# What explains faculty use of Center for Clinical and Translational Science (CCTS) services?

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## University of Illinois at Chicago Center for Clinical and Translational Science (CCTS)

#### INTRODUCTION

Although designed as a resource to support all investigators interested in conducting translational research, there is currently little knowledge regarding those faculty characteristics that are associated in practice with the utilization of university-based translational research services. As part of our effort to better understand the role that the Center for Clinical and Translational Science (CCTS) plays in supporting research at the University of Illinois at Chicago (UIC), we conducted an analysis of recently collected survey data as a first step in addressing this issue.

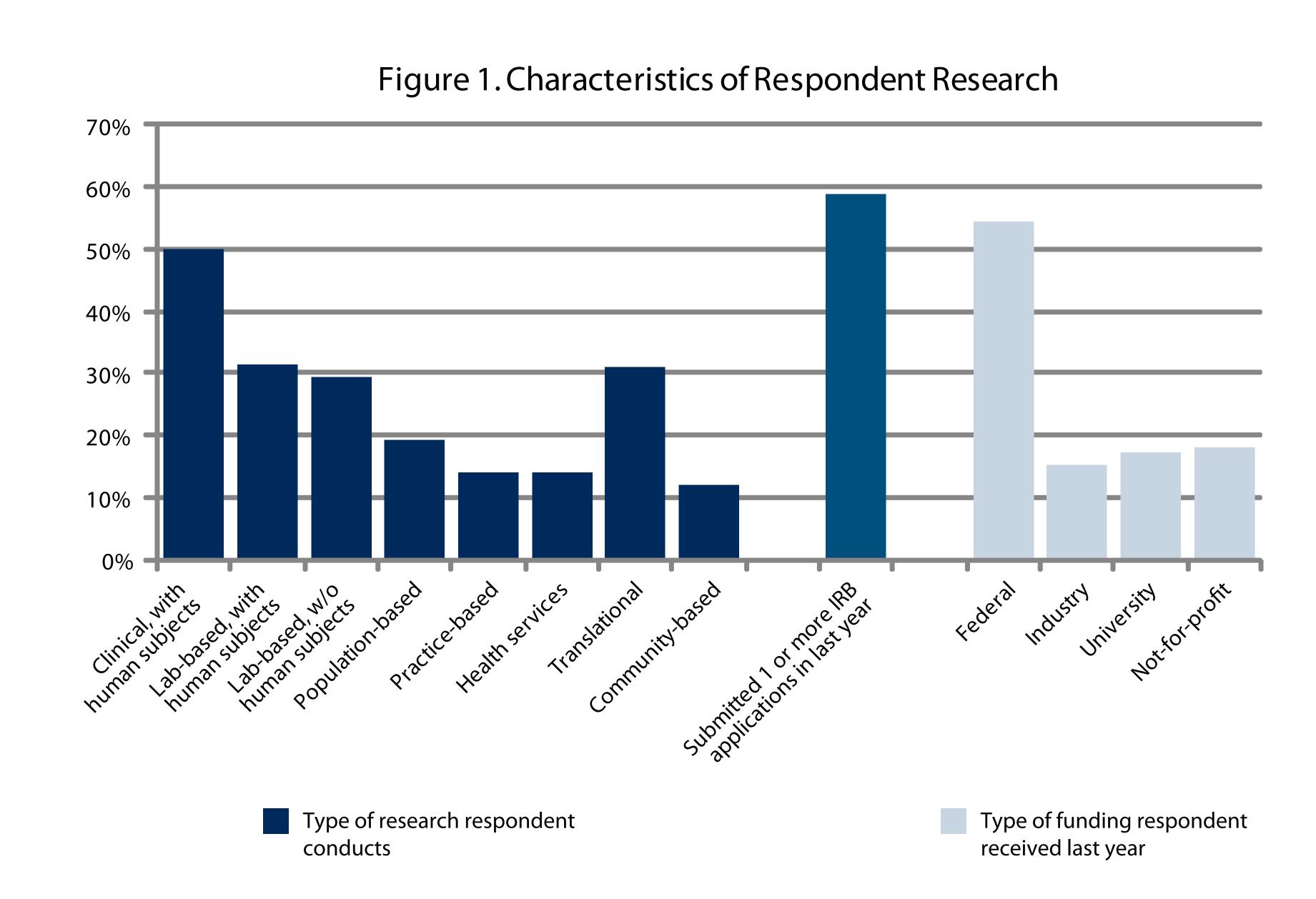
### METHODS

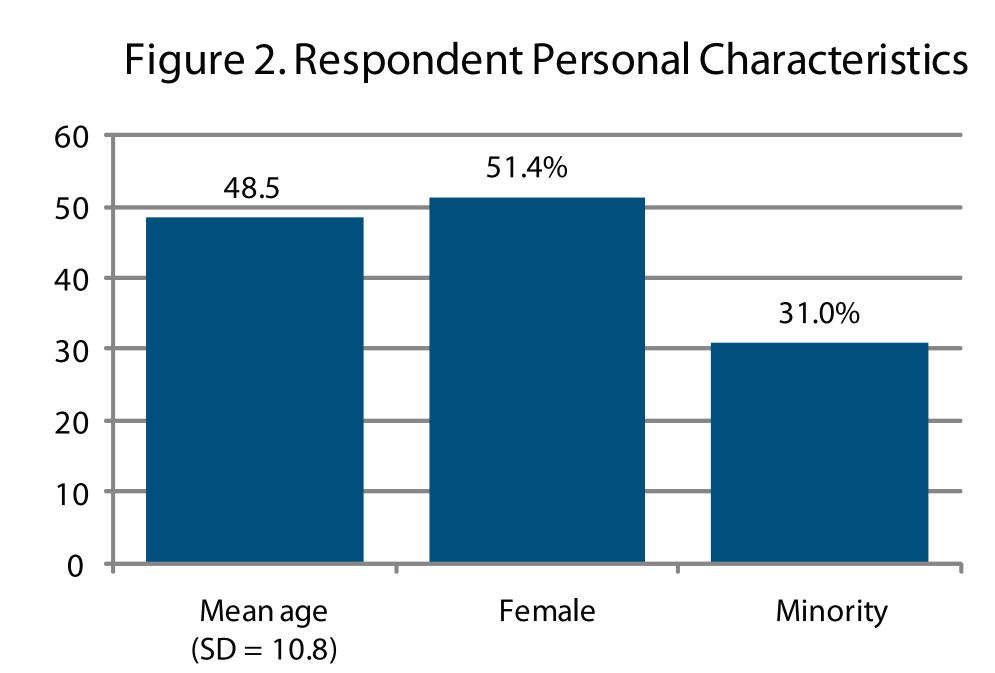
Data come from a survey of users and nonusers of services available through the CCTS at UIC. Users were defined as persons having received services from one or more of the CCTS cores between January 2007 and August 2010. A random sample of UIC and affiliated faculty who were nonusers of CCTS services were also included in the survey. Survey details include the following:

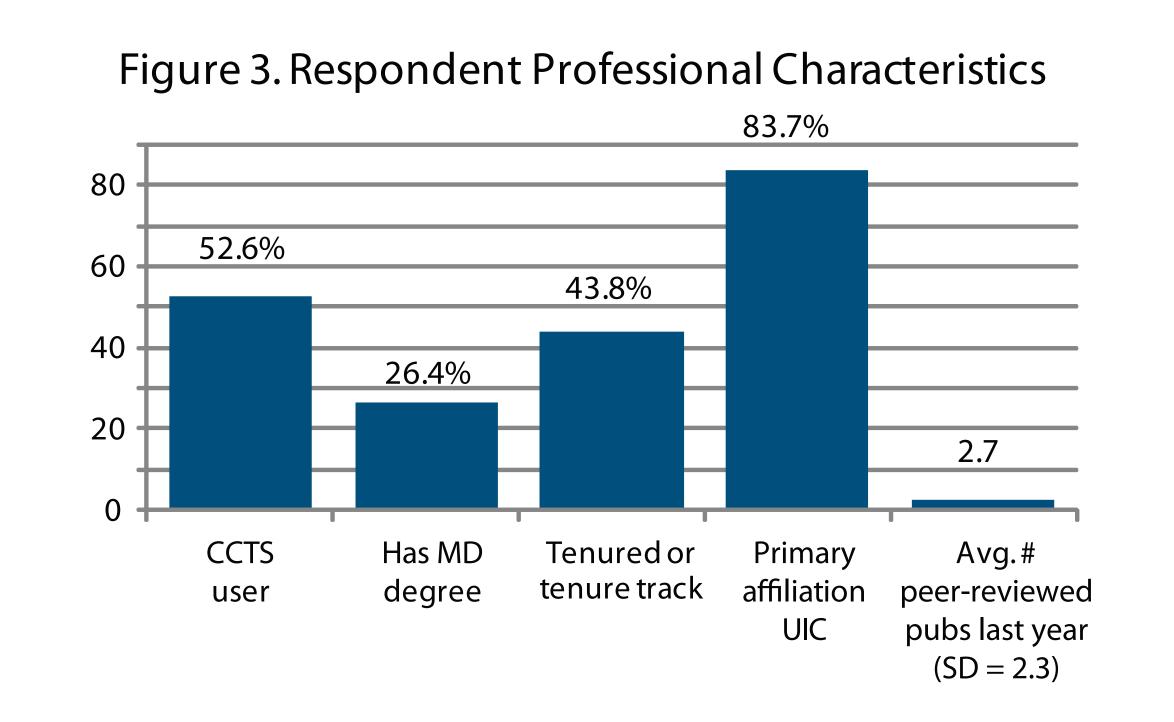
- The final sample consisted of 1,428 persons (929 users and 499 nonusers).
- The Web-based survey was launched on October 4, 2010, and will close on December 15, 2010. Results presented here include all faculty completing the questionnaire as of November 11, 2010.
- The average time required to complete the survey questionnaire was 21.3 minutes.

We obtained data regarding CCTS service utilization from our service utilization database and appended it to the survey data. We then employed logistic regression to examine the correlates of CCTS service use (1 = yes, o = no).

We examined multiple personal and professional characteristics, as well as the characteristics of respondent research. These results are summarized in Figure 1.







#### FINDINGS

Personal and professional characteristics of the sample can be found in Figures 2–3.

Table 1 below presents the results of the logistic regression model constructed to examine the correlates of CCTS service utilization. We find that three variables have independent associations with service use. Specifically, researchers with a medical degree were less likely to be CCTS users (OR = 0.27, CI = 0.09-0.86). Those researchers with industry (OR = 5.05, CI =1.37-18.51) and/or university (OR = 3.81, CI = 1.07-13.47) funding had an increased likelihood of using CCTS services.

Table 1. Logistic regression of CCTS service utilization on faculty personal, professional, and research characteristics

	Odds Ratio	(95% CI)
Personal Characteristics		
Age (in years)	0.99	(0.09–0.86)
Gender (1 = female)	1.37	(0.56 - 3.32)
Minority (1 = yes)	2.17	(0.76–6.25)
Professional Characteristics		
Primary affiliation at UIC ( $1 = yes$ )	2.49	(0.68–9.14)
Tenured or tenure track $(1 = yes)$	0.41	(0.15-1.14)
MD degree $(1 = yes)$	0.27*	(0.09-0.86)
Number of peer-reviewed publications last year	1.12	(0.89-1.40)
Research Characteristics		
Conducts clinical research with human subjects	1.88	(0.71-5.00)
Conducts laboratory-based research with human subjects 2.15	(0.71–6.50)	
Conducts laboratory-based research without human subjects	0.94	(0.29-3.08)
Conducts population-based, epidemiological, or public health		
research	1.31	(0.41-4.20)
Conducts practice-based research	0.51	(0.14-1.86)
Conducts health services research	0.42	(0.10-1.88)
Conducts translational research	1.33	(0.46-3.80)
Conducts community-based research	1.40	(0.31-6.27)
Submitted one or more IRB applications last year	2.06	(0.74-5.68)
Received federal funding last year	0.46	(0.16–1.29)
Received industry funding last year	5.04*	(1.37–18.51)
Received internal university funding last year	3.81*	(1.07–13.47)
Received nonprofit funding last year	0.50	(0.17-1.46)

### CONCLUSIONS

Physicians may be less likely to access CCTS services because they have access to alternative research support. They may also access services indirectly via research staff.

Faculty reporting industry funding and internal university funding may be more likely to utilize CCTS services because industry and internal grants tend to be smaller, making the use of CCTS services more necessary. It may also be that more established investigators, who are federally-funded, tend to develop their own research support infrastructures, making them less dependent on CCTS services. Curremt work involves conducting focused interviews with service users and non-users to better understand the motivations for, and barriers to, use of CCTS services.

We acknowledge several limitations to this research:

- The regression model was constructed using a relatively small sample size (n = 136).
- Analyses are based on a single binary indicator of service utilization. We are currently exploring construction of continuous measures that standardize and integrate the various types of services currently being offered at UIC.
- This analysis does not capture indirect service utilization, for example, when faculty research staff access services on behalf of a senior investigator.
- Other variables likely to influence service utilization, including access to alternative resources, need to be assessed in future research.

#### Acknowledgments

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