THANKYOU3

#### **RESEND2**

Thank you, I will have the invitation resent to you as soon as the issue is resolved. If you have any questions when you receive the e-mail, please give us a call at 1-800-848-4075 or e-mail us at <a href="mailto:ECDS@rti.org">ECDS@rti.org</a> and we will be happy to discuss them.

1. CONTINUE → GO TO THANKYOU3

#### **NEWE-MAIL**

I can have the invitation sent to a different e-mail address. Could you tell me the other e-mail address to which we should send the invitation?

INTERVIEWER: REPEAT E-MAIL ADDRESS TO R TO ENSURE CORRECT E-MAIL ADDRESS ENTERED
(PROGRAMMER ALLOW UP TO 50 CHARACTERS)
1. CONTINUE → GO TO THANKYOU
(PROGRAMMER ALLOW UP TO 50 CHARACTERS)

#### **APPTBEGIN**

We spoke on <<INSERT DATE APPOINTMENT SCHEDULED>> and arranged this time to complete an interview for the Early Career Doctorates Survey, which is being conducted for the National Science Foundation. May we begin?

- 1. BEGIN INTERVIEW → GO TO BEGIN
- 2. RESCHEDULE INTERVIEW → SCHEDULE APPT (GO TO CATIINTRO)
- 3. R INDICATED WILL COMPLETE BY WEB → GO CATICALL2

#### **CATICALL2**

Hi, this is [name] calling back from RTI International on behalf of NSF, the National Science Foundation. We recently spoke with you about completing the Early Career Doctorates Survey. I see you haven't yet had a chance to complete the web survey. We could [IF WEBSTATUS=0 THEN SHOW "begin the survey now"; IF WEBSTATUS=1 THEN SHOW "complete the survey now starting from where you left off"] or we could schedule an appointment if now is not a good time.

- 1. BEGIN INTERVIEW → GO TO BEGIN
- 2. SCHEDULE INTERVIEW → SCHEDULE APPT (GO TO CATIINTRO)
- 3. RESPONDENT SAID THEY MAY COMPLETE BY WEB → GO TO THANKYOU2
- 4. RESPONDENT SAID THEY WILL NOT COMPLETE → GO TO CODE AS REFUSAL; GO TO REASONS
- 5. R INDICATED WILL COMPLETE BY WEB → GO CATICALL2 (AUTOMATICALLY SCHEDULE CALLBACK FOR 7 DAYS)
- 6. R INDICATED THERE WAS A PROBLEM WHEN ATTEMPTING TO COMPLETE → GO TO PROBLEMS

#### **CATICALL3**

Hi, this is [name] calling back from RTI International on behalf of the National Science Foundation, the NSF. We recently spoke with you about completing the Early Career Doctorates Survey. I see that you requested that we call after we resolved the issue. The issue has been resolved. We could [IF WEBSTATUS=0 THEN SHOW "begin the survey now"; IF WEBSTATUS=1 THEN SHOW "complete the survey now starting from where you left off"] or we could schedule an appointment if now is not a good time.

- 1. BEGIN INTERVIEW → GO TO BEGIN
- 2. SCHEDULE INTERVIEW → SCHEDULE APPT (GO TO CATIINTRO)
- 3. RESPONDENT SAID THEY MAY COMPLETE BY WEB → GO TO THANKYOU2
- 4. RESPONDENT SAID THEY WILL NOT COMPLETE → GO TO CODE AS REFUSAL; GO TO REASONS
- 5. R INDICATED WILL COMPLETE BY WEB → GO CATICALL2 (AUTOMATICALLY SCHEDULE CALLBACK FOR 7 DAYS)
- 6. R INDICATED THERE WAS A PROBLEM WHEN ATTEMPTING TO COMPLETE → GO TO PROBLEMS

#### **CATICALL4**

Hi, this is [name] calling back from RTI International on behalf of the National Science Foundation, the NSF. We recently spoke with you about completing the Early Career Doctorates Survey. I see that you requested that we send you an e-mail after we resolved the issue. We sent the e-mail about 1 week ago. I was calling to confirm you received

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the e-mail, to see if you have any questions, have experienced any further issues, or if you would like to complete the interview over the phone.

- 1. BEGIN INTERVIEW → GO TO BEGIN
- 2. SCHEDULE INTERVIEW → SCHEDULE APPT (GO TO CATIINTRO)
- 3. RESPONDENT RECEIVED E-MAIL WILL COMPLETE BY WEB → GO TO THANKYOU3
- 4. RESPONDENT SAID THEY WILL NOT COMPLETE → GO TO CODE AS REFUSAL; GO TO REASONS
- 5. R INDICATED WILL COMPLETE BY WEB → GO CATICALL2 (AUTOMATICALLY SCHEDULE CALLBACK FOR 7 DAYS)
- 6. R INDICATED THERE WAS A PROBLEM WHEN ATTEMPTING TO COMPLETE → GO TO PROBLEMS

#### **THANKYOU2**

Thank you for your time today. We hope you will consider completing the survey. Your participation is critical to the success of this survey. If there are any questions that I have not been able to answer for you today that would help in your decision of whether or not to participate, please contact our data collection team at 1-800-848-4075 or e-mail us at <a href="ECDS@rti.org">ECDS@rti.org</a>.

[INTERVIEWER: END CALL]

2. CONTINUE → GO TO REASONS

#### **THANKYOU3**

Thank you for your time today. Again, I would like to let you know your participation is critical. Do you have any questions I can answer before we end our call?

[INTERVIEWER: ANSWER QUESTIONS].

If there are any/any other questions at any point we can answer please contact our data collection team at 1-800-848-4075 or e-mail us at <a href="ECDS@rti.org">ECDS@rti.org</a>.

Thank you, goodbye.

#### 1. CONTINUE → CODE TO BEGIN NEXT CALL AT CATICALL2

#### **THANKYOU4**

Thank you. I will have your case reviewed and we will [IF PROBLEMTEXT=1 THEN "call you"; IF PROBLEMTEXT=2 THEN "e-mail you"] when the issue is resolved.

Do you have any other questions before we end the call?

[INTERVIEWER: ANSWER QUESTIONS].

Thank you, goodbye.

1. REQUESTED CALL AFTER PROBLEM RESOLVED →GO TO CATICALL3

2. REQUESTED E-MAIL AFTER PROBLEM RESOLVED → GO TO CATICALL4

#### REASONS

INTERVIEWER: THIS SCREEN TO BE COMPLETE AFTER ENDING CALL WITH R

INTERVIEWER: WHAT WERE THE REASONS THE R DID NOT WANT TO PARTICIPATE OR WAS RELUCTANT TO PARTICIPATE. CHECK ALL THAT APPLY.

- 1. TOO BUSY
- 2. DOES NOT PARTICIPATE IN RESEARCH
- 3. CONCERNED ABOUT PRIVACY/CONFIDENTIALITY
- 4. CONCERNED ABOUT WHAT HAPPENS WITH DATA
- 5. QUESTIONS/CONCERNS ABOUT RTI INTERNATIONAL
- 6. QUESTIONS/CONCERNS ABOUT NATIONAL SCIENCE FOUNDATION
- 7. QUESTIONS IMPORTANCE OF SURVEY
- 8. OTHER \_\_\_\_\_\_(50 CHARACTERS)

#### **BEGIN**

[IF WEBSTATUS=0 GO TO FIRST SURVEY SCREEN]

[IF WEBSTATUS=1 GO TO LAST QUESTION ANSWERED]

#### Attachment C.9 – ECD Contact Final e-mail reminder to ECD – All ECD

TO: <<ECD e-mail address>>

FROM: Phou, Kelly S. < kphou@nsf.gov>

SUBJECT: NSF Early Career Doctorates Survey

During the last <<insert time period>>, we have been trying to reach you about the Early Career Doctorates Survey (ECDS), which is being conducted by the National Science Foundation (NSF) with RTI International serving as the data collection contractor. The survey ends on <<ENDDATE>>. You are one of a small number of people who were randomly selected to participate in the survey. Your perspective cannot be replaced.

The purpose of this survey is to gather information about individuals who earned a doctoral degree (Ph.D., M.D., Ed.D., etc.) from any institution in any field in 2007 or later. Data gathered through the ECDS will be critical to informing decisions at the NSF about how to best support the U.S. research community, especially its newest members.

You can access the survey by clicking the link below. To maintain the confidentiality of your responses, a secure username and password were generated for you and are embedded in this link. You are the only person who has access to it. Please retain this e-mail. You can use the link below to start where you left off should you need to complete the survey in more than one session. We expect that the survey should take about 30 minutes to complete.

Secure Link to ECDS

If you have any questions, please contact us at 1-800-848-4075 or ECDS@rti.org.

Finally, from the NSF, the NIH, and the entire data collection team, let me express our sincere appreciation for your time and consideration. Thank you very much.

Sincerely,

<Signature>

Kelly S. Phou, Project Officer Early Career Doctorates Survey National Center for Science and Engineering Statistics National Science Foundation

#### Attachment C.10 – ECD Contact Thank you letter – All ECD

TO: <<ECD e-mail address>>

FROM: Phou, Kelly S. < <a href="mailto:kphou@nsf.gov">kphou@nsf.gov</a>>

SUBJECT: NSF Early Career Doctorates Survey

Dear Dr. << ECD respondent>>,

On behalf of the National Center for Science and Engineering Statistics within the National Science Foundation, the National Institutes of Health, and the rest of the data collection team, I want to thank you for your participation in the Early Career Doctorates Survey.

Your participation will help us provide critical information about the experiences of early career doctorates to researchers, other agencies, and policymakers. This information will be used to make decisions about how to best support the work and development of early career doctorates and the U.S. research enterprise more generally.

If you have any final questions or thoughts about the survey, please contact us. You can call toll-free at 1-800-848-4075 or e-mail us at <a href="mailto:ECDS@rti.org">ECDS@rti.org</a>.

Thank you again for your help.

<Signature>

Kelly S. Phou, Project Officer Early Career Doctorates Survey National Center for Science and Engineering Statistics National Science Foundation



Your work is critical to the success of the U.S. scientific enterprise and will influence U.S. and global scientific markets for years to come.





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# For additional information contact:

Kelly S. Phou, Project Officer
National Center for Science and Engineering Statistics
National Science Foundation
4201 Wilson Boulevard, Suite 965
Arlington, VA 22230
E-mail: kphou@nsf.gov

#### Visit us at:

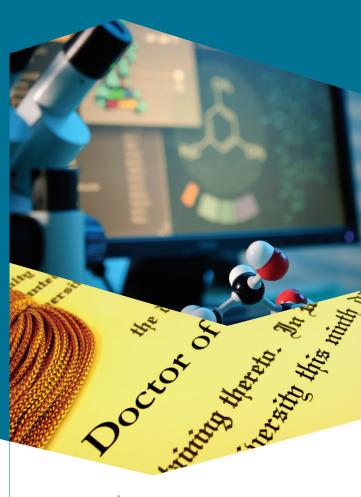
www.earlycareerdoctoratessurvey.org





NCSES National Center for Science and Engineering Statistics

# EARLY CAREER DOCTORATES SURVEY









# **About the Survey**

The Early Career Doctorates Survey is a survey of individuals who earned their first doctoral degree (PhD, MD, or equivalent) within the last 10 years and are currently working in one of the following areas of employment:

- . U.S. academic institutions
- Federally funded research and development centers (FFRDCs)
- Intramural research program of the National Institutes of Health (NIH)

The work and professional development of recent doctorate recipients will influence innovation in U.S. and global markets for years to come. Despite the critical importance of this population to the success of the U.S. science and engineering enterprise, comprehensive surveys of this group are limited, and the data needed to understand their work patterns and contributions to the U.S. economy are sparse.

To address this need, the National Center for Science and Engineering Statistics (NCSES) at the National Science Foundation developed the Early Career Doctorates Survey to gather in-depth information about postdoctoral appointees (postdocs) and other recent doctorate recipients during the first 10 years of their working careers.

# What topics does the survey cover?

$\checkmark$	Educational history	Degrees earned—dates awarded, fields of study, and institutions
<b>√</b>	Professional activities and achievements	Conference attendance Publications and presentations Professional service Grants experiences Patents
$\checkmark$	Employer characteristics	Type of employer Type of work
<b>√</b>	Professional and personal life balance	Typical workload  Flexibility in scheduling your work
<b>√</b>	Mentoring, training, and research opportunities	Work relationships Work expectations Training Research opportunities
<b>√</b>	Career paths and plans	Plans over the next 10 years

#### How was I selected?

Approximately 350 institutions were selected to participate in this survey. A coordinator at your institution compiled a list of all early career doctorates employed by the institution. Your name was randomly selected from this list.

# What does my participation involve?

The web survey takes about 30 minutes. You will receive an e-mail with a link to the survey, your username, and your password. You may complete the web survey in one session or in multiple sessions. If you exit the survey before you finish, your answers will be saved.

# How are my privacy and confidentiality protected?

Protecting your privacy is a priority for NCSES and RTI International (the survey contractor). The following steps ensure that your privacy and confidentiality are protected:

- The survey data will be used for statistical purposes only and will be safeguarded in accordance with the National Science Foundation Act of 1950, as amended, and the Confidentiality Information Protection and Statistical Efficiency Act of 2002.
- Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the federal information systems that transmit your data.
- The survey uses a secure connection (https) and all data will be maintained within encrypted databases.
- You have unique credentials (username and password).
- All survey staff will complete a confidentiality training and sign an affidavit of nondisclosure before working on the survey.
- All personally identifiable information (PII) will be removed from the final data files.
- Prior to publication, data will be aggregated in ways that prevent the identification of individual respondents.

# Will this affect my employment?

Your participation is voluntary and confidential, and will not affect your employment in any way.

