SOCIETY OF SENSORY PROFESSIONALS
18 SEPT 2014

ENSURING THE SENSORY PROFESSIONAL PIPELINE



NEED TO GATHER DATA TO AVOID COGNITIVE BIASES AND ERRORS

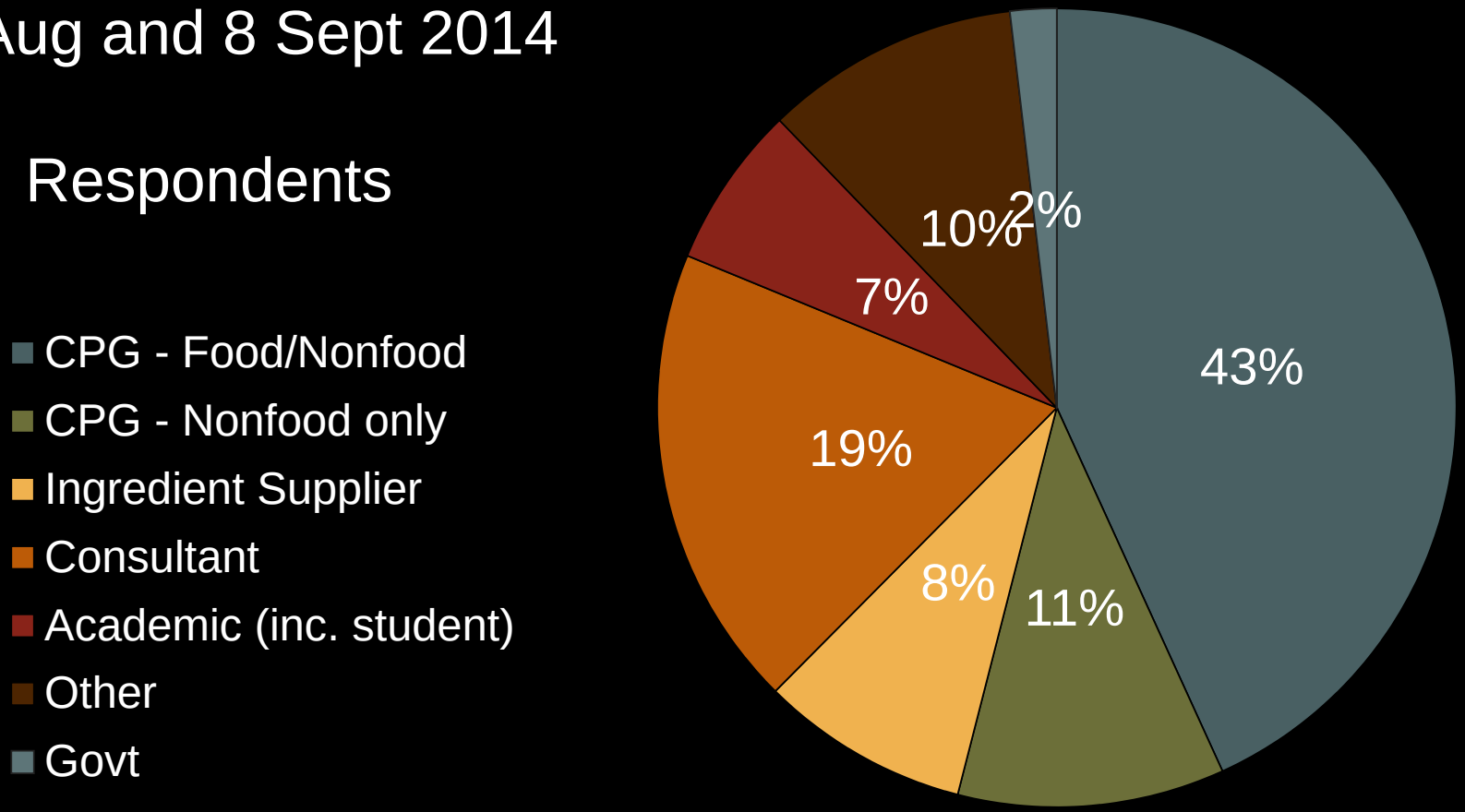
- Group attribution error – the mistaken belief that the characteristics of an individual group member are reflective of the group as a whole.
- False-consensus bias – when a person tends to overestimate the extent to which their beliefs or opinions are typical of those of others.
- Availability heuristic – a mental shortcut that relies on immediate examples that come to mind, thus individuals weigh their judgments toward recent information, forming opinions biased toward recent news.

PART 1:

SURVEY OF SSP MEMBERSHIP

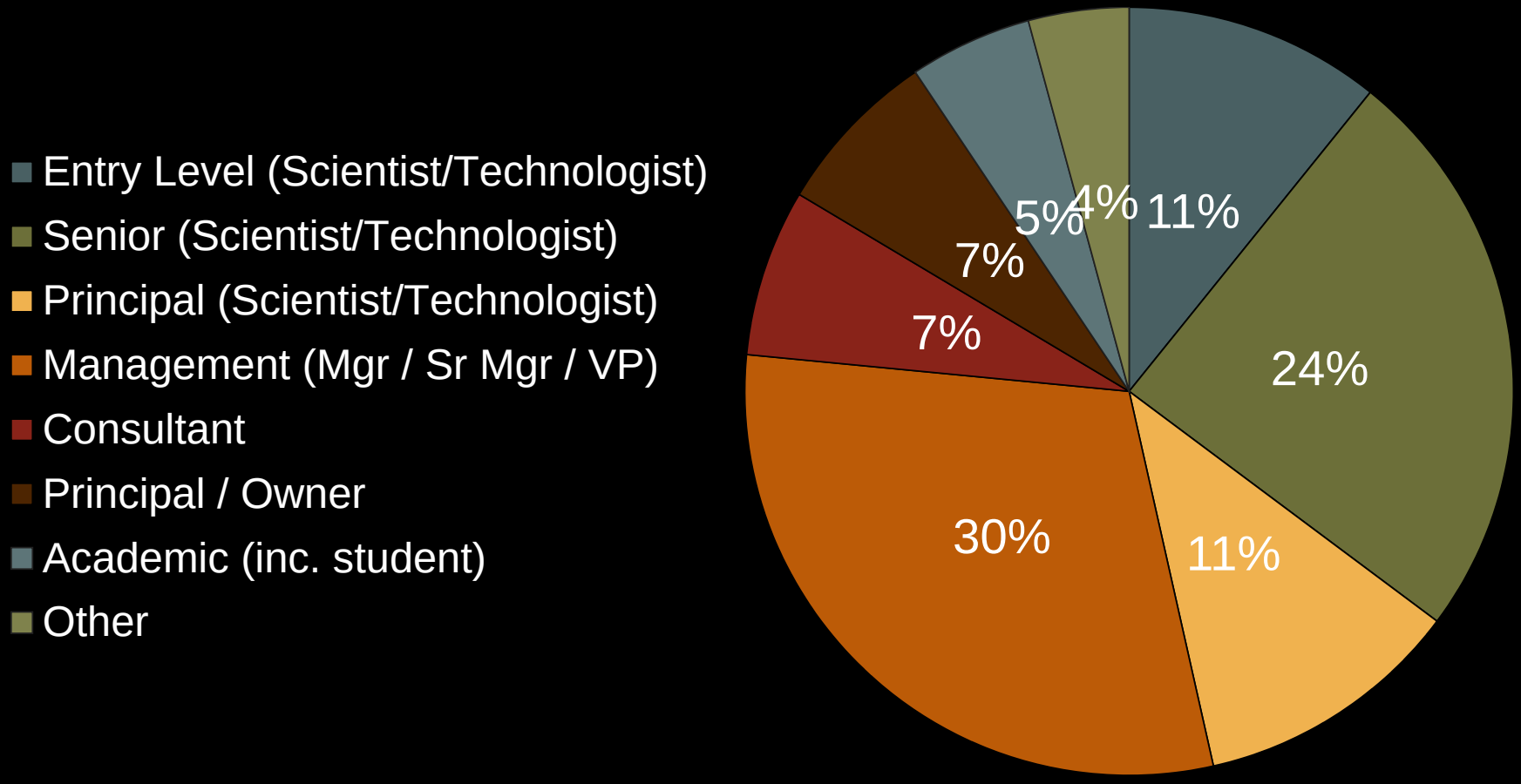
SNAPSHOT OF CURRENT SSP MEMBERSHIP

- Surveyed SSP membership between 18 Aug and 8 Sept 2014
- 213 Respondents

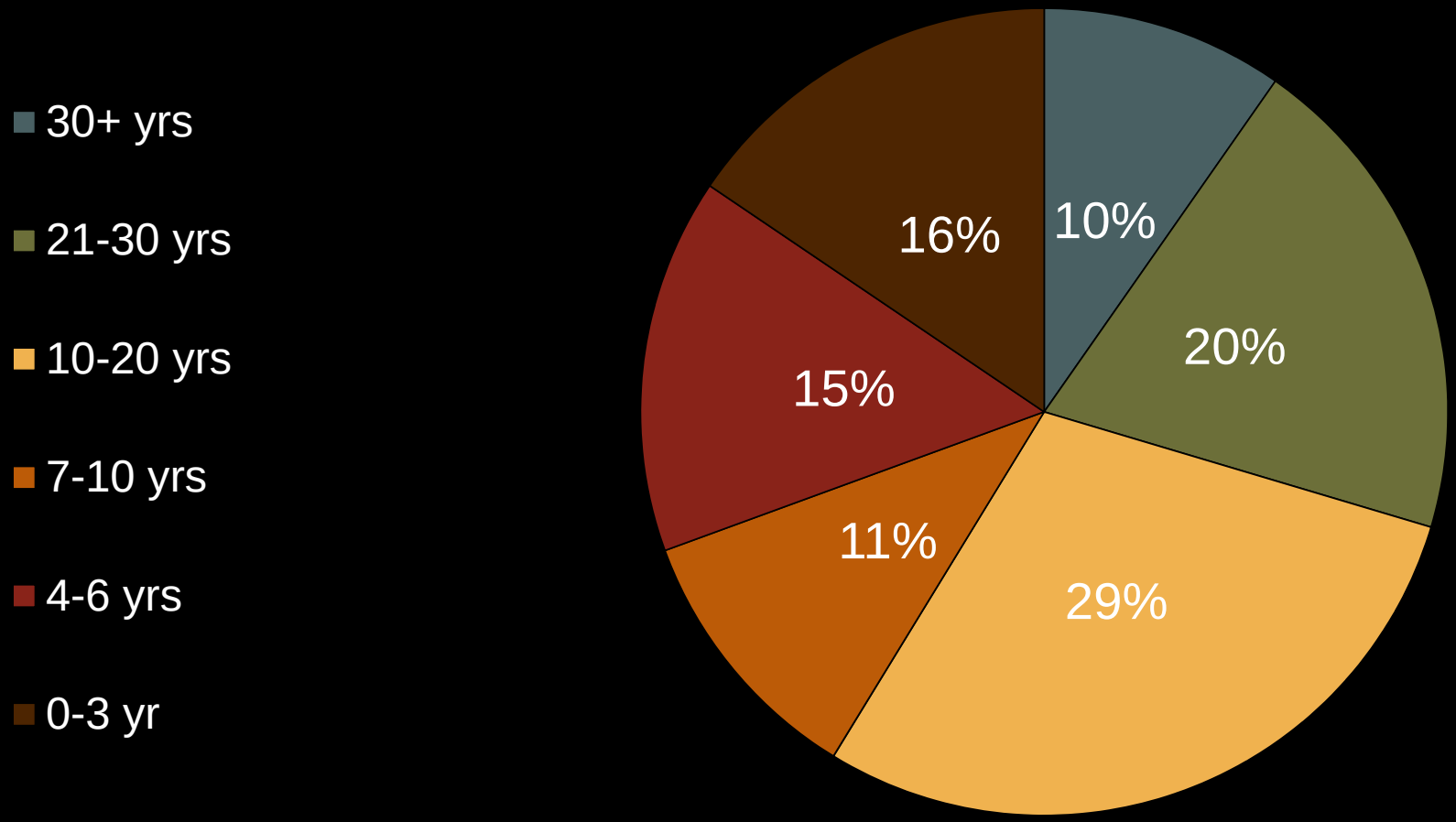


Whoops! forgot to include CPG – Food only!

CURRENT JOB TITLE OR POSITION

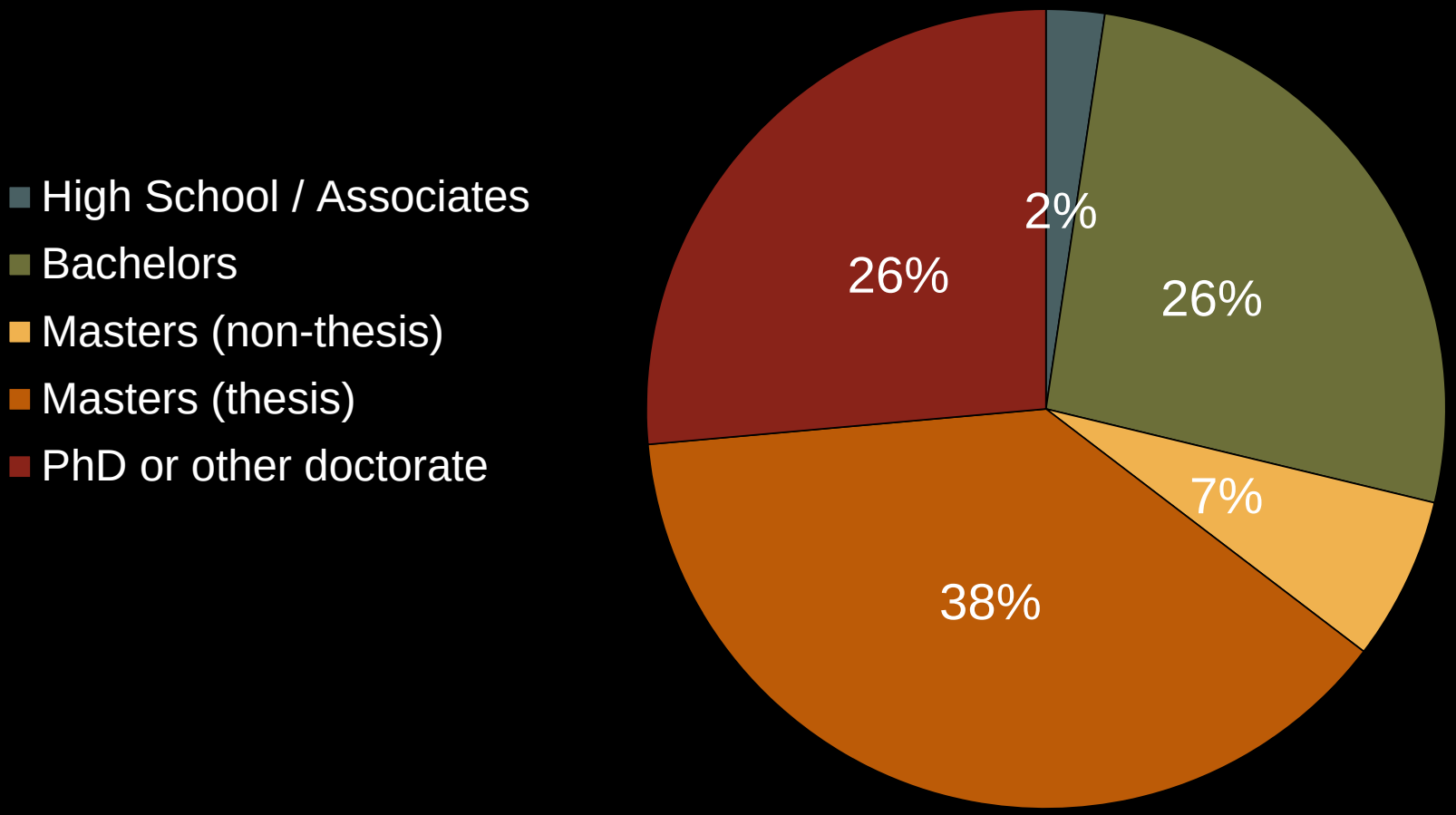


EXPERIENCE AS A SENSORY PROFESSIONAL



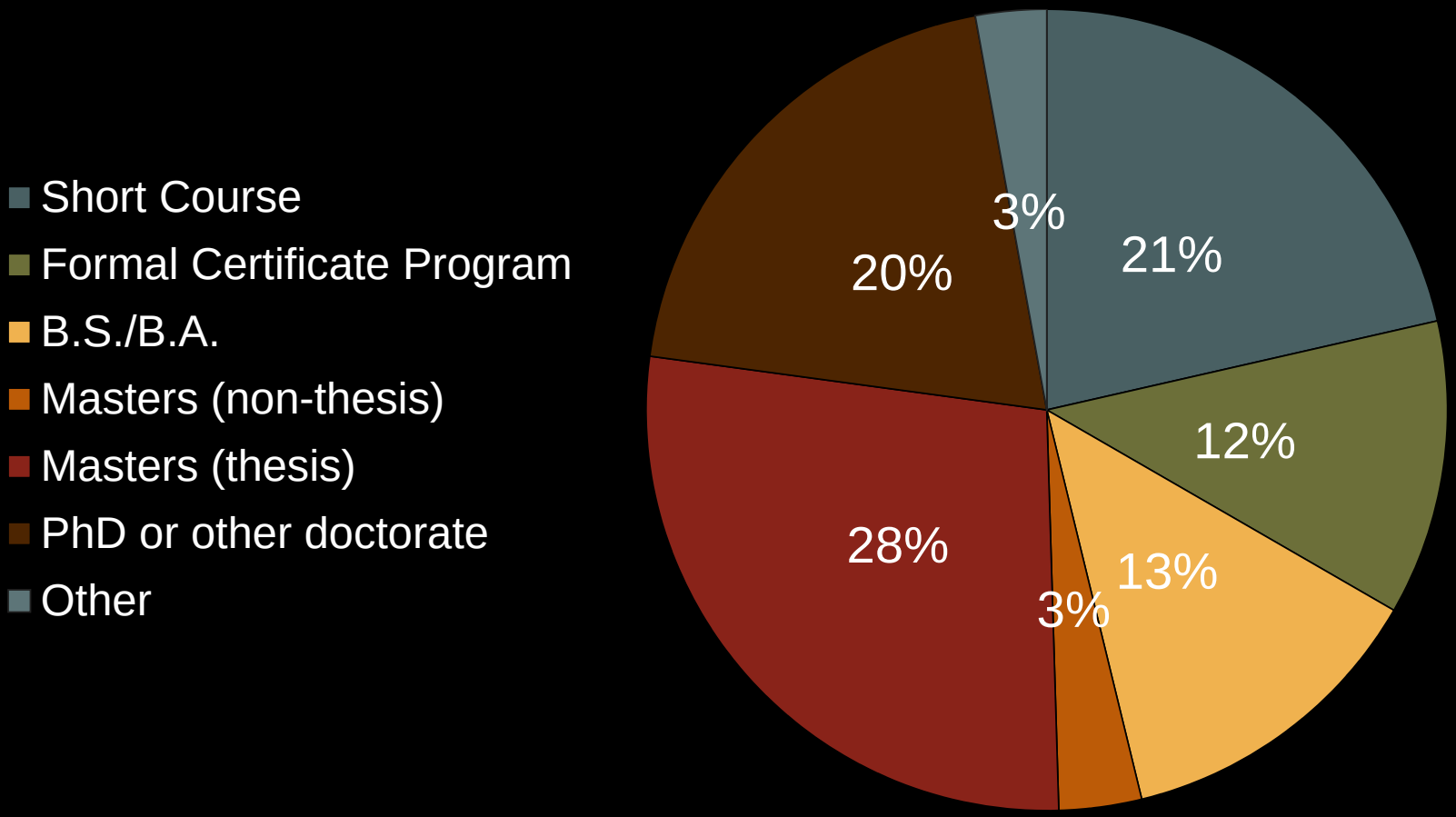
excludes 5 students and 2 retired individuals

HIGHEST FORMAL EDUCATION (IN ANY FIELD)



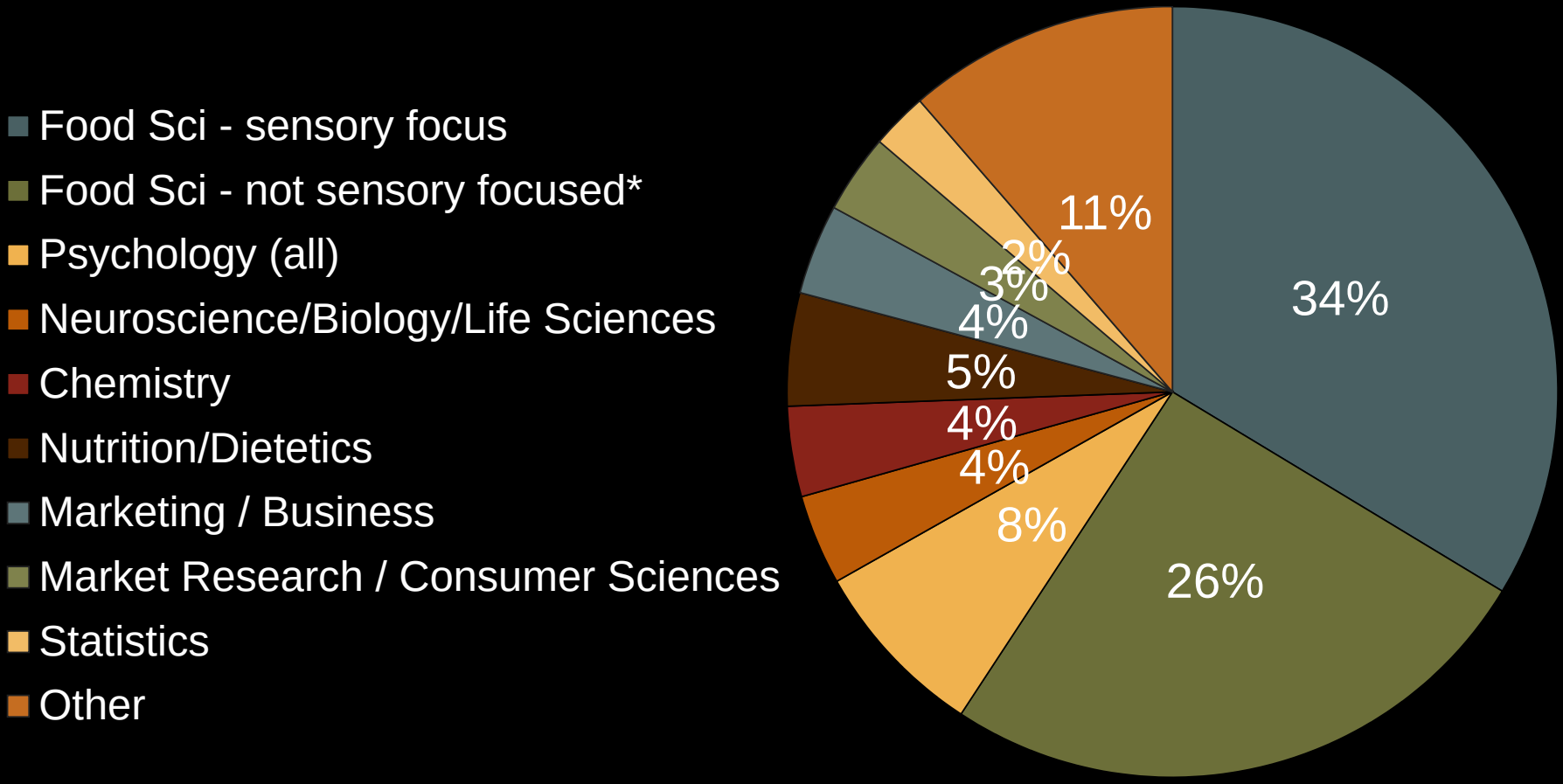
for comparison, only 8% of Americans over 25 have a masters and 3% have a doctorate

HIGHEST EDUCATION RELATED TO SENSORY SCIENCE



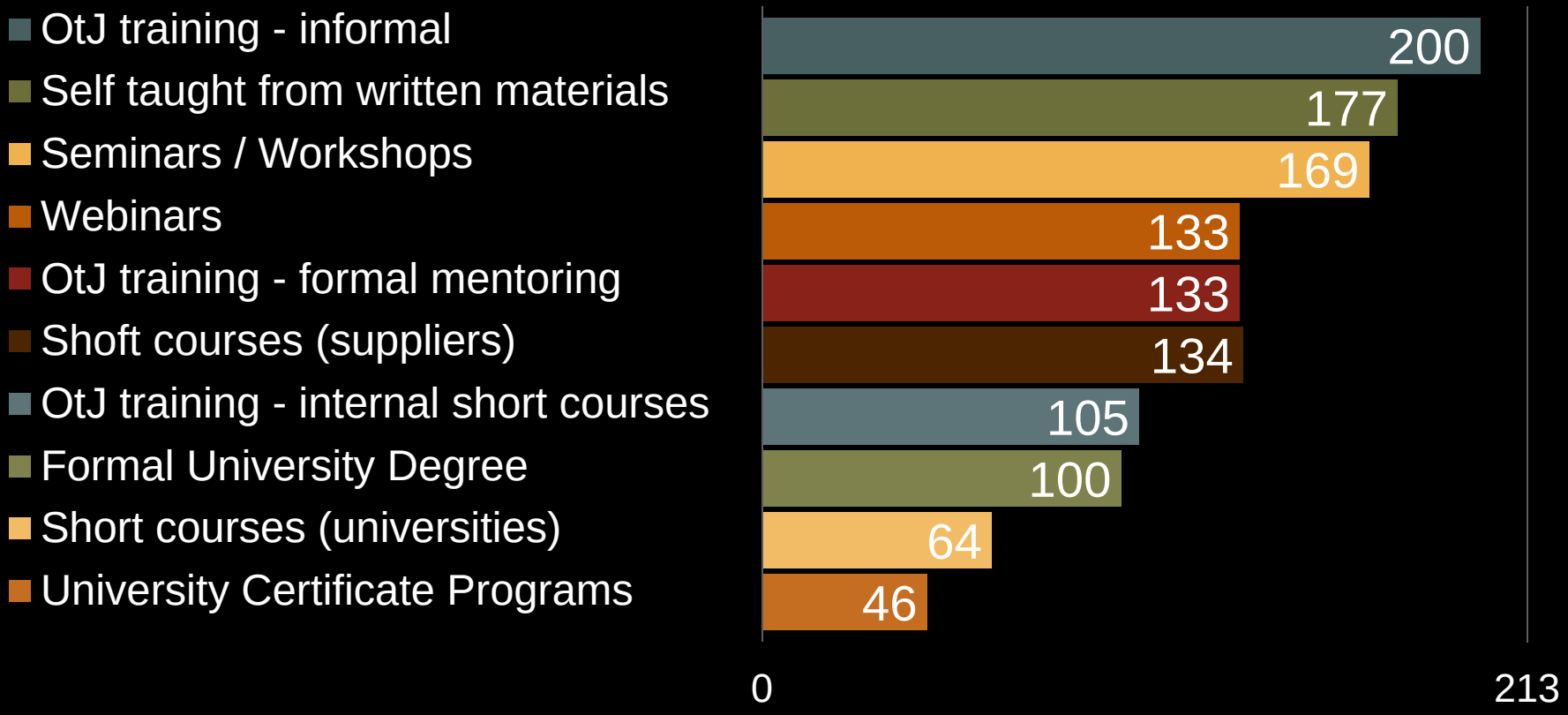
71% have a graduate degree (from prior slide), but only 51% are sensory related

DISCIPLINE OF HIGHEST DEGREE



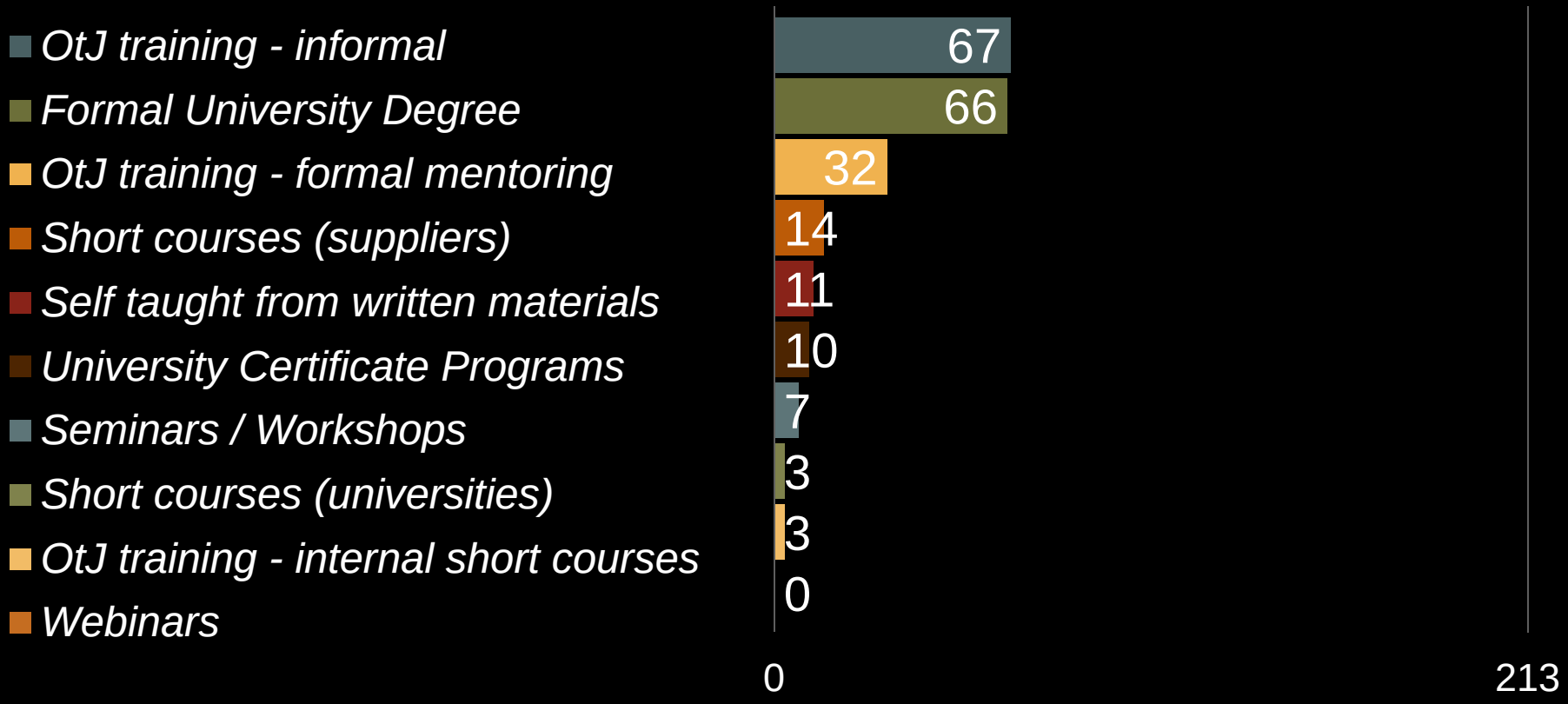
70% of respondents trained as food scientists

SOURCES OF SENSORY TRAINING (CHECK ALL THAT APPLY)



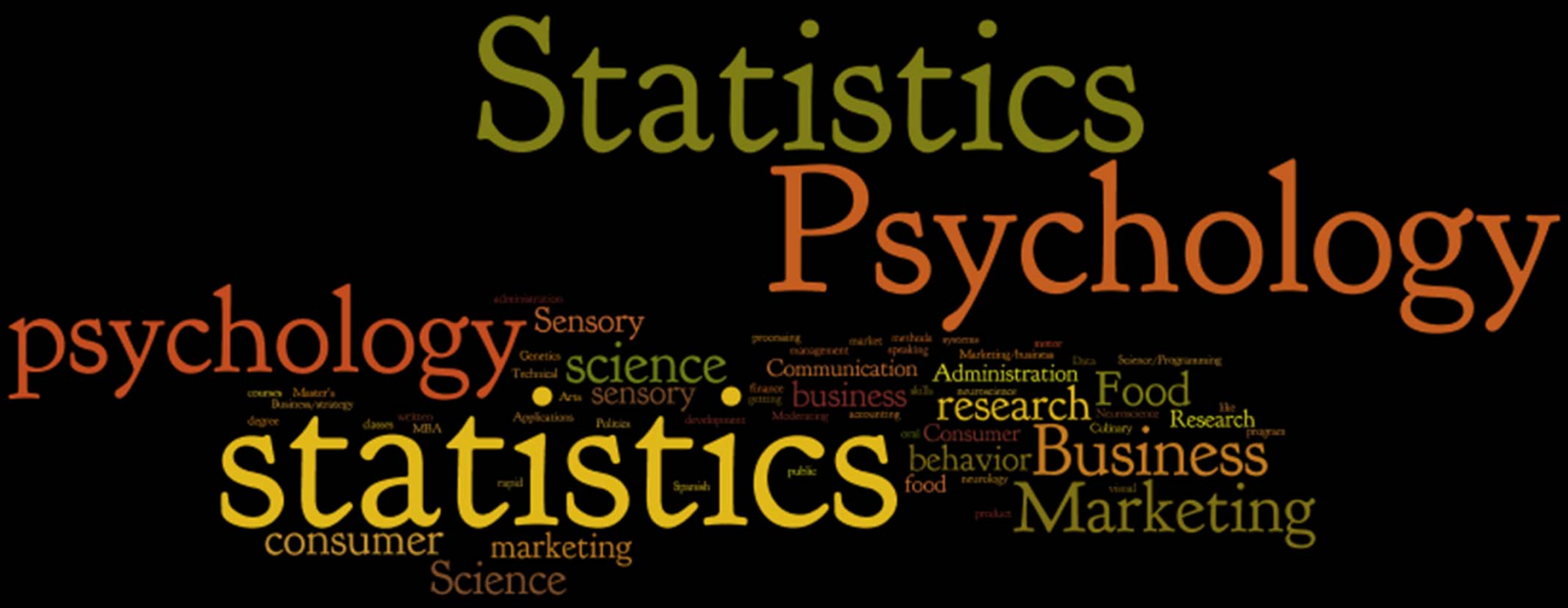
many in our field do not have formal academic training in sensory

PRIMARY SOURCE OF SENSORY TRAINING (PICK ONE)



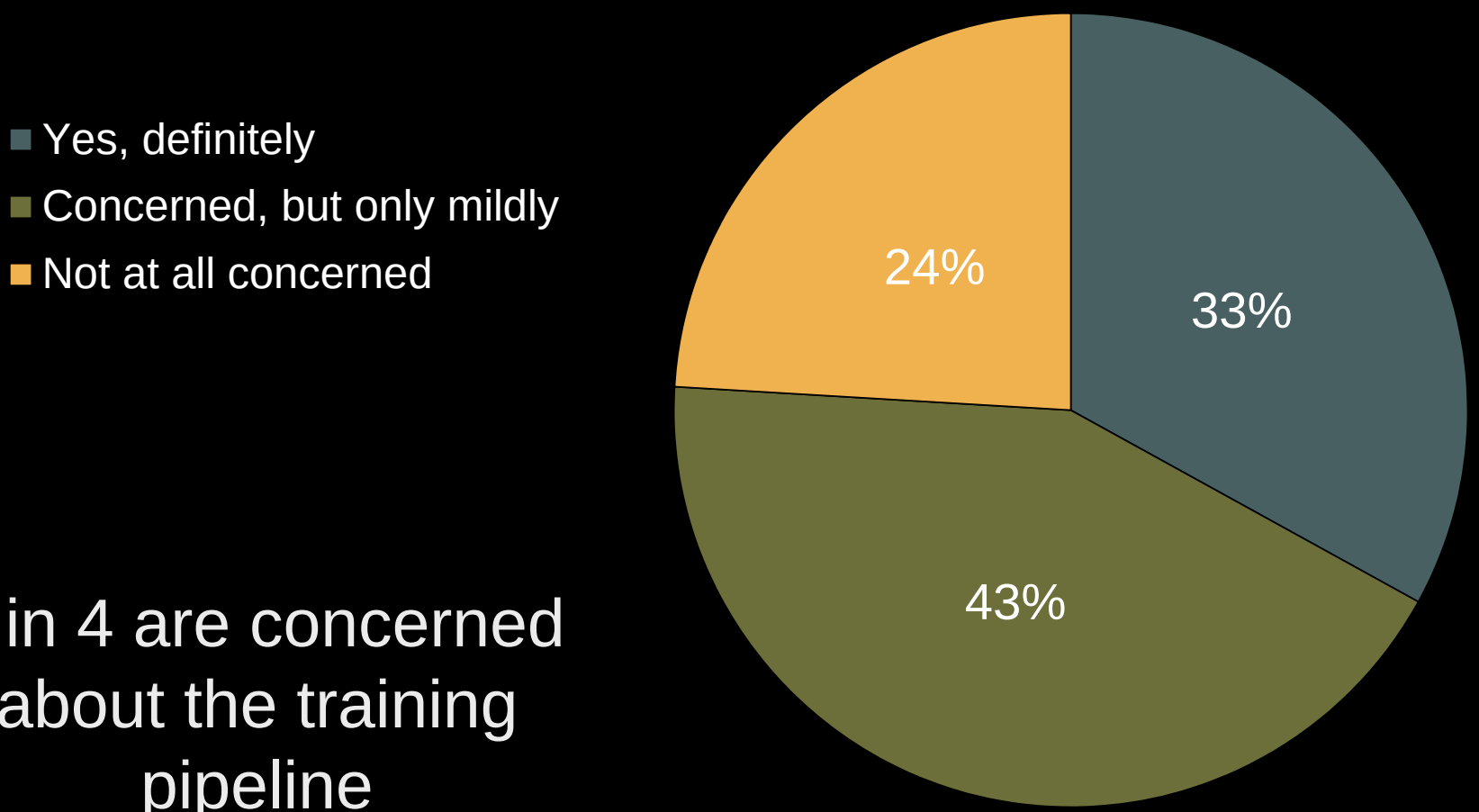
how do we improve the quality of on the job training?

‘IF YOU COULD GO BACK IN TIME, WHAT ONE DISCIPLINE DO YOU WISH YOU COULD HAVE TAKEN ADDITIONAL COURSEWORK IN?’



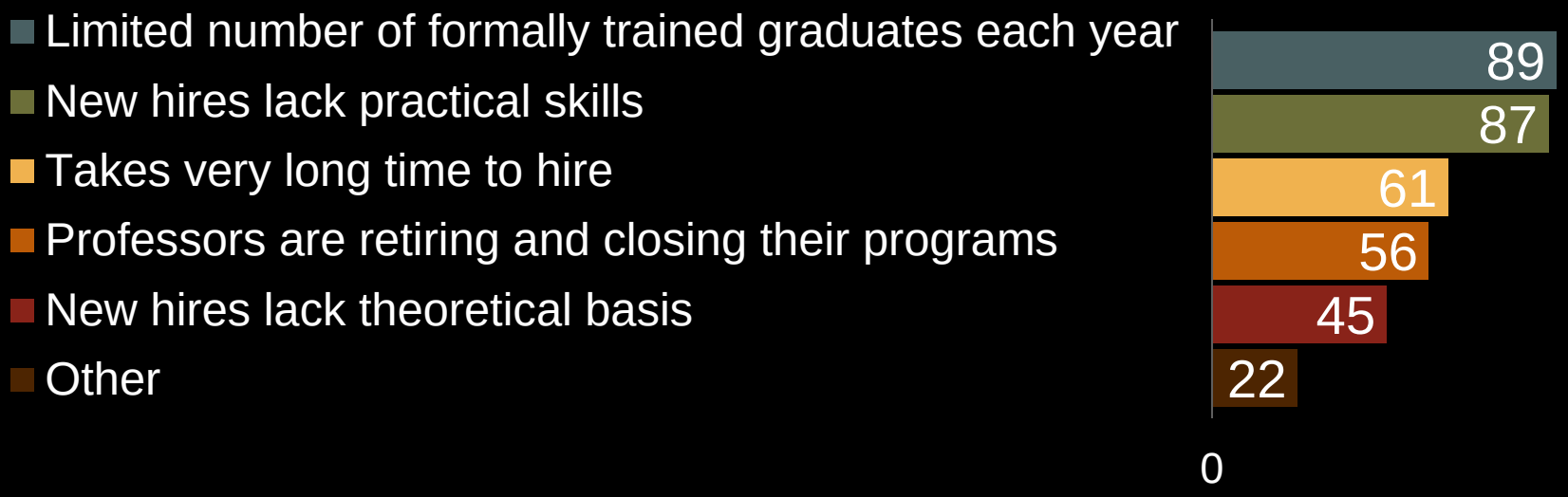
(thanks to Bethia for this question!)

‘ARE YOU CONCERNED ABOUT THE FORMAL (ACADEMIC) TRAINING PIPELINE?’

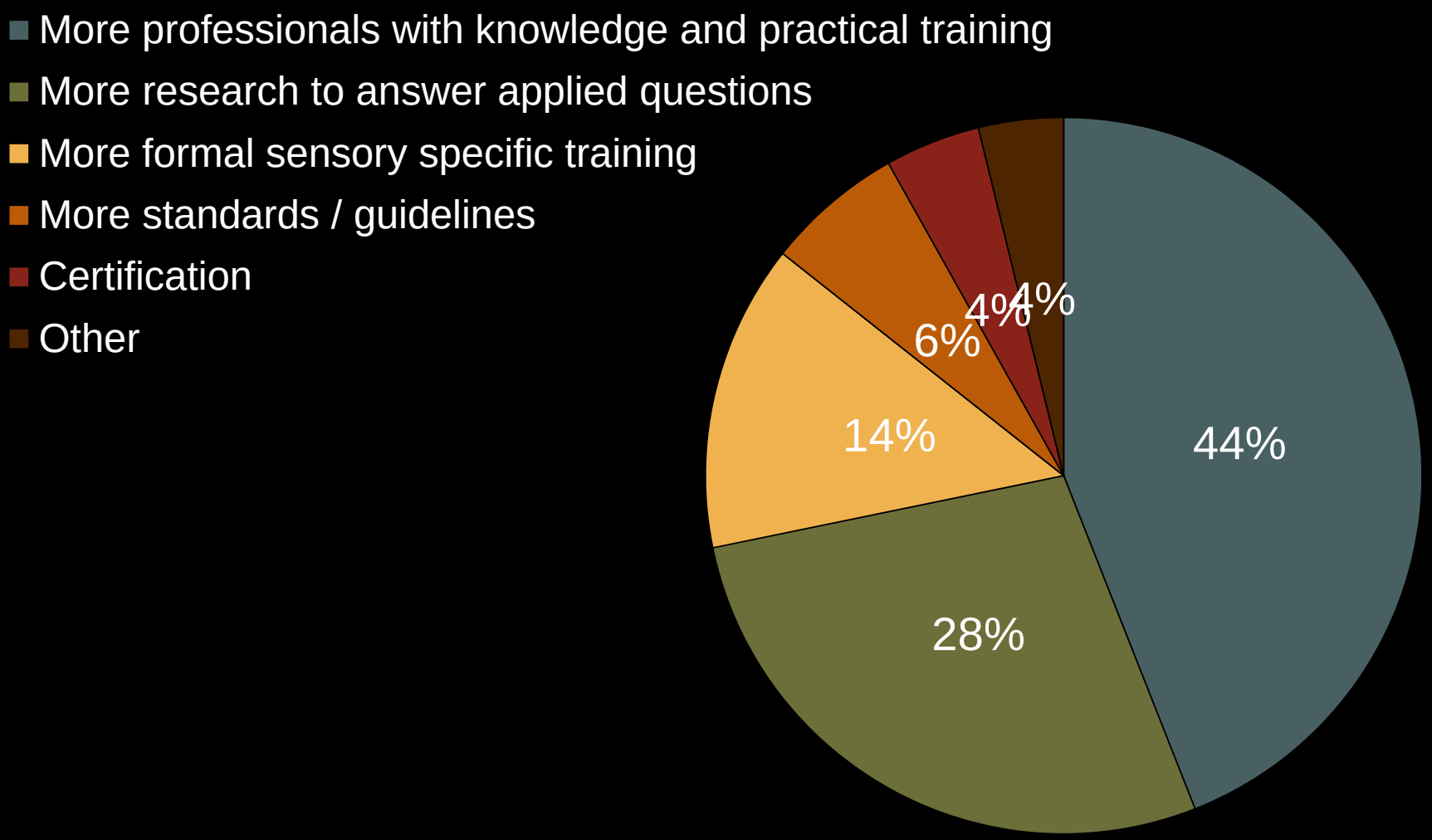


3 in 4 are concerned about the training pipeline

‘WHY ARE YOU CONCERNED?’ (CHECK ALL THAT APPLY)



‘WHAT KIND OF GROWTH IN SENSORY WOULD YOU LIKE TO SEE IN THE FUTURE?’



PART 2:

SURVEY OF SENSORY PROFESSORS IN NORTH AMERICAN UNIVERSITIES

DEMOGRAPHICS

- All have PhDs (n=31; 15 men)
- 35% completed postdoctoral training
- Ranks are slightly top heavy
- Most trained in Food Science and/or Nutrition Departments
- 98% are tenured or on tenure track

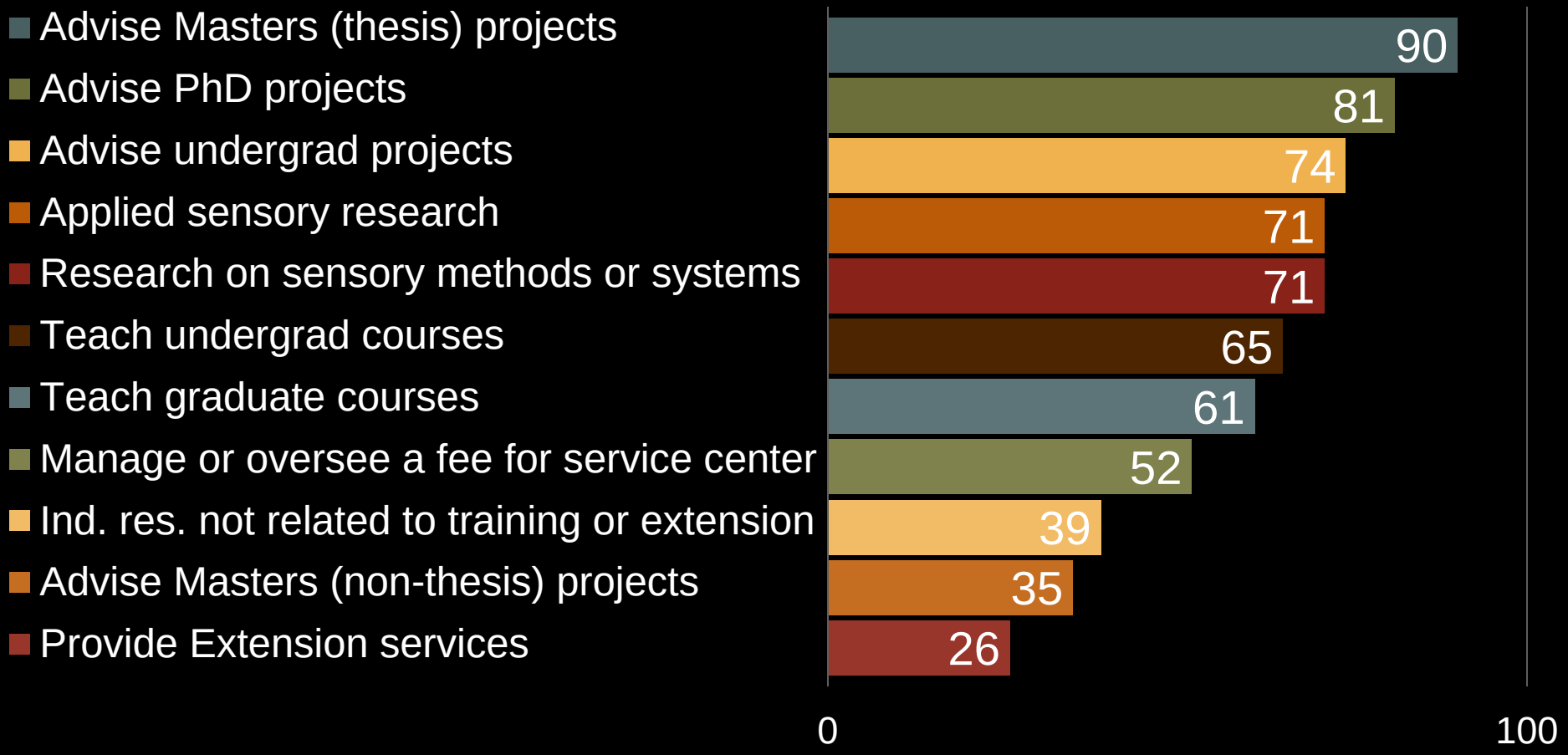
DISTINGUISHED PROFESSOR / ENDOWED CHAIR	19%
PROFESSOR	32%
ASSOCIATE PROFESSOR	16%
ASSISTANT PROFESSOR	26%
ADJUNCT FACULTY	3%
OTHER STAFF POSITION	3%

FOOD SCIENCE	58%
FOOD SCI & NUTRITION	16%
OTHER	13%
NUTRITION	6%
ENOLOGY & VITICULTURE	3%

LAND GRANT UNIVERSITIES (N=27)

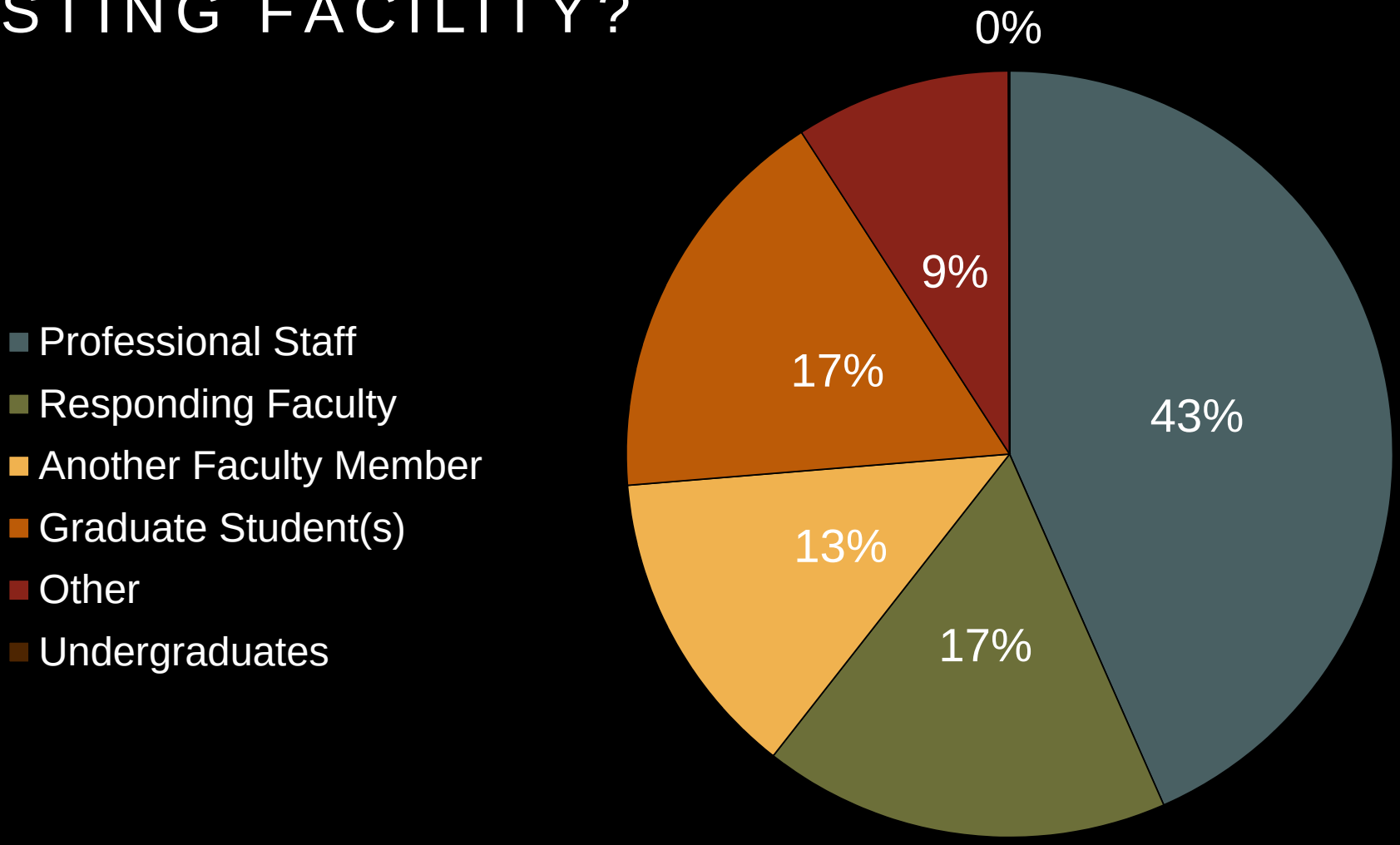
- 2 way Teaching/Research splits are modal (17 of 27)
- Teaching appointments range from 0 to 60%, and half (52%) have 25% or less effort toward teaching
- Research appointments range from 25% to 100%, with most (74%) having at least 50% effort toward research
- Extension appointments range from 0 to 60%; zero is modal, and only 19% have more than 10% effort for extension

SENSORY RELATED ACTIVITIES



3 in 4 conduct applied sensory research. half do contract testing.

WHO MANAGES YOUR FEE-FOR-SERVICE TESTING FACILITY?



Should have asked how many require graduate students to work in testing facility…

FUNDING SOURCES

Funding Source	CATA	Primary Source
Competitive Funding - USDA AFRI, NIH, NASA	**68%**	**26%**
Industrial sources - Sponsored research (grants, longterm projects)	**68%**	**26%**
Industrial sources - Fee for service (routine product testing)	**65%**	**19%**
Internal university or departmental funding	65%	10%
Commodity boards - State or local	52%	6%
Noncompetitive federal funds (USDA Hatch Act)	42%	6%
Commodity boards - National	32%	6%

Current Training

- Graduate in a typical year

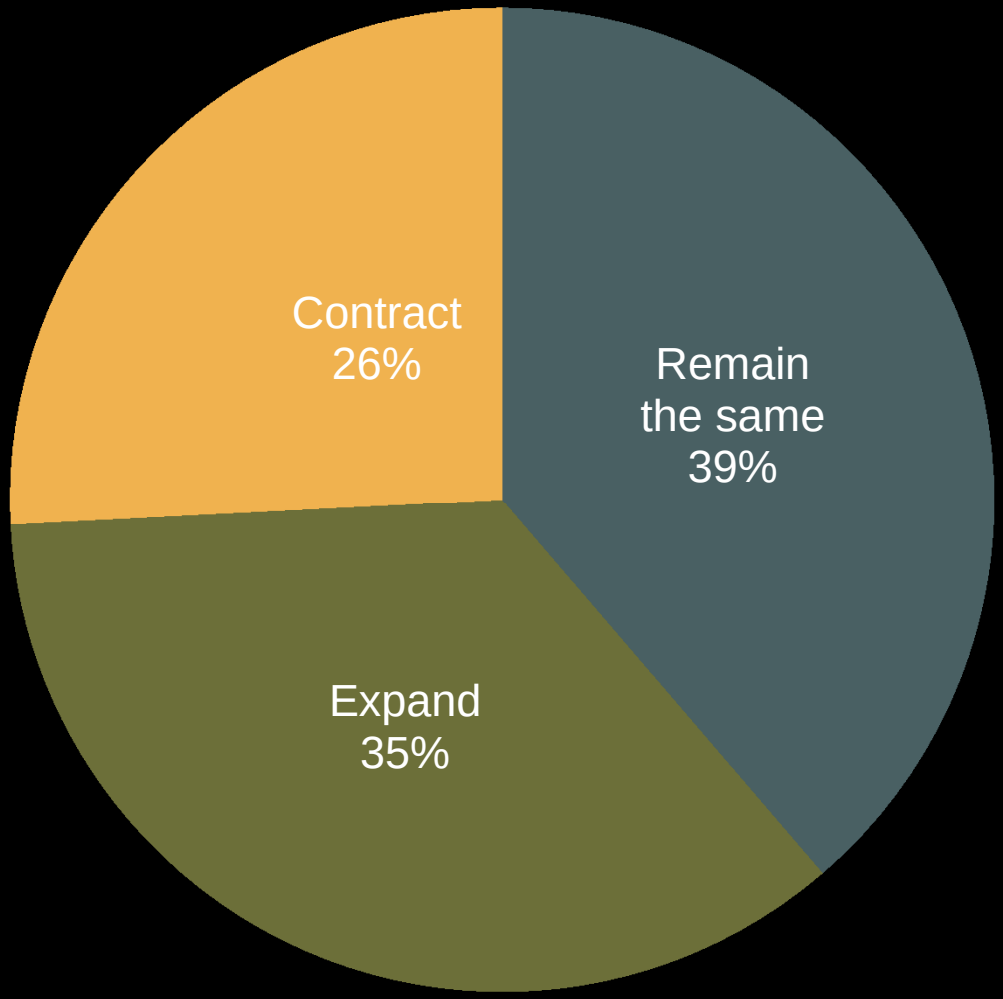
Undergrads with 1 sensory course	22
Undergrads who have worked in your sensory facility or on a sensory project	4
Undergrads with 2+ sensory courses	2

Train in a typical 3 year period

Masters (thesis), strong sensory focus	4
Masters (non-thesis), strong sensory focus	2
PhD, strong sensory focus	2
Postdoc, strong sensory focus	1
Visiting scholar, strong sensory focus	1

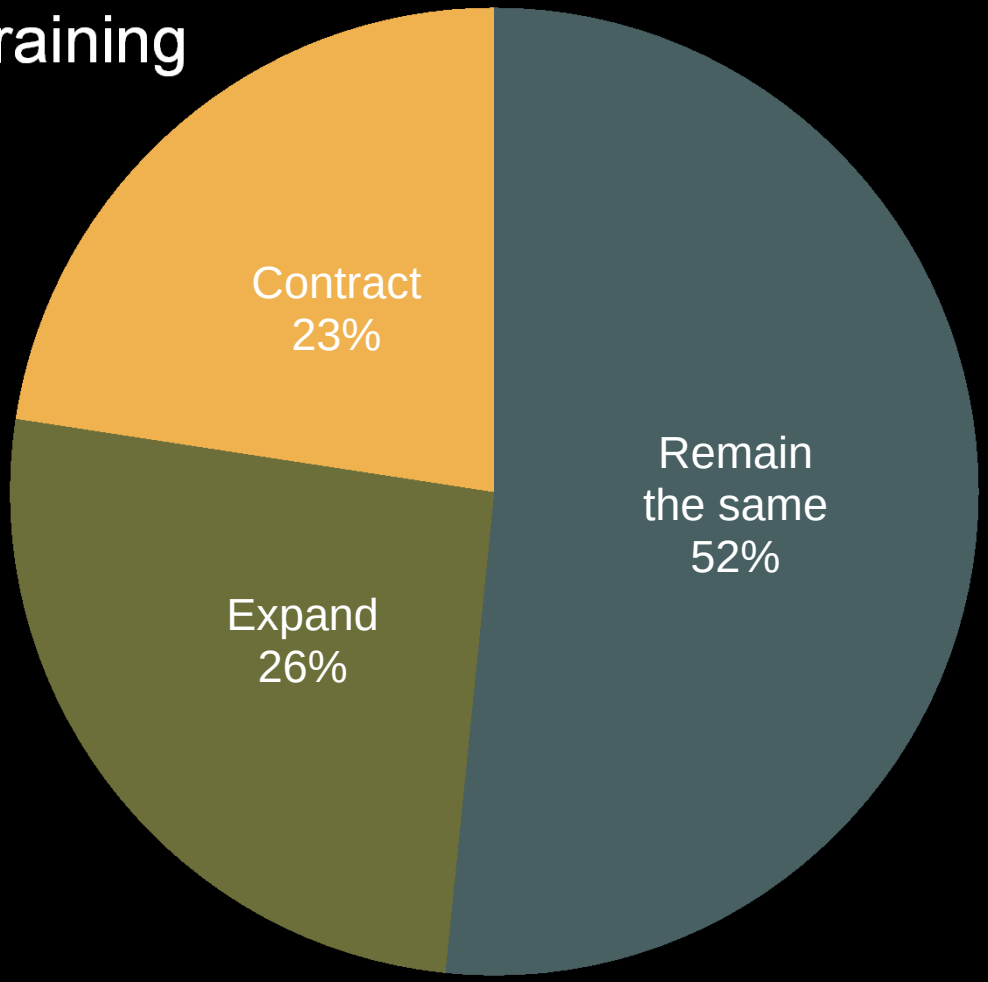
THE FUTURE

Over the next 10 years, how do you envision the *demand* for university trained sensory scientists changing?



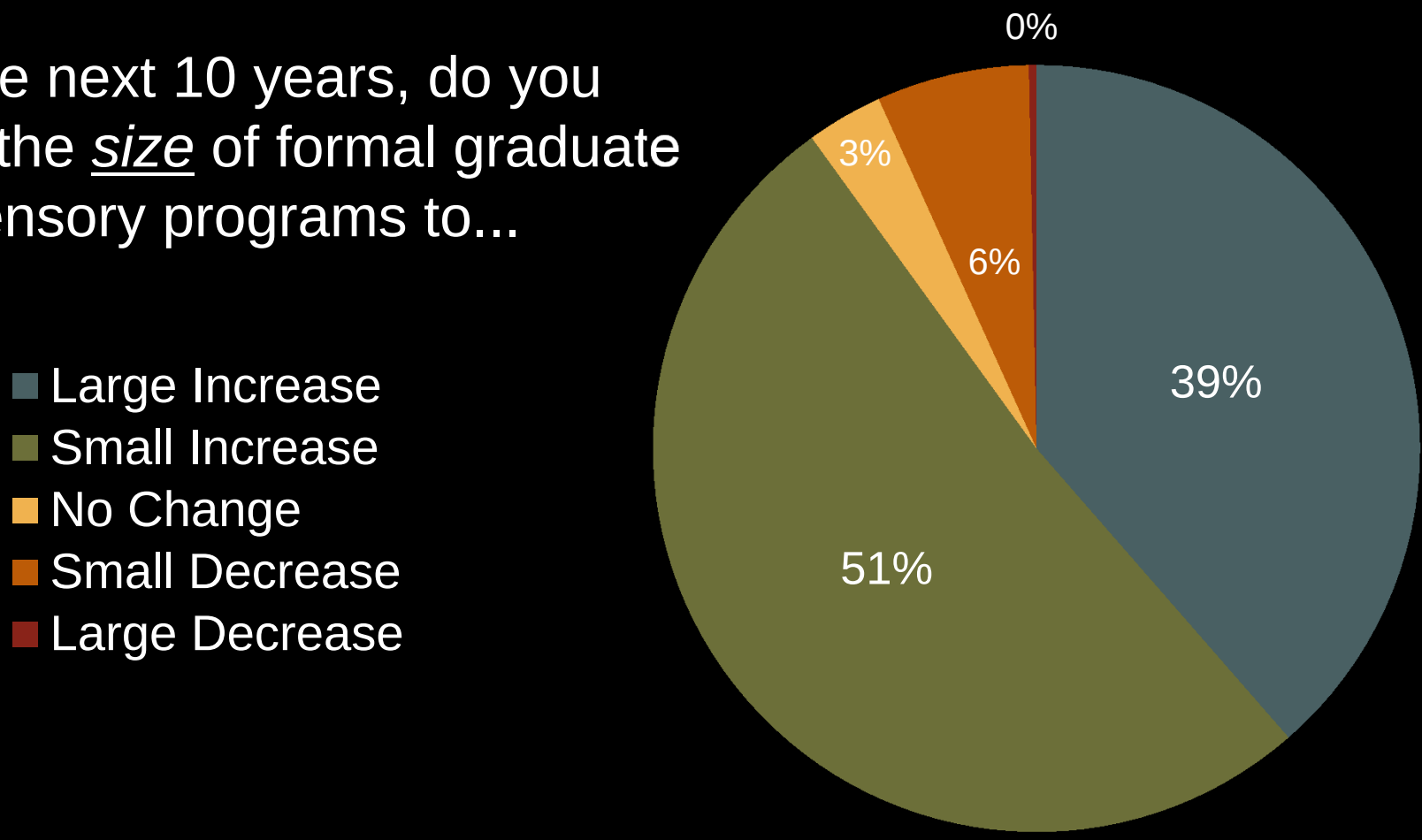
THE FUTURE

Over the next 10 years, do you expect the *number* of universities that offer formal academic training to...



THE FUTURE

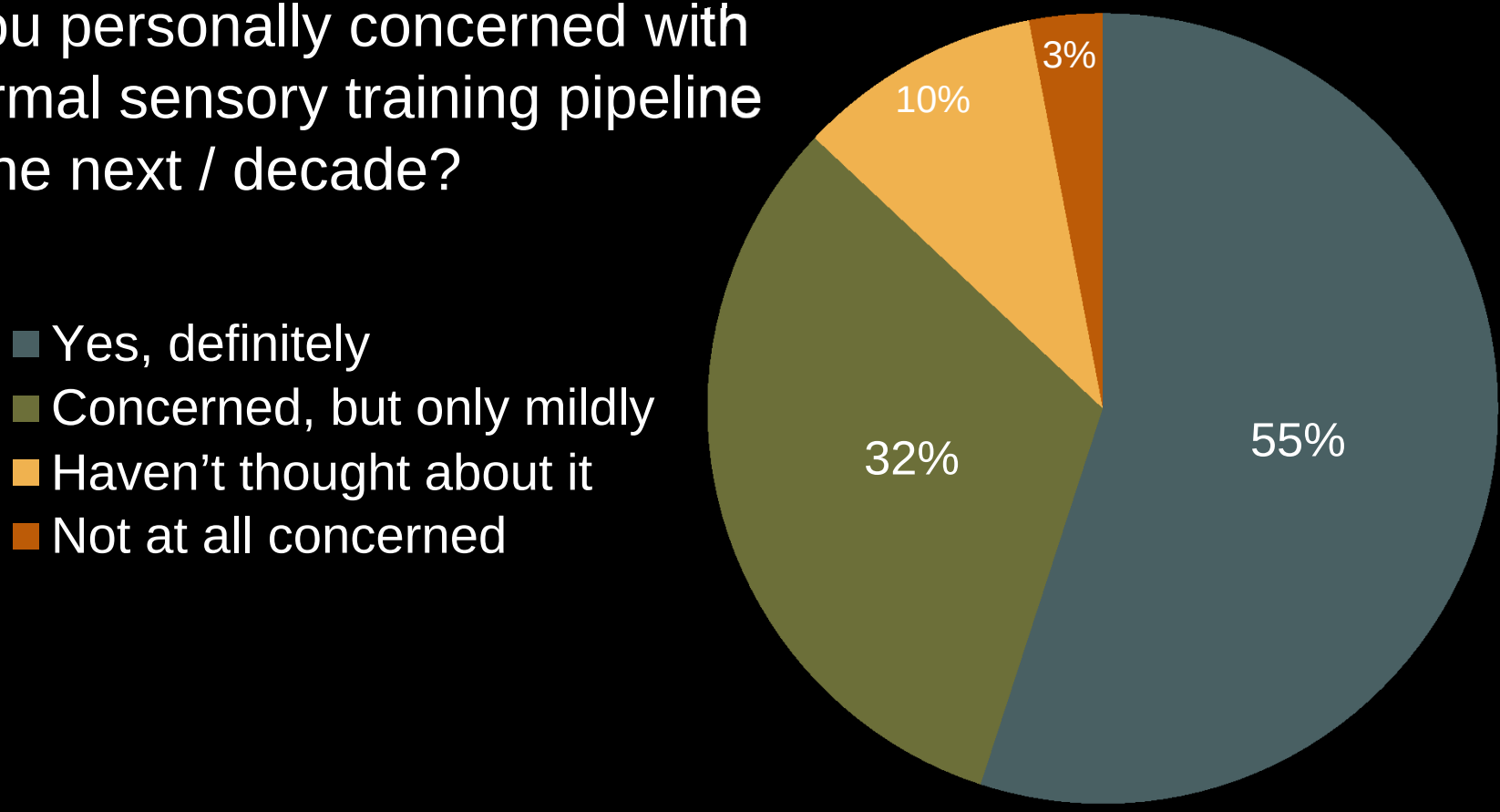
Over the next 10 years, do you expect the *size* of formal graduate level sensory programs to...



most professors expect growth in lab size

THE FUTURE

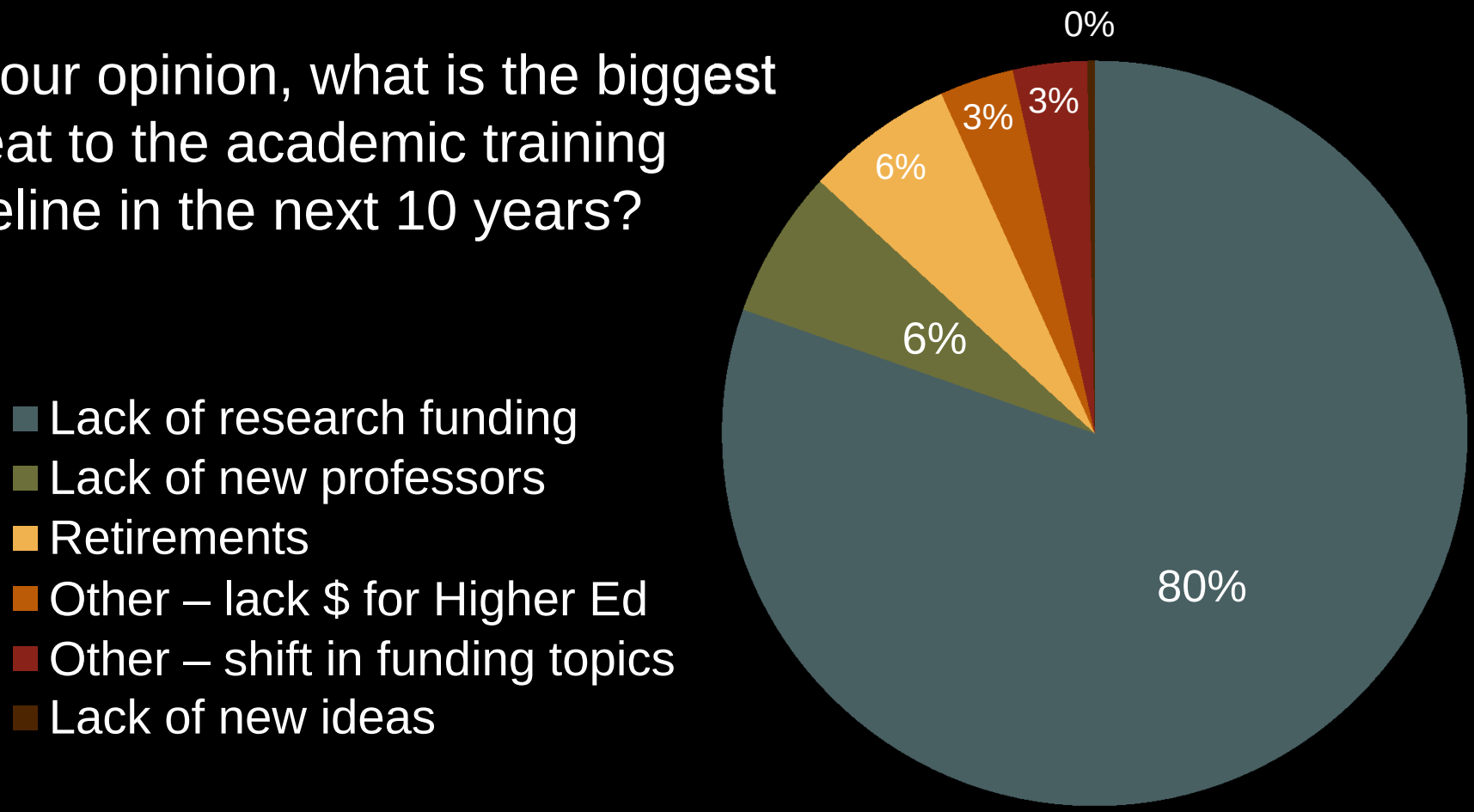
Are you personally concerned with the formal sensory training pipeline over the next / decade?



most are worried about training pipeline

THE FUTURE

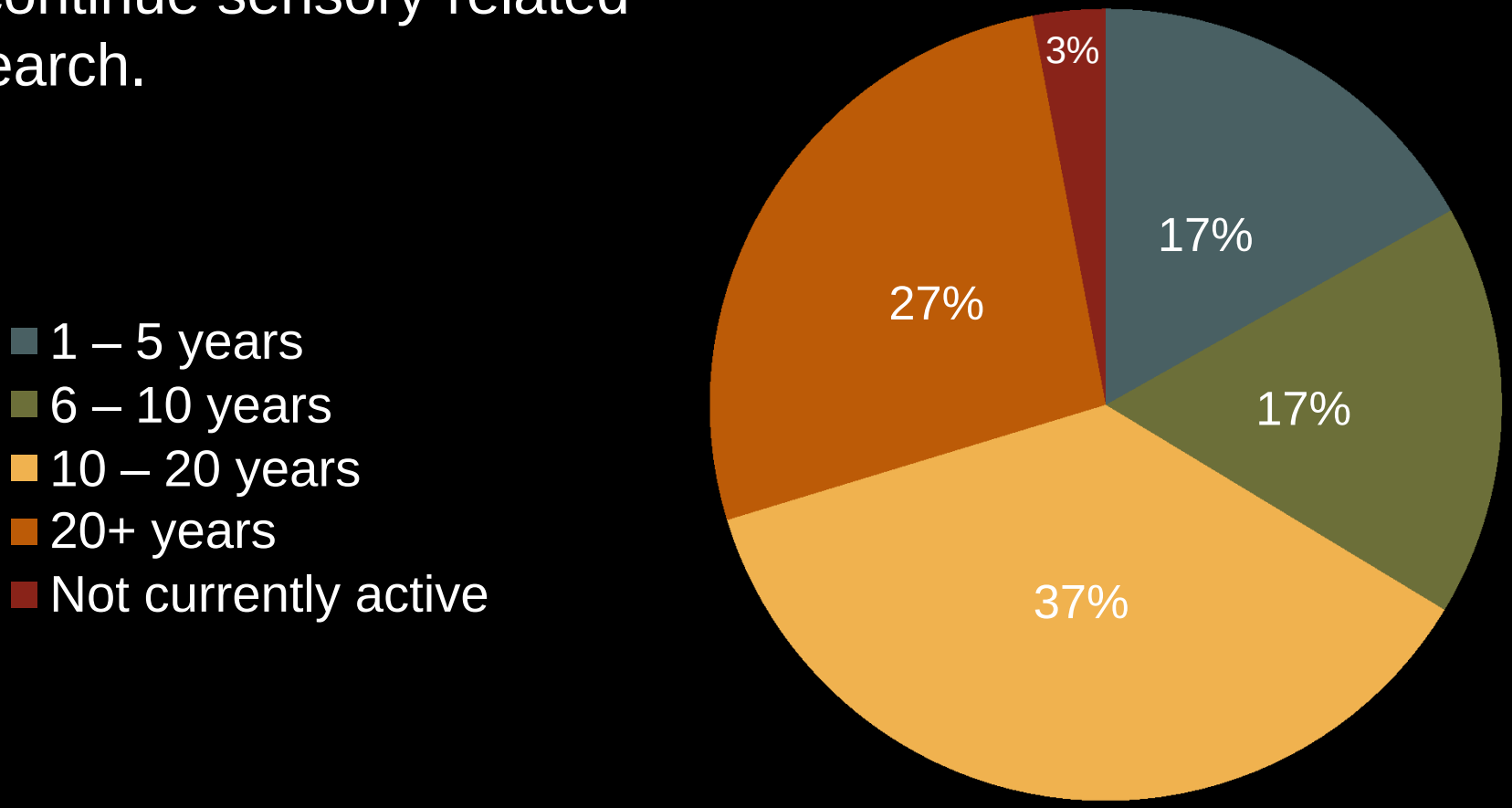
In your opinion, what is the biggest threat to the academic training pipeline in the next 10 years?



Retirements/replacement not seen as a big threat

FACULTY RETIREMENTS

Please estimate (roughly) how long until you plan to retire or discontinue sensory-related research.



PART 3:

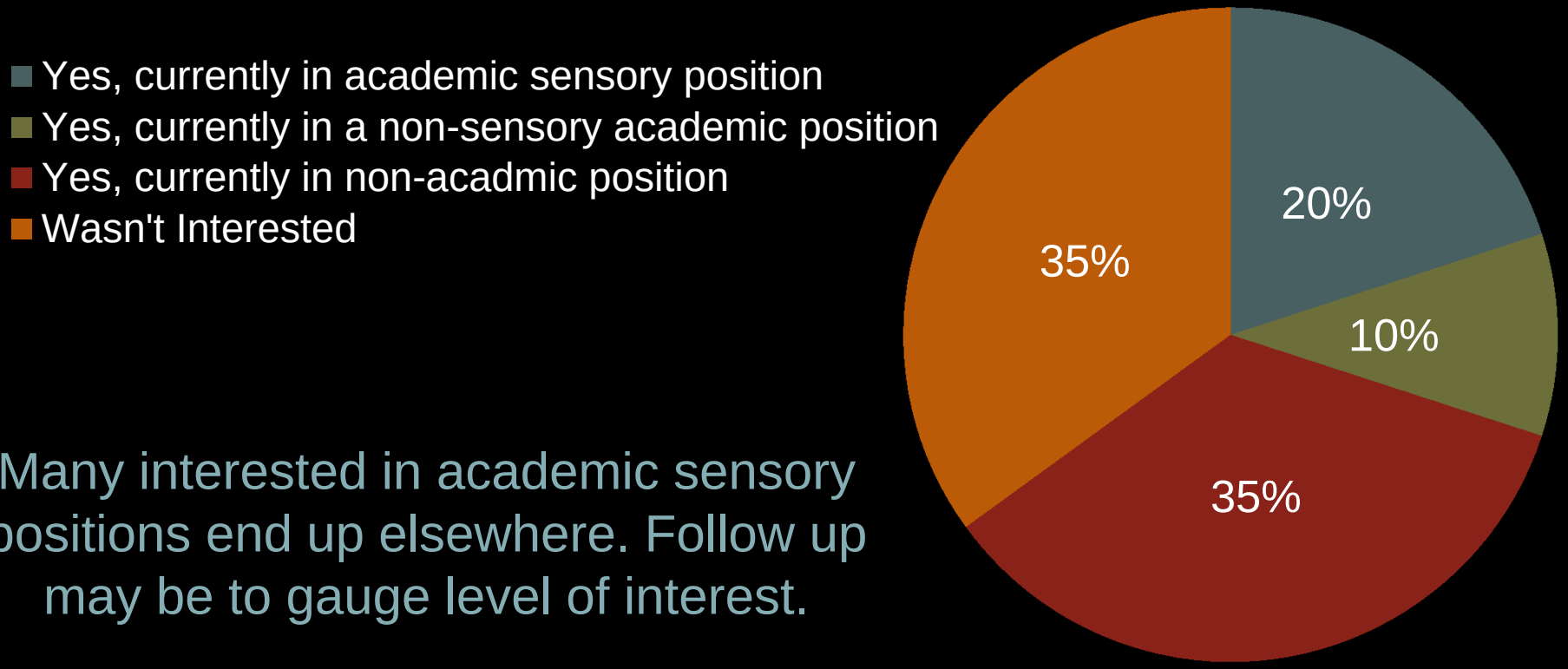
DO WE HAVE A LEAKY PIPELINE TO THE ACADEMY?

S A M P L E

- n=20 (16 women; 4 men)
- All have PhDs within the past 10 years on a sensory related topic from a university in North America
- Most trained in Food Science and/or Nutrition Departments
- Most still very active in the sensory field

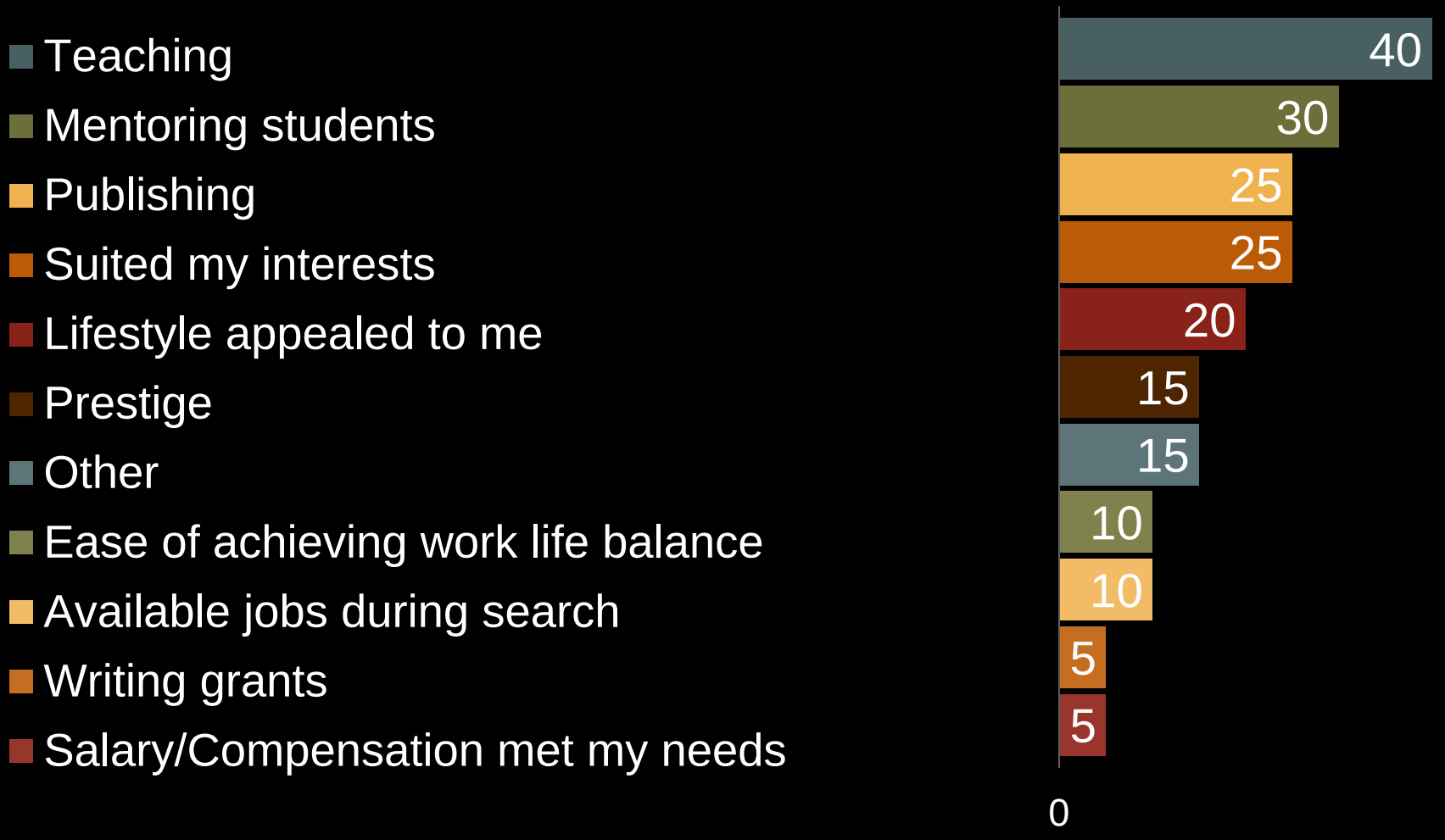
INTEREST IN ACADEMIC POSITIONS

Have you ever been interested in a permanent academic position in sensory science?



Many interested in academic sensory positions end up elsewhere. Follow up may be to gauge level of interest.

FACTORS THAT ATTRACT (%)



FACTORS THAT DETER(%)



Fewer selected overall despite there being one more option

PART 4:

DISCUSSION

DISCUSSION – THOUGHT STARTERS

- Employers want students with “business savvy” who can “hit the ground running” – savvy is “knowing when to put your hand in the wood chipper” – the academy cannot teach this…
- True cost of internships – they give students valuable experience, but also slow students down
- State of the professoriate – retirements and replacement probably not an issue, but funding is…