Reducing the precarity of researchers’ careers: Perspectives from early career researchers

Matthew D. DiFranco, MCAA Chair

October 7, 2019
MCAA MAJOR SURVEY 2017

Demographics

- Sent to 80,000 former/ current MCA and MSCA beneficiaries
- 5,479 completed surveys, giving a 7% response rate
- 91% (4,971) of the respondents stated having only one nationality
- 38 being the average age of respondents
- 182 respondents stated as having a disability
- 62% of respondents were male, 38% were female and 0.5% stated other

Post-Fellowship Employment - Summary

- Most respondents worked in the Academia sector 70%, 10% work in Industry
- There were no relevant gender differences of employment sector
- Top three of employment fields were Biological Sciences, Physics and Chemistry
- 57% of recognised researchers had permanent employment contracts
- Main current jobs were across 62 international countries. Of these 32 (52%) were European
MOBILITY AND CAREER CHOICES:
A Comparison between Gender and the Main Reasons for those that took a Career Break Of 6+ Months

<table>
<thead>
<tr>
<th>Reason</th>
<th>Female</th>
<th>Male</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childcare commitments (parental leave, maternity, paternity)</td>
<td>158</td>
<td>2549</td>
<td>19</td>
</tr>
<tr>
<td>End of temporary contract</td>
<td>65</td>
<td>425</td>
<td>8</td>
</tr>
<tr>
<td>Lack of research positions</td>
<td>72</td>
<td>72</td>
<td>0</td>
</tr>
<tr>
<td>Travelling</td>
<td>40</td>
<td>39</td>
<td>1</td>
</tr>
<tr>
<td>Studying &amp; training other than research training</td>
<td>44</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>41</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Willingness to diversify career experience in a non-research position</td>
<td>41</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>To write papers for publication</td>
<td>20</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Other family reasons (e.g. related to partner)</td>
<td>74</td>
<td>157</td>
<td>2</td>
</tr>
<tr>
<td>Illness</td>
<td>72</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Eldercare commitments (immediate or spouses’ family)</td>
<td>20</td>
<td>21</td>
<td>0</td>
</tr>
</tbody>
</table>

MOBILITY AND CAREER CHOICES:
No. of times respondents have moved country of residence

- Own Career
- Partner’s Career

<table>
<thead>
<tr>
<th>No. of times moved</th>
<th>None</th>
<th>Once</th>
<th>2…</th>
<th>3 times</th>
<th>4…</th>
<th>5 times</th>
<th>More than…</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Respondents</td>
<td>4166</td>
<td>1260</td>
<td>1558</td>
<td>1012</td>
<td>401</td>
<td>244</td>
<td>234</td>
</tr>
</tbody>
</table>

Legend:
- None
- Once
- 2…
- 3 times
- 4…
- 5 times
- More than…
MCAA MAJOR SURVEY 2017
*FIRST STAGE RESEARCHERS – CAREER PREPARATION*

- **25% (1,053) surveyed were studying a Biological Sciences doctoral degree.**
- Since 2001, 80% (3,383) of respondents had started their doctorate studies.
- 3.8 was the average number of years taken to complete and achieve a doctoral award.
- ‘My interest in the subject’ motivated 70% to pursue a PhD.
- The current decade saw the number of respondents starting doctorate studies fall by 11% on the previous decade.

### FIRST STAGE RESEARCHERS:
**CAREER ASPIRATIONS DURING DOCTORAL STUDIES**

<table>
<thead>
<tr>
<th>Career Path</th>
<th>Before Study</th>
<th>During Study</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research career outside higher education</td>
<td>327</td>
<td>514</td>
<td>616</td>
</tr>
<tr>
<td>Academic career in higher education (research and teaching)</td>
<td>427</td>
<td>530</td>
<td></td>
</tr>
<tr>
<td>Research career in higher education</td>
<td>224</td>
<td>350</td>
<td></td>
</tr>
<tr>
<td>Any other professional career</td>
<td>227</td>
<td>384</td>
<td></td>
</tr>
<tr>
<td>Teaching career in higher education</td>
<td>215</td>
<td>274</td>
<td></td>
</tr>
<tr>
<td>Self-employment (including setting up own business)</td>
<td>150</td>
<td>239</td>
<td></td>
</tr>
<tr>
<td>Teaching (at a level below higher education)</td>
<td>178</td>
<td>290</td>
<td></td>
</tr>
<tr>
<td>Returning to or remaining with employer who is sponsoring your degree</td>
<td>122</td>
<td>158</td>
<td></td>
</tr>
<tr>
<td>Don’t know/ Not Applicable</td>
<td>87</td>
<td>134</td>
<td></td>
</tr>
</tbody>
</table>

Legend: **Before Study** before starting doctorate studies, **During Study** during doctorate studies, **Now** after completing doctorate studies.
First Stage Researchers: Research Skills Development

- My skills in applying appropriate research methodologies, tools and techniques have developed during my programme: Mostly Disagree 3.2%, Neither agree or disagree 7.8%, Mostly agree 51.5%
- My skills in critically analysing and evaluating findings and results have developed during my programme: Mostly Disagree 3.4%, Neither agree or disagree 8.6%, Mostly agree 48.7%
- My understanding of ‘research integrity’ (e.g. rigour, ethics, transparency, attributing the contribution of others) has developed during my programme: Mostly Disagree 4.7%, Neither agree or disagree 13.4%, Mostly agree 42.8%
- As a result of my research, I feel confident about tackling unfamiliar problems: Mostly Disagree 5.6%, Neither agree or disagree 12.8%, Mostly agree 40.0%, Definitely agree 0.3%
- My confidence to be creative or innovative has developed during my programme: Mostly Disagree 6.8%, Neither agree or disagree 14.4%, Mostly agree 40.0%, Definitely agree 39.5%

---

First Stage Researchers: Comparison of the Training Undertaken against the Desired Training during Doctoral Studies
MCAA MAJOR SURVEY 2017

*RECOGNISED RESEARCHERS – CAREER PREPARATION*

- 28% (1,247) were first stage researchers, 66% (2,941) were recognised researchers.
- Of the recognised researchers only 41% were female with 59% being male.
- 21% (601) had a break of 6+ months, 29% (316) due to lack of research positions.
- 76% (2,231) had moved 2+ times from their country of residence due to their own career.
- 47% (1,327) secured their first paid post before submitting their PhD.

RECOGNIZED RESEARCHERS:
Influences for Accepting Postdoctoral Positions

- It allowed me to continue my research: 76.2%
- It was a necessary step toward an academic career: 74.9%
- It improved my CV/job prospects: 65.7%
- I wanted training in another field: 30.6%
- Because the location suited me: 28.6%
- I wanted to work with a specific person: 22.6%
- Because the location suited my partner: 19.8%
- It was the only acceptable employment I could find at the time: 17.3%
- I wanted to work in a specific organisation: 14.2%
Most MCA participation was FP7 Initial Training Networks 16% and H2020 Individual Fellowships 15.5%.

There was a 521% increase in the number of MC Fellows from 2009 (317) and 2017 (1,969).

94% (4,399) respondents had received one or more MCA/MSCA grant.

29% (1,580) had benefitted from another external grants (ERC, Research Council & other).

42% (1,993) became MCAA members after receiving a grant. 45% were female, 39% being male.

Points of Interest

BARRIERS TO GETTING AHEAD IN CAREER
EXAMPLES OF BARRIERS OF GETTING AHEAD IN CAREER

- “Dishonesty of the scientific community in general, supremacy of politics...”
- “Not possible to open a position based on research (even if the applicant is able to secure a lot of funding)”
- “Culture of older male colleagues”
- “Too much teaching and other academic duties, no much time for research”
- “The fact that I am 55 years old and do not have a fixed position”
- “Getting promotion”
- “Lack of language skills”
- “Bureaucracy at employer”
- “Multinational companies allow innovative thinking to be originated only from their home country and creative actions at secondary countries are limited”
- “Time management, competing priorities”
- “Not enough top-publication”
- “Work-family balance”
- “Support within the department”

MCAA MAJOR SURVEY 2017

Thanks and Acknowledgements

- Survey Respondents
- MCAA Career Development Working Group and Dr. Adéll Pásztor, Newcastle University
- MCAA Board 2016-18 and Present MCAA Board
- European Union’s Directorate General for Education, Youth, Sport & Culture Funding
MCA Science Policy

www.mariecuriealumni.eu/
future-framework-programme-9-fp9-your-hands

Declaration on Sustainable Research Careers

1. Provide sustainable career prospects for researchers
2. Deploy career management services at organisations employing researchers
3. Put more emphasis on transferable skills training and recognition
4. Provide a wide variety of networking options and services in and outside of academia
