

NOVA UNIVERSITY NETWORK

ANNUAL REPORT 2012



NOVA
UNIVERSITY NETWORK

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Abbreviations of NOVA member institutions

AU-ST	University of Aarhus, Science and Technology
HU-AF	University of Helsinki, Faculty of Agriculture and Forestry
HU-V	University of Helsinki, Faculty of Veterinary Medicine
LBHI	Agricultural University of Iceland
LIFE	<i>University of Copenhagen, Faculty of Life Sciences</i>
HEALTH	University of Copenhagen, Faculty of Health and Medical Sciences
SCIENCE	University of Copenhagen, Faculty of Science
NVH	Norwegian School of Veterinary Sciences
SLU	Swedish University of Agricultural Sciences
UEF-F	University of Eastern Finland, School of Forest Sciences
UMB	Norwegian University of Life Sciences

Abbreviations of BOVA member institutions

EMU	Estonian University of Life Sciences (Estonia)
ASU	Aleksandras Stulginskis University (Lithuania)
LLU	The Latvia University of Agriculture
LSMU-VA	Lithuanian University of Health Sciences – Veterinary Academy

Text (where nothing else stated) and layout: Terttu Virri, central NOVA coordinator 2011-2012. Cover photo: NOVA-BOVA Seminar in Tartu, Estonia, May 2012, Eeva Karmitsa.

1. Words from the Chair

In the beginning of the year 2012, the rotating secretariat of the NOVA University Network was transferred from Iceland (Agricultural University of Iceland) to Finland. It was a pleasure of the Faculty of Veterinary Medicine, University of Helsinki, to take over the chairmanship of NOVA for the years 2012 and 2013. The transition of the secretariat went smoothly with one month overlapping time.

NOVA University Network has traditionally organized annual seminars, at which NOVA colleagues have been able to meet each other and discuss relevant matters. In 2012, a first joint seminar with the BOVA University Network was held in Tartu, Estonia. The theme of the seminar "Bridging countries, bridging generations" reflects the values of NOVA and cooperation between the two university networks very well. At the seminar, the NOVA BOVA cooperation agreement was renewed, and the two university networks will continue to reinforce common activities within higher education in the Baltics and Nordic countries.

During the year 2012 several significant organizational changes were planned or implemented within the NOVA member institutes, which all faced tightening of the economy followed by the general economic situation in the Nordic countries. The old quote "The only constant in life is change" has always been valid in the Nordic universities. Constant change brings along a lot of work and at some stage uncertainty, making planning ahead somewhat difficult. Despite of all this, a commendable wide variety of high quality courses were offered by NOVA in 2012. The emphasis of the NOVA courses was, as according to the NOVA strategy, on the doctoral courses. I wish to thank all the active students and devoted teachers who made this possible.

The NOVA University Network wishes to be up-to-date and develop within the changing Nordic academic world. For that reason, it was decided that the NOVA strategy would be renewed during the year 2013, to measure up the requirements of the future. Some preliminary discussions took place at the Board and the KUF meetings in autumn 2012 and the new strategy will be agreed on at a strategy seminar in May 2013, which will this time replace the regular annual seminar.

Nordic cooperation in higher education in the field of life sciences is of high value. Together we can accomplish to arrange courses that will not only give the students high quality education but also provide them with invaluable Nordic contacts which they may benefit from in the future. I am confident that joining forces in the Nordic context is a valid form of cooperation today, and in the future.



Antti Sukura
Chair of the NOVA Board 2012-2013

2. Activities 2012

2.1 PhD education

In 2012, NOVA announced two open calls for applications for PhD courses*. During the spring call 2012, a total number of 11 applications were received, of which 9 got funding. Rejections were caused by the lack of Nordic dimension – in particular the teachers of the course coming only from one single NOVA member institute.

Also during the autumn call 2012, 11 applications were submitted. Due to the limitations of the budget, only four courses got funding. All the applications did meet the NOVA criteria, and the KUF made the decision according to the evaluation scores given to the applications. The total amount of funds reserved for the PhD courses in 2013 courses is 338 226 €.

Sixteen PhD courses were run in 2012, attracting total of 355 students and thereof 257 NOVA students. One course was cancelled, due to the late withdrawal of several teachers.

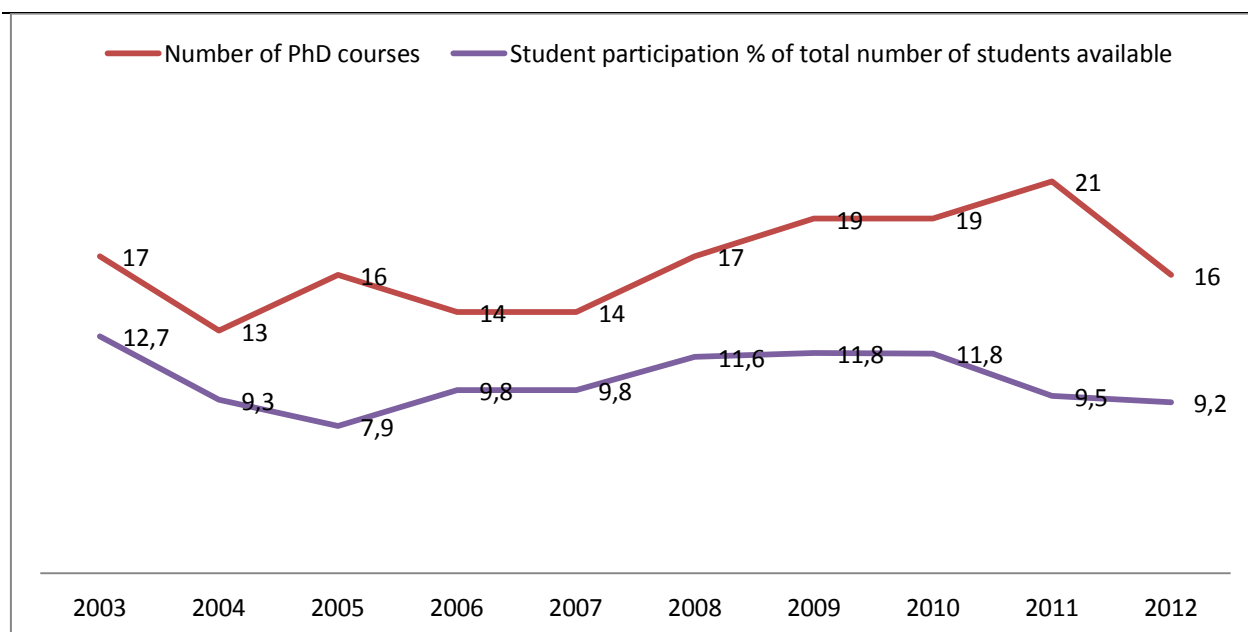
Table 1 PhD courses in 2012, ECTS, number of students

Host institute	Network	Course title	ECTS	Number of NOVA students	Total number of students
AU-ST	Agriculture Engineering	Fundamentals of Ventilation, Indoor Air Quality, Air Motion and Emissions	10	5	9
AU-ST	Agro Ecology	Sustainability assessment in food and farming systems – conventional, organic and beyond	4	16	16
HU-AF	Plant Pathology	Innate immunity of plants: basal defence and pathogen counterdefence	5	25	29
HU-AF	SoilSoc	Sustainable use of tropical soils 2	5	20	41
HU-V	Animal Welfare	Animal Ethics	5	21	24
HU-V	Food Hygiene	Molecular methods for detection of foodborne pathogens	2,5	19	20
HU-V	Veterinary Epidemiology	EpiNOVA advanced course - GIS and spatial analysis using open source software	6	8	11
LIFE	Agriculture Economics	The Empirics of Economic Organizations and Transaction Costs	5	2	17
LIFE	Statistics in agriculture	Applied statistics with R for the agricultural, life and veterinary sciences	6	29	34
LIFE	Urban Forestry & Urban Greening	Governance in Urban Forestry & Urban Greening	5	7	12
LIFE	Veterinary clinical research and scientific method	Clinical–and Biomedical Research and Scientific Methods. Experimental design in clinical studies. Clinical intervention and evidenced-based medicine.	6	16	16
SLU	Animal Breeding	Next Generation Sequencing - applications in animal breeding and genetics	5	28	28
SLU	Ethology	The good, the bad and the ugly sides of human - animal interactions	5	27	37
SLU	Forest planning and inventory	3D Remote Sensing of Forests	5	17	22
SLU	Plant Breeding	Pre-breeding for sustainable plant production	6	18	24
SLU	Wood Technology	Wood structure and properties with a special emphasis on wood durability	4	7	15
				265	355
Cancelled					
UEF-F	SoilSoc	Peat soils and peatlands in Nordic countries	3		

*The courses granted in 2012 will run in 2013, except for one course that took place in late 2012.

Table 2 Number of PhD courses and number of students 2003-2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Number of PhD courses	17	13	16	14	14	17	19	19	21	16
Number of NOVA PhD students on the courses	270	186	162	200	197	264	301	331	317	265
% of NOVA PhD students of total number of PhD students at the NOVA member institutions	12,7	9,3	7,9	9,8	9,8	11,6	11,8	11,8	9,5	9,2



The number of the PhD students attending to the NOVA courses in 2012 was almost the same as in 2008, when almost the same number of courses took place. In the [table 2](#), a percentage of the PhD students in the courses of all the registered PhD students at the NOVA member institutions are shown.

The majority of the participants in PhD courses in 2012 were NOVA PhD students (see [table 3](#)), which is the main target group for the courses. “Other students” –category on the table 3 includes the following groups: Other Nordic non-NOVA students, students coming from industry and all other students not falling into the other groups. [Table 4](#) shows that for the past 4 years the share has been stable between NOVA students and other groups.

Table 3 Student groups in NOVA PhD courses in 2012, absolute numbers and percentages

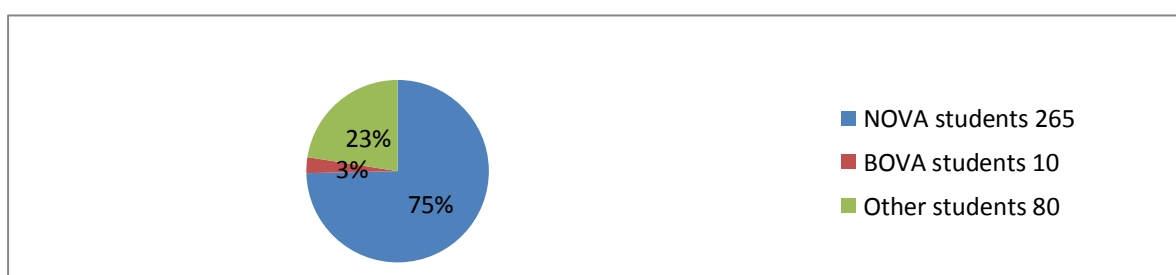
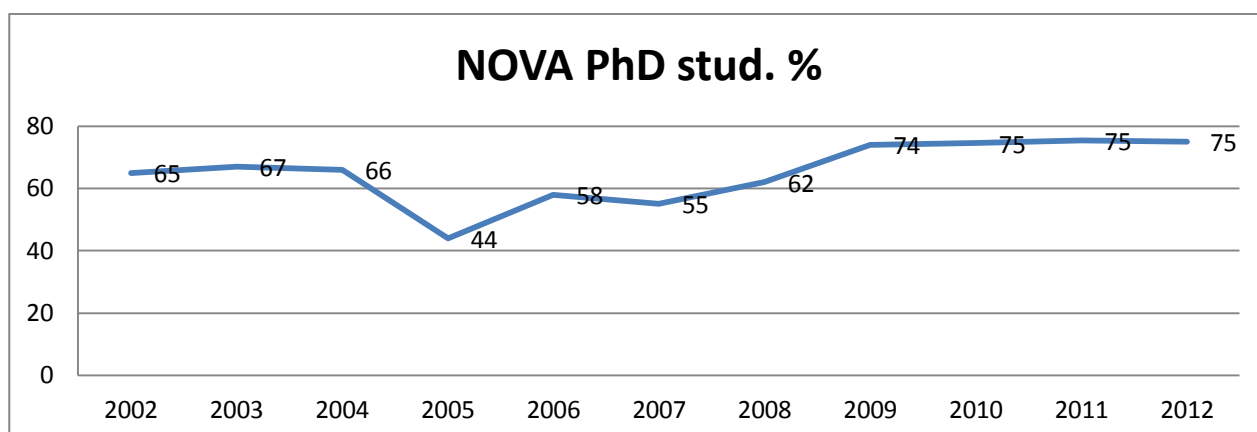


Table 4 Percentage of NOVA PhD students in the NOVA PhD courses, 2002-2012



However, there was a vast variety in the percentages of the NOVA students in individual courses running in 2012: Three of the courses attracted only NOVA students (100%) and three courses had less than 50% NOVA student participation. The average percentage of the students from the hosting institution was 34%, minimum percentage being 0% and maximum 49%.*

[Table 5a](#) (page 7) shows the number of students in all the NOVA PhD courses in 2012 and [table 5b](#) (page 7) is a chart showing the same numbers in percentages.

The share of the students from each member institution in average during the years 2003-2012 compared to the year 2012, ([table 6](#), page 7) partially reflects the number of the courses hosted by each member institution. For example, the Norwegian University of Life Sciences, UMB, did not host any PhD courses in 2012, hence the relatively low number of students attending the courses. An example of the opposite can be seen in the participation numbers of the Faculty of Veterinary Medicine of the University of Helsinki (HU-V). In 2012, three PhD courses were hosted by HU-V, hence the notable rise (37,5 %) of the student participation.

Some of the changes in the student participation are not explained by the before mentioned factor. The rise in Aarhus figures is explained by the fact it joined NOVA only in 2009. The faculty of Agriculture and Forestry, University of Helsinki, had 33% higher student participation in 2012 than in average 2003-2012, although hosting only 2 courses in 2012 (compared to 3 courses in 2010 and 4 courses in 2011). This could partially be explained by HU-AF actively promoting of the NOVA courses to the students.

*Detailed information course by course can be found in the appendix.

Table 5a Student attendance by member institution in all the PhD courses in 2012

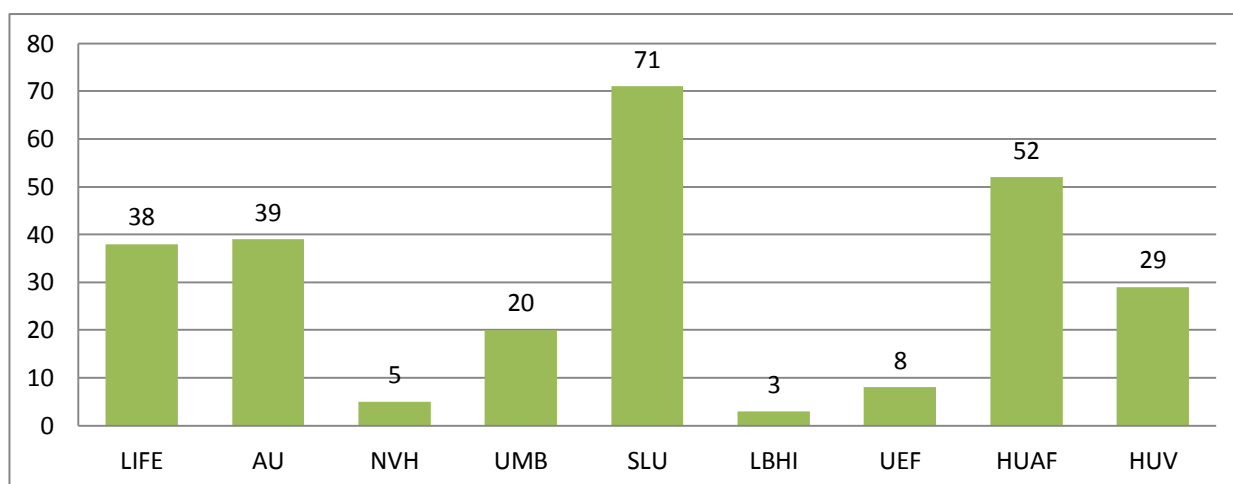


Table 5b Percentage of students by member institution, all the PhD courses in 2012

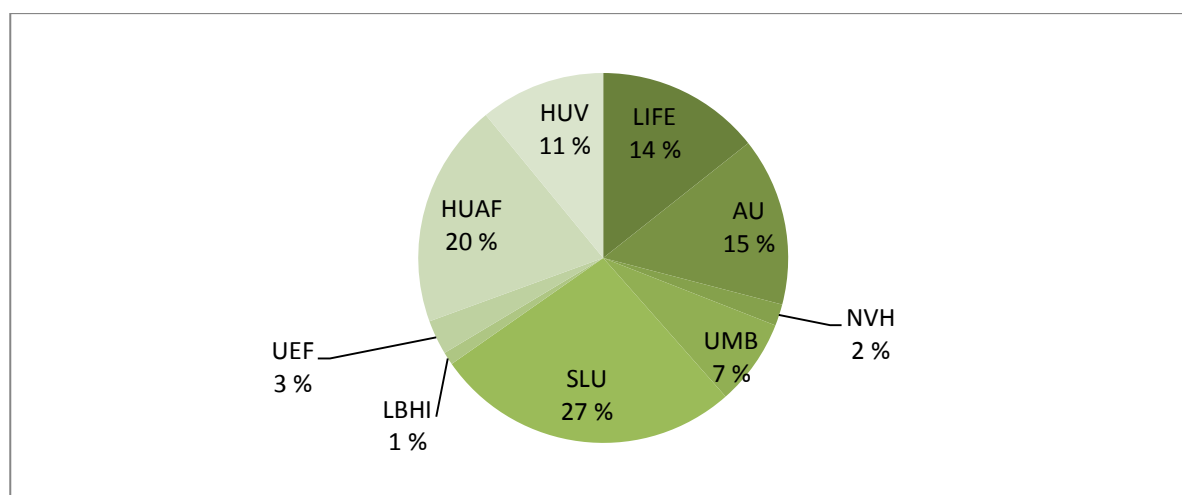


Table 6 Share of students (PhD), by member, years 2003-2012 and 2012

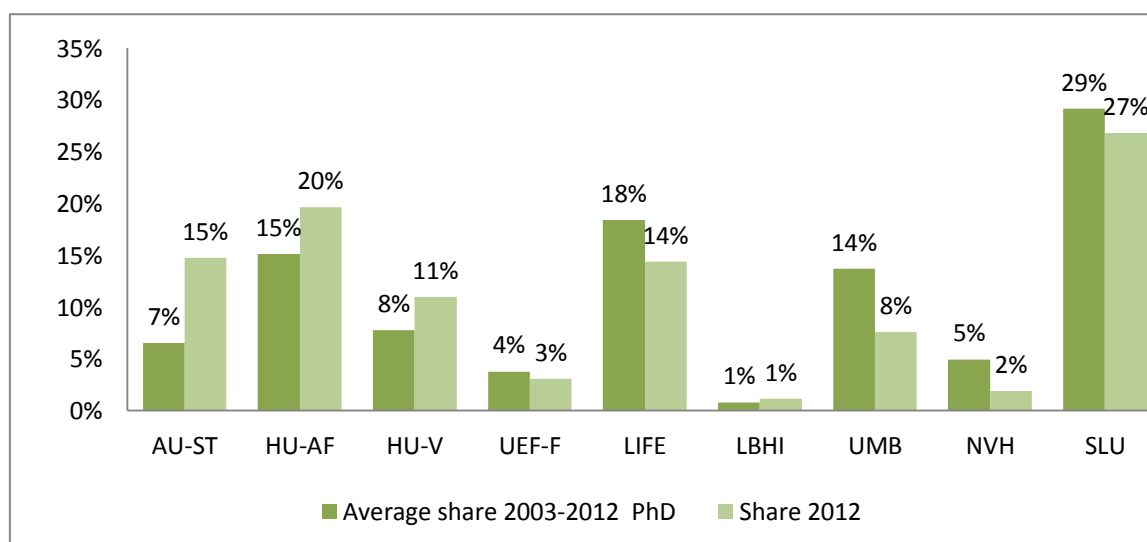


Table 7 Final grant amount, price per student and per ECTS - PhD courses 2012

Course title	ECTS	NOVA students	All students	Grant paid €	price per NOVA student	price per 1 ECTS (all students), €
Fundamentals of Ventilation, Indoor Air Quality, Air Motion and Emissions	10	5	9	11 409	2 282	MAX 126,77
Sustainability assessment in food and farming systems	4	16	16	16 000	1 000	250,00
Innate immunity of plants: basal defence and pathogen counter defence	5	25	29	26 320	1 053	181,52
Sustainable use of tropical soils 2	5	20	41	28 000	1 400	136,59
Animal Ethics	5	21	24	18 534	883	154,45
Molecular methods for detection of foodborne pathogens	2,5	19	20	17 502	921	350,04 MAX
EpiNOVA advanced course – GIS and spatial analysis using open source software	6	8	11	16 000	2 000	242,42
The Empirics of Economic Organizations and Transaction Costs	5	2	17	2 800	1 400	32,94 MIN
Applied statistics with R for the agricultural, life and veterinary sciences	6	29	34	18 424	635	90,31
Governance in urban forestry and urban greening	5	7	12	7 000	1 000	116,67
Clinical and viomedical research and scientific methods	6	16	16	21 843	1 365	227,53
Next Generation Sequencing – applications in animal breeding and genetics	5	28	28	43 555	1 556	311,11
The good, the bad and the ugly sides of human - animal interactions	5	27	37	16 400	607 MIN	88,65
3D Remote Sensing of Forests	5	17	22	25 702	1 512	233,65
Pre-breeding for sustainable plant production	6	18	24	20 577	1 143	142,90
Wood structure and properties with a special emphasis on wood durability	4	7	15	7 906	1 129	131,77
				total	average	average
				297 972 €	1 243 €	176 €

Table 7 shows the total cost of each PhD course (i.e. the euro amount paid) in 2012 and calculations of the cost per NOVA student (not all the students in each course), as well as the price of 1 ECTS, calculated by dividing the cost of the course by total amount of ECTS produced (all students). The final amount (on the table section “grant paid”) of the grant for each course depends on the actual number of the NOVA PhD students in the course, for which NOVA pays maximum of 200€ each. The maximum number of PhD students that can be counted in the before mentioned maximum amount, is 25. In addition to that, only up to 50% of the NOVA students in a course can be from the hosting institute.

The average cost of the courses, per a NOVA student, is 1 243 €. The range is quite vast, the minimum being 607 € and the maximum 2 282 €. The statistics about the price of each ECTS produced NOVA students show that in half of the courses (8), the cost per each ECTS produced by NOVA students, was in the range of 200 – 282 €. Four courses produced ECTS at a lower cost and four courses at a higher cost than that.

The total amount of funding granted to these 16 courses was 436 335 €, of which 68% was used (297 972 €). Two of the courses could claim less than 40 % of the maximum grant. This was due to the fact that the number of NOVA PhD students at these courses was very low. In average, 70% of the total PhD grant amounts were used in 2012.

2.2 Master level education

Table 8 NOVA master level courses in 2012

Course					Students				Teachers			
	Host	ECTS	Grant €	Grant used €	NOVA students	BOVA students	Other	Total	NOVA	Baltic	other	Total
Insect pollinators and pollination ecology	HU-AF	3	5000	5000	11	-	3	14	4	-	1	5
Molecular plant-microbe interactions laboratory course	SLU	3	5000	5000	16	-	-	16	4	-	-	4
Sustainable pig production	SLU	5	11388	10747	4	5	-	9	3	4	-	7
Plant pathology in a changing world (2011-2013)	UMB	5	5000	2339	7	-	1	8	8	-	-	8
total				23086	38	5	4	47	19	4	1	24

In 2012, four (4) NOVA intensive master courses took place. The regular maximum grant for the master courses is 5000 €. Sustainable pig production was the only course that applied and received more than that. This course was also supported by Nordic Council of Ministers in a form of NOVA BOVA Nordplus network grant, and the total cost of the course (NOVA+NCM funding) was 23 303 €.

The average teacher student ratio in master courses was quite high, one teacher per 2,3 students. The average number of students was quite low, 11,75, the average number of NOVA students being 9,5. The cost of one ECTS varied from the highest 269 € / ECTS (Sustainable pig production*) to the lowest 58,50 € / ECTS (Plant pathology). Counting the cost of the courses per NOVA student (paid amount / number of NOVA students in the course), the cheapest course was the Molecular plant microbe course, with the cost of 313 € / NOVA student. The most expensive course using this calculation method was the Sustainable pig production course, which cost 2687 € / NOVA student.

*From the 9 students on the course, 1 didn't accomplish the course.

During 2012, NOVA funded the following projects:

- A kick-off meeting for the NOVA network administrators of adult education, 4 365 €,
- Planning project of Visual teaching within the academic field of Landscape architecture study in NOVA universities, 3 888 €
- Planning project for NordicDENDRO, a network in dendrochronology in Nordic countries, 4 987 €
- NOVA BOVA Nordplus coordinators meeting in Helsinki, 4 740 €

2.3 Mobility

The NOVA BOVA Nordplus network, which gets its funding from the Nordic Council of Ministers via the Nordplus programme, was coordinated during the academic year 2011-2012 by Þorbjörg Valdís Kristjánsdóttir from LBHI. For the academic year 2012-2013 and 2013-2014 the central coordinator is Janna Koivisto, HU-V. With Nordplus funds, applied yearly in an open call, intensive master courses which are open to all NOVA and BOVA master students are organized. The network also gives grants for students and teachers in mobility within NOVA and BOVA universities. Scholarships for students are awarded to cover living expenses and travel costs, whereas teachers can apply for funding of mobility between NOVA institutions. Their stay must be related to specific and integrated teaching activities. During the academic year 2011-2012 only 3 NOVA teachers were in Nordplus mobility (two from SLU and one from LIFE).

Table 9 describes the number of master students who have received mobility support per academic year, both in normal mobility (i.e. more than for weeks) and in express mobility (less than four weeks).

Table 9 Number of NOVA Master students per academic year 2003/04-2011/12

Academic year	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12
MSc students in standard mobility (> 4 weeks)		68	37	52	53	23	29	39	47
MSc students in express mobility (< 4 weeks)		17	35	50	73	69	70	66	45
TOTAL	55	85	72	102	126	92	99	105	92
% of MSc students of available students in mobility*	1,5	2,3	2	2,8	3,3	2,4	2,3	1,8	1,5

*Registered master students in the member institutes in total

2.4 NOVA BOVA Nordplus Network activities

NOVA BOVA Nordplus network was established in 2008. The local coordinators are important players in the network activities. They met regularly during 2012. Mostly the meetings took place as video meetings, due to the fact that from the academic year 2012/2013 onwards, Nordplus ceased to support network meetings. Three face-to-face meetings were organized, one in Iceland in March, one connection to the Annual Seminar in Tartu and one in Helsinki in October (supported by NOVA).

The network was granted to run six intensive master courses during 2012, which NOVA supported with so called NOVA guarantee (paying travel grants to the students). These courses were

- Woody Biomass Plantations Options for Cost-effective Mitigation of Climate Change Effects , LLU, Jelgava, Latvia, 26-30 March, 2012
- Entrepreneurship and Innovation for Rural Development , EMU, Tartu, Estonia, 5-9 March 2012
- Evaluation of Quality of Poultry Meat and Eggs , LSMU-VA, Kaunas, Lithuania, 19-23 March, 2012
- Causes and consequences of pollinator decline, EMU, Jarvselja, Estonia, 5-11 August, 2012
- Land Administration in Baltic Countries, LLU, Jelgava, Latvia, 22-26 October, 2012
- Pomology and Fruit Sciences, ASU, Kaunas, Lithuania, 8-12 October, 2012.



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3. Annual Seminar

In 2010, the BOVA rector **Mait Klaassen** proposed a joint NOVA BOVA seminar to be held in the Baltics. This proposition was accepted by the NOVA Board in 2011 with pleasure. The hosting university in the BOVA side was the Estonian University of Life Sciences (EMU) in Tartu, where the seminar took place on May the 4th and 5th 2012. In total 124 people participated in the seminar.

The arrangements for the seminar as well as the programme were jointly taken care of the BOVA team lead by Mait Klaassen and NOVA Executive Committee lead by NOVA chair **Antti Sukura**. The theme was agreed to be "Bridging countries, bridging generations", reflecting the cooperation between the Nordic and the Baltic countries and changing ways of learning and teaching. The BOVA secretary **Ruta Zaleckite** worked closely with the NOVA central coordinator in coordinating the programme, and **Küllli Kõrgessar** efficiently took care of the practical arrangements in Tartu.

On the afternoon before the seminar, the participants were welcomed to a visit to EMU. Different options for the visit were available, which allowed the participants to choose the place to visit that interested them most. By the number of visitors, the tour of the Centre of Excellence (ENVIRON) combined with the visit to the laboratory of plant pathology, and the tour to the Institute of Veterinary Medicine and Animal Clinic were the most popular.

The first day of the seminar concentrated on the “bridging generations” –theme, with plenaries and workshops on the different methods of learning. The seminar was opened by Mr **Anders Koppel**, the Deputy Secretary General for Higher Education and Research of the Estonian Ministry of Education and Research. He talked about the current trends in the Estonian higher education policy, explaining how the current system where only approximately 50% of the students get free higher education is unsatisfactory. The plans are to change all the programmes (taught in Estonian) to be free of charge, providing the student meets certain criteria.

If you have an apple and I have an apple
and we exchange these apples then you
and I will still each have one apple.

But if you have an idea and I have an
idea and we exchange these ideas, then
each of us will have two ideas.

George Bernard Shaw 1856-1950

The first day programme was enriched by two speakers, Director **Berth Sundström** from the Nordic Council of Ministers office in Estonia, and Professor **Ülo Niinemets** from EMU. Their speeches were followed by three plenary sessions. The first one was presented by an invited guest, Professor **Peter van Beukelen** for Utrecht University. He is a veterinarian with a strong interest in educational matters, and his plenary topic was “Active learning: The key to development of lifelong skills”. As a take home message, he summarized the actions for implementation of active learning:

- Communication...communication...communication
- Support from all levels of management'
- (Permanent) Faculty / Staff training
- Specific attention to assessment
- (Permanent) Motivation of students

Meeli Voore, an e-learning coordinator from EMU, gave a plenary themed “E-learning – what we learn with pleasure we never forget”. She described the process of changing the learning and teaching from teacher being a deliver of the content and skills and the students being just reflectors, to more active process where teachers become learners and learners become teachers, in a constant change of ideas, processing, and sharing. The next phase of the learning / teaching would be reached by using interactive methods – flipping classroom – , keeping in mind the requirements of the future professionals.

Tell me and I will forget

Show me and I will remember

Involve me and I will understand

Step back and I will act

Confucius 551-479 BC

Timo Pentikäinen had titled his plenary “Social Business for education and beyond”. He was an invited speaker from IBM Software. The participants of the seminar learned basic facts of social learning, social networking, social media and social business. Sharing ideas, finding connections and realizing that content is only one part of a successful business (and teaching / learning), among conversation and community. It is very important that the social needs are integrated in the context of daily work.

In the afternoon of the first day, 5 workshop alternatives were organized. The goal was to find answers to the question “How to design better NOVA or BOVA courses?”. The feedback questionnaire revealed that 62% of the respondents thought the workshops were good, very good or excellent.



Photo: Eeva Karmitsa

At the end of the first day, the renewal of the NOVA-BOVA cooperation agreement was signed by BOVA rector Mait Klaassen and NOVA chair Antti Sukura. The agreement is in effect until the next mutual meeting of NOVA Board and BOVA Rectors' Board in 2015.



Photo: Alatskivi Castle

The gala dinner took place in Alatskivi Castle, an hour drive from Tartu. Alatskivi is a manor built in late 19th century, modelled after the Balmoral castle in Scotland. Before the dinner, there was a tour in the castle.

The second day of the seminar was about “bridging countries”, concentrating on the cooperation and common trends in the field of life sciences within the Nordic-Baltic region. **Harry Zilliacus**, senior adviser from the NordForsk program, spoke about NordForsk’s role in the Nordic-Baltic research cooperation. Three plenaries took place, the first one presented by **Jukka Kola**, vice rector at the University of Helsinki. He was talking about



Agricultural Challenges and University Teaching. With the changes in agriculture both in Nordic-Baltic region and globally, more investments in education and research are needed, with special focus in developing countries. There is a need for broader Bachelor programmes and specialization should take place at the Master level. International co-operation and multidisplinary in teaching is needed.

The second plenary of the day was held by Dr **Vilis Brukas** from the European Forest Institute. He explored the future of forestry in the Nordic-Baltic region, analyzing the different kinds of “forest regions” in the EU and especially in the Nordic and Baltic countries. The focus in the plenary was in the future, evaluating possible trends in the forestry. Vilis Brukas prognosed that the intensity of forest utilisation will increase and forest science will continue to grow in complexity, which means there will be growing need for intensified research and research training in the field.

The final plenary of the seminar was held by **Laima Taparauskiene**, vice rector of research in ASU. She talked about Urbanization, Water resources and Climate change. The major challenges in urbanization are caused by the need of more production on less land, with less water and less energy. There will be a lot of issues concerning water resources and consumption in the future, as well as climate change. The challenge is to adapt to the changes, but also diminish the effects by active measures in agriculture.

The second day of the seminar included a “minisymposia”, during which different areas of interest gathered people to explore for example different possibilities for research funding. **Jens Streibig**, University of Copenhagen, told about his experience of running a PhD course in collaboration with BOVA. NOVA Vet symposium gathered the veterinarians to discuss about day one skills of veterinarians and a new NOVA network “Adult Education” had its own symposium.

At the end of the day, there was a voluntary walking tour around Tartu, after which the last participants headed home, except for the the NOVA student board members and the BOVA student council members, which had a meeting on the following day.

4. NOVA Board, NOVA KUF and NOVA EC activities

Due to the change in the NOVA chairmanship from Iceland to Finland, the Icelandic NOVA chair and KUF chair, as well as the central coordinator were replaced by representatives of Faculty of Veterinary Medicine, University of Helsinki. Dean Antti Sukura started as NOVA chair, professor Anna Valros as NOVA KUF chair, and Terttu Virri as NOVA central coordinator.

According to the Board and KUF decisions, it was agreed that from 2014 onwards, the activity plans (both the general and the local ones) will be made as two-year plans. In the Board, a decision to change the procedure of the minutes approval was changed so that in every meeting, two inspectors for the minutes are elected.

The NOVA Board had three meetings in 2012: A video meeting in February, meeting in Tartu in May and a meeting in Copenhagen in October. Some member changes in the Board took place: Until October, Grete Bertelsen was representing LIFE. Because of the organizational changes in the University of Copenhagen, from October onwards the two faculties, Science and Health and Medical Sciences, both got a representative in the Board. From SCIENCE, Dean John Renner Hansen and from HEALTH Vice Dean Birgit Nørrung. were welcomed as new Board members.

At the October meeting of the Board, the Danish NOVA members presented a suggestion of making some changes to NOVA, both in administration and function. As a result, a decision about renewing the NOVA strategy one year ahead of the schedule, was done. It was agreed that a strategy meeting will be held in 2013, instead of an annual seminar, and the new strategy for the years 2014 – 2017 will be formulated. It was also decided that during 2013 only one PhD grant application call will be opened.

The NOVA KUF met four times during 2012: Video meeting in March, meeting in Joensuu in June, video meeting in September and meeting in Uppsala in November. A few new KUF members started in 2012: Senior Researcher Heli Peltola, UEF-F, replaced Dr. Aija Ryyppö, and Planning Officer Pauliina Karvinen started as a new NOVA coordinator in UEF-F. Also Aarhus University got a new international coordinator, Susanna Pakkasmaa, who shares NOVA tasks in AU-ST with Marianne Aarø-Hansen. Likewise getting one place for each in the Board, the two new faculties of the University of Copenhagen (SCIENCE and HEALTH) had each one representative in the KUF. Vice Dean of Education Grete Bertelsen started as the representative of SCIENCE, and Head of Department Hans Henrik Dietz as the representative of HEALTH.

Decisions on the grants were made at the June and November meetings. The KUF members evaluated in total 22 PhD course application, from which 13 got funding (see page 4). In addition to the KUF regular meetings, a meeting with BOVA Coordination Committee at the Annual Seminar took place. The KUF actively participated in formulating the activity plan for 2013, as well as discussions about the prospective strategy seminar in May 2013.

The NOVA promotional campaign was one of the matters at the KUF's agenda during 2012. The decision about creating a new promotional leaflet for the NOVA PhD students was made, and a person was hired to produce the leaflet. An idea about making video clips to promote NOVA was presented, but it was not followed through, due to the lack of time. A new NOVA course certificate was seen important to be made, and with the contribution of all the local coordinators, the form of the new certificate was agreed on.

The NOVA Executive Committee, formed by the NOVA chair, the KUF chair and a NSB representative (Tommy Chan, HU-AF), and the central coordinator as presenting official and secretary, decided on 7 different financial matters within its field of operation: One course grant, 4 planning grants and 2 network support grants. All the EC meetings were carried out as E-mail meetings.

5. NOVA Student Board

The NOVA student Board had 3 face-to-face meetings during 2012. The first meeting took place in Copenhagen in February, the second one in Tartu, Estonia during the Annual Seminar and the third one in Reykjavik in October. In addition to these meetings, three video meetings took place. At the meeting in Tartu, the new key persons of the NOVA student board were elected. Julia Weijola (HU-AF) was elected as the chair and the representative in the NOVA Board, to replace Kristian Krag who acted as the chair until May 2012. Marcus Andersson (SLU) was elected to be the vice chair and the representative in the NOVA KUF. Other key persons include the treasurer (Elina Viitasaari, HU-V), second KUF representative (Hanna Husum, UMB), secretary (Hanna Telama), NOVA Executive Committee member (Tommy Chan HU-AF), BOVA contact (Nanna Noerholm, LIFE) and information officer (Maria Herva, UEF-F).

NOVA student board actively took part in the formulation of the agenda of the Annual Seminar and created a Decision Paper, an updatable document in which the students' views on variety of matters in NOVA's activities are outlined. The representatives of the NSB have been attending the Board and the KUF meetings, presenting an activity follow-up at each meeting. The NSB has also been active in initiating for example creation of "course packages" at each NOVA member institute, which would be possible for a NOVA student to take as an entity.

6 Cooperation partners

Alongside with the established cooperation with *BOVA university network*, NOVA renewed the agreement with the *Nordic Forest Research Cooperation Committee* (SNS), which is continuously giving financial support for forestry related NOVA PhD courses. *The Nordic Association of Agricultural Scientists*, NJF, opened a discussion of possible cooperation with NOVA by organizing a NJF seminar alongside with a NOVA PhD course.

The North European Regional Office of European Forest Institute, EFINORD, initiated cooperation with NOVA, first step being the secretariat of both organs encouraging networks of NOVA / EFINORD to apply for each other's grants. It was agreed that the established EFINORD networks can apply for NOVA funding, as long as the network fulfills the NOVA criteria, without having to go through a one year pilot phase which new NOVA networks are normally obliged to.

7. Financial Accounts 2012

Table 10 Balance statement 2012

		Income	Expenses	Balance
1.1.2012	transfer from LBHI	200 000,00		200 000,00
28.8.2012	transfer from LBHI	157 685,00		357 685,00 starting capital
				1 037 687,00
	membership fees	680 002,00		1 102 449,00
	unpaid member fee 2011 (LIFE)	64 762,00		1 110 704,00
	SNS	8 255,00		1 117 020,00
	returned grant	6 316,00		1 119 095,00
	NSB returned funds	2 075,00		475 691,00 funds 31.12.2013
	expenses *		643 404,00	

*total expenses of 2012, deducted by Nordplus funds (in a separate account) and Nordplus guarantee 2011-2012 fully paid by LBHI

Table 10 Accounts 2012 and Budget 2013

	2012 BUDGET	31.12.2012	%	2013 BUDGET
Member fees				
AU-A	85 275,00	85 275,00		68 343,00
HU-AF	68 807,00	68 807,00		55148,55
HU-V	20 012,00	20 012,00		16039,35
LBHI	5 672,00	5 672,00		4 545,30
LIFE	148 928,00	148 928,00		119 360,45
NVH	30 356,00	30 356,00		24 328,80
SLU	200 720,00	200 720,00		160 873,10
UEF-F	14 614,00	14 614,00		11 712,05
UMB	105 618,00	105 618,00		84 649,40
Total member fees	680 002,00	680 002,00	100 %	545 000,00
External funding Nordplus	89 100,00	89 100,00	100 %	n/a (separate budget)
External funding SNS		8 255,00		11 000,00
Member fees 2011 paid in 2012		64 762,00		n/a
Overpaid advance payments		8 391,00		n/a
Total income	769 102,00	850 510,00		556 000,00
Activities				
PhD courses	-450000	-434 745,00	97 %	-378 670,00
Other projects	-110000	-90 427,00	82 %	-100 000,00
NOVA N+guarantee and Nordplus support	-65 000,00	-55 254,00	85 %	-65 000,00
External projects / Nordplus	-89 100,00	-89 100,00	100 %	n/a (separate budget)
Promotional campaign	-10000	-1 828,00	18 %	n/a
NSB	-21 000,00	-21 370,00	102 %	-17 000,00
Annual Seminar / Strategy seminar	-25000	-17 163,00	69 %	-10 000,00
Total activities	-770 100,00	-709 887,00	92 %	-570 670,00
Secretariat				
Salaries	-75200	-61 434,00	82 %	-68 000,00
Travels	-10000	-3 230,00	32 %	-5 000,00
Other	-15000	-13 207,00	88 %	-20 000,00
Total secretariat	-100 200,00	-77 871,00	78 %	-93 000,00
Total activities and secretariat	-870 300,00	-787 758,00	91 %	-663 670,00
Regained project grants	50 000,00	167 886,00	336 %	n/a
Result	-51 198,00	230 638,00		-107 670,00
result 2012 without regained		62 752,00		
Starting funds 1.1.2012	357 685,00			
surplus 2012	62 752,00			
Accounting year funds used in 2011	-55 254,00			
Equity 31.12.2012		475 691,00		Prognosed equity 31.12.2013 368 021,00

NOVA UNIVERSITY NETWORK

APPENDIX TO ANNUAL REPORT 2012



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Table 1 Number of students in the NOVA PhD courses 2002-2012

Year	Total no. of students	Students per course
2002	292	29
2003	402	24
2004	282	22
2005	366	23
2006	346	25
2007	355	25
2008	391	23
2009	382	20
2010	444	23
2011	398	19
2012	355	22

Table 2 Number of NOVA students in NOVA PhD courses per member 2008-2012

	AU-DJF	LIFE	HU-AF	HU-V	LBHI	UMB	NVH	SLU	UEF-F	NOVA total	NOVA PHD stud./course	NOVA PhD stud. %
2008	*	55	30	29	7	28	18	86	11	264	14	62
2009	18	47	27	19	3	52	27	91	17	301	16	74
2010	36	59	61	15	2	58	11	71	18	331	17	75
2011	40	52	52	3	4	43	4	83	19	300	14	75
2012	39	38	52	29	3	20	5	71	8	265	17	75

* AU-DJF became full member from January 2009

Table 3 Share of member fee 2012 versus share of produced degrees 2012

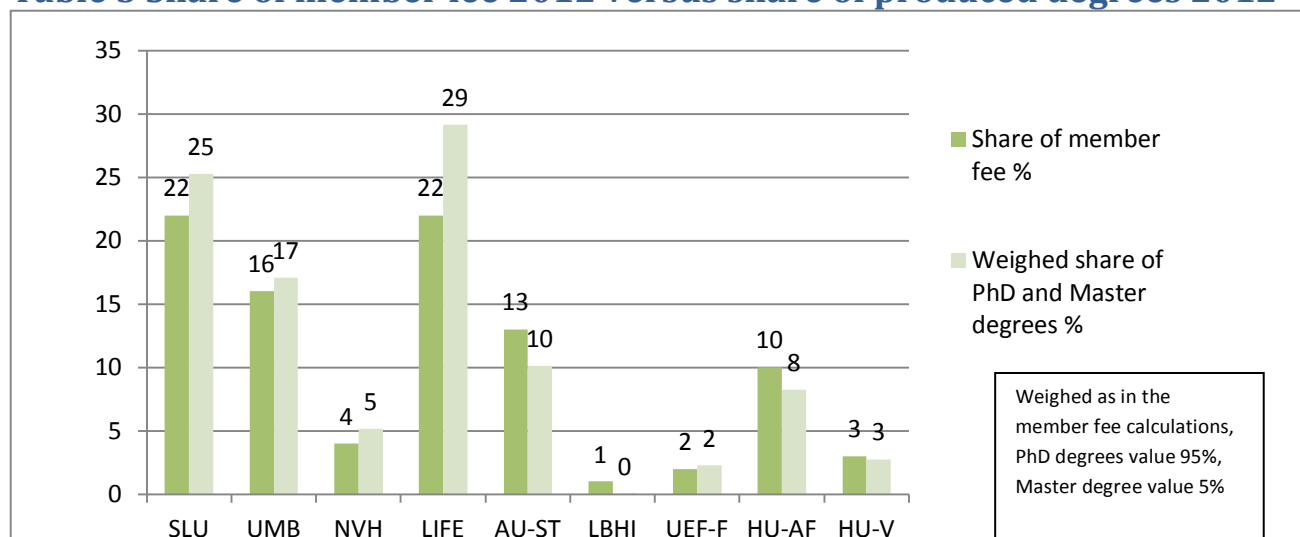
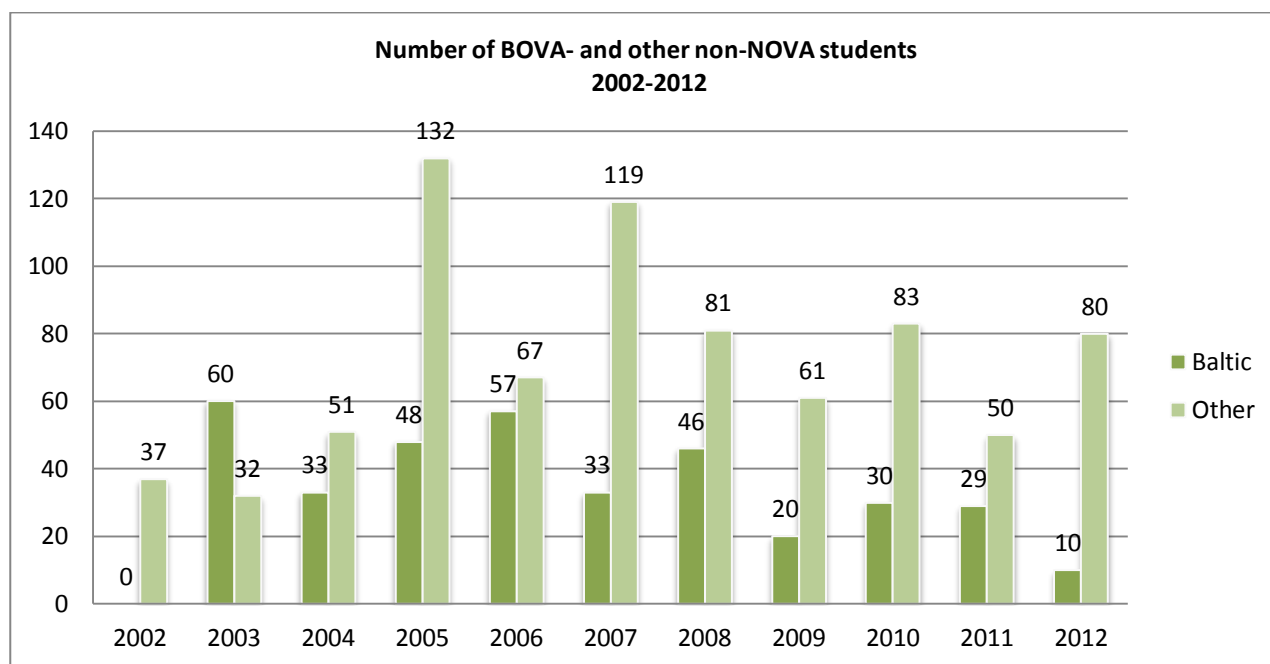


Table 4 Non-NOVA participants on NOVA PhD courses 2002-2012

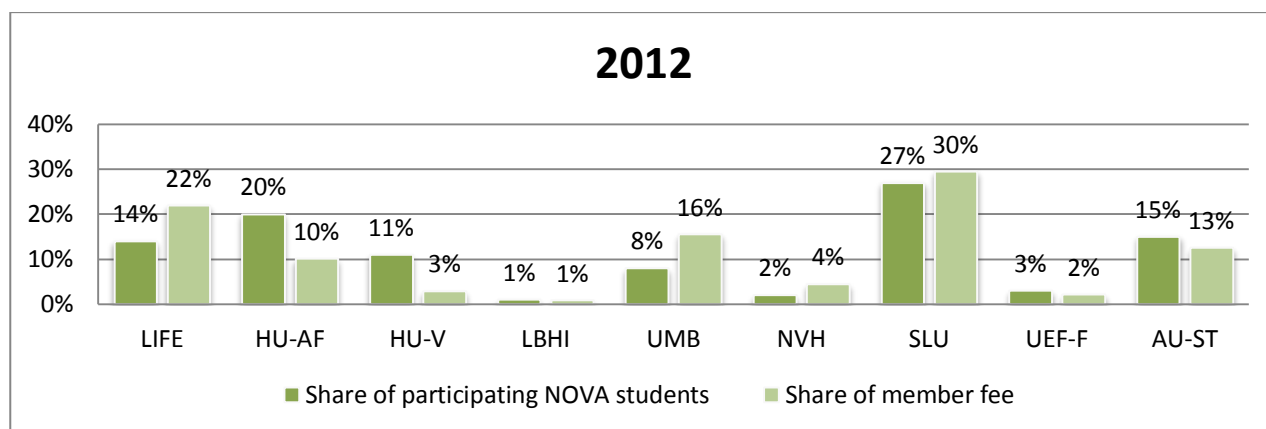
	Baltic	Other	Total non-NOVA	Percentage non-NOVA
2002	0	37	37	13 %
2003	60	32	92	23 %
2004	33	51	84	30 %
2005	48	132	180*	49% *
2006	57	67	124	36 %
2007	33	119	152	43 %
2008	46	81	127	32 %
2009	20	61	81	21 %
2010	30	83	113	25 %
2011	29	50	79	20 %
2012	10	80	90	25 %

*The large number of non-NOVA participants partly explained by NOVA supporting two PhD courses with main funding from external donors (EU, NordForsk).



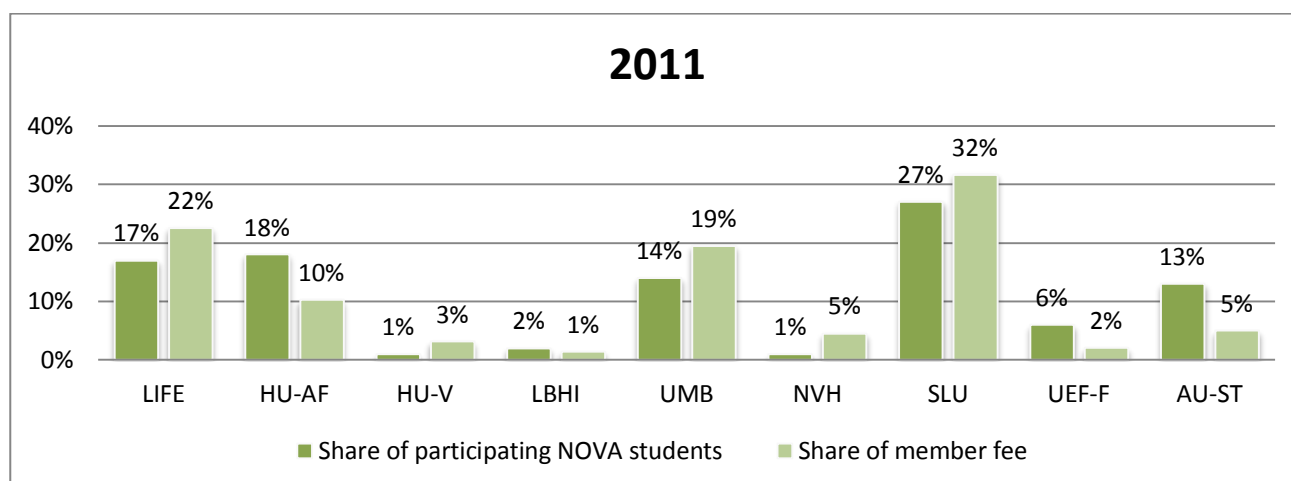
Tables 5a - 5d Relative student participation (all courses) by member related to member fee, 2009-2012

5 a 2012



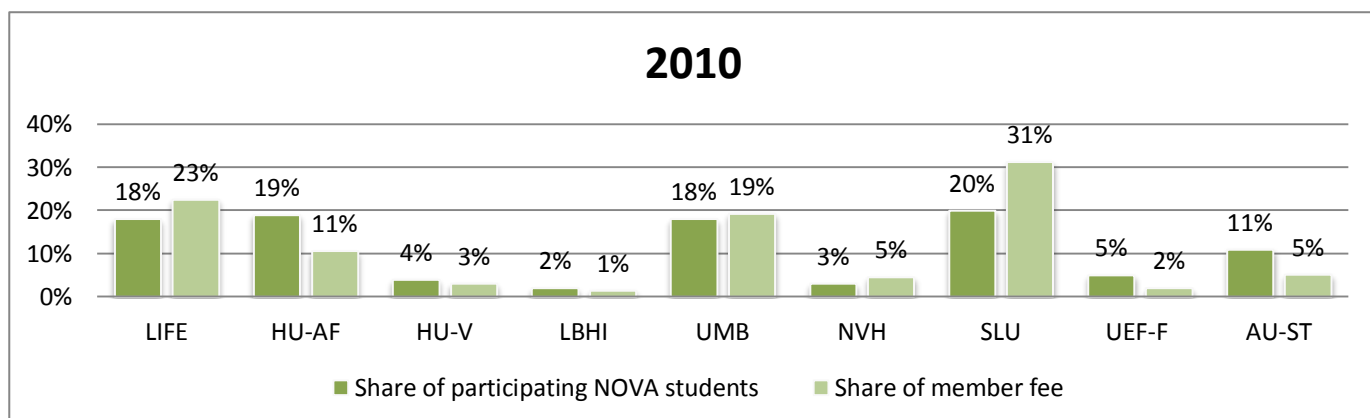
5 b 2011

	LIFE	HU-AF	HU-V	LBHI	UMB	NVH	SLU	UEF-F	AU-ST
Share of participating NOVA students	17 %	18 %	1 %	2 %	14 %	1 %	27 %	6 %	13 %
Member fee (Euro)	108 476	49 346	15 124	6 902	93 975	21 846	152 635	10 018	24 077
Share of member fee	22 %	10 %	3 %	1 %	19 %	5 %	32 %	2 %	5 %



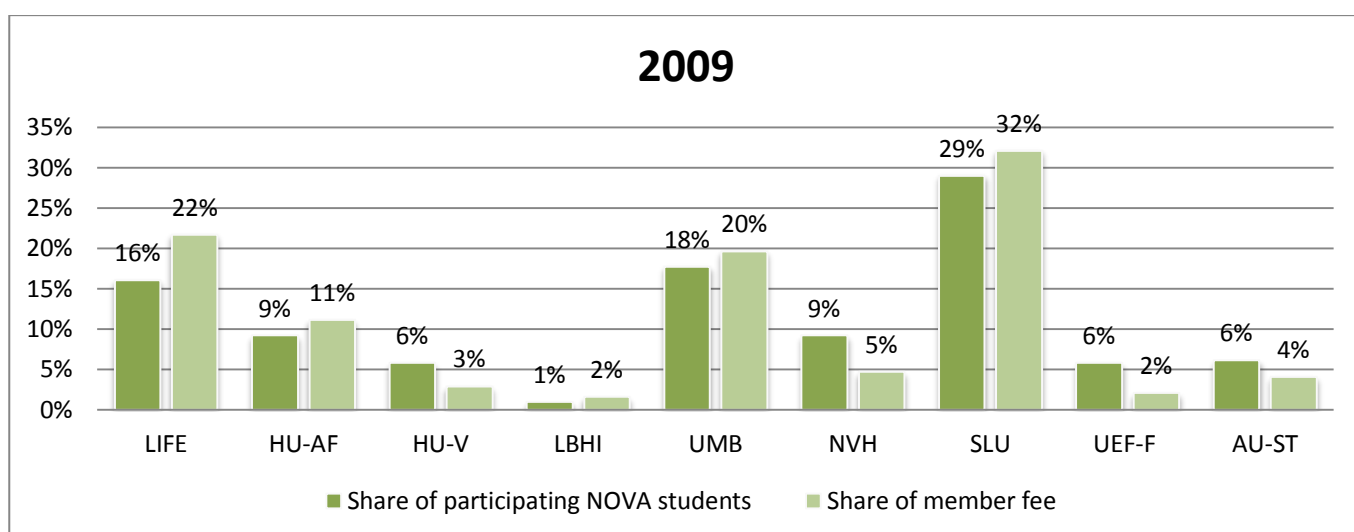
5 c 2010

	LIFE	HU-AF	HU-V	LBHI	UMB	NVH	SLU	UEF-F	AU-ST
Share of participating NOVA students	18 %	19 %	4 %	2 %	18 %	3 %	20 %	5 %	11 %
Member fee (Euro)	162 596	76 281	21 947	10 734	138 563	33 272	224 882	14 260	37 465
Share of member fee	23 %	11 %	3 %	1 %	19 %	5 %	31 %	2 %	5 %



5 d 2009

	LIFE	HU-AF	HU-V	LBHI	UMB	NVH	SLU	UEF-F	AU-ST
Share of participating NOVA students	16 %	9 %	6 %	1 %	18 %	9 %	29 %	6 %	6 %
Member fee (Euro)	119 027	60 975	15 946	8 747	107 713	25 728	175 801	11 434	22 597
Share of member fee	22 %	11 %	3 %	2 %	20 %	5 %	32 %	2 %	4 %



5 e 2009 – 2012 Average

	LIFE	HU-AF	HU-V	LBHI	UMB	NVH	SLU	UEF-F	AU-ST
Share of participating NOVA students	16 %	17 %	5 %	2 %	14 %	4 %	26 %	5 %	11 %
Share of member fee	22 %	11 %	3 %	1 %	18 %	5 %	31 %	2 %	7 %

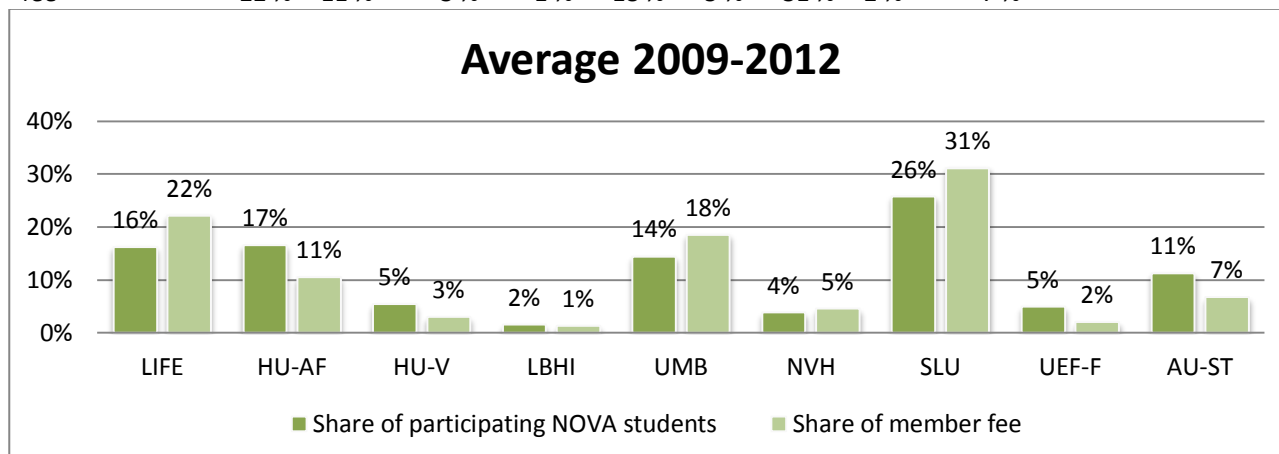


Table 6 Total number of ECTS produced (all courses) 2004-2012

	2004	2005	2006	2007	2008	2009	2010	2011	2012
NOVA PhD	940	707	803	808	860	1 094	1647	1480	1003
NOVA Other	30	57	64	28	82	10	92	46	96
Baltic	158	187	205	147	194	118	121	122	58
Other non-NOVA	158	549	192	469	371	232	268	200	303
Total	1 286	1 500	1 264	1 451	1 507	1 454	2 128	1 838	1460
Average total ECTS / course	99	94	90	104	88	77	93	88	91

Table 7 NOVA project grant amounts by category 2004-2012

Type of project	2004	2005	2006	2007	2008	2009	2010	2011	2012
Planning grants	38 921	36 493	31 432	20 250	18 000	23 210	33 227	22 395	19 999
Network projects	148 795	168 420	85 253	73 500	32 130	27 353	17 117	21 000	5 000
Mobility/NIMCs	6 000	40 000	40 588	68 077	76 108	73 285	31 024	13 200	43 987
Other	37 312	15 100	3 927		29 515	14 000	0	1 749	0
NOVA prize	4 000	0	4 000	5 000	5 000	5 000	5 000	5 000	0
Total	265 063	229 741	160 766	165 214	160 753	142 848	86 368	63 344	68 986

All figures are maximum grant amounts, not final.

Table 8 NOVA students on Nordplus mobility 2002/03 - 2011/12

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
No.of students on Nordplus > 4 weeks	43	68	37	52	53	23	29	39	47
No. of students on Nordplus < 4 weeks	12	17	35	50	73	69	70	66	45
Number of MSc degrees	1 485	1 487	1 435	1 650	1967	1533	1741	1758	2013
Appr. number of MSc students	3 700	3 700	3 600	3 700	3900	3833	4353	5935	6311
Total students on Nordplus mobility	55	85	72	102	126	92	99	105	92
Percentage of MSc stud. in mobility	1.5%	2.3%	2.0%	2.8%	3.2%	2,4%	2,3%	1,8 %	1,5 %

Table 9 Matrix: Number of students in normal mobility 2011-2012

	HU- AF	HU- V	UMB	NHV	SLU	LBHI	LIFE	UEF- F	AU- DJF	LVA	LLU	EMU	LZUU	
From HU- AF			2		11	1	3							17
HU-V					3		1							4
UMB	1				1		6							8
NHV														0
SLU			1				4							5
LBHI							1							1
LIFE	1	1	4	1	3	2								12
UEF- F														0
AU- DJF														0
LVA														0
LLU					1									1
EMU		1		2	4									7
LZUU														0
	2	2	7	3	23	3	15	0	0	0	0	0	0	55

Table 10 Matrix: Number of students in express mobility 2011-2012

	HU- AF	HU- V	UMB	NVH	SLU	LBHI	LIFE	UEF- F	AU- DJF	LVA	LLU	EMU	LZUU	
From HU- AF					10			1		2	6	4	10	33
HU-V											1			1
UMB		1												1
NVH														0
SLU														0
LBHI								1						1
LIFE	1													1
UEF- F										2	5	1		8
AU- DJF														0
LVA														0
LLU		1										8		9
EMU	9	4									4			17
LZUU		1										5		6
	10	7	0	0	10	0	0	1	1	4	15	19	10	77

Table 11 Annual profit-and-loss report 2007-2011 and 2012

	2007	2008	2009	2010	2011	2012
Member fees	698 555	665 000	547 968	720 000	482 399	680002
Nordic Council of Ministers		58 787	28 500	56 000	56 000	89100
Other external funding	220 040	12 000	8 000	16 000	4 000	8255
Unpaid member fee 2011						64762
Grant return						8391
Total funding	918 595	735 787	584 468	792 000	542 399	850510
Activities						
PhD courses	-309 454	-433 992	-422 482	-526 677	-529 751	-434745
Projects and mobility	-165 214	-160 753	-142 848	-145 299	-63 344	-90427
Other, Nordplus and NOVA guarantee	-220 040	-70 787	-28 500	-72 000	-113 285	-144354
Internal secretariat ¹⁾	-29 512					
Database development					-12 672	
Promotional campaign						-1828
NSB	-11 276	-15 362	-17 838	-21 671	-19 641	-21370
Annual seminar	-11 033	-18 316	-25 000	-22 392	-25 000	-17163
Total activities	-746 632	-699 210	-636 668	-788 039	-763 693	-709887
Regained funding ²⁾	45 253	55 732	81 459	130 433	128 876	167886
Secretariat						
Salary	-56 233	-66 161	-54 912	-66 624	-68 346	-61434
Project administration		-14 225 ²⁾				
Travels	-7 496	-5 488	-5 089	-9 613	-11 360	-3230
Other	-11 344	-9468	-14 058	-15 000	-15 000	-13207
Total secretariat	-63 426	-95 342²⁾	-74 059	-91 237	-94 706	-77871
Total activities & secretariat	-764 804	-738 820	-629 268	-748 844	-729 523	-619872
Result w/o currency and interests	153 790	-3 033	-44 800	43 156	-187 124	230638
Currency loss/gain ³⁾	-3 247	-48 505	24 053			
Internal interest	11 670	21 530	4 340	1 548	4 838	*
Result	150 544	-30 008	-16 407	44 704	-182 286	230638
Result without regained	105291	-85740	-97 866	-85 728	-311 162	62752

1) For 2008 none of the secretariat's costs are accounted below "Activities". Thus, the amount in "Total secretariat" 2008 is not directly comparable

2) Funds set aside previous years, but unused by the projects and regained.

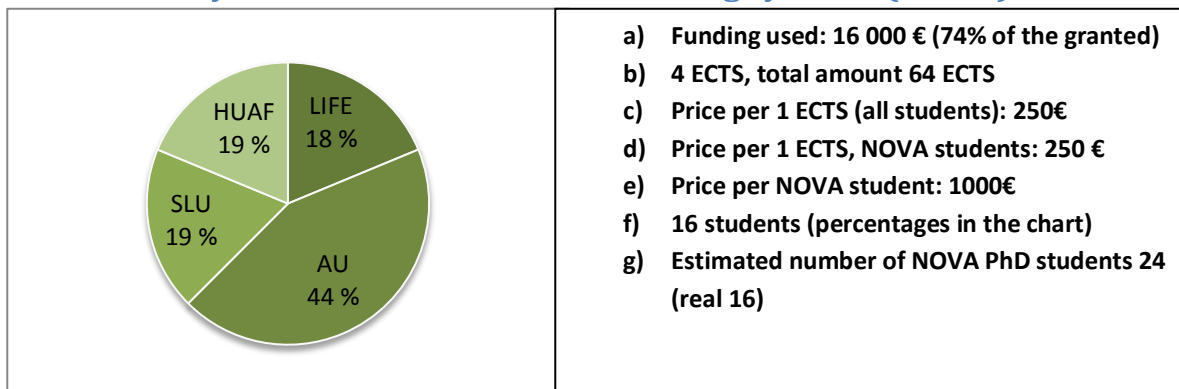
3) From 2010 accounting is done in EURO

* 2012 included in the secretariat "other"

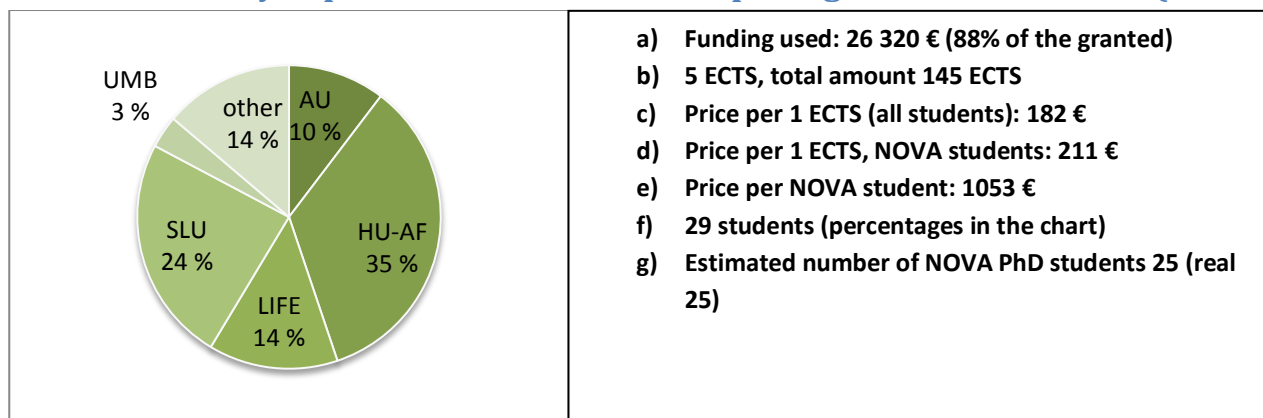
Key figures of the PhD courses in 2012

- "Funding used" means the actual amount of money the course received from NOVA, in brackets a percentage describing the funding used of the accepted grant amount (KUF's decision of the grant) is presented.
- Number of ECTS of the course and total amount of ECTS produced (=number of ECTS x number of students).
- Price per 1 ECTS for all students in the course is calculated by dividing the funding used by the total amount of ECTS produced.
- Price per 1 ECTS for NOVA students in the course is calculated by dividing the funding used by the number of ECTS produced by NOVA students.
- Price per NOVA student is calculated by dividing the funding used by the number of NOVA students in the course (which usually differs from the total number of the students).
- Total number of students in the course: Percentages of this figure by member shown in the pie chart.
- Estimated number of NOVA students is the number the main applicant has used in the grant application. In brackets the actual number of the NOVA PhD students in the course is presented.

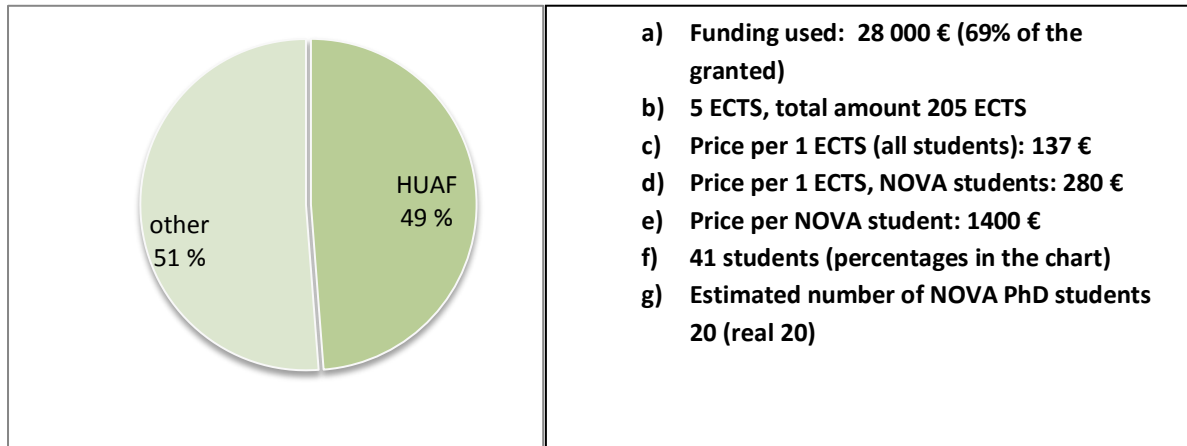
Sustainability assessment in food and farming systems (AU-ST)



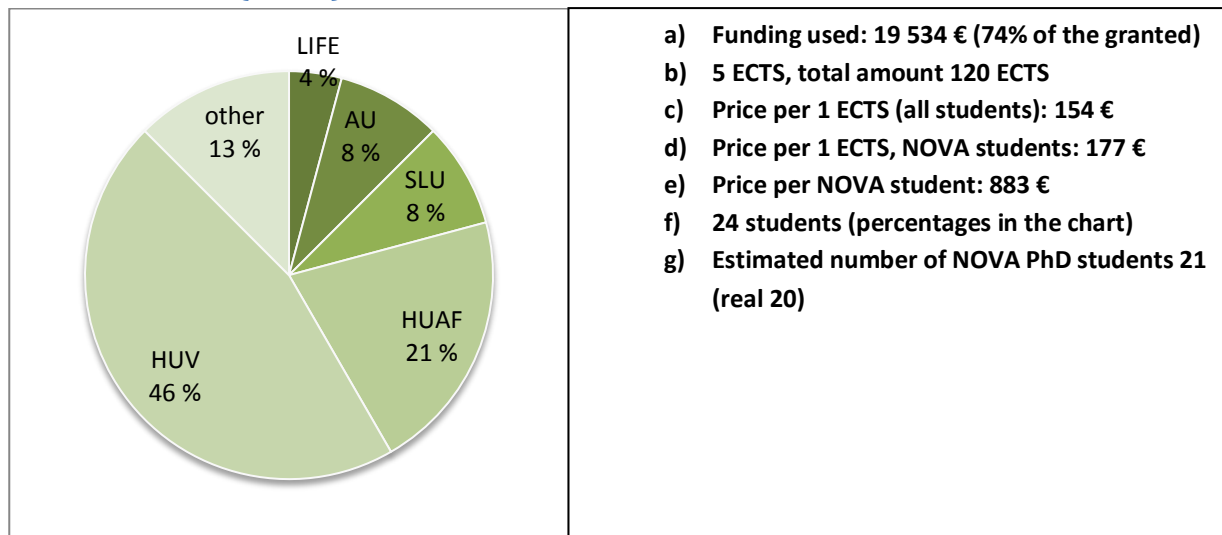
Innate immunity of plants: basal defence and pathogen counter defence (HU-AF)



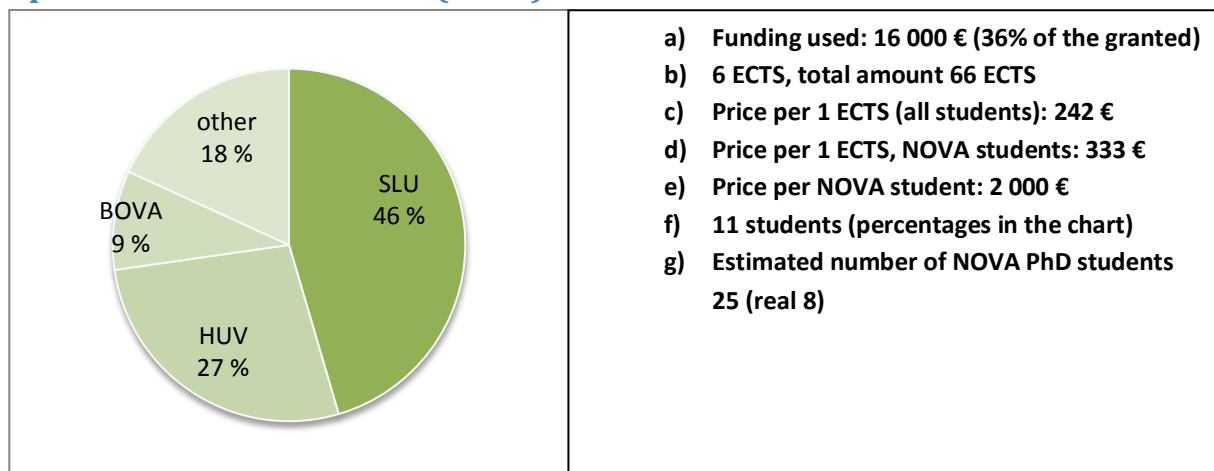
Sustainable use of tropical soils 2 (HU-AF)



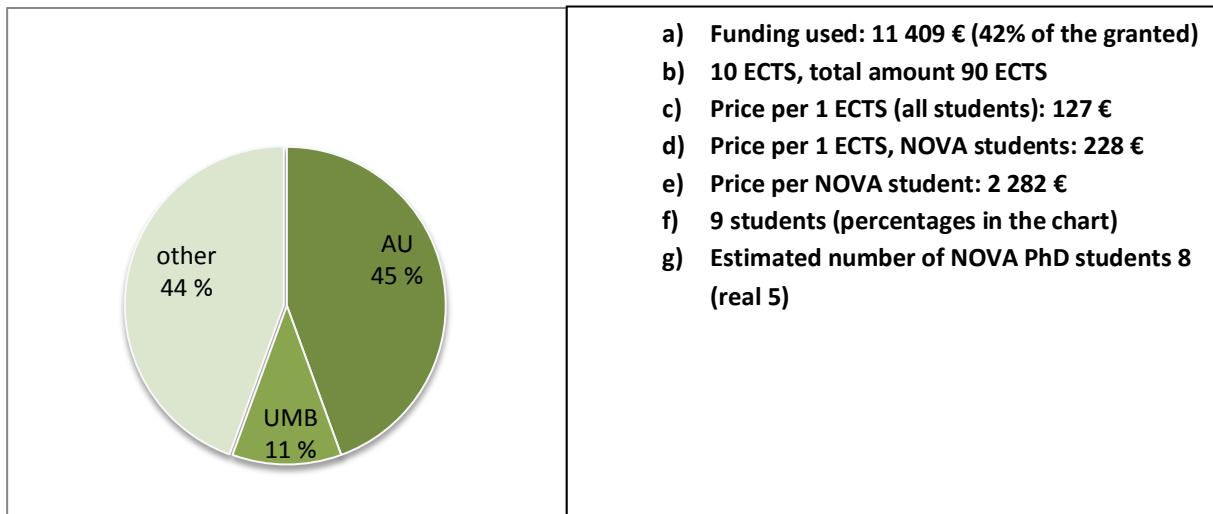
Animal Ethics (HU-V)



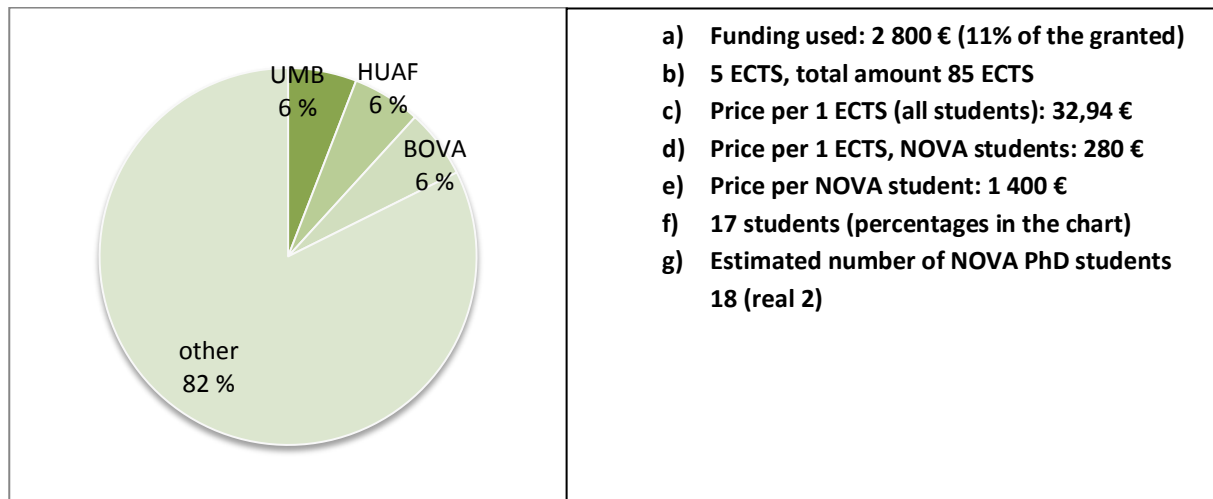
EpiNOVA advanced course (HU-V)



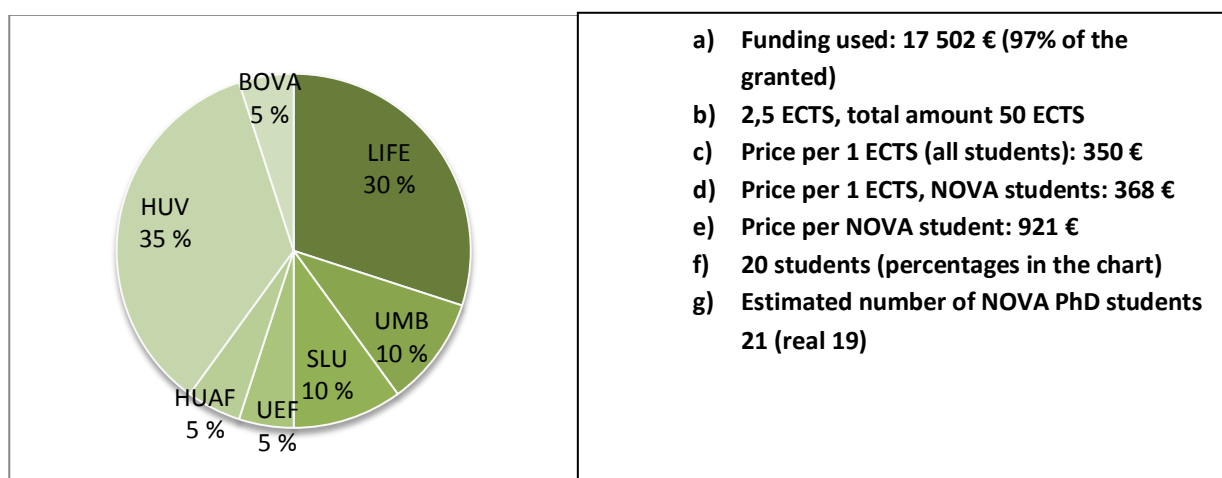
Fundamentals of Ventilation, Indoor Air Quality, Air Motion and Emissions (AU-ST)



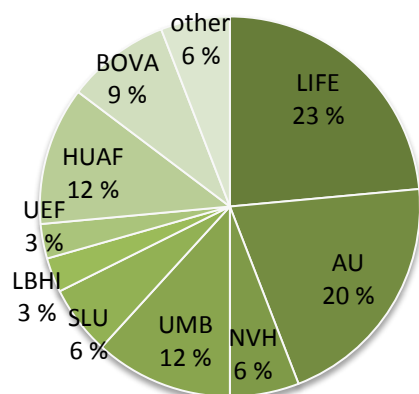
The empirics of economic organizations and transaction costs (LIFE)



Molecular methods for detection of foodborne pathogens (HU-V)

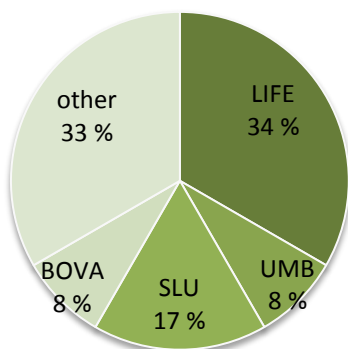


Applied statistics with R (LIFE)



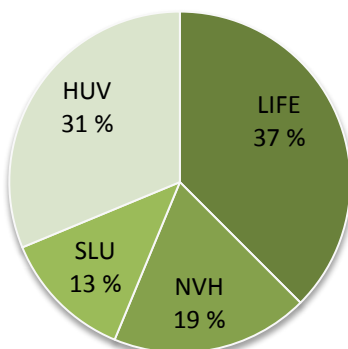
- a) Funding used: 18 424 € (74% of the granted)
- b) 6 ECTS, total amount 120 ECTS
- c) Price per 1 ECTS (all students): 90 €
- d) Price per 1 ECTS, NOVA students: 106 €
- e) Price per NOVA student: 635 €
- f) 34 students (percentages in the chart)
- g) Estimated number of NOVA PhD students 33 (real 29)

Governance in Urban Forestry and Urban Greening (LIFE)



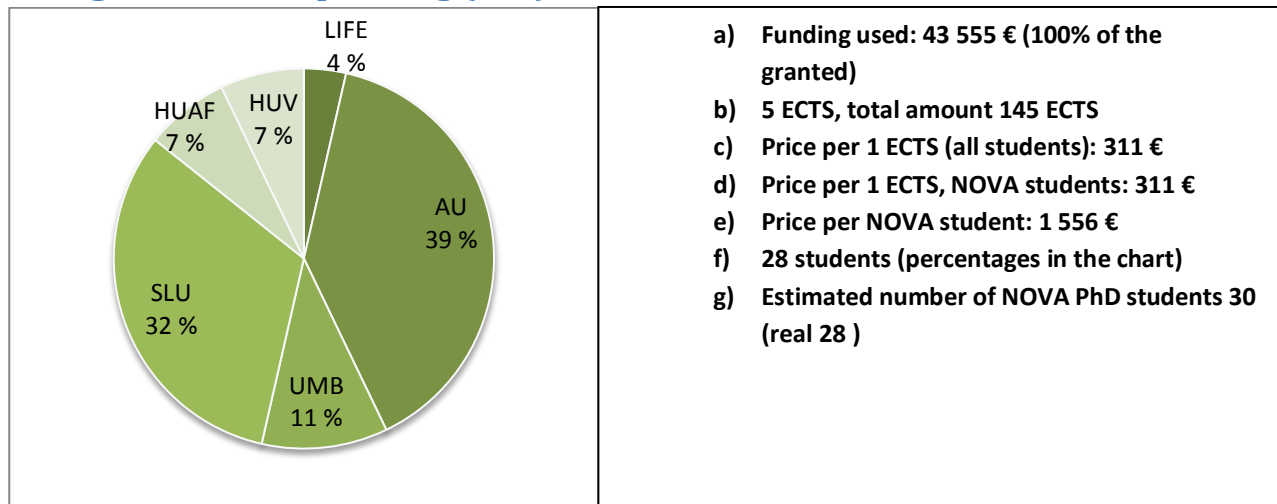
- a) Funding used: 7 000 € (49% of the granted)
- b) 5 ECTS, total amount 60 ECTS
- c) Price per 1 ECTS (all students): 117 €
- d) Price per 1 ECTS, NOVA students: 200 €
- e) Price per NOVA student: 1 000 €
- f) 12 students (percentages in the chart)
- g) Estimated number of NOVA PhD students 16 (real 7)

Clinical and biomedical research and scientific methods (LIFE)

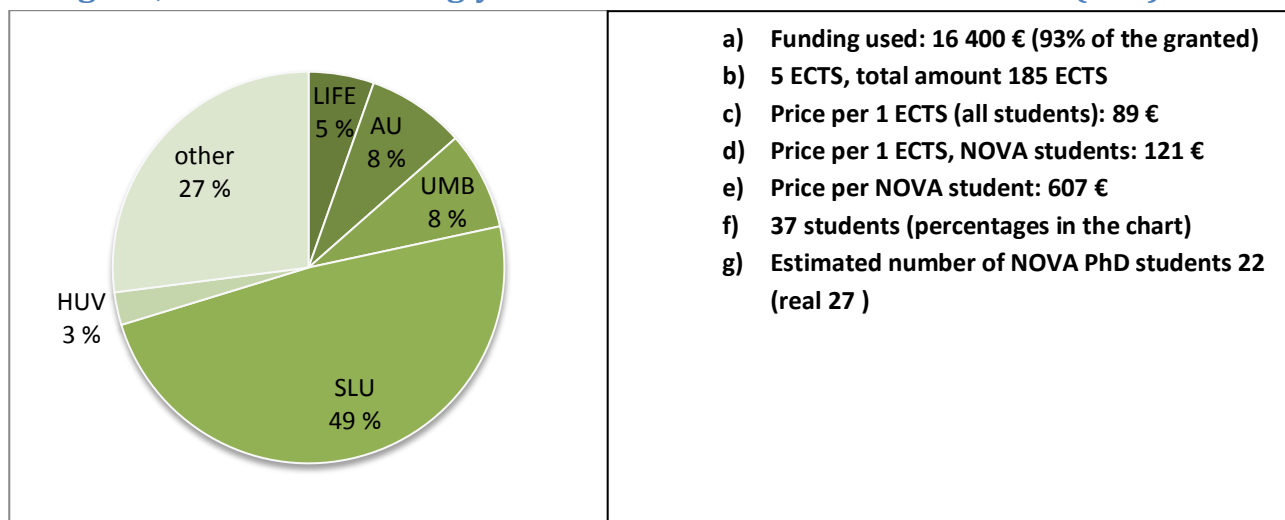


- a) Funding used: 21 843 € (61% of the granted)
- b) 6 ECTS, total amount 96 ECTS
- c) Price per 1 ECTS (all students): 228 €
- d) Price per 1 ECTS, NOVA students: 228 €
- e) Price per NOVA student: 1 365 €
- f) 16 students (percentages in the chart)
- g) Estimated number of NOVA PhD students 23 (real 16)

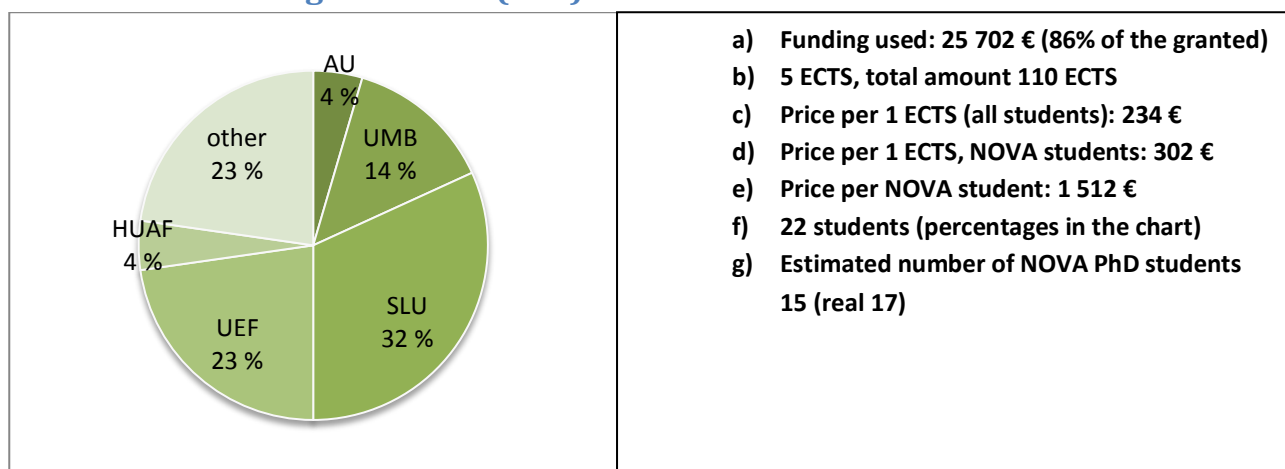
Next generation sequencing (SLU)



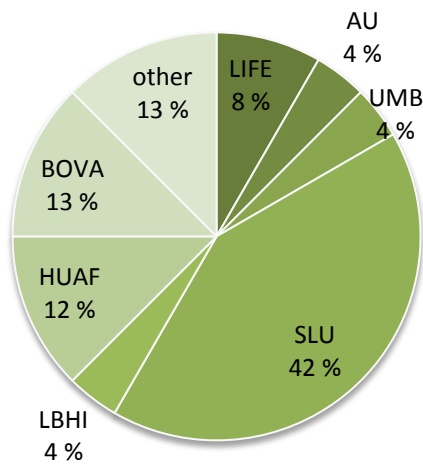
The good, the bad and the ugly sides of human-animal interactions (SLU)



3 D Remote Sensing of Forests (SLU)

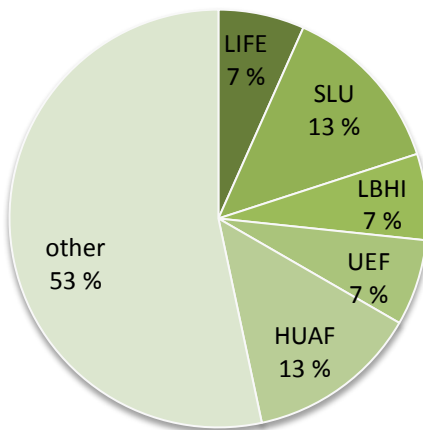


Pre-breeding for sustainable plant production (SLU)



- a) Funding used: 20 577 € (68% of the granted)
- b) 6 ECTS, total amount 144 ECTS
- c) Price per 1 ECTS (all students): 143 €
- d) Price per 1 ECTS, NOVA students: 191 €
- e) Price per NOVA student: 1 143 €
- f) 24 students (percentages in the chart)
- g) Estimated number of NOVA PhD students 25 (real 18)

Wood structure and properties (SLU)



- a) Funding used: 7 906€ (96% of the granted)
- b) 4 ECTS, total amount 60 ECTS
- c) Price per 1 ECTS (all students): 132 €
- d) Price per 1 ECTS, NOVA students: 282 €
- e) Price per NOVA student: 1 129 €
- f) 15 students (percentages in the chart)
- g) Estimated number of NOVA PhD students 10 (real 7)