

### 1. How much of your time do you spend involved in biocuration activities?

		Response Percent	Response Count
50 - 100%		75.5%	194
10 - 50%		14.0%	36
0 - 10%		10.5%	27
answered question			257
skipped question			0



### 2. Were you previously working as a biocurator?

		Response Percent	Response Count
Yes		38.5%	10
No		61.5%	16
answered question			26
skipped question			231



### 3. Are you:

		Response Percent	Response Count
Female		60.0%	6
Male		40.0%	4
answered question			10
skipped question			247



#### 4. How old are you?

		Response Percent	Response Count
Under 25		0.0%	0
25 - 30		10.0%	1
31 - 40		0.0%	0
<b>41 - 50</b>		<b>90.0%</b>	<b>9</b>
51+		0.0%	0
<b>answered question</b>			<b>10</b>
<b>skipped question</b>			<b>247</b>




#### 5. What is your highest level of education?

		Response Percent	Response Count
Secondary education		0.0%	0
Undergraduate degree (science)		0.0%	0
Undergraduate degree (non-science)		0.0%	0
Masters or other taught postgraduate degree		10.0%	1
<b>Ph.D. in a biological science</b>		<b>90.0%</b>	<b>9</b>
Ph.D. in another dicipline		0.0%	0
<b>answered question</b>			<b>10</b>
<b>skipped question</b>			<b>247</b>

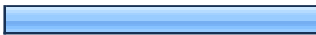

### 6. Did you enter biocuration directly from education (please count your Ph.D. as education)?

		Response Percent	Response Count
Yes		60.0%	6
No		40.0%	4
answered question			10
skipped question			247


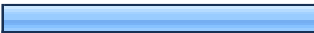

### 7. How long ago did you leave the field of biocuration?

		Response Percent	Response Count
Less than one year ago		16.7%	1
1 - 3 years ago		16.7%	1
More than 3 years ago		66.7%	4
answered question			6
skipped question			251




### 8. In what field do you work now?

		Response Percent	Response Count
Bioinformatics		50.0%	3
Bench science/"wet lab" science		0.0%	0
Software engineering		0.0%	0
I have retired/I am not currently working		0.0%	0
Other (please specify)		50.0%	3
answered question			6
skipped question			251

### 9. Why did you leave the field of biocuration? Please tick all that apply:

		Response Percent	Response Count
I left to do further study		0.0%	0
I didn't like my working environment		0.0%	0
I was offered a better employment opportunity that wasn't related to biocuration		33.3%	2
I had to move from my place of work and couldn't find biocuration work at my new location		0.0%	0
<b>My work as a biocurator was no longer sufficiently challenging</b>		<b>50.0%</b>	<b>3</b>
My contract expired and was not renewed		0.0%	0
Personal reasons (for example, having a family)		0.0%	0
Other (please specify)		33.3%	2
<b>answered question</b>			<b>6</b>
<b>skipped question</b>			<b>251</b>

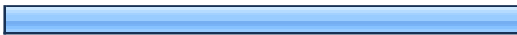

### 10. Did your role as a biocurator prepare you for your current role?

		Response Percent	Response Count
Yes, it gave me specific skills for my current role		50.0%	3
Yes, it gave me good transferable skills for my current role		66.7%	4
No, my role as a biocurator did not provide me with skills that I did not already possess.		16.7%	1
		answered question	6
		skipped question	251




### 11. Please list any skills in particular you feel your role in biocuration provided you with:

	Response Count
	4
answered question	4
skipped question	253



### 12. Did you enjoy your work as a biocurator?

		Response Percent	Response Count
Yes		83.3%	5
No, I'm glad I left!		16.7%	1
		answered question	6
		skipped question	251






### 13. Would you like to return to biocuration?

		Response Percent	Response Count
Yes, and I think I will be able to in future		25.0%	2
Yes, but I don't think I'll have the opportunity		25.0%	2
<b>No</b>		<b>50.0%</b>	<b>4</b>
<b>answered question</b>			<b>8</b>
<b>skipped question</b>			<b>249</b>



### 14. Are you:

		Response Percent	Response Count
<b>Female</b>		<b>66.2%</b>	<b>147</b>
Male		33.8%	75
<b>answered question</b>			<b>222</b>
<b>skipped question</b>			<b>35</b>






### 15. How old are you?

		Response Percent	Response Count
Under 25		0.9%	2
25 - 30		6.3%	14
31 - 40		38.7%	86
<b>41 - 50</b>		<b>40.5%</b>	<b>90</b>
51+		13.5%	30
<b>answered question</b>			<b>222</b>
<b>skipped question</b>			<b>35</b>


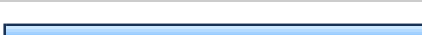
### 16. Are you a member of the International Society for Biocuration?

		Response Percent	Response Count
Yes		52.9%	117
No		47.1%	104
<b>answered question</b>			<b>221</b>
<b>skipped question</b>			<b>36</b>



### 17. What is your highest level of education?

		Response Percent	Response Count
Secondary education		0.9%	2
Undergraduate degree (science)		7.2%	16
Undergraduate degree (non-science)		0.0%	0
Masters or other taught postgraduate degree		21.1%	47
<b>Ph.D. in a biological science</b>		<b>68.2%</b>	<b>152</b>
Ph.D. in another dicipline		2.7%	6
<b>answered question</b>			<b>223</b>
<b>skipped question</b>			<b>34</b>






### 18. Did you enter biocuration directly from education (please count your Ph.D. as education)?

		Response Percent	Response Count
Yes		32.0%	71
No		68.0%	151
<b>answered question</b>			<b>222</b>
<b>skipped question</b>			<b>35</b>



## 19. Do you work in:

		Response Percent	Response Count
Academia		89.3%	176
Industry		10.7%	21
	Other (please specify)		28
answered question			197
skipped question			60





## 20. What best describes your situation?

		Response Percent	Response Count
Student		1.8%	4
Permanent post		41.3%	92
Contract - duration of 1 year or less		8.1%	18
Contract - duration of 1 - 3 years		25.1%	56
Contract - duration of 3 years or more		23.8%	53
answered question			223
skipped question			34





## 21. Are you a principal investigator/group leader?

		Response Percent	Response Count
Yes		9.1%	20
No		90.9%	199
answered question			219
skipped question			38


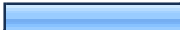

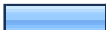

## 22. Is your PI/group leader also primarily a biocurator?

		Response Percent	Response Count
Yes, my PI/group leader is a biocurator		33.3%	67
No, my PI/group leader is an experimental scientist		18.4%	37
<b>No, my PI/group leader is a bioinformatician/computational scientist</b>		<b>33.8%</b>	<b>68</b>
No, my PI is none of the above		14.4%	29
		<b>answered question</b>	<b>201</b>
		<b>skipped question</b>	<b>56</b>

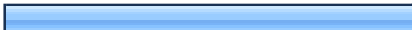
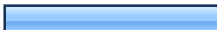
## 23. Before you worked in biocuration, what best describes what you did?

		Response Percent	Response Count
I've only ever worked in biocuration		9.4%	19
Bench scientist - related to my curation work		33.0%	67
<b>Bench scientist - not related to my curation work</b>		<b>40.4%</b>	<b>82</b>
Computational work - bioinformatics, computer programming etc.		17.2%	35
		Other (please specify)	25
		<b>answered question</b>	<b>203</b>
		<b>skipped question</b>	<b>54</b>

**24. How long have you been in your current post? (Consider the complete length of time you have been doing the same role, even if it spans more than one contract)**

		Response Percent	Response Count
Less than one year		12.2%	27
<b>1 - 3 years</b>		<b>28.1%</b>	<b>62</b>
4 - 6 years		23.1%	51
7 - 9 years		15.8%	35
More than 9 years		20.8%	46
<b>answered question</b>			<b>221</b>
<b>skipped question</b>			<b>36</b>

**25. Is your current post your first biocuration role?**

		Response Percent	Response Count
Yes		<b>65.6%</b>	<b>145</b>
No		34.4%	76
<b>answered question</b>			<b>221</b>
<b>skipped question</b>			<b>36</b>










## 26. How long have you been involved in biocuration?

		Response Percent	Response Count
less than 1 year		1.3%	1
1 - 3 years		3.9%	3
4 - 6 years		13.2%	10
7 - 9 years		36.8%	28
<b>More than 9 years</b>		<b>44.7%</b>	<b>34</b>
		<b>answered question</b>	<b>76</b>
		<b>skipped question</b>	<b>181</b>




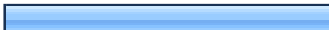

## 27. Which best describes the area in which you are involved in biocuration?

		Response Percent	Response Count
Primary database, for example GenBank		8.7%	18
<b>Secondary database, for example UniProt</b>		<b>26.1%</b>	<b>54</b>
Biological sequence analysis		15.5%	32
Biological ontology		7.7%	16
Small molecules/chemistry-based resource		2.9%	6
Interactions or pathways		9.7%	20
Literature analysis		11.6%	24
Organism-specific resource		17.9%	37
		Other (please specify)	21
		<b>answered question</b>	<b>207</b>
		<b>skipped question</b>	<b>50</b>

## 28. What motivated you to become a biocurator? Please tick all that apply.

		Response Percent	Response Count
Biocuration arose naturally out of previous work/research		37.3%	82
I liked the idea that I would do work that is essential for modern science		40.5%	89
I had enjoyed previous biocuration experience		10.5%	23
<b>I wanted to move away from experimental research</b>		<b>47.7%</b>	<b>105</b>
I felt biocuration offered me a intellectually challenging role		42.7%	94
I had worked with/knew other biocurators and liked the sound of the role		8.6%	19
I needed a job, applied for post		39.5%	87
It is financially rewarding		5.9%	13
The diversity of the work appealed to me		32.7%	72
		Other (please specify)	11
<b>answered question</b>			<b>220</b>
<b>skipped question</b>			<b>37</b>

**29. On a scale of 1-5, 1 being not at all enjoyable and 5 being very enjoyable, where do you rate your role?**

		Response Percent	Response Count
1 - not at all enjoyable		1.4%	3
2		4.5%	10
3		16.7%	37
4		<b>52.5%</b>	<b>116</b>
5 - very enjoyable		24.9%	55
		<b>answered question</b>	<b>221</b>
		<b>skipped question</b>	<b>36</b>

**30. We have listed below some attributes that you may think are important for biocurators to possess. How important do you feel each of the following factors are, in order to curate effectively, on a scale of 1-5, where 1 is not at all important and 5 is very important:**

	1 - not at all important	2	3	4	5 - very important	Rating Average	Response Count
Previous experience as an experimental scientist	2.3% (5)	8.9% (19)	12.6% (27)	34.6% (74)	<b>41.6% (89)</b>	4.04	214
Theoretical knowledge about the science you are involved in curating	0.9% (2)	2.8% (6)	9.9% (21)	37.7% (80)	<b>48.6% (103)</b>	4.30	212
Scripting/programming knowledge	16.9% (36)	<b>33.3% (71)</b>	29.1% (62)	16.0% (34)	4.7% (10)	2.58	213
Formal training in data management/curation	16.8% (36)	26.2% (56)	<b>29.0% (62)</b>	16.8% (36)	11.2% (24)	2.79	214
Formal scientific training at degree level or above	1.9% (4)	3.3% (7)	12.7% (27)	31.1% (66)	<b>50.9% (108)</b>	4.26	212
Good written and verbal communication skills	1.9% (4)	2.8% (6)	12.7% (27)	35.2% (75)	<b>47.4% (101)</b>	4.23	213
<b>answered question</b>							<b>214</b>
<b>skipped question</b>							<b>43</b>

**31. Below, we've listed some statements about biocuration jobs. Please state how you feel about each of the following aspects on a scale of 1 = not at all enjoyable, to 5 = very enjoyable.**

	1 - not at all enjoyable	2	3	4	5 - very enjoyable	Rating Average	Response Count
A quantifiable sense of progress	1.4% (3)	7.6% (16)	22.7% (48)	<b>39.3% (83)</b>	28.9% (61)	3.87	211
Interaction with end users and data submitters	3.3% (7)	10.0% (21)	24.8% (52)	<b>35.2% (74)</b>	26.7% (56)	3.72	210
Repetitive nature of day-to-day work	17.5% (37)	32.2% (68)	<b>38.9% (82)</b>	10.9% (23)	0.5% (1)	2.45	211
Scientific work that's not results-driven	5.3% (11)	14.4% (30)	<b>35.4% (74)</b>	32.5% (68)	12.4% (26)	3.33	209
Intellectual challenges and problem solving	0.5% (1)	1.9% (4)	9.4% (20)	34.9% (74)	<b>53.3% (113)</b>	4.39	212
Working extensively with scientific data	0.5% (1)	1.9% (4)	12.3% (26)	<b>46.7% (99)</b>	38.7% (82)	4.21	212
Working with a wide range of scientific data	0.5% (1)	1.4% (3)	11.4% (24)	38.9% (82)	<b>47.9% (101)</b>	4.32	211
					<b>answered question</b>		<b>214</b>
					<b>skipped question</b>		<b>43</b>

**32. Are there other aspects of your job in biocuration, not mentioned above, that you particularly enjoy?**

	Response Count
	72
<b>answered question</b>	<b>72</b>
<b>skipped question</b>	<b>185</b>

### 33. And are there other aspects, not mentioned above, that you particularly dislike?

	Response Count
	65
answered question	65
skipped question	192

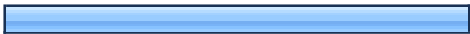
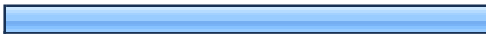




### 34. How important are the following for you as a biocurator? Please rate them on a scale of 1 = not at all important, to 5 = very important.

	1 - not at all important	2	3	4	5 - very important	Rating Average	Response Count
Recognition from other scientists for the work biocurators do	2.8% (6)	6.1% (13)	23.8% (51)	<b>37.4% (80)</b>	29.9% (64)	3.86	214
Autonomy over your work	0.9% (2)	4.2% (9)	18.3% (39)	<b>41.3% (88)</b>	35.2% (75)	4.06	213
Freedom to choose your curation projects	1.0% (2)	11.1% (23)	24.5% (51)	<b>40.9% (85)</b>	22.6% (47)	3.73	208
Freedom to conduct research outside of your core curation responsibilities - both curation-based research and other research.	11.4% (24)	15.6% (33)	20.9% (44)	<b>29.4% (62)</b>	22.7% (48)	3.36	211
Feeling intellectually challenged by your role	0.9% (2)	1.9% (4)	6.1% (13)	36.6% (78)	<b>54.5% (116)</b>	4.42	213
Having an input into the overall direction of your resource	0.9% (2)	2.8% (6)	12.7% (27)	34.9% (74)	<b>48.6% (103)</b>	4.27	212
Keeping abreast of current developments in your scientific area	0.5% (1)	3.3% (7)	16.6% (35)	<b>40.8% (86)</b>	38.9% (82)	4.14	211
Feeling part of a community of biocurators	4.3% (9)	10.4% (22)	21.3% (45)	<b>35.1% (74)</b>	28.9% (61)	3.74	211
Feeling part of a community of scientists	1.9% (4)	4.2% (9)	16.9% (36)	<b>39.9% (85)</b>	37.1% (79)	4.06	213
						answered question	214
						skipped question	43


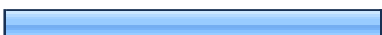

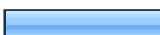



**35. Please now think about your current work as a biocurator. How strongly do you agree with the following statements? Please rate them on a scale of 1 = strongly disagree, to 5 = strongly agree**

	1 - Strongly disagree	2	3	4	5 - Strongly agree	Rating Average	Response Count
Other scientists appreciate the work I do	4.7% (10)	17.3% (37)	<b>37.4%</b> <b>(80)</b>	26.2% (56)	14.5% (31)	3.29	214
I have autonomy over my work	6.5% (14)	8.4% (18)	28.5% (61)	<b>35.5%</b> <b>(76)</b>	21.0% (45)	3.56	214
I have the freedom to choose my curational projects	13.6% (29)	20.7% (44)	<b>28.6%</b> <b>(61)</b>	24.4% (52)	12.7% (27)	3.02	213
I have freedom to conduct basic research outside of my core curation responsibilities	<b>30.0%</b> <b>(64)</b>	25.4% (54)	20.2% (43)	14.1% (30)	10.3% (22)	2.49	213
I feel intellectually challenged by my role	4.2% (9)	7.5% (16)	16.8% (36)	<b>39.7%</b> <b>(85)</b>	31.8% (68)	3.87	214
I am able to contribute to the direction and development of my resource	5.6% (12)	7.9% (17)	19.6% (42)	<b>35.0%</b> <b>(75)</b>	31.8% (68)	3.79	214
I have the opportunity to keep abreast of current developments in my scientific field	3.8% (8)	8.1% (17)	23.7% (50)	<b>36.0%</b> <b>(76)</b>	28.4% (60)	3.77	211
I feel part of a community of biocurators	9.5% (20)	15.2% (32)	<b>31.3%</b> <b>(66)</b>	30.8% (65)	13.3% (28)	3.23	211
I feel part of a wider scientific community	5.7% (12)	15.2% (32)	25.6% (54)	<b>36.5%</b> <b>(77)</b>	17.1% (36)	3.44	211
I get a sense of satisfaction/accomplishment from my job	4.2% (9)	5.2% (11)	18.3% (39)	<b>42.3%</b> <b>(90)</b>	30.0% (64)	3.89	213
<b>answered question</b>							<b>214</b>
<b>skipped question</b>							<b>43</b>


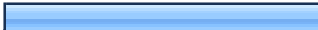



**36. Which of the following statements describe your relations with other biocurators and scientists? Please tick all that apply.**

		Response Percent	Response Count
I work regularly with other computer scientists/software engineers		74.8%	160
<b>I work regularly with other biocurators</b>		<b>78.0%</b>	<b>167</b>
I work regularly with other scientists		44.9%	96
I am quite isolated from the biocuration community.		17.8%	38
I am quite isolated from computational scientists/software engineers		10.3%	22
I am quite isolated from the wider scientific community.		19.2%	41
		<b>answered question</b>	<b>214</b>
		<b>skipped question</b>	<b>43</b>

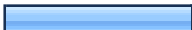

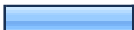

### 37. How could your job as a biocurator be improved? Please tick all that apply.

		Response Percent	Response Count
Improved curational tools		66.2%	139
More automation of routine curational tasks		60.5%	127
Better training specifically for your current job		15.2%	32
Better training about curation in general, or training for a future job		26.2%	55
Better training in bioinformatics		42.9%	90
Better training in programming/scripting languages		54.8%	115
More adherence to community standards by data submitters		54.8%	115
	Other (please specify)		11
		<b>answered question</b>	<b>210</b>
		<b>skipped question</b>	<b>47</b>

**38. Are you involved in user training/outreach for your resource? Please tick all that apply.**

		Response Percent	Response Count
No		28.3%	60
Yes - I respond to helpdesk queries		50.5%	107
Yes - I prepare materials for documentation and/or training		45.3%	96
Yes - I deliver face-to-face training		33.5%	71
Yes - I present talks/posters at meetings		55.2%	117
<b>answered question</b>			<b>212</b>
<b>skipped question</b>			<b>45</b>

**39. Do you travel for your work as a biocurator?**

		Response Percent	Response Count
No, I don't travel at all		30.0%	64
Yes, I travel 1-2 times a year		40.8%	87
Yes, I travel 3-4 times a year		20.2%	43
Yes, I travel 4+ times a year		8.9%	19
<b>answered question</b>			<b>213</b>
<b>skipped question</b>			<b>44</b>





#### 40. Are you happy with the amount of travel you do?

		Response Percent	Response Count
Yes, I'm happy		65.3%	139
No, I'd like to travel more		27.7%	59
No, I'd like to travel less		7.0%	15
answered question			213
skipped question			44





#### 41. Do you think you are paid fairly?

		Response Percent	Response Count
Yes, I am paid fairly		68.2%	144
No, I feel I am underpaid		31.8%	67
answered question			211
skipped question			46






## 42. Do you see a long-term career (i.e., 3 years or more) for yourself in biocuration?

		Response Percent	Response Count
Yes, I want to stay in biocuration and that there will be opportunities for me to do so		59.5%	125
Yes, I want to stay in biocuration but I don't think opportunities will exist for me to do so		29.0%	61
No, I don't want to stay in biocuration but would like to remain in science		10.0%	21
No, I don't want to stay in biocuration, nor do I want to remain in science		1.4%	3
		<b>answered question</b>	<b>210</b>
		<b>skipped question</b>	<b>47</b>

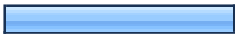

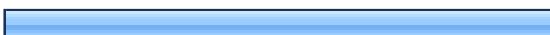
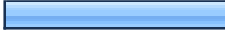


## 43. What do you think the main barriers are to you remaining in biocuration? Please tick all that apply.

		Response Percent	Response Count
Increased competition from other biocurators for employment		24.2%	15
<b>There won't be sufficient biocuration jobs to apply for</b>		<b>82.3%</b>	<b>51</b>
I don't think my skills will keep up with the demands of the job		16.1%	10
No opportunities to move into more senior roles		59.7%	37
		Other (please specify)	8
		<b>answered question</b>	<b>62</b>
		<b>skipped question</b>	<b>195</b>

**44. What do you consider to be the main challenges to biocuration? Please tick all that apply.**

		<b>Response Percent</b>	<b>Response Count</b>
Curation might be perceived as irrelevant if we cannot cope with the flow of data		39.9%	85
Dealing with increased flow of data		70.4%	150
Impressing upon other scientists the importance of curation		56.8%	121
Improved computational methods will reduce the need for biocurators		17.8%	38
<b>Securing funding to maintain and develop resources</b>		<b>77.9%</b>	<b>166</b>
	Other (please specify)		6
		<b>answered question</b>	<b>213</b>
		<b>skipped question</b>	<b>44</b>

**45. What do you think the ISB should do to promote biocuration and biocurator's interest? Please tick all that apply.**

		Response Percent	Response Count
Encourage development of communal curation tools		36.9%	79
Engage with journals to promote adoption of standard nomenclatures/depositories		80.4%	172
<b>Engage with funding bodies to promote importance of curation</b>		<b>88.3%</b>	<b>189</b>
Organise training for curators		35.5%	76
Organise and secure funding for regional meetings for curators		50.5%	108
Seek out and publicise employment opportunities		60.3%	129
	Other (please specify)		6
<b>answered question</b>			<b>214</b>
<b>skipped question</b>			<b>43</b>

**46. We would be interested in learning more about possible career paths through biocuration. If you would be interested in staying in touch with the ISB to allow us to follow your career, please leave your email below (Contact details are not linked to survey responses).**

	Response Count
	64
<b>answered question</b>	<b>64</b>
<b>skipped question</b>	<b>193</b>