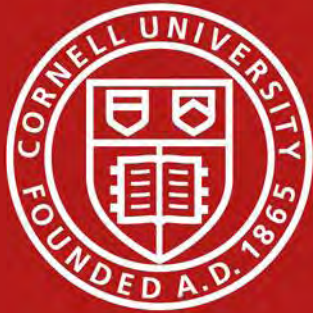


**Assessment and Review of
Graduate Programs –
Doctoral**

Nancy Busch, Barbara Knuth, Henning Schroeder

Assessment and Review of Doctoral Programs

- 9:00 Welcome and introductions
- 9:10 Purpose of session, agenda overview
- 9:15 Henning Schroeder, U. MN & CGS: Quality metrics assessment and allocation plan
- 9:45 Nancy Busch, Fordham U.: Assessment focusing on humanities
- 10:15 Barbara Knuth, Cornell U.: Ongoing program assessment & metrics
- 10:45 Small group discussions
- 11:10 Report out
- 11:25 Concluding thoughts



Cornell University

Assessment & Review of Doctoral Programs

Ongoing Program Assessment & Field Metrics

Barbara Knuth
Vice Provost & Dean
Cornell University

December, 2013



Graduate Program Assessment at Cornell

- ~ 100 graduate fields (Graduate School includes PhD, research masters, professional masters – e.g., M.Eng., M.Arch, M.L.A.; does not include MBA, JD, DVM).
- Types of assessment (to inform decision making):
 - External department program reviews (~ every 7-10 years)
 - Student learning outcomes (continuous monitoring; reported every 2 years)
 - Biennial field meetings w/ Graduate School leadership (every 2 years)
 - Self-service (Private) Field Metrics (sortable; demographic details)
 - Public Field Metrics (sortable; aggregate demographics)
 - Student Surveys (results are summary Public and detailed Self-service)
 - Admitted Not Attending (August)
 - New Students (September)
 - PhD Student Experience (February, every 2 years)
 - Exit Survey (all graduates, every term)



Learning Outcomes & Assessment

- Explicit learning outcomes stated for each degree program.
- Every 2 years, each degree program reports on one or more learning outcomes:
 - Measures used (what did they assess, and how?)
 - Findings/Observations (what did they conclude?)
 - What will they do in response? (changes, improvements, continuation of activities)

Learning Assessment

Graduate education at Cornell is diverse, cross-disciplinary, and dynamic. While specific learning goals reside within the many academic programs, a set of overarching outcomes characterizes the graduate educational experience.

The maintenance of academic quality resides primarily with graduate field faculty and directors of graduate study, working through the Special Committee – the group of faculty providing primary advisement and academic oversight for each graduate student.

Faculty assess student performance through a variety of direct and indirect measures; these include:

- › the assignment of registration units, which record student progress semiannually;
- › official milestones such as qualifying exams (Q exams), administered early in an academic program, admission to candidacy exams (A exams)

see also

- Rubric and Structured Observation (PDF)
- Assessment Metrics (Excel)
- Assessment of Graduate Programs: Clear Simple, and USEFUL (PDF)
- Video from Learning Assessment Workshop

Sample Rubric for Evaluation of PhD Student Progress

Graduate Education Outcomes – The student will be able to:	1 (Unacceptable)	2 (Fair)	3 (Very Good)	4 (Outstanding)
demonstrate knowledge of current research directions for the field of study.	Gaps in basic knowledge. Does not understand basic concepts, processes, or conventions of the discipline. Does not understand or misses relevant literature. Misrepresents or misuses sources.	Displays a basic understanding of the field. Literature review is adequate but not critical.	Displays a solid understanding of the field. Uses appropriate, standard theory, methods and techniques. Some exploration of interesting issues and connections.	Demonstrates thorough mastery as well as creativity in drawing on multiple sources. Synthetic and interdisciplinary. Demonstrates a deep understanding of relevant literatures.
show effective oral communication skills.	Argument is weak, inconsistent, contradictory, unconvincing or invalid.	Provides solid, expected results and answers. Clear and coherent.	Gives a solid argument with novel or fresh insights. Original with clear and coherent details.	Compelling, exciting, and persuasive. Has a point of view and a confident, independent, authoritative voice.
respond adequately to questions posed.	Unable to articulate an argument.	Provides a coherent response with some logic gaps or inconsistencies.	Shows understanding and mastery of subject matter.	Exhibits mature, independent thinking. Demonstrates command and authority over the material.
display effective written communication skills.	Academic writing lacks structure and organization. Writing has extensive spelling and grammatical errors.	Writing is adequate. Structure and organization are weak but sufficient.	Well written and well organized.	Concise, elegant, engaging, interesting, sophisticated, and original. Connects components seamlessly.
effectively frame or communicate the student's current research.	No independent research. Question or problem is trivial, weak, unoriginal, or previously solved.	Demonstrates competence but is not very original or significant. Displays little creativity, imagination, or insight.	Has a compelling question or problem. Argument is strong, comprehensive, and coherent. Has some original ideas, insights, and observations.	Argument is focused, logical, rigorous, and sustained. Proposed project is original, ambitious, creative, significant, and thoughtful. Asks new questions or addresses an important question or problem.

Degree Program Learning Outcomes

- Learning outcomes and assessment plan posted publicly for each degree program.

Classics

Classics

APPLYING
DEGREE INFORMATION
DESCRIPTION
FACULTY
ASSESSMENT

Classics Assessment Plan

Faculty assess student performance through a variety of direct and indirect measures;

Field of Classics Assessment Plan 2011			
Proficiency	Measurements	Timeframe	Source
Overarching Goals			
Complete degree in a timely fashion (5-6 years)	1. pass first year exam	by end of second semester (May of year 1)	Field records supplied by Graduate School
	2. pass Q exam	by end of fourth semester (May of year 2)	internal Field records
	3. pass A exam	before the beginning of the seventh semester (by the end of August)	Field records supplied by Graduate School
	4. presentation of dissertation prospectus	at the beginning of the second semester of the fourth year	Field records supplied by Graduate School
	5. obtain 6th year funding (where applicable)	by December of year 5	assessment by faculty using rubric
	6. pass B exam	no later than end of year 6	Field records supplied by Graduate School
Make an original and substantial contribution to the field			
Think originally and independently to develop concepts and methodologies Identify new research opportunities within the field	1. dissertation	no later than end of year 6	Field records supplied by Graduate School
	2. research projects or papers for dissemination	ongoing	CV review, annual review, or field survey
Demonstrate advanced research skills			
demonstrate proficiency in languages	1. pass Q exam	by end of fourth semester (May of year 2)	internal Field records
	2. pass modern language exams	1st by end of the third year, 2nd by end of the	internal Field records
master application of existing research methods and techniques	3. completion of 2 chosen research papers	by the time of the A exam	internal Field records of paper grade
communicate in a style appropriate to the discipline	4. satisfactory coursework as appropriate to each concentration	ongoing	annual review, transcript
Demonstrate professional skills and commitment to the values of scholarship			
Listen, give, and receive feedback effectively	1. TA evaluations	ongoing	semesterly TA evaluations
	2. TA observation	ongoing	structured observations
	3. student receptivity to criticism of academic work	ongoing	annual review, CV review
Show commitment to professional development and knowledge transfer	4. conference participation	ongoing	annual review, CV review
	5. attend department lectures, TA training, workshops	ongoing	annual review, observation

annually;
early in an
ess breadth

id

Public Field Metrics: Admissions; Enrollment; PhD Attrition & Completion; Median Time-to-Degree; Job Placement



Cornell University
Graduate School

SEARCH:

go

Academics

Admissions

Costs and Funding

Life at Cornell

Inclusion

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Academics

Fields of Study

Faculty

Graduate Degrees

Research and Scholarship

Learning Assessment

Field Metrics

home > academics > field metrics

print share

Field Metrics

To provide comprehensive information about advanced study at Cornell, the Graduate School is posting filterable data for several key areas: applications and yield, enrollment, attrition and completion, PhD outcomes and median time to degree, and job placement. Reports are filterable by graduate degree type, broad discipline groups, and graduate fields of study.

Graduate Field Selectivity and Yield Over Five Years

The selectivity and yield view shows a five year trend for applicants, applicants who were offered admissions, and admitted students who completed all requirements to become students at Cornell (matriculants). Discipline levels indicate how fields compare to their Cornell peer group.

› [Graduate Field Selectivity and Yield Over 5 Year Trend](#)

Graduate Field Enrollment Profile Over Five Years

The field enrollment profile displays the number of new student enrollments versus the students who are returning for a second year and beyond.

› [Graduate Field Enrollment Profile Over 5 Years](#)

Graduate Field Assessment in PhD Attrition and Completion Rates by Percent or Count

The attrition and completion rate view summarizes the interval in which students within the most recent ten cohorts either complete their PhD degree (completion) or leave the academic program (attrition). The information within this view can be

students and faculty

› Academic Calendar

› Commencement

› CU-CIRTL

› Events Calendar

› Forms

› Requirements

› Policies

› Thesis and Dissertation

› Professional Development

› Welcome Admitted Student

PhD Outcomes & Time-to-Degree: by Graduate Field (Public Version)

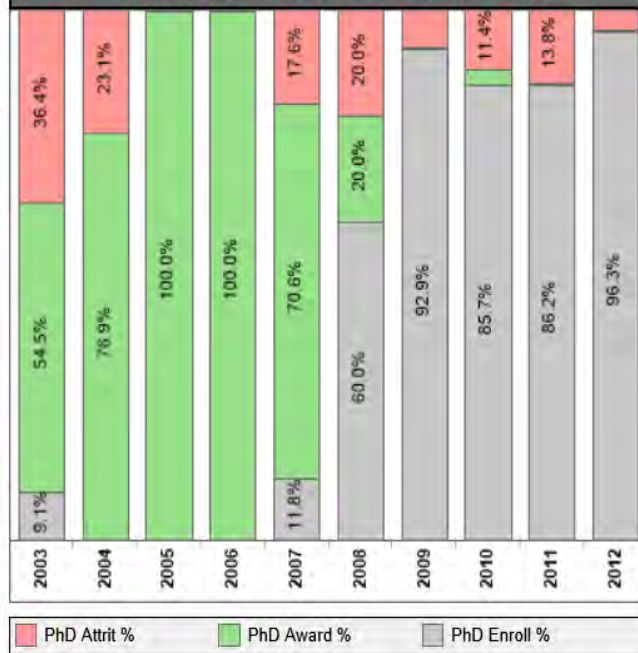


Cornell University
Graduate School

Field PhD Outcomes and Median Time-to-Degree by Cohorts

Field:

All PhD Outcomes for Mechanical Engineering



Overall Median Time-to-Degree for Mechanical Engineering in Doctoral, Professional Masters, Research Masters Programs

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Doctoral Count	11	13	5	9	17	10	14	35	29	27
Doctoral TTD	4.32	5.18	5.37	5.35	4.99	4.60		2.01		
Master's Count	55	60	35	40	45	63	48	83	58	58
Master's TTD	0.74	0.76	0.76	0.76	0.99	0.76	0.74	0.76	0.76	0.76

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Self-service Metrics (Protected Access)



Cornell University
Graduate School

SEARCH:

Grad School

Graduate School Intranet

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[Provisional List](#)

[Fellowship Memos](#)

[Data Solutions](#)

[Rolodex](#)

Reports

[Data Request](#)

[Field Metric Reports](#)

[GR Admissions Reports](#)

[GR Admissions Test Reports](#)

[GR Committee Reports](#)

[GR Current Students](#)

[GR Degree Reports](#)

[GR Enrollment Reports](#)

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[home](#) > [data solutions](#)

Data Solutions

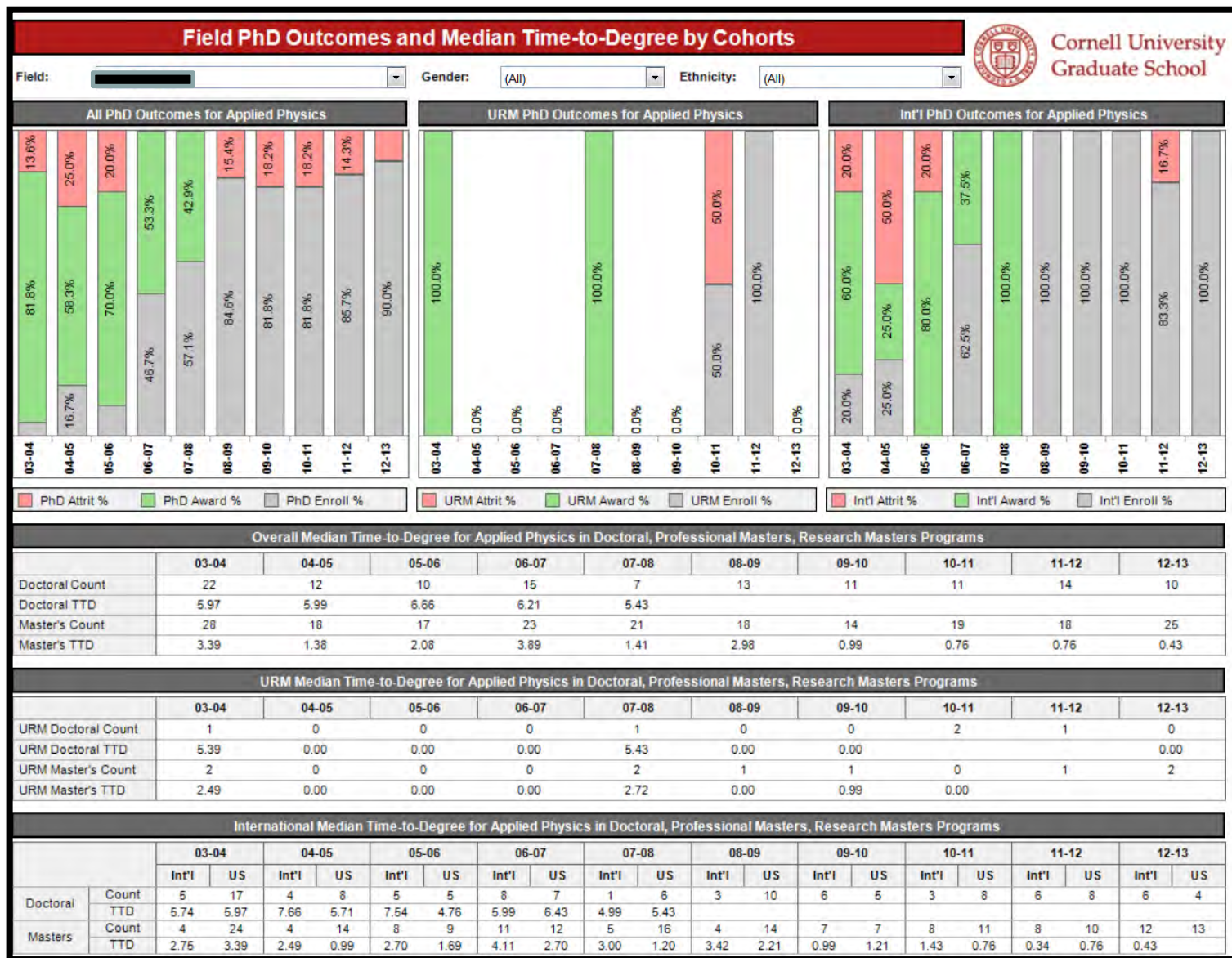
Welcome to the Data Solutions online report repository. Within these pages, you will find a variety of reports to assist you in your graduate student administration data needs. To find the data you need, simply visit the subject areas in the navigation menu to the left. The menu will continue to grow as we regularly add new and necessary reports to our repository. We suggest reading through the [Tips and Tricks](#) before running these reports; they will help you best use this tool. Please remember that you are often dealing with sensitive data and respect FERPA at all times. FERPA is the Family Educational Rights and Privacy Act, and affords students certain rights with respect to their education record. For more information on FERPA and the university, please refer to the following websites:

- › [Policy 4.5 - Access to Student Information](#)
- › [Student Record Privacy Statement: Annual Notification Under FERPA](#)

If for some reason you do not find the necessary information you seek, do not hesitate to submit a ticket to our [data request ticketing system](#). A link can also be found to your left under "Data Request".

PhD Outcomes & Time-to-Degree: by Field or Discipline, Gender, Ethnicity, Citizenship

(Private Version)



Power of Interactive Charts – Identify Trends

THE WALL STREET JOURNAL.

U.S. EDITION + Friday, May 17, 2013 As of 9:27 AM EDT

Home World U.S. New York Business Tech Markets Market Data Opinion

CIO Journal.

CIO Report | Consumerization | Big Data | Cloud | Talent & Management | Security

July 5, 2012, 5:11 PM ET

Cornell Graduate School Harnesses Data Visualization

Article

Comments (2)

Email Print



Font size controls (A A)



Joel Schectman
Reporter

As federal grants for advanced study become harder to get, leaders at Cornell University Graduate School wants to help doctoral students earn their degrees more quickly. They view data visualization as a key tool in that effort.

The move comes as cuts to federal grants for advanced study make the often drawn-out path to a doctorate degree increasingly untenable. The software Tableau will allow

PhD Attrition & Completion: by Field or Discipline, Gender, (Private Version) Ethnicity, Citizenship



Cornell University
Graduate School

Field Assessment in PhD Attrition and Completion Rates by Percent or Count

Field: Gender: (All) Ethnicity: (All) Comp / Att by Number

All Doctoral Attrition for Economics

	Cohort Count	1 Year Attrit	2 Year Attrit	3 Year Attrit	4 Year Attrit	5 Year Attrit	6 Year Attrit	6 + Attrit
03-04	31	0.0	3.0	2.0	0.0	0.0	1.0	0.0
04-05	22	2.0	2.0	0.0	0.0	1.0	0.0	0.0
05-06	13	2.0	0.0	0.0	0.0	0.0	0.0	0.0
06-07	22	1.0	0.0	1.0	0.0	1.0	0.0	0.0
07-08	22	1.0	1.0	0.0	1.0	0.0	0.0	
08-09	16	1.0	0.0	4.0	1.0	0.0		
09-10	20	0.0	2.0	0.0	1.0			
10-11	17	0.0	1.0	1.0				
11-12	31	2.0	2.0					
12-13	30	0.0						

All Doctoral Completion for Economics

	Cohort Count	1-3 Yr Comp	4 Year Comp	5 Year Comp	6 Year Comp	7 Year Comp	8 Year Comp	8 + Comp
03-04	31	0.0	3.0	5.0	10.0	4.0	2.0	0.0
04-05	22	1.0	0.0	5.0	4.0	3.0	2.0	0.0
05-06	13	0.0	0.0	3.0	6.0	2.0	0.0	
06-07	22	0.0	1.0	5.0	11.0	1.0		
07-08	22	0.0	1.0	7.0	0.0			
08-09	16	0.0	1.0	0.0				
09-10	20	0.0	1.0					
10-11	17	0.0						
11-12	31	0.0						
12-13	30	0.0						

Totals

	PhD Attrit %	PhD Award %	PhD Enroll %
03-04	19.4%	77.4%	3.2%
04-05	22.7%	68.2%	9.1%
05-06	15.4%	84.6%	0.0%
06-07	13.6%	81.8%	4.5%
07-08	13.6%	36.4%	50.0%
08-09	37.5%	6.3%	56.3%
09-10	15.0%	5.0%	80.0%
10-11	11.8%	0.0%	88.2%
11-12	12.9%	0.0%	87.1%
12-13	0.0%	0.0%	100.0%

URM Doctoral Attrition for Economics

	URM Count	1 Year Attrit	2 Year Attrit	3 Year Attrit	4 Year Attrit	5 Year Attrit	6 Year Attrit	6 + Attrit
03-04	3	0.0	2.0	0.0	0.0	0.0	0.0	0.0
04-05	1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
05-06	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06-07	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07-08	0	0.0	0.0	0.0	0.0	0.0	0.0	

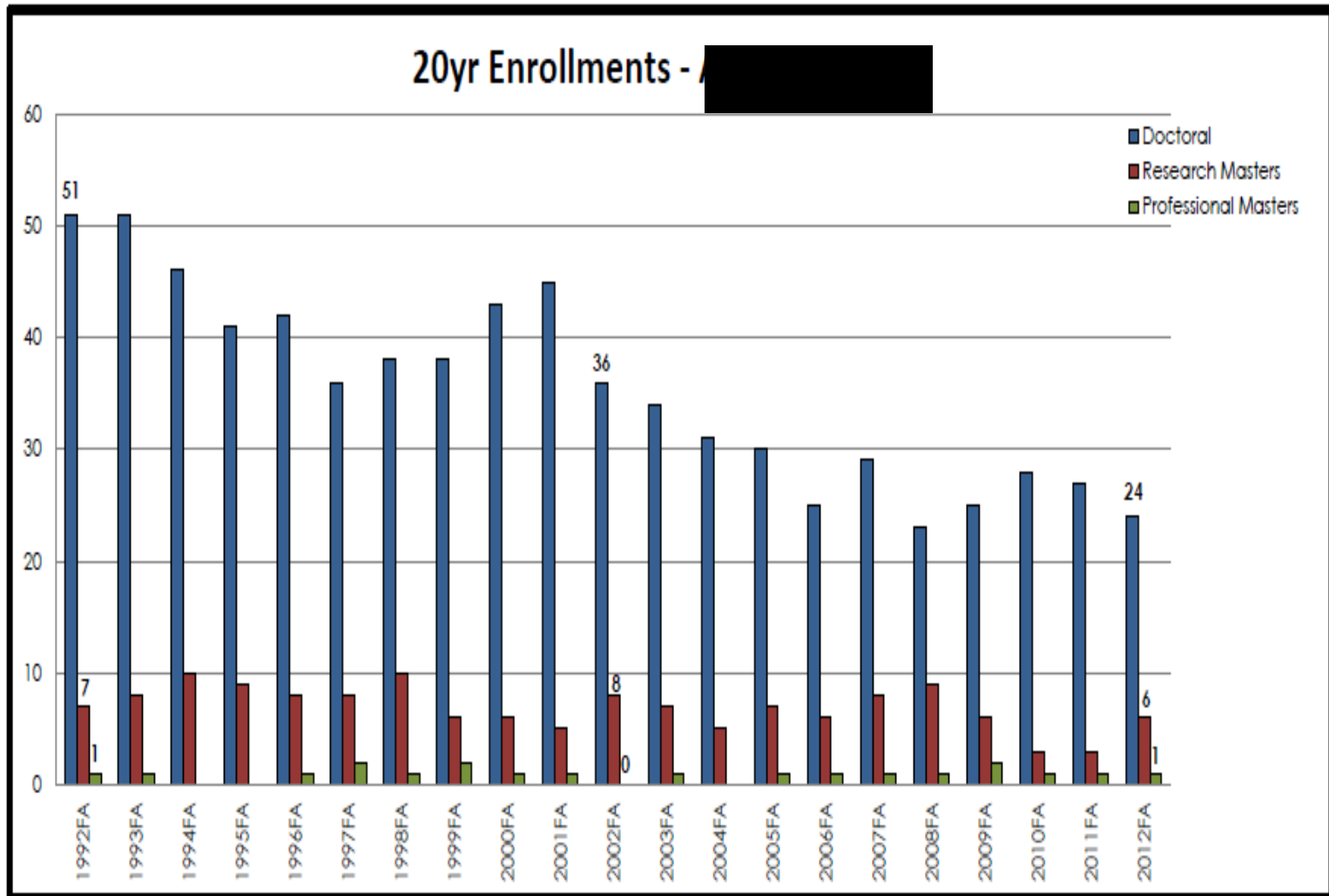
URM Doctoral Completion for Economics

	URM Count	1-3 Yr Comp	4 Year Comp	5 Year Comp	6 Year Comp	7 Year Comp	8 Year Comp	8 + Comp
03-04	3	0.0	0.0	0.0	0.0	0.0	1.0	1.0
04-05	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05-06	0	0.0	0.0	0.0	0.0	0.0	0.0	
06-07	1	0.0	0.0	0.0	1.0	0.0		
07-08	0	0.0	0.0	0.0	0.0			

URM Totals

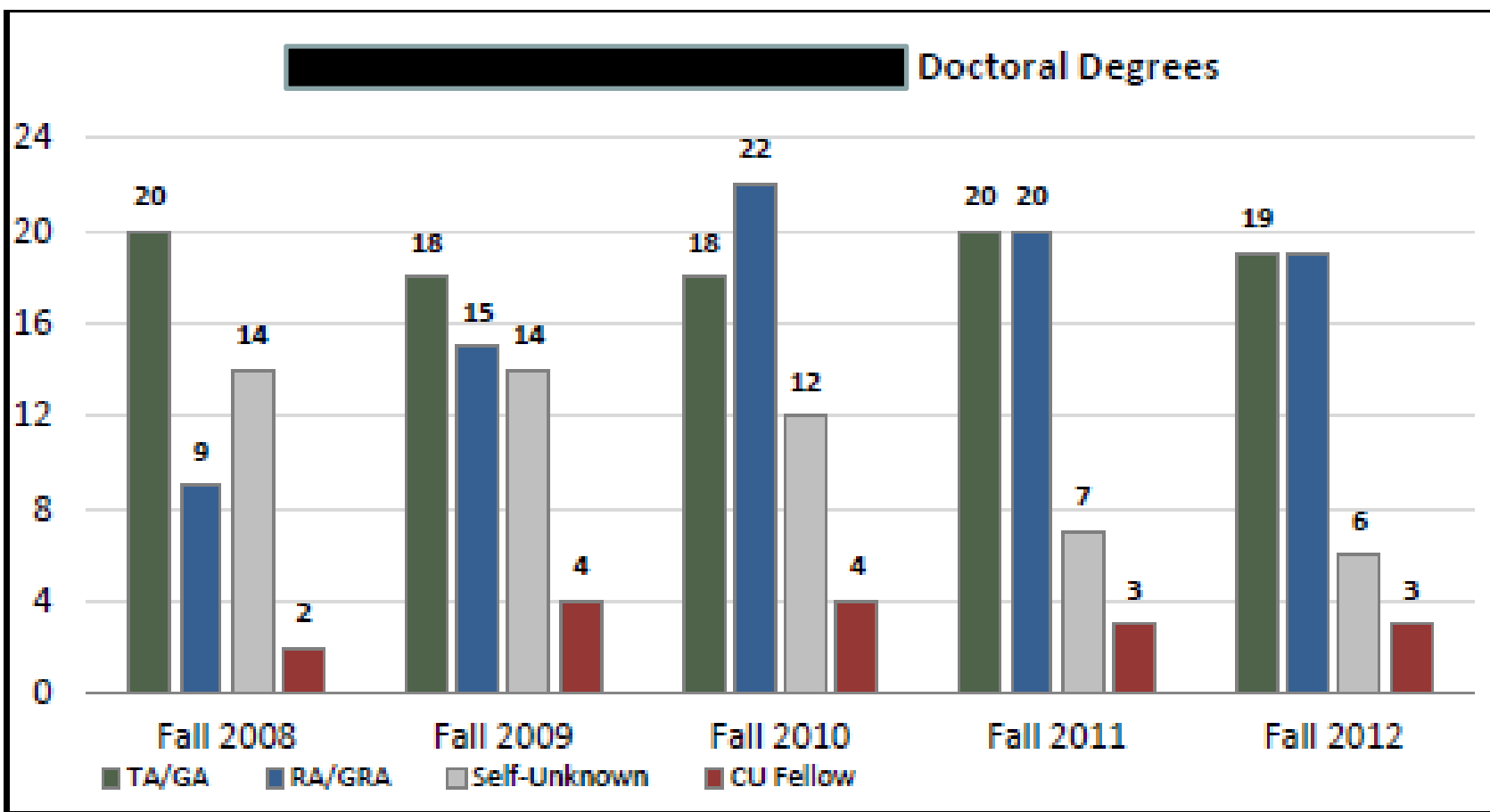
	URM Attrit %	URM Award %	URM Enroll %
03-04	66.7%	33.3%	0.0%
04-05	100.0%	0.0%	0.0%
05-06	0.0%	0.0%	0.0%
06-07	0.0%	100.0%	0.0%
07-08	0.0%	0.0%	0.0%

Enrollment Trends by Field and Degrees



Graduate Student Funding Trends

Five-year Financial Support Overview



Admissions Selectivity & Yield: By Field & Discipline, Degree, Gender, Ethnicity, Citizenship

(Private Version)



Student Progress on Exams: By Field or Discipline, Degree, Gender, Ethnicity, Citizenship, Registration Status, Exam, Year, Timing

University
Tool
Milestone Exam Details by Graduate Student

Field Description
[Dropdown]

Registered Student
[Dropdown: (All)]

Gender
[Dropdown: (All)]

URM Status
[Dropdown: (All)]

Exam Status
[Dropdown: Passed]

Degree Type
[Dropdown: Doctoral]

Milestone

- (All)
- AEXAM
- BEXAM
- MEXAM

Bench Mark

- (All)
- Behind Schedule
- Within Schedule

Admit Year

- (All)
- 99-00
- 98-99
- 97-98
- 96-97

Bench Ma

- Behin
- Withi

Student Name	Admit Term	Degree Plan	Milestone	Attempt Nbr	Date Attempted	Milestone Complete	
[Redacted]	1996FA	PHD	AEXAM	1	10/9/1998	Passed	✓
			BEXAM	1	11/9/2001	Passed	✓
[Redacted]	1999FA	PHD	AEXAM	1	3/4/2002	Passed	✓
			BEXAM	1	6/10/2004	Passed	✓
[Redacted]	2007FA	PHD	AEXAM	1	9/3/2009	Passed	✓
			BEXAM	1	4/23/2013	Passed	✓
[Redacted]	2002FA	PHD	AEXAM	1	11/15/2004	Passed	✓
			BEXAM	1	9/8/2009	Passed	✗
[Redacted]	2007FA	PHD	AEXAM	1	1/16/2009	Passed	✓
			BEXAM	1	9/7/2011	Passed	✓
[Redacted]	1999FA	PHD	AEXAM	1	3/14/2002	Passed	✓
			BEXAM	1	11/30/2005	Passed	✓
[Redacted]	1998FA	PHD	AEXAM	2	12/7/2000	Passed	✓
			BEXAM	1	12/17/2003	Passed	✓
[Redacted]	1994FA	PHD	AEXAM	1	3/5/1998	Passed	✗
			BEXAM	1	11/10/2000	Passed	✓
[Redacted]	2010FA	PHD	AEXAM	1	11/6/2012	Passed	✓
[Redacted]	1991FA	PHD	AEXAM	1	7/30/1993	Passed	✓
[Redacted]	1991FA	PHD	AEXAM	1	5/4/1994	Passed	✓
[Redacted]	1990FA	PHD	AEXAM	1	11/30/1995	Passed	✗
[Redacted]	2001FA	PHD	AEXAM	1	11/18/2004	Passed	✗
			BEXAM	1	6/12/2007	Passed	✓
[Redacted]	2005FA	PHD	AEXAM	1	11/20/2007	Passed	✓
			BEXAM	1	8/30/2011	Passed	✓
[Redacted]	2003FA	PHD	AEXAM	1	11/30/2005	Passed	✓
			BEXAM	1	10/1/2010	Passed	✗
[Redacted]	1997FA	PHD	AEXAM	1	8/6/2001	Passed	✗
			BEXAM	1	5/15/2003	Passed	✓
[Redacted]	2004FA	PHD	AEXAM	1	10/26/2006	Passed	✓
			BEXAM	1	8/12/2011	Passed	✓

Median Time to Exam by Citizenship

	AEXAM	BEXAM
Intr'l	5.5	5.5
US	5.5	6.1

Student Count by Citizenship

	AEXAM	BEXAM
Intr'l	63	37
US	185	112

Median Time to Exam by Gender

	AEXAM	BEXAM
F	5.0	5.8
M	6.0	6.0

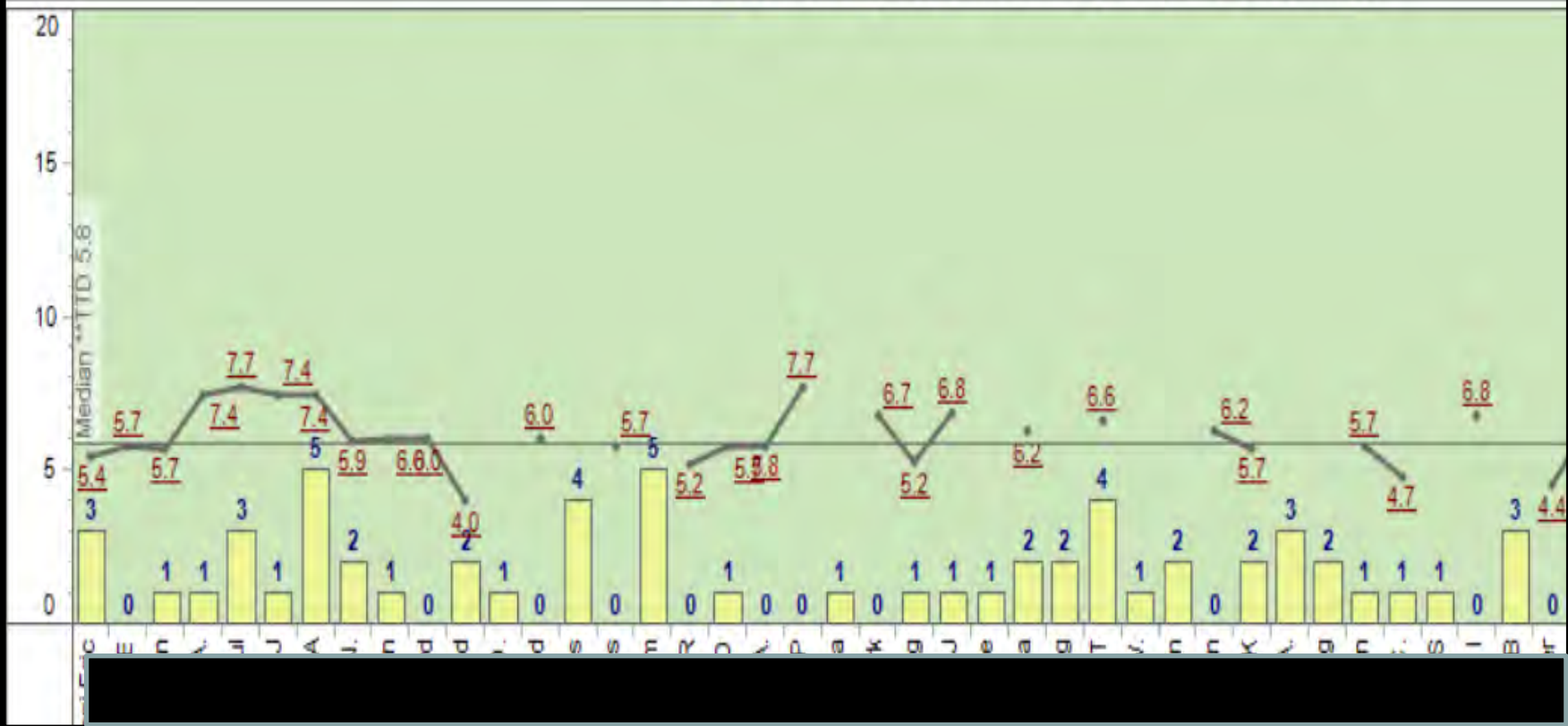
Time-to-Degree by Faculty Advisor: By Field or Discipline, Degree

(Private Version)

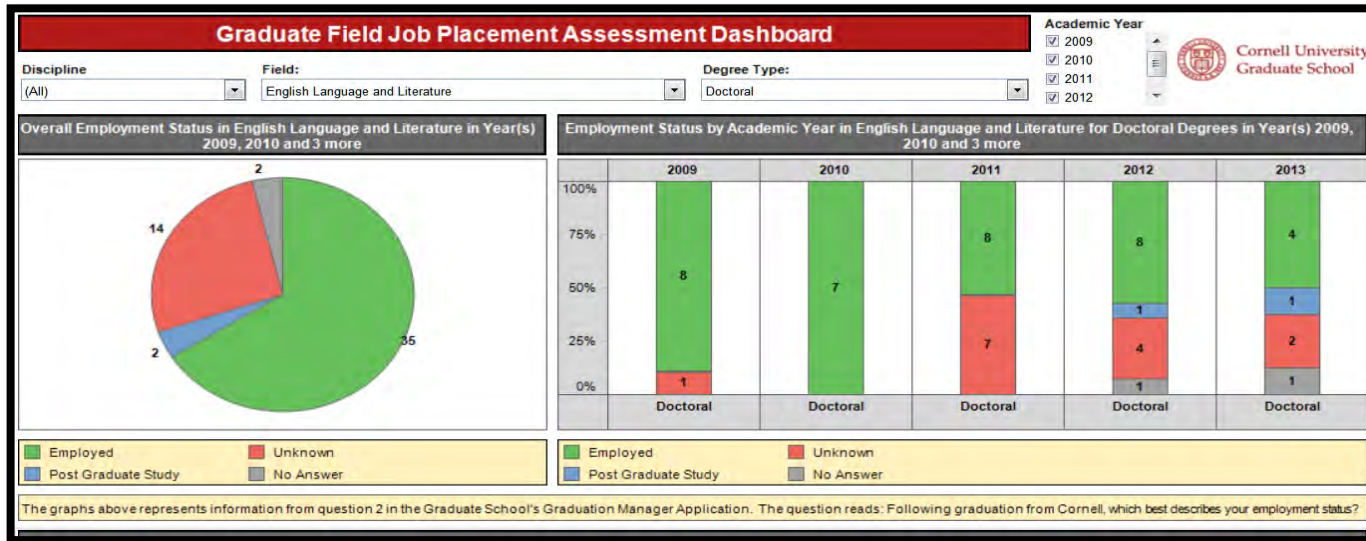
Median Time To Degree Over 10 Years w/ Current Students by Faculty Chairperson

Discipline:
 Field:
 Degree Type:

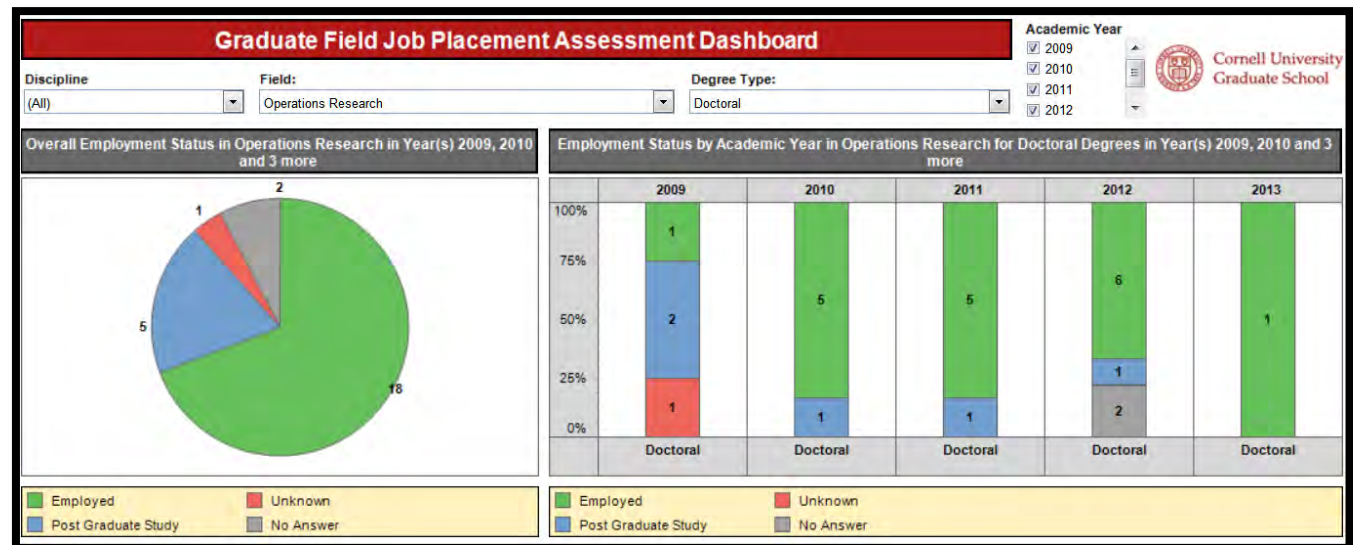
Faculty Time to Degree for Biochemistry, Molecular & Cell Biology



Initial Job Placement: By Field or Discipline, Degree (Public and Private Versions)



English Language & Literature



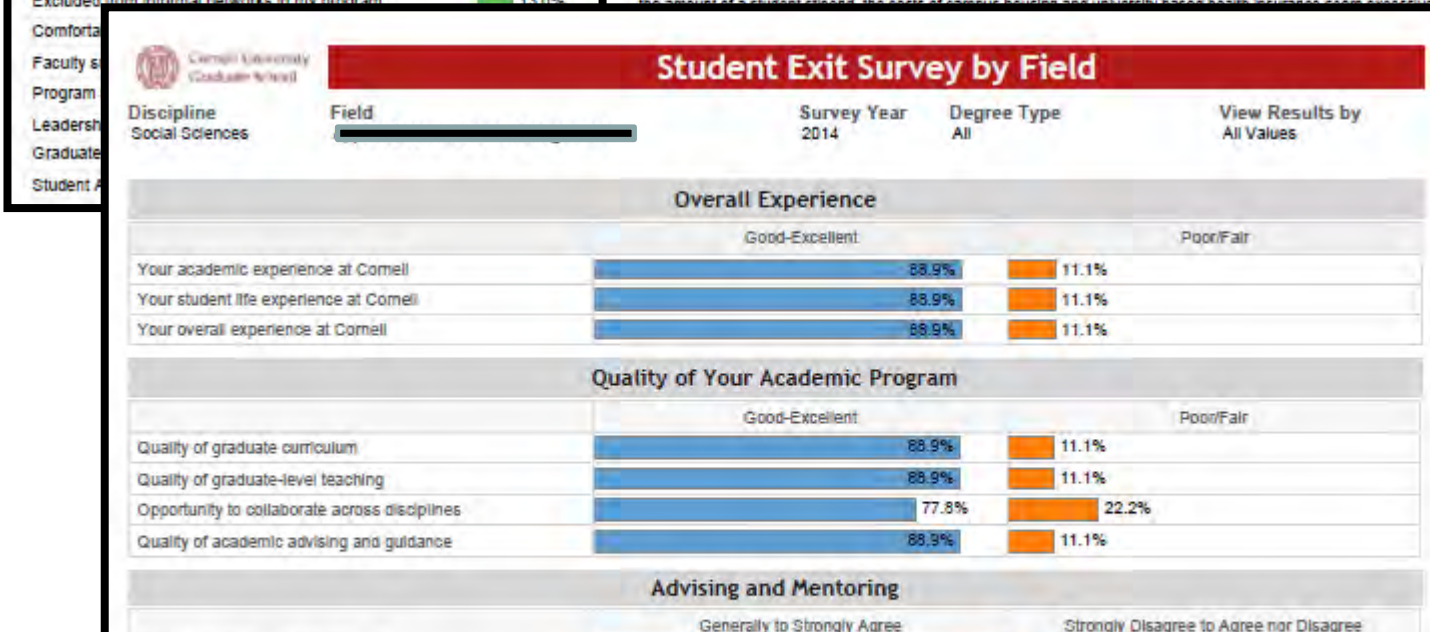
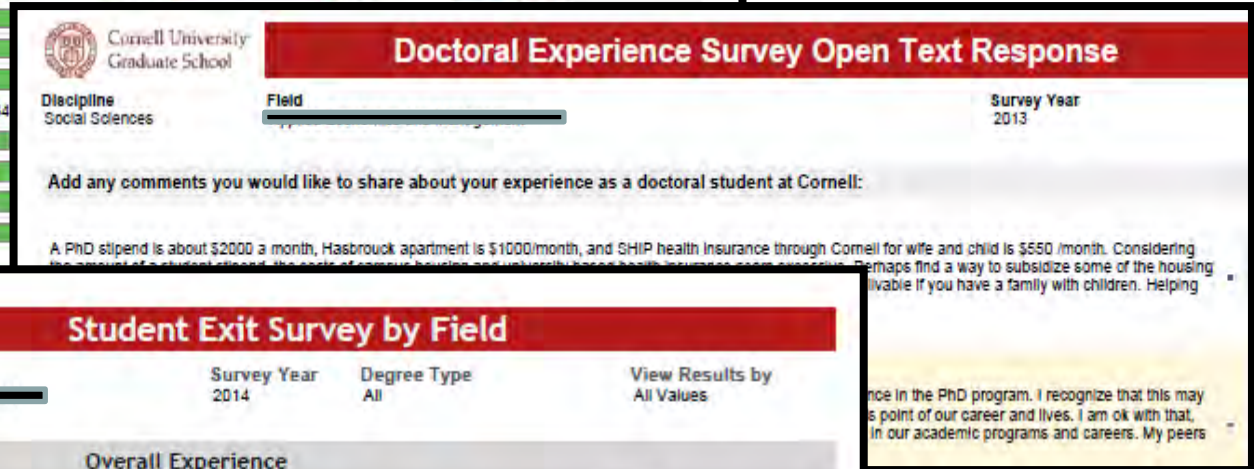
Operations Research

Career Outcomes: Planned Alumni Survey

- Doctoral alumni career outcomes surveys, starting in 2014 (2, 7, 15 years out).
- Complemented with social media for placement/career path information.
- Career path, reflections on value of graduate education for job.
- Perceptions of value of doctoral education for job entry currently.



Survey Dashboards: Public & Private Versions



Outcomes of Assessment: Field and Graduate School Conversations and Actions

home > professional development

print share







Professional Development

The Office of Inclusion and Professional Development and several of our partners including the [Office of Graduate Student Life](#), [CU-CIRTL](#), the [Center for Teaching Excellence](#), the [Office of Post Doctoral Studies](#), and [Career Services](#) offer professional development programs for graduate students and postdocs, designed to build core competencies and transferable skills in the following areas: Career Development, Leadership & Management, Teaching, Responsible Conduct of Research, and Personal Development.

For more information on the core competencies, click on any competency below.

- **Communication**
- **Career Development**
- **Leadership & Management**
- **Teaching**
- **Responsible Conduct of Research**
- **Personal Development**

Spring/Summer 2013 Program Schedule

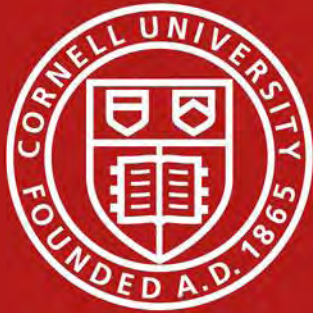
Core Competency 	Title of Program (click on title for more information)	Date and Time
	CV to Resume Seminar	January 31 12:00 - 1:00pm
	Preparing for a Career Fair Visit	February 12 12:00 - 1:00pm
	CIRTLCast: Service Learning in STEM Disciplines	February 19 11:45am - 1pm
	We're in This Together: Successful Dual Career Couples in Higher Education	March 6 12-1:30pm
	What is the Secret to Managing Time?	March 12 12-1:30pm
	Mentoring research at a primarily undergraduate institution	March 13 12pm - 2pm
		March 14

In Fields:

- Time-to-degree
- Timing of exams
- Requirements in relation to learning outcomes
- Advising quality
- Career planning
- Field mergers

In Graduate School:

- Programming to support Core Competencies
- Best practices
- Resource allocation decisions
- Campus partnerships
- External funding



Cornell University

Discussion Topics:

- Introductions in small groups: identify facilitator & reporter
- Local activities:
 - What doctoral program assessment activities are occurring on your campuses?
 - What decisions does assessment data inform?
- What issues would you consider to determine what assessment approaches would be relevant for your institution?
- What are the strengths and limitations of various assessment approaches?
- What is the role of faculty and graduate students in assessment?