

ORganisation for PhD Education in Biomedicine and Health Science in the EUropean System

ORPHEUS SELF-EVALUATION QUESTIONNAIRE

16-06-2018

This questionnaire is a tool for self-evaluation of PhD training programmes. It is based on the publication *Best Practices for PhD Training,* published 2016 by ORPHEUS (Organisation for PhD Education in Biomedicine and Health Sciences in the European System) and AMSE (Association of Medical Schools in Europe). This publication is available on www.orpheus-med.org and is based on work done over many years by ORPHEUS, AMSE and the World Federation for Medical Education. It represents a consensus by around 100 institutions from almost all European countries. The document provides a number of recommendations of what are considered to be best practices, and has two types of recommendations:

- Basic Recommendations: Recommendations that are thought to be particularly important.
- **Quality Development**: Further recommendations that are in accordance with international consensus about good practice.

In addition, there are **Annotations** that are used to clarify, amplify or exemplify expressions in the recommendations, and also to indicate flexibility.

The purpose of the questionnaire is to provide a framework for institutions to discuss and reflect on their PhD programmes a basis for deciding if improvements might be made. The effectiveness of the process will likely be enhanced if relevant stakeholders (e.g. PhD candidates, supervisors, research directors, graduate school administration, graduate school leadership) are involved in completing the form.

ORPHEUS believes that completion of the form will in itself have value for the institution, and the questionnaire is thus part of ORPHEUS' aim of promoting the enhancement of PhD training in Europe and elsewhere. ORPHEUS may, however, use the questionnaire as a basis for applying for

- a) an ORPHEUS Evaluation Certificate, or
- b) an ORPHEUS Label.

Such institutions should also complete the form on the last page of this document.

Details of the procedures for applying for these awards are provided on www.orpheus-med.org.

Institutions interested in entering this process should contact the President of ORPHEUS, Prof. Robert Harris, Karolinska Institute, Stockholm, Sweden, <u>Robert.Harris@ki.se</u> and the chairman of the ORPHEUS Labelling Board, Prof. Michael Mulvany, Aarhus University, Aarhus, Denmark, <u>mm@farm.au.dk</u>.

The questionnaire

Institution	

(abbrev	Basic Recommendations (abbreviated - see Best Practices document for full recommendations)		Please expand your answer with the following information. If the answer is "No" please indicate if you would like to make changes that would allow compliance. If such changes are not wanted, please explain.	Response. Please be succinct and refer to e.g. graduate school website where relevant.
1. Resec	arch environment			
#1: BR 1.1	There should be a strong research environment around every PhD project, either within the institution or within collaborating institutions.		Describe research areas covered by the institution. Give examples of e.g. 5 key papers. Provide information about institution ranking if relevant.	
#2: BR 1.2	Facilities should be compatible with the requirements of completing the PhD project.		Describe facilities available at the institution and from other institutions. Give examples.	
#3: BR 1.3	Research should be consistent with international ethical standards.		Provide reference to local ethical committee and other organizations concerned with maintaining ethical standards. How are these standards implemented?	

(abbrev for full i	Basic Recommendations (abbreviated - see Best Practices document for full recommendations)		Please expand your answer with the following information. If the answer is "No" please indicate if you would like to make changes that would allow compliance. If such changes are not wanted, please explain.	Response. Please be succinct and refer to e.g. graduate school website where relevant.
#4: BR 1.4	There should be provision for allowing PhD candidates to perform part of their programme in another institution, national and abroad.		Describe the arrangements provided for allowing PhD candidates to spend part of their time in another institution. How many take advantage of these arrangements? Who covers the expenses?	
#5: QD 1.1	Institutions lacking facilities/expertise could collaborate with stronger institutions to obtain these.		Describe collaborative arrangements with other institutions.	
#6: QD 1.2	Possibilities for joint and double degrees could be explored.		Are there arrangements for joint or double degrees? How many PhD candidates are currently using such a programme?	
2. Outco				
#7: BR 2.1	PhD programmes should provide PhD candidates with competences to become qualified and independent researchers, according to principles of good research practice.		What criteria are used to ensure that each PhD candidate has developed these competences?	
#8: BR 2.2	A PhD degree should also be of benefit in a career outside academic or clinical research (problem solving, analysis, evaluation, technology transfer etc.).		What arrangements are made to ensure that each PhD candidate has developed these competences?	
#9: BR 2.3	The outcomes for PhD candidates with a background in medicine or other professional training are the same as for any other PhD.		Are there any special arrangements for PhD candidates with background in professional training?	

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3. Admis	sion policy and criteria			
#10: BR 3.1	PhD candidates should be selected on the basis of a competitive and transparent process.		Describe the admission process.	
#11: BR 3.2	Applicants for PhD programmes should have an educational level corresponding to a master's degree.		Describe the level required. Are persons with a medical degree or other professional degree accepted?	
#12: BR 3.3	Before enrolment or at clearly defined times during the programme, the institution should evaluate and approve: - Scientific quality of the project, - Likelihood to complete within normal timeframe, - The possibility for candidate to provide creative input, - Qualifications of supervisors.		Describe how and when the PhD project is approved.	
#13: BR 3.4	A PhD programme should only be initiated when the resources for completion are available.		Describe how PhD programmes are financed and how it is ensured that full financing will be available.	
#14: QD 3.1	In choosing PhD candidates, the applicants' potential for research ought to be considered, not just past academic performance.		Describe the application procedure, and the weight given to e.g. previous exam marks, research experience, expressed motivation, performance at interview, letters of recommendation, etc.	

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#15: QD 3.2	Projects ought to be externally assessed by written project description or presentation to panel of independent scientists.		Are PhD projects externally/independently assessed? Who does this?	
#16: QD 3.3	If the PhD candidate is obliged to obtain extra income, it ought to be ensured that the PhD candidate has the necessary time to complete the programme.		Do PhD candidates get extra time for their project if they have to work for extra income (e.g. by teaching or clinical duties?).	
4. PhD ti	raining programme			
#17: BR 4.1	Programmes should be based on original research, courses and other activities which include analytical and critical thinking.		Describe the content of PhD programmes.	
#18: BR 4.2	Programmes should be performed under structured supervision.		Describe how the supervision process is structured.	
#19: BR 4.3	Programmes should ensure that PhD candidates have appropriate training in ethics and responsible conduct of research.		Provide a list of the courses in ethics and responsible conduct of research. How many PhD candidates take these courses each year?	
#20: BR 4.4	Programmes should have clear 3-4 year timeframe. Extensions should be possible but limited and exceptional.		Provide information about the normal length of PhD programmes. What is the actual length of study from enrolment to (a) submission, (b) defence? How is permission granted for extension?	

(abbrev	Basic Recommendations (abbreviated - see Best Practices document for full recommendations)		Please expand your answer with the following information. If the answer is "No" please indicate if you would like to make changes that would allow compliance. If such changes are not wanted, please explain.	Response. Please be succinct and refer to e.g. graduate school website where relevant.
#21: BR 4.5	Programmes should include relevant activities not directly related to the project (e.g. courses, journal clubs, participation in conferences, seminars and workshops, including preparation time) totalling about 15% of the whole programme. A substantial part should be concerned with training in transferable skills. (NB. "training" can be liberally interpreted as all scientific activities not directly related to the project,		Provide a list of courses and other activities. How are these assessed?	
#22: BR 4.6 #23: BR 4.7	e.g. journal clubs, conferences, etc.). PhD programmes that are performed in parallel with clinical or other professional training should have the same time for research and course work as any other PhD. Progress of PhD candidates should be continuously assessed by the		Describe the arrangements for PhD candidates who do their PhD parallel with the PhD studies. How is it ensured that such PhD candidates have sufficient time for their PhD studies? Describe the arrangements to monitor PhD candidates.	
#24: QD 4.1	institution throughout the PhD. For PhDs performed by clinicians, leave-of-absence from clinical duties could be provided for the PhD part of such programmes		Is leave-of-absence provided?	

Basic Recommendations (abbreviated - see Best Practices document for full recommendations)		Does your institution comply? Yes, No, Maybe.	Please expand your answer with the following information. If the answer is "No" please indicate if you would like to make changes that would allow compliance. If such changes are not wanted, please explain.	Response. Please be succinct and refer to e.g. graduate school website where relevant.
#25: QD 4.2	PhD programmes could where relevant have an element of interdisciplinarity.		What proportion of PhD projects could be termed "interdisciplinary". Give examples.	
5. Super	vision	L	,	
#26: BR 5.1	Each PhD candidate should have a principal supervisor and normally at least one co-supervisor.		How many supervisors do PhD candidates have? How are responsibilities divided?	
#27: BR 5.2	The number of PhD candidates per supervisor should be compatible with the supervisor's workload.		What is the usual number of PhD candidates per supervisor? What is the range?	
#28: BR 5.3	Supervisors should be scientifically qualified and active scholars in the field concerned.		Provide information about the qualifications required for a supervisor.	
#29: BR 5.4	Supervisors should have regular consultations with their PhD candidates.		Provide information about the number and type of consultations that supervisors hold with their PhD candidates.	
#30: BR 5.5	It should be ensured that training for all supervisors and potential supervisors is available.		Describe the training courses available. Provide information about number of supervisors who have taken these courses.	

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#31: BR 5.6	The supervisor-candidate relationship is the key to a successful PhD programme. There should be mutual respect and shared responsibility.		Describe the procedures taken to enhance the supervisor-candidate relationship. Describe how supervisors and PhD candidates are matched. Describe arrangements for solving supervisor-candidate conflicts.	
#32: BR 5.7	Institutional assistance should be provided for career development. This should be continuous, starting from the time of enrolment.		Describe how and when PhD candidates are assisted in career development. How many PhD candidates take advantage of these arrangements?	
#33: QD 5.1	Responsibilities of each supervisor		Provide information about the	
#34: QD 5.2	ought to be explicit. Supervisors ought to have broad local and international scientific networks.		responsibilities of the supervisor. How is it ensured that supervisors have suitable networks?	
#35: QD 5.3	Supervisors ought to assist with career development.		How do supervisors assist with career development? Does the graduate school provide assistance?	
#36: QD 5.4	Institutions could consider having contracts on the supervision process, signed by supervisor, PhD candidate and head of graduate school.		Are such contracts being used?	

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#37: QD 5.5	The principal supervisor, at least, ought to have some formal training as supervisor.		Provide information about training courses for supervisors. How many supervisors have had such courses?	
#38: QD 5.6	Supervisors could where possible also act as co-supervisors for PhD candidates at other graduate schools.		Is this common?	
#39: QD 5.7	Graduate schools ought to consider appointing a mentor or equivalent for each PhD candidate, in addition to the supervisor team, to discuss programmes from another aspect than the science topic alone.		Are mentors appointed? If not, would it be a good idea?	
6. PhD tl	•	T		
#40: BR 6.1	The PhD thesis should be the basis for evaluating if the PhD candidate has acquired independent research skills and can evaluate work done by others.		Is this correct for your institution? Does the institution have other means for assessing these competences?	
#41: BR 6.2	The benchmark for a PhD thesis in health sciences is the equivalent of three <i>in extenso</i> papers in scientific peer-reviewed international journals. Manuscripts are also acceptable. It is the task of the assessment committee to determine if the material demonstrates 3-4 years of research at international level.		Describe the content normally required by the institution for a PhD thesis regarding original work.	

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#42: BR 6.3	In defining the benchmark for a PhD thesis, the assessment committee should take account of the provisos listed in the Annotations, for example the annotation indicating that fewer than three papers may be accepted if published in highly rated journals.		To what extent are the "normal" requirements as described in BR6.2 adhered to, and under what circumstances are other criteria accepted?	
#43: BR 6.4	In addition to papers, the thesis should include a full literature review and full account of aims, method, results, discussion and conclusion.		Describe the content of the other parts of the thesis.	
#44: BR 6.5	If the thesis is presented in other formats (e.g. as single monograph), the assessment committee should ensure equivalence to the above benchmark.		How many theses are presented in other formats e.g. monographs?	
#45: BR 6.6	A PhD thesis in clinical medicine should meet the same standards as other PhD theses .		Is this correct for your institution?	
#46: QD 6.1	The thesis ought to be written and optimally also defended in English, unless national regulations stipulate otherwise. An abstract of the thesis should be published in English.		Provide information about the language used in the thesis, and in the defence.	

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#47: QD 6.2	If articles/manuscripts are joint publications, co-author statements ought to document that the PhD candidate has made a substantial and independent contribution. Ownership of results from PhD studies ought to be clearly stated.		Describe the procedure used to identify the contribution of the PhD candidate to each of any multi-authored publications. What procedure is used to assess the accuracy of any statements made? Are there circumstances where the same publication is used in more than one thesis? How is the question of ownership dealt with?	
#48: QD 6.3	PhD theses ought to be published on the graduate school's homepage, preferably <i>in extenso</i> . If patent or copyright legislation prevent this, at least abstracts of the theses ought to be publicly accessible.		Provide information about how PhD theses are published.	
#49: QD 6.4	There could be a lay summary of the thesis in the local language.		Describe the format of any lay summary.	
7. Thesis #50:	Acceptance of a PhD thesis should		Describe the procedures for	
BR 7.1	include acceptance of both written thesis and a subsequent oral defence.		assessing the written thesis and the oral defence.	
#51: BR 7.2	PhD degrees should be awarded by the institution on the recommendation of the assessment committee which has evaluated the thesis and the oral defence.		Is this correct for your institution?	

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#52: BR 7.3	The assessment committee should consist of established and active scientists without connection to the milieu where the PhD was performed and without conflict of interest. Min. two should be from another institution.		How many members does the assessment committee have, how are they appointed and how is it ensured that there is no conflict of interest?	
#53: BR 7.4	The supervisor should not be a member of the assessment committee. If local regulations require this, the supervisor should not have a vote.		Is this correct for your institution?	
#54: BR 7.5	If the assessment of the thesis/defence is negative, the PhD candidate should normally be given an opportunity to rewrite/an additional defence.		What arrangements are there following a negative assessment?	
#55: BR 7.6	The oral examination should be detailed enough to ensure that the thesis is the candidate's own work, that the intended training goals have been achieved, and that the candidate is able to put the results into scientific context.		Describe the format of the oral defence and the extent to which this is a true examination or more a traditional formality. Does the PhD candidate also give a lecture?	
#56: QD 7.1	The oral defence ought to be open to the public.		Who is able to attend the oral defence?	

Basic Recommendations (abbreviated - see Best Practices document for full recommendations)		Does your institution	Please expand your answer with the following information.	Response. Please be succinct and refer to e.g. graduate school website where relevant.
		comply?	If the answer is "No" please	
		Yes, No,	indicate if you would like to	
		Maybe.	make changes that would allow	
			compliance. If such changes are	
			not wanted, please explain.	
#57:	Where possible at least one member		What proportion of assessment	
QD 7.2	of the assessment committee could		committees includes members	
	be from another country.		from another country?	
#58:	Apart from the thesis, the institution		How does the graduate school	
QD 7.3	ought to ensure that sufficient		ensure that transferable skills	
	transferable skills have been acquired		have been acquired?	
	during the PhD programme.			
#59:	The competences developed during		Do PhD candidates prepare a	
QD 7.4	the PhD programme could be		portfolio, and is this assessed as	
	documented in a portfolio. This		part of the decision on award of	
	documentation could be evaluated by		the PhD degree?	
	the assessment committee and form			
	part of their decision concerning the			
	award of the PhD degree.			
	ure of Graduate School			
#60:	The graduate school should have		Provide information about the	
BR 8.1	sufficient resources for proper		resources available to the	
	conduct of PhD programmes. This		graduate school.	
	includes resources to: Support			
	admission of PhD candidates,			
	implement the PhD programmes of			
	the PhD candidates enrolled, assess			
	PhD theses and award PhD degrees.			
#61:	The graduate school should have a		Describe the website and give its	
BR 8.2	website in English and possibly also		URL. Refer to Best Practices	
	the national language including		document for type of	
	transparent information about the		information that is	
	content of PhD programmes and the		recommended.	
	policies of the graduate school.			

Basic Recommendations (abbreviated - see Best Practices document for full recommendations)		Does your institution comply? Yes, No, Maybe.	Please expand your answer with the following information. If the answer is "No" please indicate if you would like to make changes that would allow compliance. If such changes are not wanted, please explain.	Response. Please be succinct and refer to e.g. graduate school website where relevant.
#62: BR 8.3	Merit should be given for courses taken elsewhere or other relevant experience.		Is merit given? For courses? For previous research?	
#63: QD 8.1	There ought to be procedures for regular review and updating of the structure, function and quality of PhD programmes, including both supervisor and candidate feedback.		Provide information about how this is performed.	
#64: QD 8.2	Representatives of the PhD candidates ought to interact with the leadership of the graduate school regarding the running of the graduate school. Candidate organisations ought to be encouraged and facilitated.		How are PhD candidates involved in the running of the graduate school? Is there a PhD association or equivalent?	
#65: QD 8.3	PhD candidates ought to have rights and duties commensurate with the value (to the institution) of the research performed.		Describe the rights and duties of PhD candidates. How much are PhD candidates paid?	
#66: QD 8.4	There ought to be an appeal mechanism allowing PhD candidates to dispute decisions concerning their programmes and thesis assessment.		How can PhD candidates appeal?	

Basic Recommendations (abbreviated - see Best Practices document for full recommendations)		Does your institution comply? Yes, No, Maybe.	Please expand your answer with the following information. If the answer is "No" please indicate if you would like to make changes that would allow compliance. If such changes are not wanted, please explain.	Response. Please be succinct and refer to e.g. graduate school website where relevant.
#67: QD 8.5	Confidential candidate counselling concerning e.g. the PhD programme, supervision, as well as personal matters ought to be offered by the graduate.		Describe what counselling facilities are available, and the degree to which the counsellor is independent of the doctoral school leadership and supervisors. How many PhD candidates use such facilities each year?	
#68: QD 8.6	Graduate schools could consider having a thesis committee for each PhD candidate that monitors the progress of the PhD candidate through meetings with the PhD candidate and the supervisors.		Do PhD candidates have a thesis committee? Who is on this committee?	

Please provide any recommendations you may have for improvement of this	
questionnaire	

For institutions that would like to have input from ORPHEUS

The completed questionnaire should be sent to the Chairman of the ORPHEUS Labelling Board, Prof. Michael Mulvany, Aarhus Univ ersity, Aarhus, Denmark. Tel. +45 28992189, mm@farm.au.dk, who will arrange for expert facilitators to examine the responses and provide suggestions. In this case, please also provide the core data indicated below.

Please note that this service is only available for members of ORPHEUS. Please note also that this information is to provide facilitators with a general overview of the institution, and precise data are not needed; <u>estimates are sufficient</u>.

Please confirm that your institution is a member	
of ORPHEUS in good standing	
Name, position and e-mail of person completing	
the questionnaire	
Name of PhD organization responsible for PhD	
education (e.g. Graduate School of)	
Name of the University or Faculty of which the	
PhD organization is a part	
Name and e-mail of the head of the PhD	
organization	
Name and e-mail of the head of the PhD	
organization administration	
Total number of PhD candidates (PhD students)	
currently enrolled	
Gender, age, etc. of PhD candidates	
Number of PhD candidates who entered the	
graduate school in most recent year (give date)	
Number of dropouts in most recent year (give	
date).	
Number of PhD theses successfully defended in	
most recent year (give date)	
Total number of international PhD candidates	
currently enrolled	
Number of qualified persons available to the	
Graduate School for supervision (supervisor pool)	
Number of current principal supervisors	
Number of current co-supervisors	
Number of PubMed publications of supervisor	
pool in most recent year	
URL of the PhD organization (website address)	