

## Application - Big Data Social Science IGERT, 2014-2016

We seek applications for the 2014-2016 cohort of the Penn State BDSS-IGERT (“Integrative Graduate Education and Research Traineeship”) Program. We anticipate appointing approximately five additional trainees for this cohort. Please see the attached brochure for more details on the program (or go to <http://bdss.psu.edu/apply>).

### Eligibility:

- Applicants must be enrolled (or anticipate being enrolled) in one of the following Penn State Ph.D. programs: Anthropology, Communication Arts & Sciences, Computer Science & Engineering, Economics, Geography, health Policy & Administration, Human Development & Family Studies, Information Sciences & Technology, Political Science, Sociology, and Statistics, or the Dual-Title PhD in Demography (with any associated home PhD).
- For NSF-funded Traineeships (approximately four positions in 2014-2016), students must be U.S. citizens or permanent residents. For Penn State funded Traineeships (approximately one position in 2014-2016), there is no citizenship restriction.
- Students must be at a stage in their PhD program where completion of the curricular and other requirements of BDSS-IGERT is feasible, and in which completion of BDSS-IGERT can plausibly impact the character of their dissertation research. There are exceptions, but for most participating departments, BDSS-IGERT would be undertaken in years two and three of the PhD program and applicants would currently be in their first PhD semester.

### Criteria:

- The primary criterion is the potential for BDSS-IGERT to add value to the student’s PhD training and for the student to help BDSS-IGERT achieve its core objectives. The core objectives of BDSS-IGERT are the development of:
  - Penn State PhDs with a depth of training in a core discipline of social, computational, informational, statistical, or visual analytic science sufficient to succeed in that discipline, and a breadth of training across these areas sufficient to lead in the emerging field of social data analytics.
  - Penn State PhDs who expand the capabilities of social data analytics, and use those capabilities creatively to answer important social scientific questions and to address grand social challenges.
  - Penn State PhDs whose training leads them to value diverse and multinational perspectives, to effectively prioritize ethics and scientific responsibility in the creation and use of social data, and to communicate effectively with both scientific and nonscientific audiences.
  - A dual-title PhD degree in Social Data Analytics that persists beyond the IGERT funding period and serves as a model for similar programs in other institutions and scientific domains.

- BDSS-IGERT is an intensive interdisciplinary traineeship with elements from the social, computational, informational, statistical, and visual analytic sciences. We do not expect applicants to be expert in all these component areas. (If such people existed, BDSS-IGERT would be unnecessary.) We are, however, looking for students whose interests, expertise, and advisor support are compatible with enthusiastic and productive engagement in the full range of interdisciplinary research, education, and experiential activities of BDSS-IGERT.
- BDSS-IGERT is a collaborative effort. Trainees will be selected with the intention of forming a cohort that is diverse and balanced in terms of disciplinary backgrounds, skills, interests, and life experience.

To apply for 2014-2016 IGERT traineeships, please provide the following materials.

**Materials are due December 18, 2013**, by 5 pm, via email to Kristy Boob, [kmc248@psu.edu](mailto:kmc248@psu.edu). Materials required by the deadline:

From you:

- Current cv and contact information.
- Estimated “backward calendar” for your existing home degree (absent appointment to BDSS-IGERT). Starting with expected PhD completion date, indicate expected milestone dates (e.g., comprehensive exams) and, for every semester back to Fall 2013, anticipated/completed coursework and other degree obligations (e.g., clinical and consulting hours, colloquium expectations, field work).
- Statement of interest, in pdf or word document. No more than two pages. Address why you wish to pursue the BDSS-IGERT traineeship, how you believe the BDSS-IGERT program would assist you in achieving your objectives, how you believe you would assist the BDSS-IGERT program in achieving its objectives.
- Answers to questions on the accompanying application form.
- **As soon as possible**, an email from your PSU account stating:
  - *This email is to indicate my intent to apply for the Big Data Social Science IGERT traineeship. I hereby authorize my department to provide the IGERT Graduate Staff Coordinator (Kristy Boob, Department of Political Science) with a copy of my Penn State application materials and current Penn State academic records, for the purpose of review by the BDSS-IGERT admissions committee.*

From your advisor:

- Letter of recommendation. As with your personal statement, this letter should indicate that the advisor understands the parameters of the BDSS-IGERT traineeship, considers you a good choice for the BDSS-IGERT program, and considers the BDSS-IGERT program a good choice for you.

From your graduate director (or similar departmental administrator):

- Brief email indicating that she/he is aware of your IGERT application.

**BDSS IGERT Traineeship Application for 2014-2016 Cohort**

Name:

Date:

**Current degree details**

**Current degree program, PhD start date, and expected PhD completion date:**

**Advisor(s):**

**Fields (majors, minors). Other PSU degrees / certificates / etc being sought:**

**Related Background**

Please summarize prior training and experience in each area. We anticipate and understand that most students will have minimal background in one or more areas.

**Social**

Please summarize prior training or experience in one or more of the social sciences. (Students in social science disciplines please indicate only areas of specialty.)

**Statistical**

Please summarize prior training or experience in theoretical or applied statistics. (Students in STAT PhD program, please indicate only areas of specialty.)

**Computational and informational**

Please summarize prior training or experience in the computational or informational sciences. (Students in CSE or IST PhD program, please indicate only areas of specialty.)

**Visual**

Please provide details of any prior training or experience in visual analytics, visualization, human-computer interaction, data representation, design, or associated visual or cognitive sciences.

**Other "Data Science" or "Big Data"**

Please provide details of any prior training or experience with "data science" (collecting, manipulating, analyzing, modeling, interpreting data, especially data that is "big" and/or "complex").