ORPHEUS Report: Organization for Ph.D. Education in Biomedicine and Health Sciences in the European System

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The purpose of the **Bologna Process** (or Bologna Accords) is the creation of the European Higher Education Area by making academic degree standards and quality assurance standards more comparable and compatible throughout Europe.
Represent education and research to influence policy making

Encourage cooperation among members and develop networks

Promote cooperation in development of joint Ph.D. programs

Promote harmonization of Ph.D. programs

Stimulate quality assurance and develop an accreditation process

>70 institutions in 30 countries

http://orpheus-med.org
2004  The Declaration of the European Conference on Harmonization of Ph.D. Programs in Medicine and Health Sciences - Zagreb Declaration

2005  Guidelines for Organization of Ph.D. Programs in Biomedicine and Health Sciences

2007  Helsinki Consensus Statement on Ph.D. Training in Clinical Research

2009  Towards Standards for Ph.D. Education in Biomedicine and Health Sciences

2010  The Advancement of European Biomedical and Health Science Ph.D. Education by Cooperative Networking

2011  Implementation of ORPHEUS Standards – Quality Assessment
Time Line for Training

ORPHEUS

Bachelor’s Degree

M.S. Degree

Ph.D. Degree

US

Bachelor’s Degree

Ph.D. Degree

Y  2  4  6  8  10
Towards Standards for Ph.D. Education in Biomedicine and Health Sciences

Aarhus University, Denmark
2009
Admissions Criteria

Qualifications
Admissions based on a Master’s degree
Proven Research Competence
Academic Distinction
Admissions Criteria

Requirements for Enrollment

Scientific Quality of Project

Quality of Supervisors

Resources
Admissions Criteria

Access to Ph.D. Programs

Competitive and Open Process

Recognizes Progression from Master’s work
Requirements of the Program

Length of Program

Clear time limit for Completion

Upper Limit on work encourages concentration, facilitates planning program infrastructure
Requirements of the Program

Structure of Program

Original Research and Training

Course work limited to < 6 months

Training in Transferable Skills
(presentation, management, evaluation skills)
Requirements of the Program

Securing Quality

Internal and External Reviews

Evaluations of Trainee Progress and Plans

Evaluations of Coursework
Requirements for the Supervisor

Essentials

Academic Credentials

Should be Available to Trainee

Relationship based on Mutual Respect and Responsibility

Co-supervision is Encouraged
Requirements of the Ph.D. Thesis

Essentials

Equivalent of 3 peer-reviewed papers
Independent Literature Review
Trainee Contributions Clearly Defined
Written and Defended in English
Published online by the Institution
Evaluation of the Ph.D. Thesis

Essentials

Senior and Active Committee Member

Independent Committee Member

Clearly Defined Criteria for Assessment

Assessment Performed in a Timely Manner

Allowance made for a Second Defense
Implementation of ORPHEUS Standards – Quality Assessment

Over 300 attendees representing over 100 institutions
Orpheus Quality Indicators

Research Environment

Number of staff, students, degrees awarded, publications with impact

Infrastructure – laboratories, computers, finances, students support, relationships with industry, international relations
Orpheus Quality Indicators

Research Environment

Time available to students, publications, trainees, group size, international connections

Research activities, finances, journal clubs, weekly group meetings, career development resources, networking opportunities
Orpheus Quality Indicators

Ph.D. Supervision

Defined Qualification for Supervisors include Ph.D., Institutional Affiliation, Funding

Defined Responsibilities on Project Input, Monitoring, Ethics, and Career Development

Communication and Past Trainee Success

Formal Mentoring for Supervisors
Orpheus Quality Indicators

Ph.D. Program

Website with Program Standards and Outcomes

Financial Support Available

Ethical Compliance, RCR, COI

Ombudsman and Student Representation

Evaluations with Feedback to Students
Orpheus Quality Indicators

Ph.D. Thesis

Contributes to New Knowledge

Demonstrates Independence, Critical Thinking

Productivity - Publications

Competent and Independent Evaluations
Orpheus Quality Indicators

Student Perspectives

Transparency, Program Information concerning Structure and Outcomes, and Clear Expectations

Student Role in Program Evaluation and Organization

Feedback acted Upon
Opportunities
Simplifies Program Comparisons
Clarity in Recruiting Trainees
Increased Exchange Opportunities & Partnerships
Food for Thought
Acknowledgements

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ORganisation of PhD Education in Biomedicine and Health Sciences in the EUropean System
ORganisation of PhD Education in Biomedicine and Health Sciences in the EUropean System
Goals
The overarching aim of the Bologna Process is to create a **European Higher Education Area** based on international cooperation and academic exchange that is attractive to European students and staff as well as to students and staff from other parts of the world.
European Higher Education Area

Facilitate mobility of students, graduates and higher education staff;

Prepare students for their future careers and for life as active citizens in democratic societies, and support their personal development;

Offer broad access to high-quality higher education, based on democratic principles and academic freedom.
Give support and guidance to members in enhancing their contribution to medicine and society

To provide information to members and Ph.D. candidates in Europe

Represent education and research and influence policy making

Encourage cooperation among members and develop networks

Promote cooperation in development of joint Ph.D. programs

Promote harmonization of Ph.D. programs

Encourage mobility of students and staff throughout Europe

Stimulate quality assurance and develop an accreditation process

Cooperate with other associations with similar goals

http://orpheus-med.org
Orpheus Quality Indicators

Combined Ph.D.-Clinical Programs

Timesharing between Disciplines

Maintaining Academic Freedom in Clinic

Translational Research Allowed

Flexibility in Training Schedules

Student Support including Monitoring of Activities