

Supplementary Table S2: Questionnaire for the technical personnel.

| Relevant demographics | | |
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| No. | Question | Answer choices |
| 1 | Your position with the biobank? | Technical personnel Biobank director Project/ biobank management Laboratory head Quality management IT co-worker |
| 2 | What kind of education do you have as technical personnel? | Medical technical assistant Biological technical assistant Laboratory technician Another educational qualification, specifically: (<i>free text field</i>) |
| 3 | For how many years have you been working with the biobank? | Less than 1 year 1 to less than 3 years 3 to less than 5 years 5 years and longer |
| 4 | What describes your English skills best? | I am a native speaker I can communicate easily in English on technical subjects and understand texts straight away I can communicate in English My English is rather weak I cannot speak English at all |
| Educational needs | | |
| No. | Question | Answer choices |
| <i>In which areas would you like to have further training?</i> | | |
| 5.a | Collection and transport of biospecimens | <i>7-item likert scale:</i> <input type="radio"/> Absolutely not interested <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Very interested |
| 5.b | Which topic in this area is particularly important for you? | <i>Free text field</i> |
| 6.a | Entry, processing, and release of biospecimens | <i>7-item likert scale:</i> <input type="radio"/> Absolutely not interested <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Very interested |
| 6.b | Which topic in this area is particularly important for you? | <i>Free text field</i> |
| 7.a | Storage of biospecimens | <i>7-item likert scale:</i> <input type="radio"/> Absolutely not interested <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Very interested |

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| 7.b | Which topic in this area is particularly important for you? | Free text field |
| 8.a | Quality management | 7-item likert scale: <ul style="list-style-type: none"> <input type="radio"/> Absolutely not interested <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Very interested |
| 8.b | Which topic in this area is particularly important for you? | Free text field |
| 9.a | Data management and data protection | 7-item likert scale: <ul style="list-style-type: none"> <input type="radio"/> Absolutely not interested <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Very interested |
| 9.b | Which topic in this area is particularly important for you? | Free text field |
| 10.a | Occupational Safety | 7-item likert scale: <ul style="list-style-type: none"> <input type="radio"/> Absolutely not interested <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Very interested |
| 10.b | Which topic in this area is particularly important for you? | Free text field |
| 11.a | Ethical, legal, and social issues | 7-item likert scale: <ul style="list-style-type: none"> <input type="radio"/> Absolutely not interested <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Very interested |
| 11.b | Which topic in this area is particularly important for you? | Free text field |
| 12 | If there are other topics from your point of view that are important to you in connection with further education, you can enter them here: | Free text field |
| 13 | For which of these areas do you need practical skills? (Multiple answers possible) | Collection and transport of biospecimens |
| | | Entry, processing, and release of biospecimens |
| | | Storage of biospecimens |
| | | Quality management |
| | | Data management and data protection |
| | | Occupational safety |
| | | Ethical, legal, and social issues |
| | | Other (free text field) |
| 14 | Which of these areas should be supported by practical exercises in a further training measure? (Multiple answers possible) | Collection and transport of biospecimens |
| | | Entry, processing, and release of biospecimens |
| | | Storage of biospecimens |
| | | Quality management |

| | | |
|--|--|--|
| | | Data management and data protection |
| | | Occupational safety |
| | | Ethical, legal, and social issues |
| | | Other (<i>free text field</i>) |
| 15 | In which of these areas is basic knowledge sufficient? (Multiple answers possible) | Collection and transport of biospecimens Entry, processing, and release of biospecimens Storage of biospecimens Quality management Data management and data protection Occupational safety Ethical, legal, and social issues Other (<i>free text field</i>) |
| Existing knowledge | | |
| No. | Question | Answer choices |
| 16 | I know what the main task of a biobank is. | Yes No |
| <i>Please assess your skills and knowledge on the following learning objectives below:</i> | | |
| 17 | I can explain the importance of pre-analytical factors for the quality of biospecimens and can describe how these shall be documented. | 7-item likert scale: <input type="radio"/> Disagree entirely <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Agree entirely |
| 18 | I can describe different types of biospecimens. | |
| 19 | I know for which analyses FFPE and cryogenic tissue are suitable or not suitable. | |
| 20 | I can describe the necessary steps for the transport of biospecimens. | |
| 21 | I know how to document entry and release of biospecimens. | |
| 22 | I can explain different processing methods for biospecimens. | |
| 23 | I can describe important aspects of biospecimens processing and storage. | |
| 24 | I know how to prepare different biospecimens for shipment (e.g. by courier transport). | |
| 25 | I can describe how the treat biospecimens after storage for further processing. | |
| 26 | I can describe how to store and retrieve biospecimens to ensure their optimal use. | |
| 27 | I know how to handle stored biospecimens. | |
| 28 | I know how to properly process cryospecimens without thawing them. | |
| 29 | I can document deviations from the SOP. | |
| 30 | I know the difference between anonymization and pseudonymization | |
| 31 | I can explain the purpose of the "Material and Data Transfer Agreement". | |
| 32 | I know how to dispose biospecimens that are not going to be used. | |
| 33 | I know what to do with stored biospecimens in the event of a revocation of consent. | |
| 34 | I know how to handle liquid nitrogen and dry ice. | |
| 35 | I know how to react in a case of an accident. | |
| Previous participation in advanced trainings | | |
| No. | Question | Answer choices |
| 36 | In how many different training courses did you participate ? | None |
| | | 1 |
| | | 2 |
| | | 3 |
| | | 4 |
| 37 | What was the topic of the training? | <i>Free text field</i> |
| 38 | Was the training specifically for technical staff? | Yes |

| | | |
|---|--|---|
| | | No |
| 39 | What was the format of the training? | Practical course |
| | | Online course |
| | | Lecture/ theory/ seminar |
| | | eLearning |
| | | Other (<i>free text field</i>) |
| 40 | How long did the training last? | 1 to under 3 hours |
| | | 3 to under 5 hours |
| | | 5 to 8 hours |
| | | 1 to 2 days |
| | | 3 to 5 days |
| | | Longer |
| 41 | In which environment did the training take place? | Academy |
| | | Industry |
| | | Other (<i>free text field</i>) |
| 42 | How much did it cost? (in €) | <i>Free text field</i> |
| 43 | How difficult was it for you to get time off for the training? | 7 -item likert scale: |
| | | <input type="radio"/> Very difficult |
| | | <input type="radio"/> |
| | | <input type="radio"/> |
| | | <input type="radio"/> |
| | | <input type="radio"/> |
| | | <input type="radio"/> Not difficult at all |
| 44 | How motivated were you to participate in the training? | 7-item Likert scale: |
| | | <input type="radio"/> Absolutely not motivated |
| | | <input type="radio"/> |
| | | <input type="radio"/> |
| | | <input type="radio"/> |
| | | <input type="radio"/> |
| | | <input type="radio"/> Highly motivated |
| 45 | How satisfied were you with the training? | 7-item Likert scale: |
| | | <input type="radio"/> Absolutely not satisfied |
| | | <input type="radio"/> |
| | | <input type="radio"/> |
| | | <input type="radio"/> |
| | | <input type="radio"/> |
| | | <input type="radio"/> Very satisfied |
| Questions along the design of a future advanced training for biobank technicians | | |
| No. | Question | Answer choices |
| 46 | Do you have any suggestions and proposals on how to improve further training measures? | <i>Free text field</i> |
| 47 | Have you already had experience with eLearning courses? | Yes |
| | | No |
| 48 | What do you think are the advantages of eLearning? | <i>Free text field</i> |
| 49 | What do you think are the disadvantages of eLearning? | <i>Free text field</i> |
| 50 | What kind of learning method do you prefer? | eLearning/ online course |
| | | Printed scripts |
| | | Lecture/ theory/ seminar |
| | | Practical course |
| | | Combination of theoretical and practical training |
| | | Other, please fill in: (<i>free text field</i>) |

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| 51 | Would you appreciate a final test in a further training measure to check your learning success? | Yes |
| | | No |
| 52 | Would you like to receive a certificate as proof that you passed the examination? | Yes |
| | | No |
| 53 | In my opinion, a good further education measure should: | ... be well organized |
| | | ... communicate knowledge in a simple and understandable way |
| | | ... take place in groups |
| | | ... be designed for self-study |
| | | ... be application-oriented |
| | | Other (free text field) |
| Ending of the survey | | |
| No. | Question | Answer choices |
| 54 | What age group are you in? | younger than 20 |
| | | 20-29 |
| | | 30-39 |
| | | 40-49 |
| | | 50-59 |
| | | 60 and older |
| 55 | Is there anything else you would like to tell us concerning our survey or the topic of "Further training in biobanks"? Here you have the opportunity to do so: | Free text field |