BERD units within the CTSA consortium vary in size, scope and institutional alignment. This survey is a way for the BERD KFC to quantify such characteristics cross-sectionally and to describe temporal trends in composition and scope. The data contained in this survey will be made available in a de-identified dataset for benchmarking purposes. In the context of this survey, we ask that you think of your BERD unit as the collection of activities and personnel about which you would report accomplishments to your CTSA PI and ultimately NCATS. For example:

It may help to think of this collection of activities as what you summarize in your annual CTSA progress reports or use as justification for future or continued CTSA funding. By the term funding, we are referring both to federal CTSA funds as well as other funds (e.g., institutional) used to support your CTSA.

BERD members are personnel affiliated with your BERD unit that receive direct (salary offset) or indirect (cost recovery) salary support for BERD activities. BERD members may devote all, or only small fraction, of their efforts to CTSA affiliated activities. For this survey, we are interested in that part of your BERD members' efforts that are related to CTSA affiliated activities.

CTSA affiliated activities are those that align with the BERD unit's specific aims and would be considered reportable in a CTSA progress report. These activities should pass a smell test. That is, activities that are consistent with your BERD unit's mission but are not felt to be related (or supported) by the CTSA should not be reported in this survey. Only those activities that are considered to be related to the CTSA should be reported.

It is certainly possible that entire biostatistics departments may qualify as BERD units. However, for other departments in which some members are CTSA affiliated and others are not, the reporting of the BERD unit characteristics will be distinct from, although possibly overlapping with, the department.

All responses should be provided in the context of a complete year. This may be a calendar year, fiscal year or a grant reporting year. Calendar year report is preferred, but provided your reporting unit remains constant over time, you may use alternative year start dates if it expedites reporting.

We recognize that it may take some time to gather the data necessary to complete this survey. To facilitate completion over multiple sessions, you can save your responses online in REDCap Survey at any point and complete the evaluation at a later time. You can also print a pdf of the instrument for reference prior to completing the online version.

Only one response from each BERD (typically from the BERD voting member from your CTSA) should be submitted. If your BERD encompasses members from multiple institutions, please compile all data into a single response prior to submission.
Select the CTSA Institution you are representing.

- Albert Einstein College of Medicine
- Boston University
- Case Western Reserve University
- Children's National Medical Center
- Columbia University
- Duke University
- Emory University
- Georgetown University with Howard University
- Harvard University
- Indiana University School of Medicine
- Johns Hopkins University
- Mayo Clinic
- Medical College of Wisconsin
- Medical University of South Carolina
- Mount Sinai School of Medicine
- New York University School of Medicine
- Northwestern University
- Ohio State University
- Oregon Health & Science University
- Penn State Milton Hershey Medical Center
- Rockefeller University
- Scripps Research Institute
- Stanford University
- Tufts University
- University of Alabama at Birmingham
- University of Arkansas for Medical Sciences
- University of California at Davis
- University of California at Irvine
- University of California at Los Angeles
- University of California at San Diego
- University of California, San Francisco
- University of Chicago
- University of Cincinnati
- University of Colorado Denver
- University of Florida
- University of Illinois at Chicago
- University of Iowa
- University of Kansas Medical Center
- University of Kentucky Research Foundation
- University of Massachusetts Medical School at Worcester
- University of Michigan at Ann Arbor
- University of Minnesota at Twin Cities
- University of New Mexico Health Sciences Center
- University of North Carolina at Chapel Hill
- University of Pennsylvania
- University of Pittsburgh
- University of Rochester School of Medicine and Dentistry
- University of Southern California
- University of Texas Health Science Center at San Antonio
- University of Texas Health Science Center at Houston
- University of Texas Medical Branch
- University of Texas Southwestern Medical Center at Dallas
- University of Washington
- University of Wisconsin-Madison
- University of Utah
- Vanderbilt University (partnering with Meharry Medical College)
- Virginia Commonwealth University
- Washington University
- Weill Cornell Medical College
- Yale University
- University of Miami
- Other
Section 1 - Institutional activities and environment

1. How many institutions partner together to form your CTSA? ________________________________

2. From how many institutions are your CTSA BERD members drawn? ________________________

3. From how many distinct academic units are your BERD members drawn? (by academic unit, we mean any formal division, department, center, institute or section; base your count on the smallest academic units defined for your institution) ________________________

4. Counting all CTSA affiliated BERD practitioners, please provide the number and total FTE within each of the following categories: (For FTE use decimal point such as 1.5 or 2.0) If a person can be counted in more than one category, count the person only once in the category that most closely aligns with his or her primary role. Please note the definition of “BERD member” on the survey’s cover page. BERD members need to be aligned with the CTSA’s activities and receive some support (federal or institutional funding) for those activities.

   MS Biostatistician
   N (provide number) ________________
   FTE (For FTE use decimal point such as 1.5 or 2.0) (provide number) ________________

   Doctoral-level Biostatistician
   N (provide number) ________________
   FTE (For FTE use decimal point such as 1.5 or 2.0) (provide number) ________________

   MS Epidemiologist
   N (provide number) ________________
   FTE (For FTE use decimal point such as 1.5 or 2.0) (provide number) ________________

   Doctoral-level Epidemiologist
   N (provide number) ________________
   FTE (For FTE use decimal point such as 1.5 or 2.0) (provide number) ________________

   MS Bioinformatician
   N (provide number) ________________
   FTE (For FTE use decimal point such as 1.5 or 2.0) (provide number) ________________

   Doctoral-level Bioinformatician
   N (provide number) ________________
### 5. In terms of total FTEs, what percentage of FTEs do your BERD members represent relative to the combined biostatistics and epidemiology resources (e.g., non-BERD faculty and support staff) for all institutions participating in your CTSA?

- [ ] < 5%
- [ ] 5-30%
- [ ] 31-70%
- [ ] 71-95%
- [ ] >95%

### 6. In terms of total number of employees, what percentage of employees are BERD members relative to the combined biostatistics and epidemiology personnel (e.g., non-BERD faculty and support staff) for all institutions participating in your CTSA?

- [ ] < 5%
- [ ] 5-30%
- [ ] 31-70%
- [ ] 71-95%
- [ ] >95%

### 7. Rate the following items in the context how they could be used to improve, strengthen or maintain your BERD unit's impact on clinical and translational science?

**7a. The existence of a common, centralized academic home for BERD**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

**7b. Availability of institutional funds to support targeted growth**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

**7c. Integrate BERD leadership into clinical and translational science leadership**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

**7d. Availability of promotion and tenure guidelines that recognize collaborative work**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

**7e. Availability of dedicated time for professional activities**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree
8. Of the items listed in question 7 above, which would you consider is your highest priority?

☐ a  ☐ b  ☐ c  ☐ d  ☐ e

9. Considering all of the activities in which your BERD unit is involved, estimate how your BERD’s financial resources are distributed across the following categories. Enter a fraction (e.g., 0.5 for 50%) for each item. The sum of the eight items should total 1.0.

Consulting __________________________________
Data Operations __________________________________
Education/mentoring __________________________________
Biostatistical or other methodological Research __________________________________
Non-methodological Research __________________________________
Scientific review, oversight, and professional service __________________________________
National CTSA Consortium activities __________________________________
Administrative oversight __________________________________

10. Which of the following BERD KFC working groups do members of your BERD participate in? (check all that apply)

☐ BERD - Biostatistical Consult and Collaboration Manuscript Group
☐ BERD - Data Management and Quality Working Group
☐ BERD - Education Manuscript Group
☐ BERD - Education Working Group
☐ BERD - Ethical Practice of Biostatistics in Clinical and Translational Research
☐ BERD - Evaluation
☐ BERD - Online Resources Task Force
☐ BERD - Operations Group
☐ BERD - Promotion and Tenure Manuscript Group
☐ BERD - Reproducible Research

11. Which of the following non-BERD CTSA Consortium activities do members of your BERD participate in? (check all that apply)

☐ Strategic goal 1 committee
☐ Strategic goal 2 committee
☐ Strategic goal 3 committee
☐ Strategic goal 4 committee
☐ Strategic goal 5 committee
☐ Clinical Research Management
☐ Clinical Service Core
☐ Regulatory Knowledge
☐ Education and Career Development
☐ Community Engagement
☐ Comparative Effectiveness Research
☐ Public-Private Partnerships
☐ Translational
☐ Communications
☐ Informatics
☐ Evaluation
☐ Clinical Research Ethics
☐ Administration

12. Which of the following services does your BERD provide on a cost-recovery or fee-for-service basis? (check all that apply)

☐ Statistical consulting
☐ Statistical analyses (including manuscript co-authoring)
☐ Proposal or protocol development
☐ Data management
☐ Teaching (e.g., developing a workshop and charging for attendance)
Section 2 - Consulting activities

For questions in this section, consulting is defined as an interaction between an investigator and a BERD practitioner for the purpose of conferring about biostatistics, epidemiology, or research design. Consultations are generally limited in scope and are aimed at completing a requested activity for the investigator. Ongoing collaborative or consulting activities funded by sources of funding other than CTSA federal or institutional dollars should not be counted here.

13 How many projects does your BERD unit support with consulting in a year?

☐ Not tracking ☐ 0 ☐ 1-100 ☐ 101-200 ☐ 201-300 ☐ >300

Enter the specific number here, or select one of the above categories __________________________

14 What proportion of projects receiving consulting services have a junior investigator as the PI (e.g., Assistant Professor or below, or defined as new or early stage investigators by the NIH)?

☐ Not tracking ☐ < 5% ☐ 5-30% ☐ 31-70% ☐ 71-95% ☐ >95%

Enter the specific percentages (as an integer) here (e.g., 83), or select one of the above categories __________________________

15 Use this space to provide any additional details about your BERD's consulting activities that are not captured above.
Section 3 - Education/Mentoring activities

For questions in this section, education is defined as the delivery of knowledge pertaining to biostatistics, epidemiology, or research design. Formal mentoring is defined to occur when a BERD practitioner is named as a mentor on a grant or university/institutional document.

16 Does your BERD unit provide the following activities? (check all that apply)
- Academic credit courses
- Lectures, Workshops, or Seminars
- On-line courses
- Continuing education courses (e.g., CME)
- Workshops on use of statistical software
- None of the above

17 Does your BERD unit provide formal mentoring to investigators?
- Not tracking
- Yes
- No

18 Use this space to provide additional details about potentially innovative ways your BERD engages in educational and mentoring activities.
Section 4 - Research Directed by BERD Members

For questions in this section, please consider only those grant or contract applications for which the research will be led by one of your BERD members. Typically, these applications will be methodological or secondary data analysis grants, but they may include biostatistical cores and epidemiological studies.

19 During the past year, how many grant or contract applications were submitted by your BERD unit personnel as principal investigator (including co-principal investigator, core director, program director, etc.)?

☐ Not tracking  ☐ < 5  ☐ 5-10  ☐ 11-20  ☐ 21-30  ☐ >30

Enter the specific number here, or select one of the above categories __________________________________

20 In the past year, how many manuscripts were published with one of your BERD members as the first author or corresponding author and that acknowledged the CTSA grant?

☐ Not tracking  ☐ 0  ☐ 1-10  ☐ 11-20  ☐ 20-30  ☐ >30

Enter the specific number here, or select one of the above categories __________________________________

21 Does your CTSA offer intramural funding opportunities specifically targeted to BERD research (e.g. novel methodology development)?

☐ Yes  ☐ No

22 In the past year, how many software applications or scripts for BERD methods were made publicly available by your BERD?

☐ Not tracking  ☐ 0  ☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5  ☐ >5
Section 5 - Research Not Directed by BERD Members ("Non-BERD Research")

For questions in this section, please consider only those grant or contract applications where: (1) one of your BERD members actively participated in proposal development or grant/contract writing; (2) the primary focus of the proposal was not focused on BERD related research; and (3) the BERD member was not included as a principal investigator or project, program, or core director.

23 In the past year, how many grant or contract applications did your BERD unit help prepare that met the definition above?

☐ Not tracking  ☐ < 5  ☐ 5-25  ☐ 26-50  ☐ 51-100  ☐ >100

Enter the specific number here, or select one of the above categories (number)

24 In the past year, how many grant or contract applications included requests for funding for BERD members or for services from your BERD?

☐ Not tracking  ☐ < 5  ☐ 5-25  ☐ 26-50  ☐ 51-100  ☐ >100

Enter the specific number here, or select one of the above categories (number)

25 In the past year, how many grant or contract applications included a request for funding for your BERD unit or members to develop related methodology (e.g. a biostatistical methods related specific aim)?

☐ Not tracking  ☐ < 5  ☐ 5-25  ☐ 26-50  ☐ 51-100  ☐ >100

Enter the specific number here, or select one of the above categories (number)

26 In the past year, how many manuscripts were published that were supported by your BERD unit and acknowledged the CTSA grant? Please only include manuscripts for which BERD practitioners were not listed as the first author or corresponding author (such publications should be reported in section 4 above).

☐ Not tracking  ☐ < 5  ☐ 5-25  ☐ 26-50  ☐ 51-100  ☐ >100

Enter the specific number here, or select one of the above categories (number)
Section 6 - Scientific review, oversight, and professional service

27 During the past year, did anyone of your BERD members participate in any of the following scientific review activities?

- NIH Study Sections: □ Yes □ No
- Other (non-NIH) external study sections: □ Yes □ No
- Editorial boards for journals: □ Yes □ No
- Internal study sections or pilot grant review committees: □ Yes □ No
- External Advisory Committee: □ Yes □ No
- Protocol Review Committee/Scientific Advisory Committee: □ Yes □ No

28 During the past year, did any of your BERD members participate in the following oversight activities?

- Institutional Review Board (IRB) or Ethics Committee: □ Yes □ No
- Institutional Animal Care and Use Committee (IACUC): □ Yes □ No
- Data and Safety Monitoring Committee (DSMC) (variously known as Data Monitoring Committee (DMC), Data and Safety Monitoring Board (DSMB), etc.): □ Yes □ No
## Section 7 - Data Quality and Management

29. For research supported by your CTSA, how involved is your BERD unit in each of the following data operations?

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Usually</th>
<th>About Half the Time</th>
<th>Seldom</th>
<th>Never</th>
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</thead>
<tbody>
<tr>
<td>a. Case report form (CRF) creation</td>
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<tr>
<td>b. Database design</td>
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<td>c. Integrating and merging secondary data sources (e.g., registry data, electronic health record, imaging data)</td>
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<td>d. Data monitoring and quality assurance</td>
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<tr>
<td>e. Creating analytic datasets</td>
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<tr>
<td>f. Teaching good data management practices</td>
<td>☐</td>
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<tr>
<td>g. Developing and maintaining institutional policies and standards for data management</td>
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</table>
Section 8 - Feedback and Comments

This is the final section. These questions are optional but will help us strengthen the National BERD KFC.

30 Please describe activities or approaches that could be used to strengthen the National BERD KFC.

31 Are there activities in which your BERD unit engages that have not been assessed or adequately assessed in this survey? If yes, please use the following space to provide additional information about your BERD.

33 If you were to be provided additional funding (institutional or grant), how would you use these funds to enhance consortium activities?

32 How can we improve the BERD Self-Assessment and Reporting Tool?

34 Provide a brief description of one or two 'success stories' that were made possible by a member of your BERD unit who was assuming a role of a 'research facilitator' or 'connector' (i.e., performing activities beyond being a collaborator in a research project to enable the research success of others).

35 Indicate the number of person-hours that were required to complete this survey. The number of person-hours should include the time to compile the necessary data in addition to the time required to enter the responses in the survey.

☐ Did not track ☐ 0-5 ☐ 6-10 ☐ >10 person-hours

Enter the specific number here, or select one of the above categories

36 Please use the following space to provide any additional feedback on the survey that you may have.