Mathematical and Statistical Sciences Annual Survey

Sponsored by
AMS
ASA
IMS
MAA
SIAM

For office use only
_____ 20

American Mathematical Society
PO Box 6248 | Providence, RI 02940-6248
401.455.4124 (t)
401.331.6248 (f)
Email: ams-survey@ams.org

Survey of Doctorate Recipients (SDR)

July 1, 2019 – June 30, 2020

Conducted by American Mathematical Society

Contact Information:

First Name | Last Name | Today's Date

Doctoral Institution | Department/Program | City & State

Type of Research Doctoral Degree (e.g., PhD, Ed.D, etc.)

Email (please use an email address that is most likely to be active after your graduation.)

Dear PhD recipient,

Congratulations on receiving your doctorate!

On behalf of the sponsoring societies for the Mathematical and Statistical Sciences Annual Survey (AMS, ASA, IMS, MAA, and SIAM), we are writing to ask that you complete a brief questionnaire regarding your PhD degree, your experience completing it, and your career direction. Your department chair or other representative has forwarded this request to you on our behalf, and we ask that you return your completed questionnaire to him or her within the time frame mentioned below.

With the exception of your dissertation title, the data collected will be anonymized, and an aggregated analysis will be published in a report in *Notices of the American Mathematical Society*.

It is our hope that these reports will provide recognition of your achievements, valuable insights for other students in these programs, guidance for individuals contemplating careers based in mathematical and statistical training, and insight for those who guide and support graduate programs in the mathematical and statistical sciences.

Please complete the attached fillable pdf form and return it via email to your department contact no later than August 30, 2020. We are relying heavily on your initiative to help in making our report as comprehensive and authoritative as possible, so we hope you will respond in a timely fashion.

Please accept our thanks in advance for your willingness to participate. To underscore those thanks, if you complete the form by this date, we will enter you into a drawing for one of ten US$100 Amazon gift cards. The drawing will be held in December 2020.

If you have questions or concerns about this survey, you many contact us by email at: ams-survey@ams.org.

Again, congratulations on achieving the milestone of earning a PhD!

Best regards,
Amanda Golbeck, chair, AMS-ASA-IMS-MAA-SIAM Joint Data Committee
Tom Barr, AMS Special Projects Officer

Information about the Mathematical and Statistical Sciences Annual Survey of can be found at www.ams.org/annual-survey.

SECTION A: DEGREE INFORMATION

A1. When did you start this doctoral degree and when was the degree granted?

Month/year degree started: ____ Month ____ Year Month/year degree granted: ____ Month ____ Year

A2. What is the title of your dissertation?

_____

A3. Please write the name of the primary field of your dissertation research (see the list on page 4). _____

A4. Using the list on page 4, enter the two digit MR code that best describes the primary field of your dissertation. _____

A5. Who was your dissertation advisor:

Advisor 1 name: _____ Department and Institution*: _____

Advisor 2 name: _____ Department and Institution*: _____

* If different from doctoral-granting institution.

A6. During the completion of your degree, did you do any of the following (check all that apply):

1 ☐ Grading
2 ☐ Recitation sections
3 ☐ Full responsibility for teaching a section of a course
4 ☐ Research Assistant
5 ☐ Other _____
6 ☐ None

SECTION B: EMPLOYMENT INFORMATION

B1. Check the one that describes your employment status:

1 ☐ I am currently employed or have a job lined up to start by September 1, 2020.
2 ☐ Actively searching for a job
3 ☐ Primarily pursuing further education
4 ☐ Other; please specify: _____

If you answered 1 above, please provide the following information; otherwise go to Section C.

B2. Please provide the following information (please use the full organization name and avoid acronyms):

Job title: _____

Department: _____

Name of the company/organization/institution:

_____

Geographic location (City & state/country): _____

B3. Employment status:

1 ☐ Full-time (35+ hrs/week or equivalent)
2 ☐ Part-time (Less than 35 hrs/week)

B4. Which of the following ranges best describes the maximum duration of your current employment?

1 ☐ 0–1 year
2 ☐ 1–2 years
3 ☐ 2–3 year
4 ☐ more than three years, but time limited
5 ☐ Continuing/renewable

B5. Is your job

1 ☐ An academic postdoc*
2 ☐ A government or industry postdoc*
3 ☐ Neither of the above

** A postdoctoral appointment is an academic position for a term of one to three years primarily intended to provide an opportunity to extend graduate training or to further research experience.*

B6. If you are employed in a post-secondary academic institution, indicate which of the following best describes the category of your job:

1 ☐ Tenured-track/tenured faculty
2 ☐ Renewable but not tenure eligible
3 ☐ Academic staff
4 ☐ Other (specify) _____

B7. Which of the following work activities constitute a significant portion of your primary employment?

(Please check all that apply)

1 ☐ Teaching
2 ☐ Research
3 ☐ Customer/client services
4 ☐ Individual-effort technical (e.g., programming) work
5 ☐ Team-based technical work
6 ☐ Management or administration
7 ☐ Other; please specify: _____

B8. How many years of full-time employment in the mathematical sciences or related fields have you had prior to your current work?

(Do not count time as a graduate assistant or research assistant.)

Number of years ☐ (round to whole years; may be zero)

B9. Which of the following categories best describes your employer?

1 ☐ Academic institution; please choose one:

- 1.1 ◯ Four-year college or university
- 1.2 ◯ Two-year college or university
- 1.3 ◯ Elementary/secondary school or system
- 1.4 ◯ Other; please specify: _____

2 ☐ Research institute or other not-for-profit;

3 ☐ Government; please choose one:

- 3.1 ◯ Federal
- 3.2 ◯ State/Local
- 3.3 ◯ Other; please specify: _____

4 ☐ Business/Industry; please choose one:

- 4.1 ◯ Financial Services (including banking & insurance)
- 4.2 ◯ Business Services (including engineering, technology, consulting services)
- 4.3 ◯ Aerospace/Defense
- 4.4 ◯ Energy
- 4.5 ◯ Software
- 4.6 ◯ Health care
- 4.7 ◯ Pharmaceutical & Medical Devices
- 4.8 ◯ Biotechnology
- 4.9 ◯ Survey/Market Research
- 4.10 ◯ Communications (TV, radio, telecom, internet-Google, Yahoo, Facebook)
- 4.11 ◯ Consumer Merchandising (ebay, Amazon, Walmart, Target)
- 4.12 ◯ Self-employed; please specify: _____
- 4.13 ◯ Other; please specify: _____

B10. What will your basic annual salary be for this job? (Used to calculate starting salaries. This data will be treated as strictly confidential; only statistical summaries of these will be published.)

US$_____. 00 *(preferred)*

If you prefer not to report an exact amount, please indicate into which range your current or expected salary falls?

1 ☐	$40,000 or less	11 ☐	$130,001 - $140,000
2 ☐	$40,001 - $50,000	12 ☐	$140,001 - $150,000
3 ☐	$50,001 - $60,000	13 ☐	$150,001 - $160,000
4 ☐	$60,001 - $70,000	14 ☐	$160,001 - $170,000
5 ☐	$70,001 - $80,000	15 ☐	$170,001 - $180,000
6 ☐	$80,001 - $90,000	16 ☐	$180,001 - $190,000
7 ☐	$90,001 - $100,000	17 ☐	$190,001 - $200,000
8 ☐	$100,001 - $110,000	18 ☐	$200,001 - $210,000
9 ☐	$110,001 - $120,000	19 ☐	$210,001or more
10 ☐	$120,001 - $130,000	20 ☐	Don't know

B11. Are you currently actively looking for another job?

1 ☐ Yes 2 ☐ No

SECTION C: BACKGROUND INFORMATION

This data will be treated as strictly confidential; only statistical summaries of these will be published.

C1. What is your gender identity?

1 ☐ Woman 2 ☐ Man 3 ☐ Non-binary

C2. What is your citizenship status?

1 ☐ US Citizen
2 ☐ Non-US Citizen with permanent resident US Visa
3 ☐ Non-US Citizen with temporary US Visa

C3. If a non-US citizen, of which country are you a citizen?

_____

C4. What is your Ethnicity?

1 ☐ Hispanic or Latino
2 ☐ Not Hispanic or Latino

C5. What is your racial background (check all that apply)?

1 American Indian or Alaskan Native
2 Asian
3 Black or African American
4 Native Hawaiian or other Pacific Islander
5 White
6 Other (specify) _____

C6. What was your age when you received this PhD? _____

Please enter any comments you wish to provide in the space below:

Thank you for completing this questionnaire.

Return completed survey to department contact.

Field of Thesis Groupings

Dissertations are grouped by using the Mathematical Reviews (MR) 2020 Mathematics Subject Classifications. The fields of study below should be used in responding to item A3 on page 2. Please choose the MR code which best describes your field of thesis.

(1-ALG) ALGEBRA/NUMBER THEORY

06 Order, lattices, ordered algebraic structures
08 General algebraic systems
11 Number theory
12 Field theory and polynomials
13 Commutative algebras
14 Algebraic geometry
15 Linear and multilinear algebra; matrix theory
16 Associative rings and algebras
17 Nonassociative rings and algebras
18 Category theory, homological algebra
19 K-theory
20 Group theory and generalizations

(2-ANAL) REAL, COMPLEX, FUNCTIONAL, HARMONIC ANALYSIS (AND TOPOLOGICAL GROUPS)

22 Topological groups, Lie groups
26 Real functions
28 Measure and integration
30 Functions of a complex variable
31 Potential theory
32 Several complex variables and analytic spaces
33 Special functions
40 Sequences, series, summability
42 Harmonic analysis on Euclidean spaces
43 Abstract harmonic analysis
44 Integral transforms, operational calculus
46 Functional analysis
47 Operator theory

(3-GEOM) GEOMETRY/TOPOLOGY

51 Geometry
52 Convex sets and discrete geometry
53 Differential geometry
54 General topology
55 Algebraic topology
57 Manifolds and cell complexes
58 Global analysis, analysis on manifolds

(4-DISC) DISCRETE MATH/COMBINATORICS/LOGIC/COMPUTER SCIENCE

03 Mathematical logic and foundations
05 Combinatorics
68 Computer science

(5-PROB) PROBABILITY

60 Probability theory and stochastic processes

(6-STAT) BIOSTATISTICS/STATISTICS

61 Biostatistics (Annual Survey of new PhDs only)
62 Statistics

(7-APPL) APPLIED MATHEMATICS

70 Mechanics of particles and systems
74 Mechanics of deformable solids
76 Fluid mechanics
78 Optics, electromagnetic theory
79 Mathematical Physics, physical applications
80 Classical thermodynamics, heat transfer
81 Quantum theory
82 Statistical mechanics, structure of matter
83 Relativity and gravitational theory
85 Astronomy and astrophysics
86 Geophysics
90 Operations research, mathematical programming
91 Game theory, economics, social, and behavioral sciences
92 Biology and other natural sciences, behavioral sciences
94 Information and communications, circuits

(8-NUM) NUMERICAL ANALYSIS/APPROXIMATIONS

41 Approximations and expansions
65 Numerical analysis

(9-OPT) LINEAR, NON-LINEAR OPTIMIZATION/CONTROL

49 Calculus of variations and optimal control; optimization
93 Systems theory; control

(10-EQUA) DIFFERENTIAL, INTEGRAL, DIFFERENCE EQUATIONS

34 Ordinary differential equations
35 Partial differential equations
37 Dynamical systems and ergodic theory
39 Differences and functional equations
45 Integral equations

(11-EDUC) MATHEMATICS EDUCATION

97 Mathematics Education

(12-OTH) OTHER/UNKNOWN

00 General and overarching topics, collections
01 History and biography