

## Besluit

### Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-master Medical Biology van de Radboud Universiteit Nijmegen

	<b>Gegevens</b>	
datum	31 augustus 2016	Naam instelling : Radboud Universiteit Nijmegen
onderwerp	Besluit	Naam opleiding : wo-master
Accreditatie wo-master	Medical Biology van de Radboud Universiteit Nijmegen (004573)	Medical Biology (120 EC)
uw kenmerk	mso/rg/16U.011897	Datum aanvraag : 15 april 2016
ons kenmerk	NVAO/20161824/AH	Variant opleiding : voltijd
bijlagen	2	Afstudeerrichtingen : Clinical Biology Functional Genomics Neuroscience Science in Society Science, Management and Innovation Science and Education
		Locatie opleiding : Nijmegen
		Datum goedkeuren panel : 6 juli 2015
		Datum locatiebezoeken : 19 en 20 oktober 2015
		Datum visitatierapport : 2 februari 2016

Instellingstoets kwaliteitszorg : ja, positief besluit van 21 november 2011

#### Beoordelingskader

Beoordelingskader voor de beperkte opleidingsbeoordeling van de NVAO (Stcrt. 2014, nr 36791).

#### Bevindingen

De NVAO stelt vast dat in het visitatierapport deugdelijk en kenbaar is gemotiveerd op welke gronden het panel de kwaliteit van de opleiding 'satisfactory' [voldoende] heeft bevonden.

#### Advies van het visitatiepanel

Samenvatting bevindingen en overwegingen van het panel.

The master's programme Medical Biology is a two-year-programme and consists of 120 EC. Students can choose between the specialisations 'Clinical Biology', 'Functional Genomics',

Pagina 2 van 6 and 'Neuroscience'. Students can choose to participate in their second year of study in one of the society-oriented specializations: Science in Society, Science, Management and Innovation or Science and Education. The panel has established that the intended learning outcomes of the programme are in line with (inter)national requirements. The programme has developed clear profiles for the research specialisations as well as for the society-oriented specialisations.

The panel suggests that the profiles of the research specialisations could be reflected more clearly in the intended learning outcomes of the programme.

The programme starts with orientation courses and courses focussing on state-of-the-art trends in the biomedical field that introduce students to research topics and research institutes related to their specialization. All specializations consist of specialization specific courses, electives, research internships and a literature thesis. The panel has studied the programme and established that the curricula of the different research specializations offer students adequate opportunities for academic specialisation. The programme is structured in a balanced combination of orientation courses, compulsory courses, electives and research projects. Being a member of the research group, students are well guided in their development into an independent (junior) researcher. The panel established that students would benefit from an advanced statistics course.

The contents of the research specializations in Medical Biology are of good quality. Especially the Neuroscience specialization and the new curriculum of the Medical Epigenomics specialization (that has replaced the Functional Genomics specialization) provide students with specialised knowledge in a dynamic, future-oriented research field. These specializations demonstrate major attention for developments in New Biology. The panel recommends the programme to make systems biology a compulsory part of all specializations, which currently is not the case in the Clinical Biology specialization.

The three society-oriented specialisations provide students with the complementary knowledge and skills that enable them to use their biological knowledge in business, policy, science communication or education environments.

The programmes use a variety of teaching methods: lectures, case studies, field work, group assignments and individual research projects. According to the panel these are adequate didactic practices for master's programmes in the field of Medical Biology. The panel established that the programme is feasible. The availability of sufficient academic research internships is a point of attention. Coherence and feasibility of individual trajectories are monitored in portfolio activities. Although the panel considers the portfolio to be a valuable tool, it concludes that current practice does not provide much added value to the personal and academic growth of students.

The programme is delivered by qualified and highly motivated staff members. According to the panel the student-staff ratio is too high and needs to become more favourable in order to maintain and improve the quality of the programme. The Programme Committee plays a proactive role in the quality assurance of the programme.

The panel has checked whether the programme has adopted an adequate assessment system.

The panel has established that the programme uses diverse assessment methods that are aligned with the learning objectives of each course. The panel is convinced that the

Pagina 3 van 6 programme, and particularly the Board of Examiners and their Assessment Committee, have installed adequate measures to monitor assessment quality. Safeguarding the quality of final research projects gets attention from examiners and the Board of Examiners. The panel has the opinion that at the start of those projects an additional control procedure is necessary in order to safeguard the academic quality and realistic and feasible planning of research internships.

The Board of Examiners has a proactive attitude. The panel observed that many of the measures have been taken quite recently. It will take some time to make these procedures a routine for the teaching staff. Furthermore, concerted consultation of teachers about assessment (peer review) should be encouraged. Assessment quality profits from 'continuously learning from each other'. In this respect, the programme can profit from best practices elsewhere in academia.

After studying a sample of final reports, the panel establishes that students realise the intended learning outcomes of the master's programme Medical Biology. Academic depth of the final works deserves continuous attention. Based on the performance of alumni the panel concludes that the programme prepares students well for an academic or business position on the labour market.

The panel assesses the standards from the Assessment framework for limited programme assessments in the following way:

*Master's programme Medical Biology:*

Standard 1: Intended learning outcomes	satisfactory
Standard 2: Teaching-learning environment	good
Standard 3: Assessment	satisfactory
Standard 4: Achieved learning outcomes	satisfactory

**General conclusion:** **satisfactory**

**Aanbevelingen**

De NVAO onderschrijft de aanbevelingen van het panel, in het bijzonder de aanbeveling aandacht te schenken aan het hoge staf-studentratio door te investeren in een meegroeiend docentenkorps.

Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WHW heeft de NVAO het college van bestuur van de Radboud Universiteit Nijmegen te Nijmegen in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 27 juni 2016 naar voren te brengen. Van deze gelegenheid heeft het college van bestuur geen gebruik gemaakt.

De NVAO besluit accreditatie te verlenen aan de wo-master Medical Biology (120 EC; variant: voltijd; locatie: Nijmegen) van de Radboud Universiteit Nijmegen te Nijmegen. De opleiding kent de volgende afstudeerrichtingen: Clinical Biology, Functional Genomics, Neuroscience, Science in Society, Science, Management and Innovation en Science and Education. De NVAO beoordeelt de kwaliteit van de opleiding als voldoende.

Dit besluit treedt in werking op 31 augustus 2016 en is van kracht tot en met 30 augustus 2022.

Den Haag, 31 augustus 2016

De NVAO  
Voor deze:

  
Dr. A.H. Flierman  
(voorzitter)

Tegen dit besluit kan op grond van het bepaalde in de Algemene wet bestuursrecht door een belanghebbende bezwaar worden gemaakt bij de NVAO. De termijn voor het indienen van bezwaar bedraagt zes weken.

Onderwerp	Standaard	Beoordeling door het panel
<b>1. Beoogde eindkwalificaties</b>	De beoogde eindkwalificaties van de opleiding zijn wat betreft inhoud, niveau en oriëntatie geconcretiseerd en voldoen aan internationale eisen.	<b>Voldoende</b>
<b>2. Onderwijsleeromgeving</b>	Het programma, het personeel en de opleidingsspecifieke voorzieningen maken het voor de instromende studenten mogelijk de beoogde eindkwalificaties te realiseren.	<b>Goed</b>
<b>3. Toetsing</b>	De opleiding beschikt over een adequaat systeem van toetsing.	<b>Voldoende</b>
<b>4. Gerealiseerde eindkwalificaties</b>	De opleiding toont aan dat de beoogde eindkwalificaties worden gerealiseerd.	<b>Voldoende</b>
<b>Eindoordeel</b>		<b>Voldoende</b>

De standaarden krijgen het oordeel onvoldoende, voldoende, goed of excellent.

Het eindoordeel over de opleiding als geheel wordt op dezelfde schaal gegeven.

Voorzitter:

Prof. dr. Jan Kijne (voorzitter), emeritus hoogleraar BioScience, Universiteit Leiden.

Leden:

- Prof. dr. Ton Bisseling, hoogleraar Moleculaire Biologie, Wageningen University;
- Prof. dr. Marieke van Ham, hoogleraar Biologische Immunologie, Universiteit van Amsterdam;
- Prof. dr. Herman Verhoef, emeritus hoogleraar Bodemecologie, Vrije Universiteit Amsterdam;
- Prof. dr. Joost Teixeira de Mattos, hoogleraar Kwantitatieve Microbiële Fysiologie, Universiteit van Amsterdam;
- Jeffrey Verhoeff BSc. (student-lid), masterstudent Biologie en Dierwetenschappen, Wageningen University.

Het panel werd ondersteund door drs. José van Zwieten, secretaris (gecertificeerd).