



## PhD Degree

**Doctoral School: LIFE, HEALTH, AGRONOMY, AND ENVIRONMENTAL SCIENCES**

The situation of our doctors, and more specifically, their professional integration, was observed on December 1st 2017, one year after the date of their defense, and on December 1st 2019, three years after their defense. This study was carried out using a questionnaire designed by the Ministry of Higher Education, Research and Innovation (MESRI), which oversees all French universities.

Number of PhD holders surveyed: **66**

Number of respondents: **54**

Response rate: **82%**

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- 1 - Profile of respondents
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- 4 - Situation of PhD holders on December 1st 2019
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## 1 - Profile of respondents

### ► All PhD holders

	Sex	
	N	%
Female	37	56%
Male	29	44%
<b>Total</b>	<b>66</b>	<b>100%</b>

	Nationality	
	N	%
French	52	79%
Foreign	14	21%
<b>Total</b>	<b>66</b>	<b>100%</b>

	Age	
	N	%
Under 24 years	0	0%
24 to 29 years	36	55%
30 to 34 years	16	24%
35 to 39 years	10	15%
40 to 44 years	2	3%
45 years and over	2	3%
<b>Total</b>	<b>66</b>	<b>100%</b>

Average = 31 years Standard Deviation = 5

### ► Responding PhD holders

	Sex	
	N	%
Female	29	54%
Male	25	46%
<b>Total</b>	<b>54</b>	<b>100%</b>

	Nationality	
	N	%
French	45	83%
Foreign	9	17%
<b>Total</b>	<b>54</b>	<b>100%</b>

	Age	
	N	%
Under 24 years	0	0%
24 to 29 years	31	57%
30 to 34 years	13	24%
35 to 39 years	8	15%
40 to 44 years	1	2%
45 years and over	1	2%
<b>Total</b>	<b>54</b>	<b>100%</b>

Average = 30 years Standard Deviation = 5

**NOTE:** The profile of respondents is similar to that of the PhD holders surveyed, with the exception of foreign doctors, who are under-represented among the respondents.

## 2 - Studies before PhD program

### ► Last degree(s) awarded before PhD program

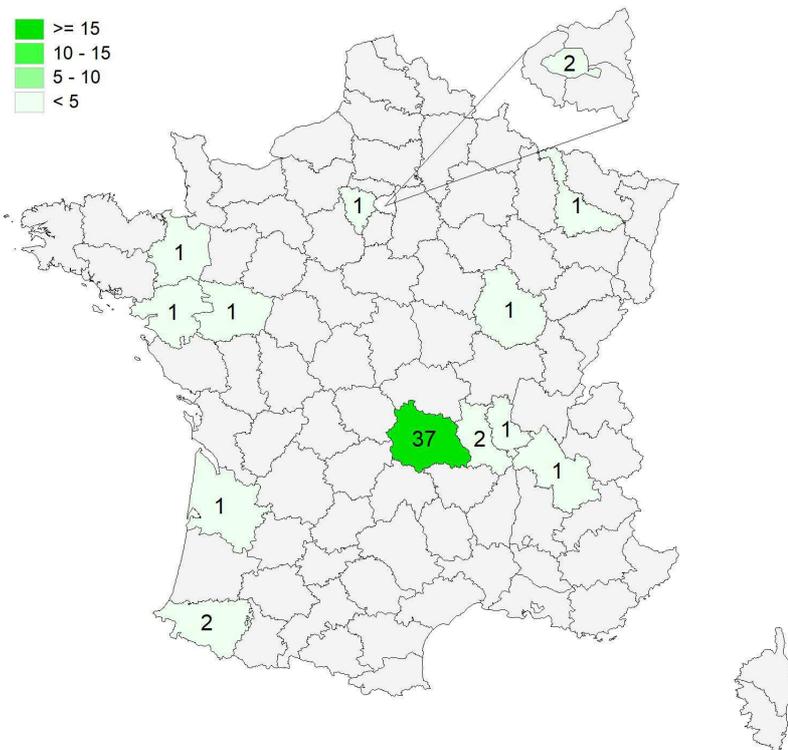
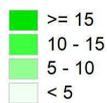
	N	
A Master's degree or equivalent	45	83%
A Medical, Pharmacy or Veterinary degree	12	22%
An Engineering degree	4	7%
A PhD degree other than the last one awarded	1	2%
A degree in Management or Commerce	0	0%
A Validation of Professional Accomplishments (VAP)	0	0%

Response rate: 100%

### ► Location of last degree received

31% of doctors received their last degree from another institution than UCA.

#### Numbers



#### Geographical distribution

Auvergne-Rhône-Alpes	41	76%
Ile-de-France	3	6%
Other department in mainland France	8	15%
Abroad:	2	4%
Brazil	1	
Iraq	1	

Response rate: 100%

### ► Professional status before receiving PhD

- 43% of PhD holders were employed before the PhD program.
- At enrollment, 22% doctors had a job unrelated to their PhD project, 58% of whom held on to the job during the program.

## 3 - PhD program

### ► PhD Specialization

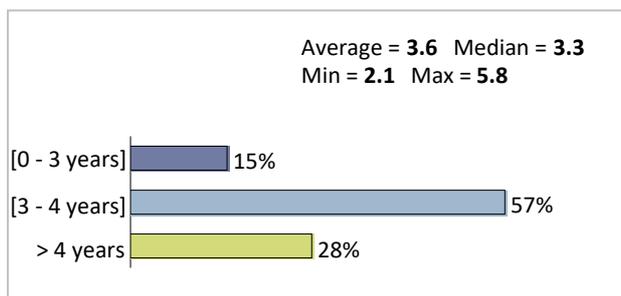
	Female	Male
Molecular and Cellular Biology	9	3
Environment, Population, and Ecology Biology	-	1
Biology of Organisms	-	3
Biomolecules, Pharmacology, Therapeutics	1	2
Agricultural Food Biotechnology, Food Sciences	2	-
Animal, Plant, and Microbial Biotechnology	-	3
Information Technology and Applications	-	2
Physiology, Biology of Organisms, Populations, Interactions	2	2
Clinical Research, Technological Innovation, Public Health	1	2
Agronomic sciences	-	1
Earth and Universe Sciences	1	-
Life and Health Sciences	13	9

Response rate: 100%

### ► Dual-Degree Thesis Program

Among the **3** doctors who were awarded a dual-degree, **2** were foreign nationals and **1** carried out his PhD program in collaboration with a research laboratory in his home country.

### ► Duration of PhD program\*



Response rate: 100%

### ► PhD funding

	N	Percentage
Specific funding	41	79%
Personal resources	11	21%
Job unrelated to PhD project	8	15%
ATER position	2	4%
No funding	2	4%
<b>Total</b>	<b>52</b>	

Response rate: 96%

\*Deviation between the defense date and the registration date in number of years

### Sources of specific funding

	N	Percentage
State funding	21	55%
Regional government	9	24%
Private funding from French-based organization	5	13%
Foreign funding	3	8%
CIFRE	2	5%
Both private and public funding (excluding CIFRE)	2	5%
French public research funding agencies	1	3%
European Commission Funding	0	0%

Response rate: 70%

### PhD funding contract types

	N	Percentage
Doctoral	24	60%
Scholarship	12	30%
Temporary job	8	20%
Permanent job	1	3%

Includes concurrent contracts (e.g. temp. + schol.)

Response rate: 74%

## ► Career Plan

	N	
Teaching or research in a public or private institution of higher education	27	51%
Working in R&D at a company	9	17%
Working in public research	9	17%
Pursuing or progressing in job held before PhD	5	9%
None	1	2%
Working in the public sector excluding research and higher education	1	2%
Working in a company excluding R&D	1	2%
Creating a company	0	0%
Career change	0	0%
Other	0	0%
<b>Total</b>	<b>53</b>	

Response rate: 98%

## ► CNU Qualification (National Council of Universities)

35% of doctors applied for a CNU qualification. 89% of these doctors received the qualification.

	Female	Male	Total
Received CNU qualification	8	8	16
Applied, awaiting response	-	1	1
Did not receive CNU qualification	-	1	1
Did not apply	20	13	33
<b>Total</b>	<b>28</b>	<b>23</b>	<b>51</b>

Response rate: 94%

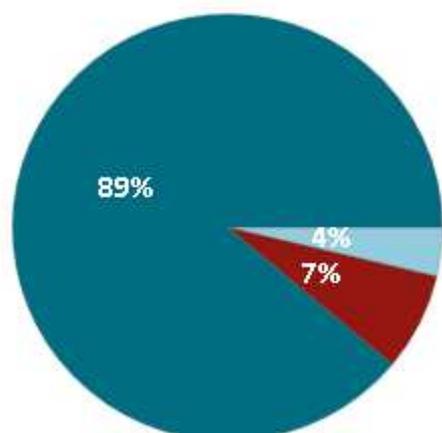
## ► Continuing studies

4 doctors enrolled in a program or a civil service exam after their PhD.

	Male	Female	Total
Master, Engineering degree or equivalent	1	-	1
PhD, Accreditation to Supervise Research (HDR)	2	-	2
Other: professional certifications (IT, TOEIC, TOEFL, etc)	-	1	1
<b>Total</b>	<b>3</b>	<b>1</b>	<b>4</b>

Response rate: 100%

### Situation of PhD holders on December 1st 2019



	Female	Male	Total
Employed	25	23	48
Employed after 1/12/2019	1	1	2
Job Seeker	3	1	4
Other	-	-	0
<b>Total</b>	<b>29</b>	<b>25</b>	<b>54</b>

- ▶ **89%** of doctors from the class of 2016 were employed on December 1st 2019.
- ▶ **4** PhD holders **were seeking employment** for the past **9** months on average and all had already held a job since receiving their PhD degree.

#### They were seeking employment in the following fields:

Research and Development	3
Higher education and research	1
Education (excluding higher education and research)	0
Innovation, research valorization and assistance	0

#### They were seeking employment in the following locations:

Their region or neighboring departments	2
Everywhere in France	1
Their department of residence	1
Abroad	0

### KEY FIGURES

Employment rate (1)	Cadre rate (2)	Contract Type			Sector		Other key figures	
		Permanent (3)	Post-doctoral contracts (4)	Other contracts (5)	Research (6)	Not research (7)	Median time spent before 1st job (8)	Median gross salary (8)
92%	96%	54.2%	25%	20.8%	34.1%	65.9%	< 1 month	€2,829

(1) Number of employed PhD holders/ (Number of employed PhD holders + Number of job seeking PhD holders)

(2) Cadres of the following categories: civil servant, administrative, IT, company head, accredited profession, higher education teachers and scientific professions, secondary and school teachers

(3) Number of PhD holders with a stable contract: permanent, civil servant, company head, accredited profession/Number of employed PhD holders

(4) Number of PhD holders with a post-doctoral contract/Number of employed PhD holders

(5) Number of employed PhD holders with another contract: temporary, interim, adjunct position, ATER/Number of employed PhD holders

(6) Number of employed PhD holders in a company working in research/Number of employed PhD holders

(7) Number of employed PhD holders in a company not working in research/Number of employed PhD holders

(8) Median=value separating the top 50% of respondents and the 50% bottom respondents

# Employment held on December 1st 2019

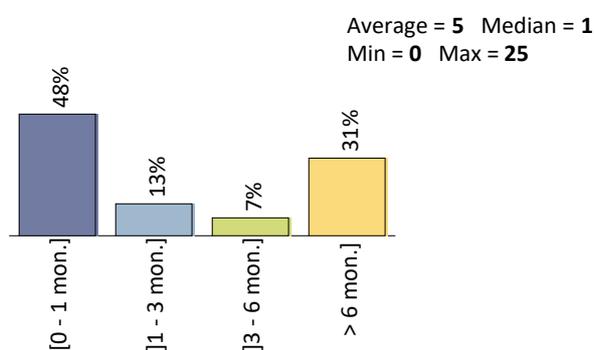
## Current employment contract type

	Female	Male	Total
Permanent	12	14	26
Temporary (excl. post-doctoral)	5	5	10
Post-doctoral contract	8	4	12
ATER position	-	-	0
Adjunct position	-	-	0
Other	-	-	0
<b>Total</b>	<b>25</b>	<b>23</b>	<b>48</b>

Response rate: 100%

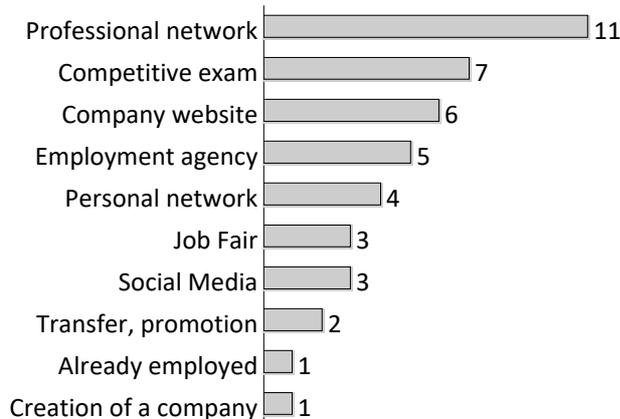
- ▶ 54% of PhD holders were still working at the first job obtained after their PhD defense.
- ▶ 93.8% of PhD holders worked full-time and 6.3% worked part-time.
- ▶ Temporary contracts varied between 1 and 48 months, with the median duration being 18 months.
- ▶ 54% of PhD holders had a stable job.

## Time spent before 1st job



Response rate: 100%

## Method of finding current job



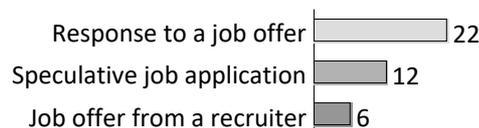
Response rate: 90%

## Skills required for job

	N	Percentage
Project management	34	79%
Staff management	29	67%
International work	26	60%
Budget management	22	51%

Response rate: 96%

## Method of applying for current job



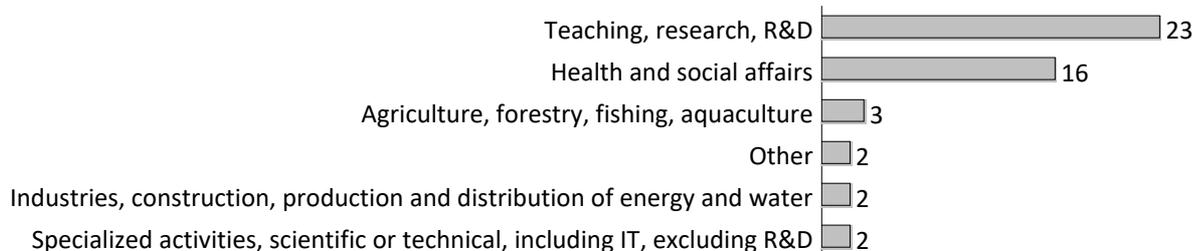
Response rate: 85%

## Functions held at current job

	N	Percentage
Higher education and research	22	50%
Health	16	36%
Research and Development	13	30%
Steering or managing projects or teams, public policy	5	11%
Research valorization and assistance, innovation	3	7%
Consulting, analysis, expertise	3	7%
Teaching (excluding higher education and research)	1	2%
Artistic creation	0	0%
Mediation, communication and scientific journalism	0	0%

Response rate: 92%

## Employment by activity sector



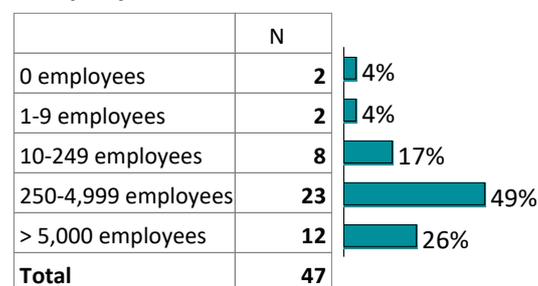
Response rate: 100%

## Company categories

	N	%
Civil service	31	65%
Private company	15	31%
Your own	1	2%
Public company	1	2%
A non-profit association or organization	-	0%
Other	-	0%
International organization or non-EU organization	-	0%
Individual with an accredited or independent profession	-	0%
<b>Total</b>	<b>48</b>	<b>100%</b>

Response rate: 100%

## Company size



Response rate: 98%

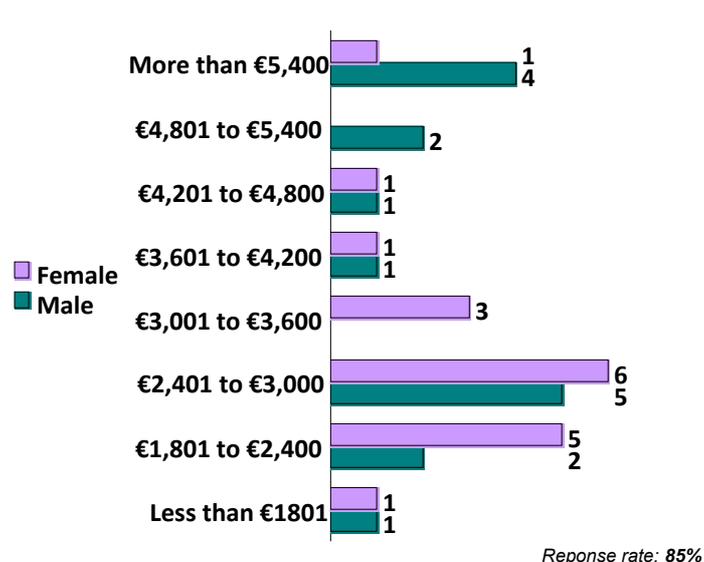
## Employment status

	Female	Male	Total
Higher education teacher, scientific profession	10	12	22
Secondary school teacher	1	-	1
School teacher, instructor, or equivalent	-	-	0
Category A civil servant	2	1	3
Company head, retailer, or equivalent	-	1	1
Engineer or company technical <i>cadre</i>	9	7	16
Administrative or commercial <i>cadre</i>	1	1	2
Accredited profession, legal and technical	-	-	0
Accredited profession, medical	1	-	1
Salaried employee	1	1	2
Information, arts and entertainment profession	-	-	0
Intermediate profession, administrative and commercial	-	-	0
<b>Total</b>	<b>25</b>	<b>23</b>	<b>48</b>

Response rate: 100%

## Salaries of PhD holders (excluding bonuses)

67 % were satisfied with their salary.



	Female	Male	Total
Average	€2,965	€3,871	€3,405
Min	€1,599	€1,353	€1,353
Max	€6,150	€7,626	€7,626
Median	€2,774	€2,952	€2,829

► The gross monthly salary of PhD holders (excluding bonuses) varied between **€1,353** and **€7,626**. The median gross salary was **€2,829\***.

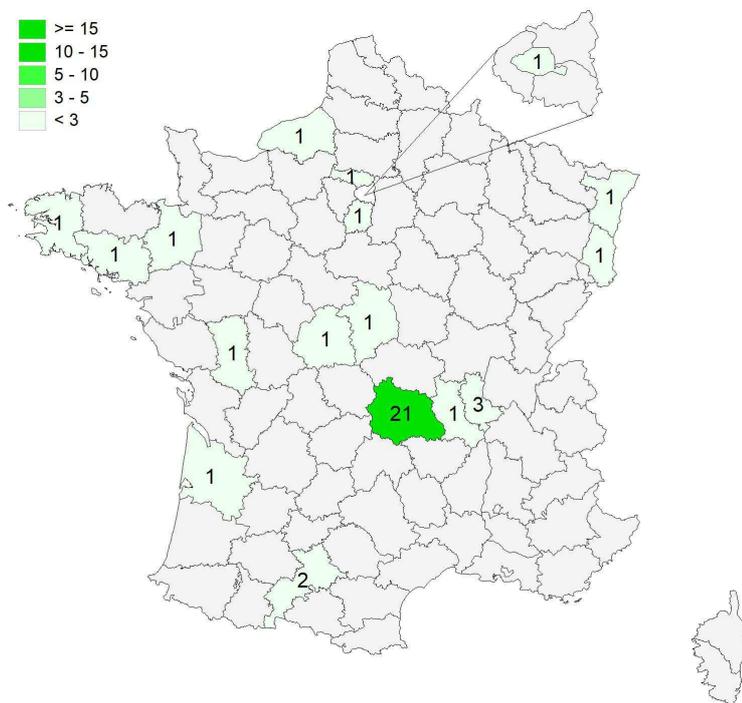
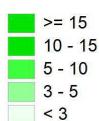
*Salaries are calculated based on full-time employment. The salaries of PhD holders working abroad were not taken into account.*

## Bonuses

9 PhD holders specified the annual gross amount of the bonuses they received. These bonuses varied between **€850** and **€12,000**, with the median amount being **€3,000**.

## Location of employment

### Numbers



### Geographical distribution of jobs

Location	Number	Percentage
Auvergne-Rhône-Alpes	25	52%
Ile-de-France	3	6%
Other departments in mainland France	12	25%
Overseas France	0	0%
Abroad:	8	17%

Denmark	1
United Arab Emirates	1
United States	2
Japan	1
United Kingdom	1
Sweden	1
Switzerland	1

Response rate: 100%

## List of jobs occupied

		Female	Male	Total
Cadre jobs	Researcher	5	3	8
	Hospital Practitioner	1	3	4
	Research Engineer	2	1	3
	Research and Development Engineer	0	3	3
	Associate Professor	3	0	3
	Associate Professor - Hospital Practitioner	1	2	3
	Hospital Engineer	2	0	2
	Department Manager	1	1	2
	Farmer	0	1	1
	Chargé de mission	1	0	1
	Research and Development Assistant	0	1	1
	Research valorization assistant	1	0	1
	Software Developer	0	1	1
	University Lecturer and Researcher	0	1	1
	University Instructor	0	1	1
	Analytical Engineer	1	0	1
	Business Intelligence Engineer	0	1	1
	Development Engineer	1	0	1
	Gastroenterologist	0	1	1
	General Practitioner	1	0	1
	Psychiatrist	0	1	1
	Nutritionist	1	0	1
	Secondary School Teacher	1	0	1
	NGS and Bioinformatics Operations Manager	1	0	1
	CNS Medication Development Manager	0	1	1
	Scientific Assistance	1	0	1
Non cadre jobs	Laboratory Technician	1	0	1
	Garbage Collector	0	1	1
<b>Total</b>		<b>25</b>	<b>23</b>	<b>48</b>

Response rate: 100%

► Job Satisfaction

86% of doctors were satisfied with their job in general.

	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied
General satisfaction with current professional situation	14	22	3	3
Satisfaction with prospective career development opportunities	10	18	6	7
Satisfaction with salary	9	19	7	7
Satisfaction with avenues opened by job	16	16	8	2
Satisfaction with appropriateness of job to PhD	16	18	6	2

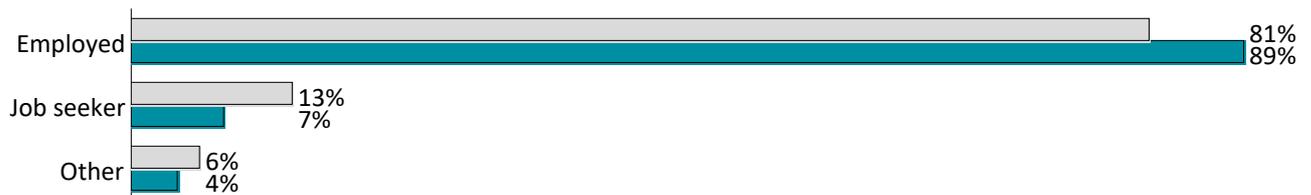
<b>General satisfaction with current professional situation</b>	33%	52%	7%	7%
<b>Satisfaction with prospective career development opportunities</b>	24%	44%	15%	17%
<b>Satisfaction with salary</b>	21%	45%	17%	17%
<b>Satisfaction with avenues opened by job</b>	38%	38%	19%	5%
<b>Satisfaction with appropriateness of job to PhD</b>	38%	43%	14%	5%

59% of doctors declared that a PhD was required to perform their current job and 81% of doctors were satisfied with the appropriateness of the job to the PhD.

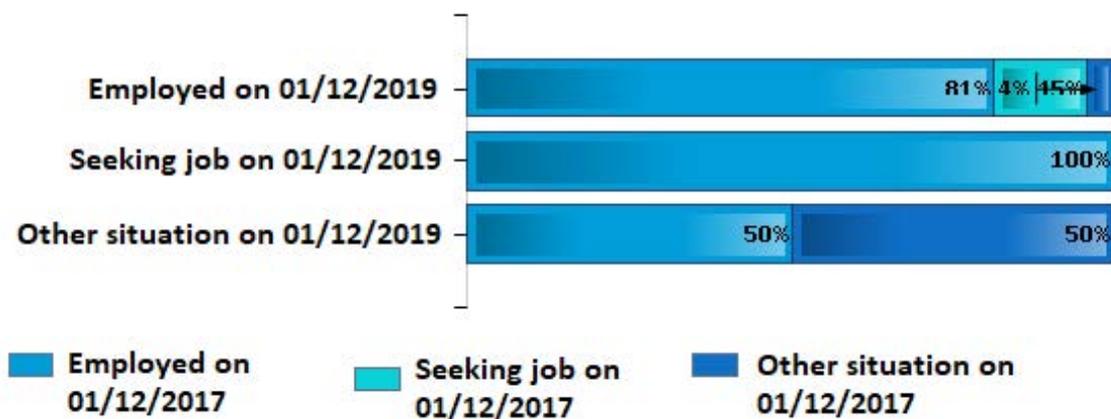
## 5 - Developments in doctors' situations 1 year and 3 years after receiving their degree

### Situations on December 1st 2017 and 2019

	Employed		Job Seeker		Other		Total	
	N	%	N	%	N	%	N	%
Situation on 01/12/2017	44	81%	7	13%	3	6%	54	100%
Situation on 01/12/2019	48	89%	4	7%	2	4%	54	100%



#### ► Development in doctors' situations after 1 year and after 3 years



81% of doctors employed on 01/12/2019 were already employed on 01/12/2017 and all of the doctors seeking work on 01/12/2019 were employed on 01/12/2017.

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## GLOSSARY

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**ATER:** Attaché Temporaire d'Enseignement et de Recherche (Temporary teaching and research assistant)

**CNU:** National Council of Universities to become an associate or full professor

**CIFRE:** Work placement agreement placing a PhD student in a company

**Dual-Degree Thesis Program:** A dual-degree thesis is a program to promote global engagement for PhD students and to develop scientific collaboration between foreign and French research teams.

**Doctoral contract:** The doctoral contract is the main type of funding granted to PhD students. The doctoral contract is open to all PhD students who have been enrolled for less than six months in their first year, with no age requirement.

**Post-doctoral contract:** A post-doctoral contract is a temporary work contract in the public and private research sphere, in France or abroad.

**PhD degree:** The PhD is the highest degree in higher education, training students for research by conducting research. In this respect, it is considered a professional research experience. It leads to the creation of new knowledge.

**ED:** Doctoral school

**ED LSHS:** Doctoral School of LITERATURE, HUMAN AND SOCIAL SCIENCES

**ED SVSAE:** Doctoral School of LIFE, HEALTH, AGRONOMY, AND ENVIRONMENTAL SCIENCES

**ED SEJPG:** Doctoral School of ECONOMIC, LAW, POLITICAL AND MANAGEMENT SCIENCES

**ED SF:** Doctoral School of FUNDAMENTAL SCIENCES

**ED SPI:** Doctoral School of ENGINEERING SCIENCES

**MCU:** Maître de Conférence Universitaire (Associate Professor)