

# MASTER OF SCIENCE IN LEADING INTERNATIONAL VACCINOLOGY EDUCATION (LIVE)

UNIVERSITY OF ANTWERP

CONDUCT-TAILORED ACCREDITATION • ASSESSMENT REPORT

*23 June 2022*



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# 1 Executive summary

The panel unanimously reached a **positive accreditation decision** regarding the quality of the programme of the Master of Leading International Vaccinology Education (LIVE). The LIVE programme is an Erasmus+ Joint Master Degree Programme, leading to three national master's degrees. The University of Antwerp jointly offers the programme with a consortium of four partner universities: two in France and two in Spain.

Based on the extensive documentation that the university provided, the panel's first impressions of the programme were positive. For the online visitation, the panel chose to further investigate four themes: profile, partnership, curriculum and assessment, and quality assurance. The panel met digitally with students, teaching staff, consortium leaders from the University of Antwerp and the other partner institutions, and representatives of the working field. The panel noticed how passionate all those involved talked about the programme, and how ambitious they are.

The panel learned that the LIVE consortium deliberately chose to offer a broad and multidisciplinary curriculum, as it wants to cover the chain of vaccine from start to finish. Students and alumni as well as working field representatives described how important and relevant this approach is. The international and intercultural aspect of the programme is strong, with students from all continents studying and learning together in three countries. The panel encourages the consortium to highlight its choice to select students with various educational background, as it contributes to learning at many levels.

The long-lasting involvement of the working field, ensured through associate partnerships, is a particular strength of the programme. It underpins the programme's relevance, and is truly beneficial for students. It introduces them to the breadth of the professional field, they have many opportunities to interact with researchers and future employers which also helps build their network, which in turn contributes to high graduate employment numbers. The LIVE family network that students and alumni are part of is another asset of the programme. Altogether, the panel believes that LIVE has a strong profile that is truly unique.

LIVE's curriculum is built on existing master's programmes of five international universities, which poses challenges when it comes to curriculum development and quality assurance. However, the panel would like to encourage the consortium to continue improving the structure and the alignment of the programme. The panel feels that LIVE's overarching quality assurance system is well-developed. Students feel that they can openly share feedback.

The panel feels that the consortium is well aware of some of the challenges that come with organising a joint programme. The consortium found ways to deal with these without compromising on quality.

The panel has two recommendations:

1. Make competences more explicit in the curriculum. LIVE's core competences are relevant and well-described, and clearly labelled in teaching unit sheets. However, the actual content of competences could be made more explicit, in particular with regard to soft skills. This also goes for how and when these skills are assessed, and how students

receive feedback. The consortium may wish to consider how soft skills could be exploited in the internship.

2. Look into possibilities for staff development. Ensure that all teachers know in what way they contribute to the programme, and how their course contributes to the competences.

The Hague, 23 June 2022

On behalf of the expert panel convened to assess the Master of Leading International Vaccinology Education (LIVE):

Janke Cohen-Schotanus  
(chair)

Eleonor Tchernoff  
(secretary)

## 2 Examination of the panel

### 2.1 Context

The Master of Leading International Vaccinology Education (LIVE) is an Erasmus+ Joint Master Degree Programme (120 EC), leading to three national master's degrees (see Annex 1). The University of Antwerp (from here: UAntwerp) offers the programme with a consortium of four partner universities: two in France and two in Spain. A cohort of students jointly spends its first semester in Spain, its second in Belgium and its third in France. The fourth and final semester is dedicated to the master thesis in the form of an internship with one of the (associated) partners.

The current accreditation procedure focuses on UAntwerp. The accreditation panel has assessed the master's programme as a whole, even though a large part of it is not directly offered by UAntwerp. However, as part of the consortium, UAntwerp bears responsibility for the whole programme – just like its partner universities.

### 2.2 The panel's first impressions

The accreditation panel's first impressions about the programme are positive: the self-evaluation report and extensive supporting material, including an informative LIVE master website<sup>1</sup>, show a relevant, broad and challenging study programme. The panel feels that there are many strong elements to the programme as a whole, its curriculum, the way it is organised, and the various stakeholders that are involved.

There are several positive elements that stand out. First of all, the international context of the programme offers students a truly international experience. Over the course of just two years, students get to live and study in three different European countries. Students also study two different languages. The student body itself is highly international as well, with students from all over the world. These students, only 25 each year, are selected from a large pool of applicants, meaning that the cohort that is selected is of a very high academic level with a strong intrinsic motivation. The LIVE family and network are a smart and helpful addition to the programme and seem to live up to their promise.

The panel appreciates the programme's wide and ambitious focus. The consortium has deliberately chosen to offer a multi- and interdisciplinary curriculum, where vaccinology is studied from numerous angles.

The learning outcomes, formulated as core competences, are well-described and fitting for the field. They cover the Flemish Discipline-specific Learning Outcomes (DLR). According to the panel, the addition of training in soft skills is particularly important, as these skills are increasingly demanded by the profession. The panel is curious to learn how these are practically implemented in the programme.

The long-lasting involvement of the professional field, ensured through associate partnerships, is another element that stands out. The consortium has chosen to involve the working field at various levels and moments during the programme. It culminates in the fourth semester, when students can choose to perform their master thesis via an internship

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<sup>1</sup> [https://clarolineconnect.univ-lyon1.fr/icap\\_website/2459/43217](https://clarolineconnect.univ-lyon1.fr/icap_website/2459/43217)

with an associate partner. The proximity to the professional field seems truly beneficial to students. They have many opportunities to interact with researchers and future employers.

Lastly, the panel feels that the consortium has organised itself well. There is a clear organisational structure, the processes are transparent, and there is an appropriate quality management system.

## 2.3 Themes to be discussed with the institution

In preparing the digital site visit, the panel formulated several questions. In a few cases, the panel would like to have more basic information to better understand certain topics. The panel is also curious about the rationale behind choices. And lastly, the panel would like to learn more about the actual practice of the programme: does it live up to its expectations?

The panel decided to structure its questions by themes. The chosen themes are:

- Profile
- Partnership
- Curriculum and assessment
- Quality assurance

### 2.3.1 Profile

The consortium has made some bold choices, such as developing a wide-ranging curriculum, and the panel would like to explore the rationale. The panel would like to hear from various stakeholders what they think is the added benefit of their collaboration and what makes the programme unique.

### 2.3.2 Partnership

The panel has a number of questions about the partnership and the consortium itself, and questions specifically addressed to the programme's management. The panel would like to learn more about how the various partners work together in practice.

Cultural difference is another topic that the panel would like to learn more about: what role does it play within the consortium, and within its student body?

One of the challenges that UAntwerp has mentioned in its self-evaluation report is the sustainability of funding. The panel would like to have a better understanding of how the funding is organised, and how the programme might continue without financial support from the Erasmus programme.

### 2.3.3 Curriculum and assessment

LIVE's curriculum has an extensive selection of courses, many with a relatively small number of ECTS. The panel would like to understand how the consortium came to this programme, how the programme is built up, how they work on the alignment and coherence, and how they deal with curriculum development. The panel is interested in the competences that LIVE is aiming at, the way that they are embedded in the programme, how these are assessed, and how the programme ensures growth. The panel has specific attention for soft skills training and the language courses.

The panel wonders whether the curriculum leaves room for specialization. They also would like to learn more about the involvement of the professional field.

The quality of the theses is another important topic that the panel is interested in, particularly as the professional field is involved. What does this involvement look like, and how is this perceived by the various stakeholders?

#### 2.3.4 Quality assurance

The panel is interested in learning more about how quality assurance works within a consortium, and how the partners work on quality enhancement. What does student representation look like, and how do students themselves experience this? Staff development is another topic of interest to the panel.

### 2.4 What did the panel learn from the visitation?

#### 2.4.1 Profile

The consortium's management spoke passionately about LIVE's profile and how this came about. Representatives explained how they had been planning to start a joint master's programme, selecting the best partners from a long-list. The five universities that made the cut all have specific expertise and/or benefit from the proximity to important companies and organizations such as GSK, Sanofi, Boehringer or the WHO.

The panel learned that the programme was designed with a strong vision in mind. Not only does it combine immunology and vaccinology – areas that are traditionally separate -, but the programme covers the whole chain of vaccine development and implementation and aims to offer 'a complete picture of the field'. The multidisciplinary study programme is therefore very broad, and the panel wondered how students, alumni and the working field would experience this. The students that the panel met with were very enthusiastic, with more than one student saying that the programme exceeded their 'already high expectations'. A student said that the programme is 'about so much more than how to develop a vaccine'. The importance of topics like public health, communication and project management were named several times. 'I have been exposed to all elements of the vaccine world', another student added, 'this master's doesn't leave any stone unturned'. Representatives of the consortium did admit that students don't always see the benefit of every element of the curriculum straight away, but they usually do once they enter the profession. Alumni explained how LIVE's broad training gave them confidence for working in the professional world: 'I understand things faster', 'I'm able to adapt quickly', 'I feel well prepared for a new job'. The working field representatives were equally positive about LIVE's multidisciplinary profile, mainly stressing the importance of soft skills such as communication.

Another deliberate choice was to involve the working field as long-lasting associate partners. The panel learned that their contribution is extensive, and ranges from hosting students for on-site visits to teaching several courses (during the second semester, at UAntwerp). It culminates in offering internships in the fourth semester. LIVE's partners are also involved in the annual VaxInEu Symposia. Students and alumni mentioned how important the involvement of the associate partners has been to them, for example in shaping their understanding of the professional field, broadening their horizon and growing their network.

A crucial element of the LIVE programme is the international and intercultural aspect. Students study and live in three countries, and students themselves come from all continents. The panel learned that the EU-regulations allow for a maximum of three students per country, and there is a cap on the number of scholarships for EU-students. These regulations



seem to have been beneficial for the programme: almost everyone that the panel spoke to emphasized the importance and the enrichment of the intercultural experience.

Students have different educational backgrounds too, in part given in by the demand of the working field. MDs (Doctors of Medicine) in particular are said to bring a different perspective, which LIVE's management described as 'an added value'. While the varying educational backgrounds may also pose a challenge (discussed in more detail in paragraph 2.3.3), teaching staff focused on the opportunities. They talked about mixing students with different backgrounds for group assignments to enhance the learning process and knowledge exchange. Students also see the positive side; they learn to rely on each other whenever they are less familiar with a topic, and learn to collaborate. The panel regards the way that the programme makes use of the variety of educational backgrounds as a particular strength.

The visitation gave the panel a much better understanding of the importance of the LIVE family. Students and alumni gave numerous examples of how interaction with fellow students, students from other promotions, alumni, and of course the professional field, have helped them.

Students start and finish their studies together, living, studying and travelling together for two years. Peer-learning seems to be a given – something that the programme may cherish. Students learn to build a relevant network already during their studies, which no doubt contributes to the high employment rates – students and alumni talked about how their contacts landed them internships or jobs. 'I met so many people', a student said, adding that 'LIVE is good at connecting people'.

The panel believes that one of the success factors of the programme lies in the extensive and carefully executed selection procedure, leading to a group of excellent and highly motivated students. Teaching staff told the panel how much they enjoy teaching LIVE students. The procedure is well thought through, with many parameters and an eye for diversity. The panel learned that the procedure has improved over the years; the panel considers the continuous improvement of processes a positive characteristic and did not perceive any bias in the selection procedure.

LIVE alumni's employment rate is high. The panel believes this is testament to all the elements named above. The programme fits in very well with the demands and wishes of the professional field. The panel learned that half of the students find a job already before graduation, and a total of 90% find a job after graduation. Some alumni belong to the top of their field, which the programme is – deservedly – proud of.

#### 2.4.2 Partnership

The panel met digitally with representatives of UAntwerp as well as the other consortium partners. This allowed the panel to get a full picture of the programme, and to get a sense of the interaction within the consortium.

In the self-evaluation report, UAntwerp clearly describes how the consortium has organized itself. The panel was pleased to hear and see that there are strong formal and informal relations, and that as a result the consortium can act quickly whenever issues arise.

The panel heard about national and cultural differences within the consortium. For example, there are different national practices in the way staff development is organized or how quality assurance outcomes are dealt with. The panel felt assured that the consortium is well aware of these differences, that these are openly discussed, that the partners are solution-oriented, and that there is mutual respect.

Since students move to a different country at least three times during their master's, the panel wonders how and by whom students are supported. The panel also learned that students don't have one 'home institution' but are registered at each university they study at (which is needed to obtain three diplomas). Students explained that this situation is handled with care: 'There is always someone we can contact'. The local coordinator is the first port of call and helps with anything from visa applications to finding accommodation and opening bank accounts. Students mentioned that UAntwerp also has a psychologist they can contact. In general, students said that there is 'a lot of personal contact' with staff, which is something the panel heard in other meetings too.

LIVE has a maximum of 25 students, while the high number of applicants shows that there is much more potential. The panel learned that the number of students is restricted because the programme is built on existing study programmes: it is impossible to take on more students next to the national students. Furthermore, the programme is expensive to run, and the funding only foresees in a limited number of scholarships.

The selection procedure makes use of various parameters, such as nationality, gender balance, and the balance between students with a bachelor's or a master's diploma. As a result, 'we miss out on some great students', a representative of the management said. The panel believes it is worthwhile to look into possible opportunities of increasing the number of students.

In its self-evaluation report, the consortium describes LIVE's sustainability as its 'biggest challenge'. At the time of writing, the consortium was still deliberating whether or not to re-apply for European funding. The panel learned that in the meantime, the consortium decided to pursue this. The panel applauds this, while acknowledging that it is no long-term solution. The panel therefore fully supports UAntwerp's efforts to use resources from "Het voorsprongfonds" to investigate if it is possible to consolidate the LIVE master in Antwerp, perhaps in cooperation with the partner universities in Lyon.

If LIVE were to be offered as a national master's programme, the panel recommends safeguarding the international and intercultural aspect as well as the multidisciplinary programme.

#### 2.4.3 Curriculum and assessment

LIVE's learning outcomes are presented as a set of seven core competences. The panel would like to know more about how the programme ensures growth, particular in competences 5 and 7 (soft skills). A consortium representative explained that these skills are built up over the course of the programme. There is limited group work in the first semester, while in the second semester (in Antwerp) the sessions are much more interactive.

The panel indeed heard many examples of students giving presentations, collaborating in projects, having to find innovative solutions, taking initiative et cetera. The consortium has

developed some challenging formats, such as a week-long business case with GSK where students collaboratively work on an assignment, and a project on writing and presenting a funding proposal. However, the panel struggled to see how the soft skill competences are structurally built into the curriculum, and especially how these skills are assessed and how students receive feedback. The panel believes that LIVE could be clearer and more transparent about what the programme aims for in this respect. Teaching unit sheets show which courses should contribute to soft skill competences, but the panel would like to encourage the consortium to go one step further and define what mastering a soft skill competence looks like. What is meant with leadership, for example?

As far as the panel could see, there are no ECTS specifically awarded to soft skills. If these skills are regarded as important, it may be worthwhile awarding ECTS. To sum up, the panel recommends making competences - and in particular those focusing on soft skills - more explicit in the curriculum.

The curriculum is based on a fixed mobility path; all students within a promotion study together in Barcelona, then in Antwerp, continuing in Lyon, and ending with an internship and thesis of their choice. The panel learned that LIVE's curriculum makes use of existing curricula from the partners - an Erasmus requirement. While the programme is based on existing courses, some courses are adapted, and there are specific courses only for LIVE students.

The panel wondered why the consortium chose so many relatively small courses (3 ECTS). The consortium representatives explained that the national masters all have many small courses, because of the diversity and basic level of knowledge that they want to convey. 'We need many small courses, 6 or 9 ECTS would be difficult'.

The panel would like to know how some of the important themes like vaccinology or immunology, which transcend semesters, are aligned. Consortium representatives explained that alignment is one of the topics that has been discussed between the partners 'from the beginning'. The panel learned that each semester has its own specialization or focus, which can also be given in by the proximity to certain companies. For example, in Lyon students learn about animal vaccines because LIVE can work together with the French headquarters of Boehringer Ingelheim Animal Health. Some overlap between courses can't be avoided but the consortium tries to keep this to a minimum, and adapts courses if needed. The quality assurance reviews are an important tool to detect this.

The panel noted that students have different starting competences, because of their various backgrounds (to illustrate, the panel met students with a background in pharmacy, biochemistry, biomedical sciences, and MDs). A student explained that the programme starts with an in-depth course on immunology 'to get us all on board'. It is 'to be expected' that there are differences between students, but 'we support each other, there is a lot of interaction between students, and also with former students: how did you approach this, how did you deal with certain issues?'. The panel commends the programme for creating a learning environment that promotes cooperation, also between different promotions. Furthermore, the panel commends the students for their constructive and solution-oriented approach.

Curriculum development is an ongoing process, the panel learned. The consortium actively asks for feedback, and the panel was given plenty examples of courses that were amended as

a result of it. With a solid quality assurance cycle and regular meetings of the Academic Management Board (AMB) and the Steering Group, the system is in place. However, there are limitations to the curriculum development process, since LIVE is built on existing study programmes. The panel would like to encourage the consortium to continue improving the structure and the alignment of the programme.

Based on the table of congruency<sup>2</sup> that was provided, the panel had the impression that the majority of courses are lectures. Consortium representatives were quick to point out that courses are indeed labelled as such, but that they are highly interactive. Many courses end with an open discussion; the panel heard more than once that LIVE students are 'very bright' and 'ask good questions'.

Throughout the visit, the panel heard about a great variety of types of courses and working forms. Students develop a MOOC, go on several lab visits, learn to vaccinate, learn to apply for funding, give mock presentations for a jury, et cetera. There is clearly a lot of collaborative work, which the panel hadn't expected based on the documentation.

The panel learned that LIVE students study together with local students; how many courses are taken together varies from one university to another, ranging from just a few to almost all. Students share that they do projects together with local students, and that they enjoy collaborating with them.

In the fourth semester, students perform their master thesis during an internship. Students who do an internship in the working field have two thesis supervisors: an academic supervisor or master thesis promotor, and an internship supervisor. Both supervisors are in touch with each other and have regular meetings with students.

The panel heard that the feedback structure has been improved; there are deadlines for submission and students receive feedback regularly. Students confirmed this. The panel approves that the feedback structure has been formalized.

When discussing the core competences with non-academic internship tutors, the panel learned that they were not fully aware of the competences that students are required to work towards. The panel considers it important that all parties involved are aware of all specific competences at stake in order to guarantee an optimal learning environment, and for students to receive relevant feedback. This is not to say that the current internships are not contributing to the competences, but again, the panel recommends making the competences more explicit, particularly those focusing on soft skills.

The panel wondered how the programme ensures that external internship places are of sufficient quality. A consortium representative explained that many internship partners come from the consortium partners' network. New institutions need to sign a partnership agreement so that 'the higher echelon of the organization' agrees with LIVE's rules and regulations. The contact between the academic and internship supervisors is another form of quality control.

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<sup>2</sup> The table has an overview of all courses, and shows which teaching and assessment methods are used for each course. It also shows to which core competences each course contributes.

The panel was provided with a sample of theses, and noticed that some of them comprised a long literature study – sometimes almost half of the total manuscript. A representative from UAntwerp explained that these are theses written during the recent pandemic, when labs were closed. A literature study was one of the replacement options.

The panel inquired about the rationale behind stimulating students to learn two additional languages. The management explained that learning foreign languages contributes to intercultural competence. Students stated that they like the language training as it allows them to communicate with locals and in the working field. Learning and practicing at the same time is seen as beneficial. One student pointed out that language courses are expensive: ‘if you don’t have it as part of your programme, you wouldn’t do it’. Another added that it may be a plus if you want to pursue a career for which another language (than English or the student’s mother tongue) is required.

The panel wondered if the curriculum leaves room for specialization, since there is no elective space. The consortium representatives explained that the balance within the curriculum is top of mind, and that providing students with a broad basis is their main aim. However, a student’s previous background and choice of internship are a way of specializing, they said. This was echoed by an alumnus who said: ‘We all have different interests.’ The panel indeed noted the wide range of internships and professional interests that students and alumni talked about. Another alumnus suggested that there is room for specialization in each course, because students can choose their own topic for presentations or group projects. The consortium had been deliberating expanding their offer on data science for some students. However, the global pandemic delayed these plans.

The panel was curious about the study load of the programme. Student and management explain that this is different for each semester, which is mostly because of varying educational systems. For example, Spain has a system of continuous assessment, while UAntwerp has no exams during the semester. Next to that, there are differences in content, with many more theoretically oriented courses in Barcelona, and more practical and interactive courses in Antwerp and Lyon. Students themselves describe the different systems as an advantage, as they have to learn to adapt and be flexible. On average, students said to spend between 30 and 35 hours per week on their studies in Barcelona and Lyon, and a little less in Antwerp. Even though this came as a surprise to the panel, who had expected a higher study load, it shows that LIVE manages to offer a challenging yet ‘studyable’ programme.

#### 2.4.4 Quality assurance

The panel was interested in how quality assurance functions within the consortium as a whole. A consortium representative explained that the LIVE master has its own quality assurance system, just like the national masters on which LIVE is built. The panel learned that this can be challenging, for example when LIVE students and local students have different feedback on the same course. However, the consortium representative stated that this has never led to real problems.

The quality assurance systems of the partner institutions are different, which may be explained by cultural aspects, and perhaps also by different stages of development. While at UAntwerp for example feedback is shared directly with the course responsible, this isn’t common practice in some of the other institutions. The panel noted that the consortium

treats these situations with sensitivity and respect, while at the same time being committed to the highest quality.

Students are satisfied with the various ways in which they can give feedback. Each semester ends with a detailed questionnaire that also asks for suggestions for improvement, and the panel heard several examples of changes that were made based on the outcomes. The panel noted that the response rate to questionnaires is high. Students also talked about a situation where they directly wanted to suggest changes to a course. After discussing this with the local coordinator the course was indeed amended.

Each promotion has its own elected student representative. The panel heard that representatives feel that they can have 'open conversations' with coordinators and students, next to their more formal role attending AMB-meetings.

Staff development was another topic that the panel wanted to learn more about. The panel heard that this is up to each university, as part of the national programme. It is therefore organised differently in each institution. 'It is difficult to discuss this, we don't have power over others', a consortium representative said. Even though the panel understands the limitations of the consortium's scope, they would like to recommend that the consortium looks into possibilities for staff development. Furthermore, the panel believes it is desirable to also clearly share the envisaged competencies with non-academic partners involved in teaching or theses supervision.

### 3 Judgement

The panel unanimously reached a **positive accreditation decision** regarding the quality of the programme of the Master of Leading International Vaccinology Education (LIVE).

‘We have a passion for vaccinology’, a representative of UAntwerp said, and the panel felt this in every meeting. From students and alumni to teaching staff and other representatives of the partner institutions, as well as the working field: everyone is very motivated, ambitious and believes in the specific approach of the LIVE programme. The multidisciplinary curriculum is highly relevant. It encourages students to find and develop their talents, and challenges them to become well-rounded professionals.

The panel believes that LIVE combines a number of elements that make it outstanding and truly unique: the multidisciplinary curriculum, the international and intercultural aspect, the strong involvement of the working field ensured through associate partnerships, the LIVE family that ensures that students and alumni learn from and with each other, and a carefully selected student body of outstanding young people. What the programme could highlight more is the deliberate choice to take on students with various educational backgrounds. The programme makes good use of collaborative work, and the diverse backgrounds contribute to learning at many levels.

Quality assurance is well-organised and the student voice is heard. The consortium is future-oriented, open to feedback, and continuously improving the programme.

LIVE is built on existing master’s programmes of five international institutions, which does pose challenges to the consortium when it comes to curriculum development and quality assurance. The panel feels that the consortium is well aware of these challenges and has found ways to deal with these without compromising on the quality of the programme. However, the panel would like to encourage the consortium to continue improving the structure and the alignment of the programme.

The sustainability of the LIVE programme is precarious, and the panel supports every effort to continue the programme. If LIVE were to be offered as a national master’s programme, the panel recommends safeguarding the international and intercultural aspect as well as the multidisciplinary programme.

The panel has two recommendations:

1. Make competences more explicit in the curriculum. LIVE’s core competences are relevant and well-described, and clearly labelled in teaching unit sheets. However, the actual content of competences could be made more explicit, in particular with regard to soft skills. This also goes for how and when these skills are assessed, and how students receive feedback. The consortium may wish to consider how soft skills could be exploited in the internship.
2. Look into possibilities for staff development. Ensure that all teachers know in what way they contribute to the programme, and how their course contributes to the competences.

## 4 Review process

The assessment was carried out in line with the 'Assessment framework programme accreditation customised to own conduct – June 2020', as ratified by the Flemish Government on 27 November 2020.

The panel prepared itself for the assessment on the basis of the self-assessment report submitted by the institution when applying for accreditation. Prior to the preparatory meeting of the panel, each panel member formulated initial impressions and questions were listed. During a preparatory online meeting on 16 May 2022, the panel discussed all information received in the application file and also prepared the virtual dialogue with the programme (institution). Impressions and questions were updated before the dialogue with the institution.

A virtual dialogue took place on 23 May 2022 with the programme management, staff, students, alumni and representatives from the professional field. The digital platform used was Teams.

During the dialogue the panel investigated the context of the programme and the institution and collected all required information to make a judgement on the quality of the programme.

During a closed meeting of the panel on 23 May 2022 the panel discussed all information obtained and translated it into a holistic judgement. The panel took this conclusion in full independence.

All information obtained led to a draft assessment report that has been sent to all panel members. The feedback from the panel members has been processed. The assessment report adopted by the chairman was submitted to NVAO on 23 June 2022.



## Annex 1: Administrative data regarding the institution and the programme

Institution	<ul style="list-style-type: none"> <li>• University of Antwerp;</li> <li>• Universitat De Barcelona;</li> <li>• Universitat Autònoma De Barcelona;</li> <li>• Université Lyon 1 Claude Bernard (program coordinator);</li> <li>• Université Jean Monnet Saint Etienne.</li> </ul>
Address, institution website	Prinsstraat 13, 2000 Antwerpen, Belgium <a href="https://www.uantwerpen.be/en/">https://www.uantwerpen.be/en/</a>
Programme	Master of Science in Leading International Vaccinology Education (LIVE)
Level and orientation	<p>Master of Science in Leading International Vaccinology Education</p> <p>LIVE graduates receive a triple degree, from three countries:</p> <ol style="list-style-type: none"> <li>1. Barcelona (SPAIN): based on the Master in "Advanced Immunology" program: <ul style="list-style-type: none"> <li>• Spanish national degree co-delivered by the Universitat de Barcelona &amp; the Universitat Autònoma de Barcelona</li> <li>• Erasmus Mundus Master's Degree in Leading International Vaccinology Education" / "Máster Universitario Erasmus Mundus en Educación Internacional en Vacunas"</li> </ul> </li> <li>2. Antwerp (BELGIUM): based on the Master in "Infectious and Tropical Diseases" program <ul style="list-style-type: none"> <li>• Belgium national degree delivered by the University of Antwerp</li> <li>• "Master of Leading International Vaccinology Education"</li> </ul> </li> <li>3. Lyon and Saint-Etienne (FRANCE): based on the Master "Biologie Moléculaire et Cellulaire, spécialité Infectiologie fondamentale" program <ul style="list-style-type: none"> <li>• French national degree co-delivered by the Université Claude Bernard Lyon 1 and the Université Jean Monnet Saint-Etienne</li> </ul> </li> </ol>

	<ul style="list-style-type: none"> <li>• “Master Sciences, Technologies, Santé, mention BIOLOGIE MOLECULAIRE ET CELLULAIRE, spécialité Leading International Vaccinology Education”</li> </ul> <p>In addition to their degree certificates, graduates receive a LIVE Diploma Supplement.</p>
(Additional) title	-
(Parts of) field of study(s)	Biomedical Sciences, Study Domain Flanders Life Sciences, ISCED
Specialisations	-
Programme routes	-
Location where the programme is offered	<ul style="list-style-type: none"> <li>• University of Antwerp, Antwerp;</li> <li>• Université Lyon 1 Claude Bernard (UCBL), Villeurbanne Cedex (program coordinator)</li> <li>• Universitat De Barcelona (UB), Barcelona;</li> <li>• Universitat Autònoma de Barcelona (UAB), Cerdanyola Barcelona</li> <li>• Université Jean Monnet Saint-Etienne (UJM), Saint Etienne 2</li> </ul>
Teaching language	English
Study load (in credits)	120 ECTS
New training in Flanders	No
Programme-specific learning outcomes	See Annex 2 of this report
Connecting options and potential further education	PhD positions, employment in a broad field connected to vaccines/immunology (e.g. research, public health, SME's, big pharma)

## Annex 2: Programme-specific learning outcomes

**Overall aim:** The LIVE program aims to prepare students for employment in multidisciplinary departments in industry, health organizations and foundations and/or for continuing their studies within PhD programs. The international dimension of the LIVE Program guarantees that students familiarize themselves with different educational methods and a multicultural education.

1. **Core Competence 1** The LIVE graduate vaccinologists have understood and can explain immunological and immunopathological mechanisms, infectious pathogens and infectious diseases which can be or should be prevented by vaccines.
2. **Core Competence 2** They know the step-by-step research and engineering processes that conduct to vaccine development. They are able to apply and/or improve a scientific methodology to improve product development. They will attain practical project management skills which are necessary for an effective application of the knowledge acquired. They are able to contribute to the formulation and implementation of a research project.
3. **Core Competence 3** They know the ecosystem of vaccine industry, research & clinical academics, and vaccine-related organizations and they have contacts in this ecosystem.
4. **Core Competence 4** Vaccinologists can imagine new forms of vaccines by manipulating the immune system to redirect its action against future targets such as cancer cells. They can act as an academic entrepreneur, defining new questions and research.
5. **Core Competence 5** The LIVE graduate vaccinologists have experienced the necessity to better communicate on the strengths and values of the vaccine in order to successfully contribute to the public health policies and vaccination campaigns. They have the ability to transfer knowledge and competences beyond the limits of his/her specialization and to embed design choices in dedicated social, economical, ethical and technical context. They communicate conclusions, and the knowledge and rationale underpinning these, to vaccine specialist and non-specialist audiences clearly and unambiguously.
6. **Core Competence 6** The LIVE graduate vaccinologists have learnt and improved two languages in addition to their native language and are positive on the value of mobility in good conditions.
7. **Core Competence 7** In addition to this specific core of skills in science & humanities related to vaccines, some other learning outcomes are expected from the LIVE program: students have developed ICT skills, efficiency for teamwork, written and oral communication, time management, numeracy: produce and search for quantitative information, analyze, think about and use it, vaccine user awareness. They shall think creatively about problems, lead him/herself and others in new practices with initiative & enterprise. They can take responsibility in multicultural teams.

## Annex 3: Composition of the panel

The assessment was made by a panel of experts convened and appointed by the NVAO. The panel is composed as follows:

**Prof. em. Janke Cohen-Schotanus** (*chair*), Professor emeritus of Research of Education in the Medical Science;

**Prof. dr. Serge Van Calenbergh** (*panel member*), Full professor and director of studies Faculty of Pharmaceutical Sciences UGent;

**Dr. Jetta Bijlsma** (*panel member*), Senior director product development at Talem Therapeutics;

**Tom Konings** (*student panel member*), Student Master of Drug Development and student representative on the Education Council KU Leuven.

The panel was assisted by:

- **Lien Beyls**, policy advisor Flanders NVAO, process coordinator;
- **Eleonoor Tchernoff**, secretary.

All panel members, the process coordinator and the secretary have signed NVAO's code of deontology.

## Annex 4: Schedule of the site visit

### 23 May 2022 – virtual meeting

Time	Session	Participants
9.00 - 9.30	Brief presentation of the programme	Coordinator and Chair member of the Steering Committee and Academic Management Board Quality Assurance Manager and Local Coordinator at UAntwerp Local coordinator F15Université Jean Monet St. Etienne Local coordinator UAB Local coordinator UB Director Faculty of Pharmaceutical, Biomedical and Veterinary Sciences, University of Antwerp
9.30 - 9.50	Internal consultation	
9.50 - 10.50	Dialogue with students	Students master I and master II
10.50 - 11.10	Internal consultation	
11.10 - 12.10	Dialogue with staff responsible for the programme	Coordinator and Chair member of the Steering Committee and Academic Management Board Quality Assurance Manager and Local Coordinator at UAntwerp Local coordinator F15Université Jean Monet St. Etienne Local coordinator UAB Local coordinator UB Student representative in the AMB
12.10 - 13.10	Lunch break	
13.10 - 14.10	Dialogue concerning the programme with with teaching staff and students	<b>Teaching staff of diverse courses</b> Prof. from University of Antwerp Prof. from University of Antwerp Prof. from Universite de Lyon  <b>1 guest lecturer</b> Prof. from Belgian Public Health Institute - Sciensano

		<b>Internship tutor(s)</b> Janssen Vaccine R&D Leiden GSK Vaccines Wavre  <b>Other support staff</b> Teaching assistant
14.10 - 14.30	Internal consultation	
14.30 - 15.20	Dialogue with alumni and professional field	<b>Alumni LIVE Master</b>  <b>Associate partners</b> Instituto Butantan, Brasil
15.20 - 16.20	Open timeslot	
16.20 – 17.00	Internal consultation	
17.00 – 18.00	Final dialogue with staff responsible for the programme	Coordinator and Chair member of the Steering Committee and Academic Management Board Quality Assurance Manager and Local Coordinator at UAntwerp Local coordinator F15Université Jean Monet St. Etienne Local coordinator UAB Local coordinator UB

## Annex 5: Overview of the material studied

### *Information file*

- Self-Evaluation Report – Programme accreditation customised to own conduct

### *Mandatory annexes to the information file*

- Data sheet LIVE
- Education portfolio
  - Learning outcomes
  - Table of congruency
  - Assessment policy
  - Nexus research-teaching (staff expertise)
  - Master thesis Handbook of Evaluation
  - Master thesis examples and scores throughout the years
  - Academic Management Board meeting minutes and presentations
  - Consortium Agreement (curriculum development and reform)
  - Internal Quality Assurance, visitations, programme review

### *Documents made available during or leading up to the dialogue*

- Video presenting the LIVE programme, made by students.

## Annex 6: List of abbreviations

EACEA	European Education and Culture Executive Agency
ECTS	European Credit according to the European Credit Transfer and Accumulation System
EMB	Education Management Board
LIVE	Leading International Vaccinology Education (master's programme)
NVAO	Accreditation Organisation of the Netherlands and Flanders (Nederlands-Vlaamse Accreditatieorganisatie)



## Colophon

MASTER OF SCIENCE IN LEADING INTERNATIONAL VACCINOLOGY EDUCATION (LIVE)

UNIVERSITY OF ANTWERP (VL10004-22)

Conduct-tailored accreditation • Assessment report

*23 June 2022*

Composition: NVAO • Vlaanderen



Nederlands-Vlaamse Accreditatieorganisatie  
Accreditation Organisation of the Netherlands and Flanders

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