

#### **OUR RESIDENCY RESEARCH METHODOLOGY**

Doximity's Residency Navigator is a tool built to help medical students make informed residency decisions and to increase transparency in the residency match process.

Residency Navigator is comprised of three major parts - (1) current residents' satisfaction survey, (2) reputation data, and (3) objective data. The residents' satisfaction survey is derived from survey responses from each residency's current residents and recent graduates. As of August 2015, there were over 16,000 unique respondents to the satisfaction survey. Reputation data is derived from peer nominations from over 30,000 board-certified physicians. Objective data is compiled from a variety of public sources as well as our proprietary Doximity database, which covers all U.S. physicians, regardless of membership with Doximity.

Search results on the public site are limited to 20 results. Doximity members also have access to additional search parameters and measures such as program size, demographics (see search page data and program page data below). From the search page, members can generate a customized list of programs that best suits their preferences and needs by selecting the parameters that are most important to them. In addition, members can get detailed information by accessing individual residency program pages.

The following document provides a detailed overview of the definition, source, and data methodology used in the Residency Navigator.

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## **ABOUT DOXIMITY**

Doximity is the largest online professional network for U.S. physicians. Its comprehensive physician database includes every United States physician as identified by National Provider Identifier (NPI) number. Physician information was compiled from hundreds of sources including the United States Department of Health and Human Services NPI Registry, state medical boards, and specialty boards (e.g., American Board of Medical Specialties, American Board of Surgery). Doximity's proprietary database is additionally bolstered by more than 500,000 registered and verified physician members who review and update their profiles to provide another set of primary data.

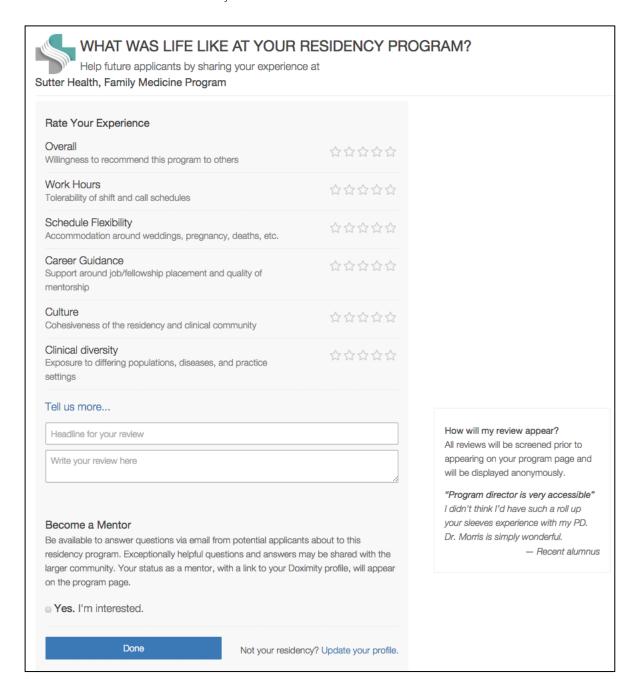
## **RESIDENTS' SATISFACTION SURVEY**

All physician members who were current residents or recent graduates of U.S. residency programs were surveyed beginning June 2015. The survey is still ongoing: interested residents and recent residency graduates are encouraged to contribute responses about their experience through October 2015.

Eligible physicians met the following criteria:

- Graduated from medical school within the past 15 years
- Either completed residency or were currently in residency for the following specialties:
  - o Anatomic & Clinical Pathology
  - Anesthesiology
  - o Child Neurology
  - Dermatology
  - Diagnostic Radiology
  - o Emergency Medicine
  - o Family Medicine
  - Internal Medicine
  - Medical Genetics
  - Neurological Surgery
  - Neurology
  - o Nuclear Medicine
  - Obstetrics & Gynecology
  - Ophthalmology
  - o Orthopedic Surgery
  - Otolaryngology
  - Pediatrics
  - o Physical Medicine & Rehabilitation
  - Plastic Surgery
  - Preventative Medicine
  - Psychiatry
  - Radiation Oncology
  - Surgery
  - Thoracic Surgery
  - Urology
  - Vascular Surgery

A screenshot of the Satisfaction Survey instrument is below:



#### MEASUREMENT OF RESEARCH OUTPUT

Profile data of all U.S. physicians, regardless of membership with Doximity, were used to calculate research output score for each residency program's recent alumni base. This score was calculated from a combination of the collective h-index of publications authored by alumni graduating within the past 15 years, as well as research grants awarded. Each program's research output was then compared to all other programs within the same specialty to create a percentile score.

## REPUTATION DATA AMONG BOARD CERTIFIED PHYSICIANS

The 2015 survey for peer nominations across 22 specialties was conducted from June to August 2015. Surveyed specialties were limited to those that participated in Electronic Residency Application Service (ERAS).

Design for the survey was modeled, with permission, on the annual physician survey that is a component of U.S. News & World Report's Best Hospitals rankings. U.S. News editors also provided informal input into the design of the survey.

Eligible physicians who were Doximity members were prompted to submit peer nominations when they signed in to the Doximity website or via email. Eligible physicians who were not Doximity members were also able to share their nominations by registering and verifying with Doximity before the end of the survey period.

Eligibility to participate in the survey was determined by a physician's board certification (see table below):

PROGRAM	BOARD	SPECIALTY
Anatomic & Clinical Pathology	American Board of Pathology	Anatomic & Clinical Pathology
Anesthesiology	American Board of Anesthesiology	Anesthesiology
Child Neurology	American Board of Psychiatry and Neurology	Child Neurology
Dermatology	American Board of Dermatology	Dermatology
Diagnostic Radiology	American Board of Radiology	Diagnostic Radiology
Emergency Medicine	American Board of Emergency Medicine	Emergency Medicine
Family Medicine	American Board of Family Medicine	Family Medicine
Internal Medicine	American Board of Internal Medicine	Internal Medicine
Neurological Surgery	American Board of Neurological Surgery	Neurological Surgery
Neurology	American Board of Psychiatry and Neurology	Neurology
Nuclear Medicine	American Board of Nuclear Medicine	Nuclear Medicine
Obstetrics & Gynecology	American Board of Obstetrics and Gynecology	Obstetrics & Gynecology
Ophthalmology	American Board of Ophthalmology	Ophthalmology
Orthopedic Surgery	American Board of Orthopedic Surgery	Orthopedic Surgery
Otolaryngology	American Board of Otolaryngology	Otolaryngology
Pediatrics	American Board of Pediatrics	Pediatrics
Physical Medicine & Rehabilitation	American Board of Physical Medicine and Rehabilitation	Physical Medicine & Rehabilitation
Plastic Surgery	American Board of Plastic Surgery	Plastic Surgery
Psychiatry	American Board of Psychiatry and Neurology	Psychiatry
Radiation Oncology	American Board of Radiology	Radiation Oncology
Surgery	American Board of Surgery	Surgery
Urology	American Board of Urology	Urology

Each physician could nominate up to 5 residency programs using a survey instrument similar to the one below:

OPHTHALMOLOGY  Please nominate up to 5 Ophthalmology residency programs that offer the best clinical training. Do not consider geography. All nominations will receive the same weight, regardless of the order in which you list them.		
	University of Colorado, Aurora, CO	
	University of Minnesota, Minneapolis, MN	
	University of Utah, Salt Lake City, UT	
	University of Chicago, Chicago, IL	
	University of Maryland, Baltimore, MD	
	University of Missouri-Columbia. Columbia. MO Program D:	
	Program name, City, State	

30,163 verified, board-certified physicians participated in the peer nomination process. The results of the 2015 reputation survey were pooled with those of the 2014 survey such that only the most recent (2015) responses were counted for physicians that responded to both years.

To account for "self-votes", raw votes were divided into alumni-votes and non-alumni votes. Alumni votes were weighted according to the % of the eligible physician population that a particular program accounts for within that specialty (number of alumni divided by total eligible within the specialty).

## PROGRAM PAGE DATA

An example program page is below. These pages are available to signed-in users only.



The following section provides further explanation of the main data listed on the program page not explained on the page itself. Unless otherwise specified, objective data derived from the Doximity database covers all physicians, regardless of Doximity membership status.

- TOP SUBSPECIALTIES BY ALUMNI Data is derived from Doximity physician profile data of alumni who graduated within the past 10 years, taking into account current subspecialty, board certification, and fellowship data. The most common subspecialties for alumni following their residency are displayed. Any discrepancy between the overall percentage who subspecialize and the aggregate top subspecialty percentages is because physicians may have more than one subspecialty.
- BOARD PASS RATES Data is self-reported and published by individual boards for the specialties of
  Internal Medicine, Family Medicine, General Surgery and Pediatrics, but has not yet been released by
  other specialty boards. For specialties whose boards have not released board pass rate data,
  PERCENT BOARD CERTIFIED was calculated, measuring presence of an ABMS board certification for
  alumni who graduated between 2005 and 2014.
- ALUMNI PUBLICATION PERCENTILE AND ALUMNI CLINICAL TRIAL PERCENTILE Data is
  derived from the Doximity profile data of alumni who graduated within the past 15 years. If a program is
  in the 98th percentile for alumni publications, then only 2% of residency programs in that specialty have
  a higher research score.
- SATISFACTION RATINGS AND REVIEWS Data is derived from the responses of verified physician members who are current residents or recent alumni of the particular program. Responses are anonymized before publication. Published data reflects the 6 questions and 1 free text review prompts of the Satisfaction Survey instrument:
  - o Overall satisfaction: Willingness to recommend this program to others
  - Work hours: Tolerability of shift and call schedules
  - o Schedule flexibility: Accommodation for weddings, pregnancy, deaths, etc.
  - o Career guidance: Support around job/fellowship placement; quality of mentorship
  - o Culture: Cohesiveness of the residency and clinical community
  - o Surgical volume (Surgical residencies): Adequacy of surgical case load
  - Clinical diversity (Non-surgical residencies): Exposure to differing populations, diseases, and practice settings
- **FEEDER MEDICAL SCHOOLS** Data is derived from Doximity user profile data of alumni who graduated within the past 10 years. The most common medical schools among the alumni of a given residency are displayed.
- **ALUMNI METRO AREAS** Data is derived from Doximity user profile data of alumni who graduated within the past 10 years. Metro areas are as defined by the US Census Bureau.
- ALUMNI LOCATIONS (MAP) Data is derived from Doximity user profile data. When an alumni
  population is significantly large, a subset of profiles will be displayed.

## MARKETING USAGE

Public search results may be announced and used in marketing materials by residency institutions.

The correct attribution for the data is "research conducted by the physician network Doximity" and the best URL to share is www.doximity.com/residency. U.S. News & World Report assisted with Doximity on the research, but these residency rankings **are not** official U.S. News & World Report rankings. Programs can receive assistance with their press outreach by emailing pr@doximity.com.

## 2015-2016 DATES OF INTEREST

The data supporting Residency Navigator will be updated twice a year.

- October 2015: Satisfaction survey will remain open until at least October 2015 and will be refreshed monthly between the months of August and December.
- December 2015: Doximity will refresh all data related to the individual program page in preparation for increased website traffic coinciding with student preparation for their 2016 rank list submissions.
   Reputation order published in August 2015 will not be changed.
- Spring 2016: The alumni satisfaction survey will be distributed again in the Spring 2016.
- Summer 2016: Doximity will refresh all data in preparation for September application season.

Updated August 2015