

Position Title and Number:	Geodesist, position # 20861
Search Committee Chair:	Michael Bevis
Search Committee Diversity Advocate:	Joachim Moortgat
Search Committee Members:	Barbara Keyfitz, C.K. Shum, Demián Gómez

Submit this form by email:

Date: Must be sent prior to extending invitations to Columbus campus candidates for on-campus interviews

To: *Divisional Dean Divisional Dean's Assistant*

cc: *Associate Dean for Diversity Equity Inclusion Wendy Smooth*

Subject: *Approval Request: Faculty Search Diversity Recruitment Report*

Directions: Please provide a brief response to each question below.

1. APPLICATIONS AND COMMITTEE TRAINING

- Did the search committee chair and/or members attend the “Searching for Inclusive Excellence” training and/or include a trainer at one of their committee meetings? If not, explain why not.

Yes, all members of the search committee participated in Dean Wendy Smooth’s “Searching for Inclusive Excellence” training.

- Indicate the objective of this search [e.g. hire assistant professor in the field of x] and the time period of the “active” search [e.g. October 2021-February 2022]:

Hire a faculty member at any rank (but preferably at the Asst. or Assoc. Professor rank) in the field of geodesy with a preference for *physical* geodesy or adjustment theory and the ability to teach core classes in the graduate curriculum following the retirement of two key faculty in the Geodetic Science Division graduate program. The position was first posted online on December 21st 2021 and the active search continued until this month, March 2022.

- What populations are underrepresented in the department/school?

Women, BIPOC, and LGBTQIA+ faculty. At present the Division of Geodetic Science (DGS) has the highest fraction of underrepresented groups in the School of Earth Sciences (SES), i.e. 1 of 3 faculty members, but even so none of its faculty are female.

- What strategies did the search committee proactively employ to recruit faculty from underrepresented populations and diversify the applicant pool? Describe the impact of these strategies, as well as the challenges.

Besides the ad in academicjobsonline.org and discipline-specific list serves, we reached out to individual potential candidates that would add to diversity, and we posted ads in a number of outlets recommended in our “Searching for Inclusive Excellence” training. Specifically: (1) the Association for Women in Science, (2) the Chronicle of Higher Education and (3) the diversity package at Academic Careers Online. See links below.”

- https://awis.associationcareernetwork.com/jobs/view/faculty-position-in-geodesy/61382352/?keywords=the+ohio+state+&pos flt=0&location=columbus&location_completion=&location_type=&location_text=columbus&location_autocomplete=true
- <https://jobs.chronicle.com/job/446608/the-ohio-state-university-school-of-earth-sciences-faculty-position-in-geodesy/>
- <https://academiccareers.com/job/34245/faculty-position-in-geodesy-school-of-earth-sciences-the-ohio-state-university/>

The main challenge in recruiting faculty from underrepresented minorities (URM) is that geodesy is a small field and not a very diverse field globally, including at the student level. OSU is the only university in the US with a formal geodesy graduate program. Globally, by far the largest center of geodesy training and research is Wuhan, China. Indeed, about half our applicants studied in one of those two programs. We recognize that it is therefore incumbent on our program to recruit and train diverse cohorts of future students, and that role model faculty could benefit such efforts.

- Did diversity and inclusion, or broadening participation, or related issues arise in discussions during the search process? If so, describe the nature and outcome of such discussions. Did candidates submit diversity statements? How were the statements evaluated as part of the review process?

Diversity and inclusion featured prominently in all our discussions. Naturally, most weight was given to candidates from URM backgrounds, but we also gave considerable weight to the diversity statements that were provided by all candidates. Of the non-URM candidates, some were moved down in our rankings due to a perceived lack of commitment to diversity, while others received extra points for their thoughtful diversity statements.

- Describe the applicant pool (using the EEO Report from Academic Jobs Online) from which the new hire will be selected. How satisfied are you with that pool and with its diversity? Please explain.

Our total number of applicants was 21. Of those, 3 were women and 18 men. Two are African, 9 are Chinese, 1 from Korea, 1 from Nepal, 6 from Iran, 1 from Turkey, 1 from Croatia, 0 from the US. This group certainly represents diverse international backgrounds but is disappointing in only having three (14%) female scholars. It is not clear to us if Iranians are considered 'white' or not. In the end, we decided to assume that they were.

- ✓ **Faculty Search Applicant Pool – Please attach the EEO Report for the position available in Academic Jobs Online (contact your college HR generalist if you need assistance with this). If a different application portal was used, provide a report similar to the attached sample.**

This can be found at the end of this report.

2. SCREENING PROCESS

- Describe the screening process and criteria employed in the evaluation of applications received.

This position is intended to fill a significant gap left by the recent retirement of 2 full professors in the geodesy program, which now only has 3 remaining faculty. For this reason, the highest priority was given to candidates that can teach core/essential classes in the geodesy curriculum. For similar reasons, a proven track record on grantsmanship and high impact published research was considered highly desirable, though we were careful not to rely blindly on 'easy' metrics like total number of citations or h-index (e.g., by looking at quality of journals, lead-author vs middle-author papers, normalizing by years since PhD, and using other approaches). Finally, the ability of a candidate to add to the diversity of our geodesy faculty was seen as an important criterion. Unfortunately, the first two criteria lead to a preference for somewhat more senior scholars, while all 3 women applicants are more junior (two within 2 years from PhD) and have not had as much time to fully establish themselves in the field, whereas the strongest Black applicant is a geophysicist who could likely not teach any the aforementioned key classes, a difficulty which, if it remains unresolved, will likely lead to the collapse of OSU's geodetic science graduate program in 12-18 months.

In an attempt to balance the factors listed above, we ranked candidates in three separate categories: 1) proven track records and assessed potential in research, funding, and (especially) teaching in the areas where recent retirements have resulted in a highly problematic and existentially dangerous capacity gap, 2) a separate ranking of all 6 candidates from URM backgrounds, given that those candidates all happened to be more junior, and 3) each committee member's final ranking of candidates to interview, based on both the ability to address DGS's urgent needs, and the desire to promote greater diversity. We ended up with a mix of established 'low risk' candidates and some of our exciting early career applicants that would enhance the diversity of our faculty. This process, which quantified the impact of diversity goals on the final selection of candidates, is described in more detail in our report of 21 March to Dean Susan Olesik and Director Steven Lower.



OPTIONAL: Please complete the following table for applicants not chosen for a campus interview using the following format (see instructions on the last section on the next page).

Applicant Name/#	1	2	3	4	5	6	7	8	9	10
██████████ (Female)			X						More interested in applications of geodetic techniques than in the techniques themselves; too much overlap with present faculty	Could not teach our physical geodesy courses or our upper level adjustment courses
██████████ (Female)			X						More interested in applications of geodetic techniques than in the techniques themselves	Could not teach our physical geodesy courses or our upper level adjustment courses
██████████ (African male)	X Not a geodesist		X						Could not teach any geodesy courses, even our entry level courses	
██████████ (African male)	X Not a geodesist		X						Could not teach any geodesy courses, even our entry level courses	

Key for Table

1. Insufficient relevant degrees/academic qualifications.
2. Insufficient relevant training for establishing a first-rate research or creative activity program.
3. Insufficient teaching experience and qualifications.
4. Research proposals or creative activity potentials were not compelling.
5. Future funding for research program was unclear.
6. Research or creative activity program lacked coherence and direction.
7. Unable to contact to schedule an interview.
8. Withdrew from consideration or declined an interview offer.
9. Other (enter description)
10. Other (enter description)

3. PROPOSED INTERVIEW POOL

- Briefly describe the credentials of the candidates that you propose to bring as finalists to campus. How satisfied are you with that pool and with its diversity? Please explain.
 1. ██████████ (PhD 2007) is a well-established Dutch-Iranian geodesist with dual appointments as Full Professor at the University of Isfahan, Iran, and Asst. Professor at Delft University, the Netherlands. He has the strongest publication record (4663 citations, h-index 30), has taught extensively on topics relevant to this search, and has well thought out teaching and diversity statements. He is interested in establishing a geodesy undergraduate minor. His research also involves AI/ML. He is a world class adjustment theorist, and capable of teaching all the upper level geodesy classes that were taught by ██████████. He is also a very accomplished GNSS geodesist, and has some expertise in inertial geodesy, a topic of increasing importance which has not been taught at OSU since ██████████ retired.
 2. ██████████ (PhD 2015) is a junior version of ██████████, having studied under the same graduate advisor (currently the world's greatest adjustment theorist, who enthusiastically endorses both, but ██████████ slightly more so) and he works on similar research topics. He too has a strong publication history in the past 7 years (1001 citations, h-index 17). He is currently an Assistant Professor in Australia (and now an Australian citizen). He can teach all the upper level adjustment courses, and also GNSS geodesy. He is already well established, internationally, as a 'rising star' of geodesy.
 3. ██████████ (PhD 2020) is an early-career female scholar with a less established publication record (29 citations, h-index 3) but doing cutting-edge research and with the most glowing letters of recommendations from her advisors at Stanford and Caltech (where she is currently a postdoc). She could teach in her area of geodesy expertise, which is InSAR. She definitely qualifies as a geodetic imager, and most importantly she is an expert in the technique itself,



and not just in its applications. She seems to be a brilliant young scientist. She can certainly teach a first course in adjustment theory, but it is much less clear if she could teach any of the advanced courses that [REDACTED] once taught. This is an open issue that would be addressed in interview.

4. [REDACTED] (PhD 1989) is our most seasoned scholar with 33 years of experience, the last 18 of which as a Senior Research Scientist in DGS. He has written several textbooks, including a brand-new textbook on physical geodesy, and been involved in a large body of journal publications (1303 citations, h-index 21) and grants. He already teaches several core geodesy classes on a voluntary basis (when funding is available) and he is the only one of the 5 selected candidates who is an expert in physical geodesy and therefore capable of teaching all the classes taught by [REDACTED].
5. [REDACTED] (PhD 2008) is another prolific scholar (1980 citations, h-index 23), who's currently an Assistant Professor of Geodesy and Remote Sensing at the University of Colorado at Boulder. His funded research makes the most extensive use of recent AI/ML advances. His letters speak to his infectious enthusiasm and impressive teaching skills, and he has already been actively involved in DEI efforts at his current institution. Like [REDACTED], he cannot teach most of the courses that were managed by [REDACTED] or [REDACTED], but he could teach in an InSAR course (though probably not as well as [REDACTED] and he could teach a course in 4D geodetic imaging using satellite photogrammetry. He has experience with GPS/GNSS fieldwork, and some experience with GPS/GNSS data processing. The entire committee was impressed by his diversity statement.

About 82% of SES faculty are white (as most commonly defined). Our search led to a pool in which ~ 27% of the candidates are white. This indicates that our outreach efforts were successful.

We are satisfied that this short list of candidates draws a well-considered and optimal balance between addressing DGS's urgent needs in terms of research and especially teaching, and the desirability of promoting increased diversity in DGS and SES.

- Were any of the candidates chosen for campus interviews veterans or a person disclosing a disability?

No.

- For each candidate chosen for a campus interview, briefly describe how the candidate would contribute to the diversity of the department/school. How would each candidate amplify the values of inclusion and excellence? How does the candidate's teaching, mentoring, research, and/or outreach and engagement amplify diversity and inclusion? How would the candidate contribute to ongoing or new diversity and inclusion initiatives in the unit?

Proposed Interview Pool Chart. This chart is mandatory but including the specific name is optional.

Total number of candidates selected for campus interviews	Gender of candidates to be interviewed		Race/Ethnicity, Disability Status, and Veteran's Status of candidates interviewed, if known
	Female	Male	
5			American Indian or Alaska Native
	1	1	Asian
			Black or African American
			Hispanic or Latino(a)
		4	International Applicant
			Pacific Islander
			Two or More Races
		3*	White
			Race Not Identified
			All by Disability Status = Yes
			All by Veteran Status = Yes
			Unknown status
5	1	4	TOTAL

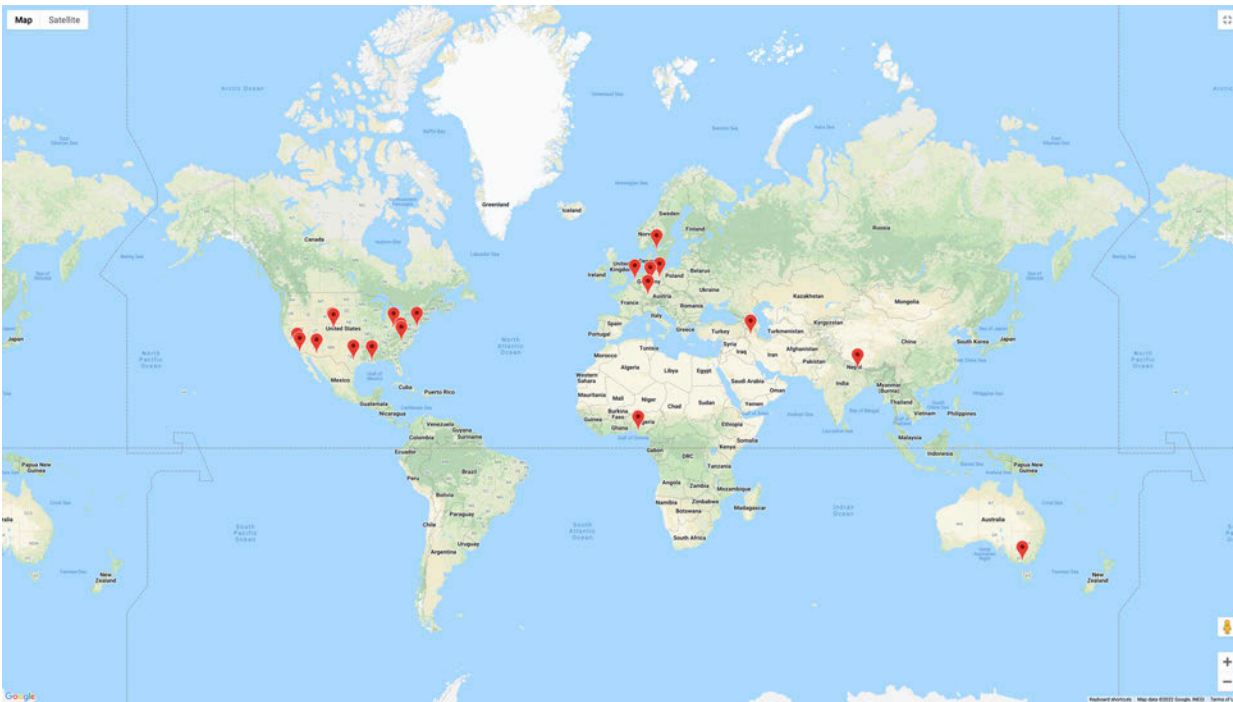
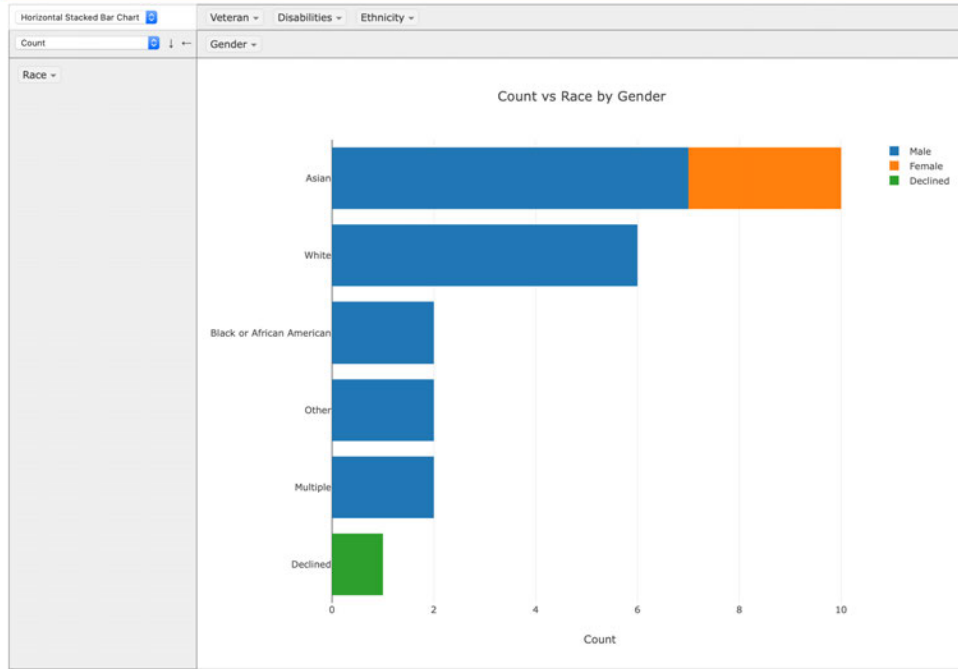
*Note that there is some discussion as to whether or not Arabs and Iranians should be labeled as 'white'.



EEO Reports

EEO Report Pivot Table / Chart For Selected Data

Please note applicants who have selected multiple values for Races (and any other data types) are counted under 'Multiple' only for that data type. You can drag and drop the data types around to change the table or chart.



AcademicJobsOnline.org

EEO Report

• **School of Earth Sciences:** [PROFESSOR #20861, 2021/12/21-2022/02/21] Faculty position in Geodesy

Applicant Race	Total Appl		Asian		Black or African American		White		Declined		Other		Multiple Selected		Int'l Appl	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Male	19	82.61%	9(2)	75%	2	100%	7(1)	100%			3(1)	100%	2	100%	11	100%
Female	3	13.04%	3	25%												
Declined	1	4.35%							1	100%						
Total Appl	23	100%	12(2)	48%	2	8%	7(1)	28%	1	4%	3(1)	12%	2	8.70%	11	47.83%

Applicant Ethnicity		Total Appl	Asian	Black or African American	White	Declined	Other	Multiple Selected	Int'l Appl
	Female	3	3						
	Declined								
	Total Appl	21	12(2)	2	6(1)		3(1)	2	10
Declined	Male								
	Female								
	Declined	1				1			
	Total Appl	1				1			
Unknown	Male	1			1				1
	Female								
	Declined								
	Total Appl	1			1				1
Total	Male	19	9(2)	2	7(1)		3(1)	2	11
	Female	3	3						
	Declined	1				1			
	Total	23	12(2)	2	7(1)	1	3(1)	2	11

Appl													
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Applicant Disabilities	Total Appl	Asian	Black or African American	White	Declined	Other	Multiple Selected	Int'l Appl
No	Male	9(2)	2	7(1)		3(1)	2	11
	Female	2						
	Declined							
	Total Appl	11(2)	2	7(1)		3(1)	2	11
Declined	Male							
	Female	1	1					
	Declined	1			1			
	Total Appl	2	1		1			
		Total Appl	19	9(2)	7(1)		3(1)	2
Total	Male	19	9(2)	7(1)		3(1)	2	11
	Female	3	3					
	Declined	1			1			
	Total Appl	23	12(2)	7(1)	1	3(1)	2	11

Applicant Veteran	Total Appl	Asian	Black or African American	White	Declined	Other	Multiple Selected	Int'l Appl
No	Male	8(2)	2	7(1)		3(1)	2	11
	Female	3						
	Declined							
	Total Appl	11(2)	2	7(1)		3(1)	2	11
Unknown	Male	1	1					
	Female							
	Declined	1			1			
	Total Appl	2	1		1			
Total	Male	19	9(2)	7(1)		3(1)	2	11
	Female	3	3					
	Declined	1			1			
	Total Appl	23	12(2)	7(1)	1	3(1)	2	11

*** For the race/gender data, the numbers in the parentheses, if any, represent multiple selections. For example, 800(25) means that 800 applicants selected that race, and among them 25 made multiple selections which include that race. See the [FAQ](#).

*** "Int'l Appl" refers to those applicants with mailing addresses in other countries (and some may be your citizens), and their responses are already included in the overall summary data.

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