Danish Diabetes Academy

Annual Report 2018

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Responsible: Managing Director Tore Sønne Christiansen
Translation: Dansk oversættelses- og sprogservice
Layout: OddFischlein I/S
ISBN: 978-87-996346-6-8
Published by: Danish Diabetes Academy
Odense University Hospital
Kløvervænget 6,
Entrance 93, 8th floor,
5000 Odense C, Denmark

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Executive summary

On January 1st, 2018, the Danish Diabetes Academy (DDA) received a new five-year grant from the Novo Nordisk Foundation of DKK 156,000,000 (EUR 20,908,992) to support the DDA's mission of educating and training the next generation of researchers in the field of diabetes. The DDA organisation was successfully re-established during 2018 with a Board of Directors, supported by an Executive Management Team and four bodies, namely the International Advisory Board, the Committee for Education, the National Advisory Forum and the Committee for Talent Development.

Despite the timing of committee set-up and the late establishment of the Executive Management Team, the DDA managed to deliver two PhD courses and one scientific conference in 2018. These were very well attended and included national and international diabetes experts as both participants and speakers.In addition, the DDA organised six networking and collaboration events in 2018 in collaboration with national and international research institutions. The events were attended by a variety of diabetes researchers from academia, hospitals and the life science industry, and from abroad.

Furthermore, the DDA was very successful in recruiting outstanding national and international PhD students, postdoc fellows and visiting professors in the field of diabetes, as 12 2/3-financed PhD scholarships, 12 postdoc fellowships (of which two were industrial fellowships) and four visiting professorships were granted in 2018 to high-quality candidates.

In relation to communications and outreach, the DDA re-established its identity in 2018 on the social media platforms LinkedIn and Facebook and created an identity on Twitter. Furthermore, the DDA released 10 press releases, of which press coverage was obtained on eight, and overall the DDA obtained 60 media coverages. The DDA also used the DDA website and the DDA newsletters to disseminate information about the DDA activities.

In the years to come, the DDA will use the feedback from participants, the members of the DDA and the DDA committees to optimise the educational activities and talent development programme, the networking and collaboration activities and the recruitment and grant activities.

For the educational activities and talent development, the areas of improvement include closer collaboration with internationally recognised research institutions and the life science industry and putting even more focus on the learning outcome. The DDA will also turn its attention to the implementation of new educational technologies and learning methods to support higher interactivity between the speaker and the participants and to facilitate adaptive learning, critical thinking and knowledge.

For the networking and collaboration activities, the areas of improvement include closer collaboration with internationally recognised research institutions and the life science industry in connection with the organisation of networking, collaboration and educational activities in order to encourage new cross-sectoral and international collaborations. The DDA will also focus more on monitoring the output of the DDA networking and collaboration activities in terms of the establishment of new collaborations.

For the recruitment and grant activities, the areas of improvement include recruiting more members to the Committee for Talent Development (clinical researchers in particular), attracting more candidates from abroad and prioritising candidates showing mobility from their PhD studies to their postdoc studies. Also, an evaluation of the DDA-funded researchers' activities in relation to the success criteria will be carried out.

For the communications and outreach activities, the areas of improvement include refreshment of the DDA website and setting up new success criteria to monitor whether the DDA's communications and outreach activities on the different communication channels increase awareness of the DDA activities among representative young diabetes researchers from academia, hospitals and the life science industry, and awareness of the DDA overall.

Finally, the DDA will focus on continuing and improving the good collaboration with the DDA's committees, the DDA members, the DDA-funded researchers and external collaborators in terms of receiving advice and suggestions for the DDA activities.

About the Danish Diabetes Academy

The Danish Diabetes Academy (DDA) was established on September 1st, 2012, with a five-year grant (from September 1st, 2012, to August, 31st, 2017) from the Novo Nordisk Foundation of DKK 201,880,000 (EUR 27,059,485) with the vision of enhancing the quality of Danish diabetes research and ensuring that it remains at the highest international level in the future for the benefit of present and future generations of patients with diabetes.

On January 1st, 2018, the DDA received a new five-year grant from the Novo Nordisk Foundation of DKK 156,000,000 (EUR 20,908,992) to support the DDA's mission of educating and training the next generation of researchers in the field of diabetes.

With the new grant from the Novo Nordisk Foundation, the DDA aims to:

- Strengthen the research training available to PhD students and postdocs within the field of diabetes, in collaboration with academia, hospitals and the life science industry;
- Serve as a national hub within diabetes, unifying academia, hospitals and the life science industry in Denmark, to strengthen educational activities and talent development within the area;
- Recruit outstanding national and international PhD students, postdocs and visiting professors within the field of diabetes in open and free competition.

For the second five-year period from 2018 to 2022, the DDA will build on the fruitful activities of the first five-year period and further strengthen the educational activities and talent development by building on existing collaborations with national and international stakeholders, and by establishing activities with new national and international public and private stakeholders. A special focus will be put on establishing a closer collaboration with the life science industry, creating opportunities for the next generation of diabetes researchers to conduct high-level industrially focused research. Moreover, the DDA's ambition as a national hub is to create further synergy between basic, translational and clinical research and public health, and to promote interdisciplinary collaboration, as future challenges within diabetes prevention and treatment are complex and therefore call for solutions generated by an interdisciplinary approach.

The accounts for 2018, can be found in Appendix 1.

The funding

156 MIO DKK

20,908,992 EUR from the Novo Nordisk Foundation in 2018 for another five-year funding of the DDA

Danish Diabetes Academy at a glance

The funding

Received in 2012: 201 million DKK from the Novo Nordisk Foundation to establish the DDA

Received in 2018: Additionally 156 million DKK from the Novo Nordisk Foundation for another five-year funding of the DDA

Vision an d mission

The vision is to enhance the quality of Danish diabetes research education to ensure that it remains at the highest international level

The mission is to educate and train the next generation of resea rchers in the field of diabetes

The DDA - who and where

The grant holder is Odense University Hospital, where the Executive Management Team is also located

The members of the Board of Directors are: Allan Flyvbjerg, CEO, Steno Diabetes Center Copenhagen, Capital Region of Denmark, and Clinical Professor of Endocrinology, University of Copenhagen (Chair)

Kurt Højlund, Professor, MD, DMSc, Chief Physician and Head of Research, Steno Diabetes Center Odense, Odense University Hospital, and Clinical Professor in Endocrinology, University of Southern Denmark

Lise Wogensen Bach, DMSc, Vice-Dean of Talent Development, Faculty of Health, Aarhus University

DDA traditions

DDA PhD Summer School for PhD students: Four interactive days with top senior speakers from Denmark and abroad

DDA Winter School in Malaga, Spain, for postdocs: Four interactive days with top senior speakers from Denmark and abroad

DDA Annual Day: An annual celebration in November of the high-class quality diabetes research in Denmark

Main collaborators – nationally and internationally

The DDA collaborates with Danish universities, hospitals and the life science industry when organising educational activities

The DDA has organised courses in collaboration with the Cambridge Metabolic Network, United Kingdom

The DDA has organised conferences in collaboration with Joslin Diabetes Center, United States, and Banting and Best Diabetes Center, Canada

The DDA annually organises networking activities with Deutsche Zentrum für Diabetesforschung

DDA networking and collaboration activities

The DDA organised over 30 networking activities from 2012 to 2018

Over 2,000 diabetes researchers participated in one or more of the DDA networking and collaboration activities from 2012 to 2018

The DDA will organised six or more networking and collaboration activities annually from 2019 to 2022

Publications

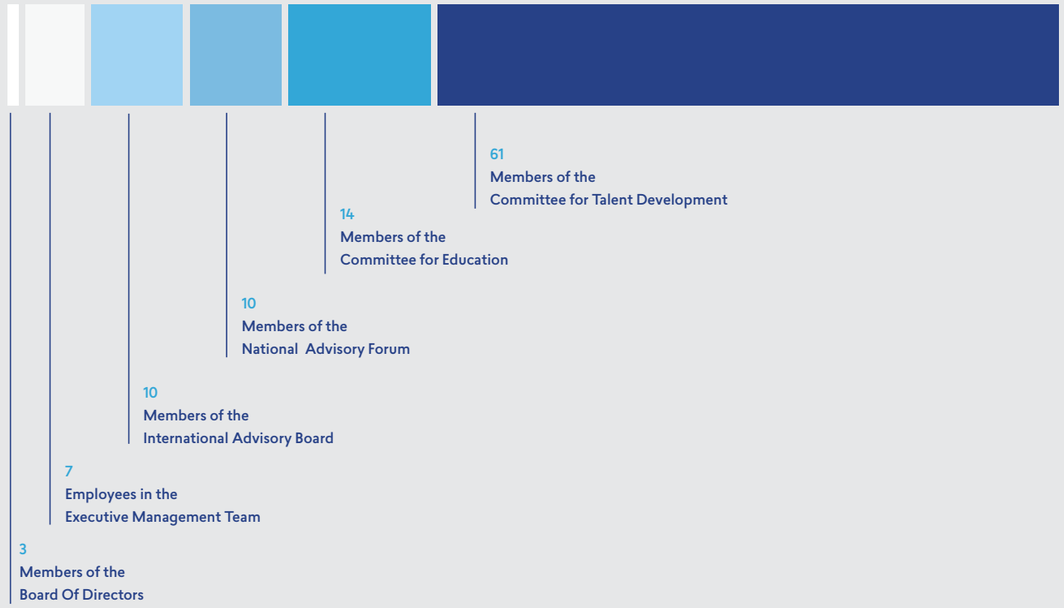
DDA-funded researchers published 335 papers, predominantly in high-impact journals, from 2012 to 2017

DDA on the social media

- Twitter: DDA-Denmark
- Facebook: @danishdiabetesacademy
- LinkedIn: Danish Diabetes Academy
- Youtube: Danish Diabetes Academy

In 2018, the number of the Organisation was

105



DDA educational activities

The DDA organised over 60 PhD and postdoc courses and symposia from 2012 to 2018

4,000

diabetes researchers participated in one or more of the DDA educational activities from 2012 to 2018

50%

of the invited teachers and speakers at the of the DDA symposia/seminars are from abroad

+ 15

educational activities annually from 2019 to 2022

DDA recruitment and grant activities

87

PhD scholarships (1/3-financed)

47

postdoc fellowships (one-year, two-year and three-year)

17

visiting professorships and full time professorships

The DDA allocated the following grants in open and free competition fTrom 2013 to 2017

2013 — 2017

33

postdoc fellowships (2-year or 3-year) and 15 one-year industrial postdoc fellowships

36

PhD scholarships (2/3-financed) and 10 one-year industrial PhD scholarships

10

visiting professorships

The DDA will allocate the following grants in open and free competition from 2018 to 2021

2018 — 2021

Organisation and management

Organisation and management

The organigram to the righ (Figure 1) shows the reporting structure of the DDA's bodies.

All of the DDA's bodies were reconstructed in 2018 upon receipt of the new five-year grant from the Novo Nordisk Foundation. The grant holder is Odense University Hospital, which is also the host institution of the DDA, and the Executive Management Team is also located at Odense University Hospital.

The DDA is headed by a Board of Directors (BoD), which is responsible for defining and implementing the overall strategy of the DDA. The Chairman of the BoD is the Head of the DDA and was appointed by the Novo Nordisk Foundation on December 22nd, 2017. The BoD is supported by an Executive Management Team and four bodies: The International Advisory Board, the Committee for Education, the National Advisory Forum and the Committee for Talent Development. The Executive Management Team is responsible for carrying out the activities proposed by the four bodies and decided upon by the BoD.

Detailed information about the tasks and responsibilities, meetings and the members of each of the DDA's bodies can be found in the terms of references (Appendix 2) and list of members (Appendix 3).

In order to ensure broad support, transparency and diversity in the composition of the DDA's four bodies, the DDA asked the faculties of science and health sciences at the universities, university hospitals, professional societies and relevant companies from the life science industry in Denmark to nominate qualified members for the DDA bodies in the spring of 2018. Based on the nominated candidates, the BoD selected the members of the four bodies taking age, gender and competencies into consideration.

The Board of Directors (BoD)

The members of the BoD are:

- Allan Flyvbjerg, CEO, Steno Diabetes Center Copenhagen, Capital Region of Denmark, and Clinical Professor of Endocrinology, University of Copenhagen (Chair)
- Kurt Højlund, Professor, MD, DMSc, Chief Physician and Head of Research, Steno Diabetes Center Odense, Odense University Hospital, and Clinical Professor in Endocrinology, University of Southern Denmark
- Lise Wogensen Bach, DMSc, Vice-Dean of Talent Development, Faculty of Health, Aarhus University

The overall principal tasks of the BoD are to set the overall strategy of the DDA on the basis of advice and suggestions from the DDA's bodies, the DDA members and external collaborators; appoint members of the various bodies of the DDA; determine the framework and the specific activities undertaken within the DDA; be responsible for public communications regarding the DDA's corporate interests, grant policies and strategies. In addition, the BoD was responsible for hiring the Managing Director of the DDA. The terms of references are included in Appendix 2a.

The BoD, which was appointed for a period of five years from January 1st, 2018, convened five times during 2018.

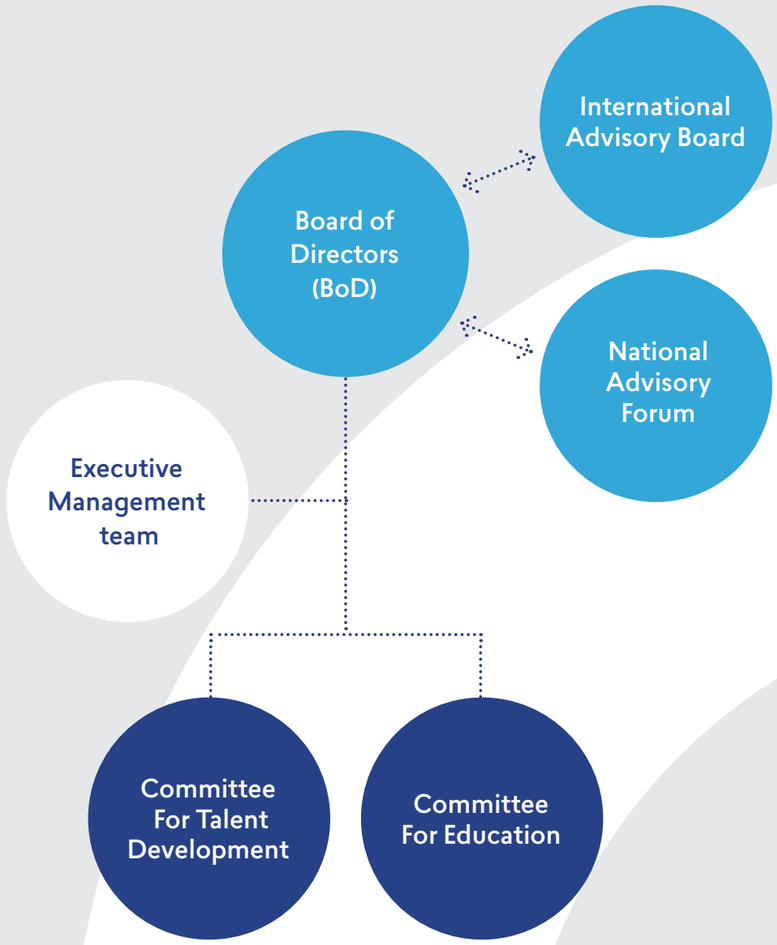


Figure 1. Organigram of the DDA

International Advisory Board

The International Advisory Board consists of ten renowned international experts within diabetes research, education and talent development. The Chairman of the Board is Rebecca Simmons, Deputy Director, THIS Institute, Cambridge, United Kingdom. All members, five men and five women, hold positions in leading research institutions within academia and life science in Europe and North America. A list of members is included in Appendix 3a.

The overall principal tasks of the International Advisory Board are to provide feedback and recommendations on activities in the DDA and provide inputs to the overall strategy of the DDA, including past, present and future DDA activities. The terms of references are included in Appendix 2b.

The International Advisory Board was established in October 2018, and the members were appointed for a period of 2.5 years. The International Advisory Board did not convene in 2018, but the Chairman met with the Managing Director and the Management Assistant in London, November 2018, where she was introduced to the DDA and her tasks as chairman.

The Committee for Education

The Committee for Education consists of fourteen national experts within relevant diabetes areas and education. The Chairman of the committee is Nils Færgeman, Professor, Department of Biochemistry and Molecular Biology, University of Southern Denmark. The members, seven men and seven women, are employed in national research institutions, including academia, hospitals and life science. A list of members is included in Appendix 3b.

The overall principal task of the committee is to plan educational and talent development activities for young diabetes researchers through theoretical and practical courses, workshops, seminars, symposia, summer schools and winter schools. The terms of references are included in Appendix 2c.

The Committee for Education was established in August 2018, and the members were appointed for a period of 2.5 years. The Committee for Education convened once in August 2018, and some of the members of the committee met with the Chairman of the BoD and the Managing Director at a meeting in Berlin, Germany, October 2018.

The National Advisory Forum

The National Advisory Forum consists of ten renowned national experts within diabetes research, education and talent development. The Chairman of the committee is Jette Kolding Kristensen, Professor, Department of Clinical Medicine, Aalborg University. The ten members, five men and five women, are employed in national research institutions, including academia and hospitals. A list of members is included in Appendix 3c.

The overall principal task of the National Advisory Forum is to be a formal body for members to providWe feedback and recommendations on the DDA activities and to make inputs to the overall strategy of the DDA, including past, present and future DDA activities. The terms of references are included in Appendix 2d.

The National Advisory Forum was established in September 2018, and the members were appointed for a period of 2.5 years. The National Advisory Forum did not convene in 2018, but members of the forum met with the Chairman of the BoD and the Managing Director at a meeting in Berlin, Germany, October 2018.

Committee for Talent Development

The Committee for Talent Development consists of 61 internationally renowned and dedicated scientific experts of the highest international calibre. Two chairmen were appointed in 2018: Scott Summers, Professor, University of Utah, United States Chair of the postdoc fellowship programme and visiting professor programme, and Timothy Osborne, Professor, Johns Hopkins University, United States - Chair of the PhD scholarship programme.

The members, 46 men and 15 women, are employed in international research institutions, including academia, hospitals and life science in Europe, North America, Australia and Asia. A list of members is included in Appendix 3d.

The overall principal task of the Committee for Talent Development is to perform an objective, professional and comprehensive peer review evaluation of applications for the DDA PhD scholarships, postdoc fellowships and visiting professorships, and to provide a motivated recommendation to the BoD on applications to be funded by the DDA. The terms of references are included in Appendix 2e.

Committee for Talent Development

61 internationally renowned and dedicated scientific experts of the highest international calibre.

The members

46 men and 15 women, are employed in international research institutions, including academia, hospitals and life science in Europe, North America, Australia and Asia.

The Committee for Talent Development was established in August 2018, and the members were appointed for a period of 2.5 years. The Committee for Talent Development did not convene in 2018, but members of the committee met with the Chairman of the BoD and the Managing Director at a meeting in Berlin, Germany, October 2018, and the chairmen of the committee joined a teleconference with the BoD in November 2018 to discuss applications for the DDA PhD scholarships, postdoc fellowships and visiting professorships.

See video of Scott Summer's experience with the DDA

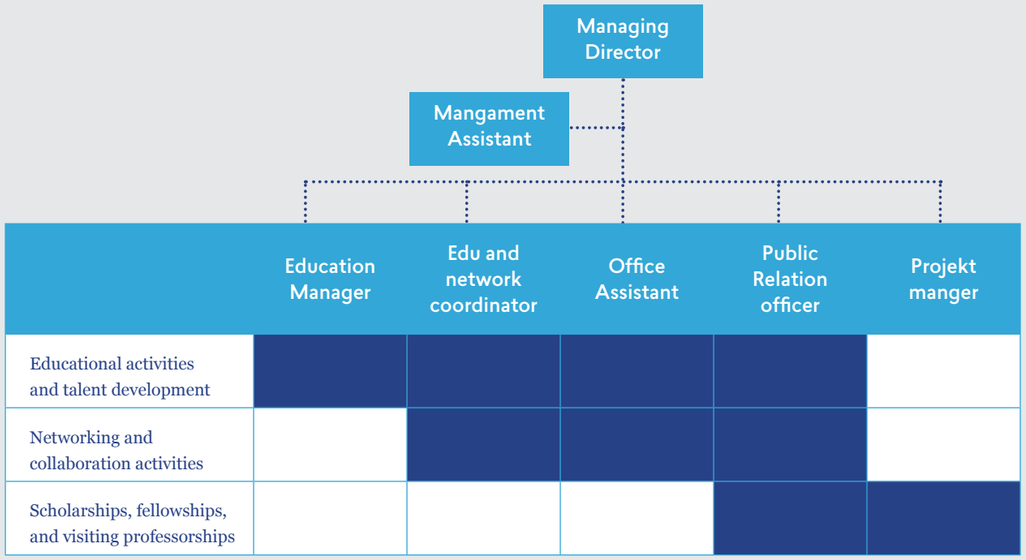
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The Executive Management Team

Odense University Hospital is the grant holder, and the Executive Management Team is therefore located at Odense University Hospital. The Executive Management Team consists of the Managing Director and six employees. The Managing Director was employed on March 1st, 2018, by the BoD and subsequently hired the employees of the Executive Management Team, which was fully established in August 2018. The composition of the Executive Management Team reflects the competencies needed to carry out the tasks within the three main focus areas of the DDA: Educational and talent development activities, networking and collaboration activities and recruitment and grant activities for PhD scholarships, postdoc fellowships and visiting professorships. Details about the employees can be seen in Appendix 4.

Figure 2. The DDA Executive Management Team
The Executive Management Team employees in 2018:

Figure 2 shows the organisation of the Executive Management Team according to tasks and responsibilities.



The Executive Management Team employees in 2018:

Tore Christiansen,
Managing Director
(from March 2018)

Tine Hylle,
Management Assistant
(from May 2018)

Jette Husum,
Education Manager
(from August 2018)

Helle Lyngborg,
Education and
Networking Coordinator
(June-October 2018)

Pernille Bruun Nielsen,
Education and
Networking Coordinator
(from December 2018)

Mette Roed,
Office Assistant
(from June 2018)

Jannie Iwankow Søgaard,
Communications Officer, part-time
(from August 2018)

Amel Skobalj,
Student Web Assistant, part-time
(from August 2018)

Activities in the Executive Management Team 2018

The Executive Management Team executed the below-mentioned activities within the three main focus areas of the DDA in 2018

Educational Activities and Talent Development

In 2018, the Executive Management Team set up the Committee for Education and organised two residential PhD courses and one symposium (see page 24). These activities included drawing up the scientific programme, advertising the event, registering participants, organising speakers' travel and accommodation, and evaluating each activity. In relation to the success criterion that the Executive Management Team provides excellent administration of the educational activities, the participants rated the Executive Management Team´s performance to a mean of 4.5 (on a scale from 1 (lowest) to 5 (highest)) (the success criterion was 4.0).

Networking and Collaboration Activities

In 2018, the Executive Management Team organised six networking and collaboration activities (see page 30). This included drawing up the workshop programme, advertising the event, registering participants, organising speakers' travel and accommodation, and evaluating the activity. The participants rated the Executive Management Team´s performance with regard to administration of the activities to a mean of 4.6 (on a scale from 1 (lowest) to 5 (highest)) (the success criterion was 4.0).

Recruitment and grant activities for PhD scholarships, postdoc fellowships and visiting professorships

In 2018, the Executive Management Team set up the Committee for Talent Development and facilitated the allocation of grants for 12 PhD scholarships, 12 postdoc fellowships (including two industrial fellowships) and four visiting professorships (see page 38). The grant allocation comprised setting up the overall application and review process including defining the evaluation criteria together with the BoD and establishing the DDA electronic reviewing web system for receiving and reviewing applications. Furthermore, the Executive Management Team was responsible for selecting reviewers among the members of the Committee for Talent Development for both pre-review and full review, ensuring that the rules on potential conflicts of interest were respected and that the reviewers delivered their reviews within the set deadline. Finalisation of the grant allocation process included final review by the two chairmen of the Committee, preparing material for the BoD for final decision, writing grant notification letters and rejection letters and creating the grant recipients and their projects in Researchfish®.

Other activities

In 2018, the Executive Management Team also set up the National Advisory Forum, the International Advisory Board and the DDA PhD Research Training Network, initiated communications and outreach activities and started up the process regarding allocation of specific grants for industrial PhD scholarships and industrial postdoc fellowships and the collaboration with the life science industry.

Reflections on the Executive Management Team

The Executive Management Team received high scores for its administration and organisation of the educational, networking and collaboration activities in 2018. Also, the team succeeded in achieving the success criteria of delivering six networking and collaboration activities. On the other hand, the number of educational and talent development activities organised by the DDA in 2018 did not meet the success criteria (see page 26). This was mainly a consequence of the late establishment of the Executive Management Team, which was first fully established in August 2018. Also, it must be mentioned that the team found it to be a challenge to balance between developing the format of the activities and executing the activities. In the end of 2018, the Executive Management Team focused on planning the DDA educational and talent development activities and the DDA networking and collaboration activities for 2019 in order to achieve the success criteria for 2019 - with regard to the number of activities and the quality of each activity.

Develop and execute was also the issue in relation to the allocation of grants for PhD scholarships, postdoc fellowships and visiting professorships. An evaluation from the two chairmen (Appendix 5) and some of the members of the Committee for Talent Development showed high satisfaction with not only the newly established web tool for submitting and reviewing applications, but also with the Executive Management Team's communication and assistance to the reviewers during the review process.
In 2019, the DDA will focus on recruiting more members (clinical researchers in particular) to the Committee for Talent Development.

The Executive Management Team succeeded in establishing a good collaboration and working relationship with the DDA's bodies (and the chairmen of the bodies in particular). In 2019, the team will focus on keeping a close and personal contact with all members of the DDA's bodies and ensuring that advice and suggestions from the members of the bodies are discussed and implemented if they are in line with the DDA's strategy and the grant agreement from the Novo Nordisk Foundation.
The collaboration and communication with the DDA's bodies was not evaluated in 2018 due to the late setup of the bodies, but an evaluation will be carried out in 2019 and form the basis for future improvements.

The collaboration between the Executive Management Team and the BoD was evaluated in 2018, and both parties experience that the collaboration runs smoothly and efficiently with a nimble, transparent and competent BoD, and an efficient and quality-conscious Executive Management Team executing the decisions of the BoD in a timely and proper manner. However, the BoD requests that, in the future, the Executive Management Team provides the BoD with additional information on external relations such as networking activities and the collaboration with the life science industry. This will be ensured by the Executive Management Team during future BoD meetings.

Conclusion

The DDA organisation was successfully re-established during 2018 with a BoD supported by an Executive Management Team and four bodies, namely the International Advisory Board, the Committee for Education, the National Advisory Forum and the Committee for Talent Development. The Executive Management Team successfully delivered on all three major focus areas and received high satisfaction scores for its performance with regard to the administration and organisation of the educational, networking and recruitment and grant activities.

Educational Activities and Talent Development

Objectives

The overall aim of the DDA educational activities a nd talent development is to strengthen the research training available to PhD students and postdocs within the field of diabetes, in collaboration with academia, hospitals and the life science industry.

The DDA educational activities and talent development include three educational programmes: a PhD course programme, a postdoc course programme and a symposium/seminar programme. For these programmes, the DDA has defined a number of specific objectives:

- **The DDA is recognised for world-class and internationally oriented PhD and postdoc courses and symposia and seminars within diabetes with an interdisciplinary focus;**
- **The DDA strengthens the PhD students' and postdocs' critical reflection and their ability to put the acquired competences to use;**
- **The DDA strengthens the PhD students' and postdocs' competences.**

For each of the specific objectives, the DDA has defined a number of success criteria, which are described later in this chapter in relation to the activities and outcome in 2018.

Strategy

The DDA´s strategy for developing educational activities involves a bottom-up process inviting suggestions from the DDA members, members of the DDA committees and boards and participants and speakers in the DDA PhD and postdoc courses and symposia/seminars. These suggestions are considered by the DDA Education Manager together with the Committee for Education, which then prepares an annual scientific curriculum describing the PhD and postdoc courses, seminars and symposia and other educational and talent development activities offered by the DDA, ensuring that these activities are aligned with the DDA's overall educational aim and objectives. Also, the Education Manager works together with the DDA PhD Research Training Network (see page 35) to ensure that the PhD courses do not overlap with the universities' PhD courses.

The Committee for Education appoints national and international researchers from universities, hospitals and the life science industry to be course leaders or members of an organisation committee. In collaboration with the Education Manager, the course leaders or the organisation committee are responsible for drawing up the scientific programme and incorporating elements of basic, translational, clinical and interdisciplinary research and supporting collaborative learning, challenge-based learning and interdisciplinary collaboration and learning. For each activity, the target group, the purpose, aim, learning objectives and success criteria are defined. Finally, all PhD courses are approved by the Danish universities' PhD schools and award ECTS credits.

The Executive Management Team is responsible for advertising the event, and all educational activities are advertised via the DDA social media, relevant websites including the DDA website, the DDA newsletter, university electronic bulletins and the websites of relevant professional bodies. In general, the DDA´s educational activities are open to all interested diabetes researchers and seats are allocated on a first-come, first-served basis with priority to DDA-funded researchers and the defined main target group (PhD students or postdoc fellows, for example, where the main target group for some PhD courses may be PhD students in their second or third year of study).

The Executive Management Team is also responsible for registration of participants, speakers' travel and accommodation and participant evaluation of each activity. The Education Manager draws up a final evaluation after the event based on the participants' evaluations, the evaluations from the course leaders or the organisation committee and an internal evaluation in the Executive Management Team. This final evaluation works as feedback to the Committee for Education and is used as tool for planning and improving future activities.

Educational activities and talent development 2018

In 2018, the DDA organised two PhD courses and one symposium, as described below. The scientific programmes of the activities are included in Appendix 6 and an overview of the participants is included in Appendix 7. No postdoc courses were organised.

PhD scholarship programme

September 3-6th, 2018:

The DDA PhD Summer School, Gl. Avernæs, Ebberup, Denmark

The target group for this PhD course was second- and third-year PhD students. In total, 50 PhD students (Appendix 7) attended the course (fully booked), which awarded 4.0 ECTS credits.

The purpose of the DDA Summer School was to introduce PhD students to the many aspects of diabetes and molecular metabolism. The aim was to update the PhD students on the latest research within diabetes and molecular metabolism and introduce the PhD students to each other, thus creating opportunities for networking. Last, but not least, the aim was to give the PhD students a chance to present their work and get feedback from the attending nationally and internationally recognised diabetes experts.

The programme (Appendix 6a) was built around six sessions with different themes and included elements of basal research, clinical research, translational research and epidemiology. The learning methods included class room lectures, student presentations, question & answers, interactive workshops, Jeopardy to recap content, reflection and discussion exercises in small groups, poster sessions, “afternoon with a brain” (meetings with experts in small groups) and plenum debate.

A video from the course can be seen here

Click here

November 26-29th, 2018:

PhD Course on Basal Metabolism and Molecular Mechanisms in Diabetes, Hotel Storebælt, Nyborg, Denmark

The target group for this PhD course was first- and second-year PhD students. In total, 49 PhD students and two master students (Appendix 7) attended the course (fully booked), which awarded 4.0 ECTS credits.

The purpose of the course was to introduce PhD students to basal metabolism and the pathophysiology of the metabolic syndrome at the molecular level as a basis for the diagnosis and treatment of type 2 diabetes in particular. The aim was to give the students knowledge about basal metabolism, obesity and adipocytes, insulin resistance and exercise and low grade inflammation.

The programme (Appendix 6b) was built around four sessions with different themes and included elements of basal research, clinical research, translational research and epidemiology. The learning methods included class room lectures, question & answers, walk & talks with discussion exercises, interactive workshops, Kahoot and Jeopardy to recap content. Moreover, the non-curricular programme included networking activities such as speed dating, networking wall with pictures and short description of each participant, bonfire/glögg and dinner.

The DDA symposia/ seminar programme

October 26-27th, 2018:

The 5th BBDC-Joslin-UCPH Conference, Mærsk Tower, Copenhagen, Denmark

The DDA organised the conference in collaboration with researchers from Banting and Best Diabetes Center, Canada, Joslin Diabetes Center, USA, and University of Copenhagen. The three organisations have long been at the heart of global diabetes research, and this conference sought to build on that long tradition.

The target group for this conference was young and senior basal and clinical diabetes researchers from Denmark and abroad. In total, 140 participants (Appendix 7) attended the conference, which awarded 1.0 ECTS credits.

The purpose of the conference was to bring together prominent researchers, but also young researchers from across the globe and foster greater cross-institutional research in the field of diabetes. The aim was to learn and discuss how to prevent function of beta cells in type 1 and type 2 diabetes and the role of inter-organ communication.

The programme (Appendix 6c) was mainly built on traditional scientific dissemination. The programme also included a closing panel debate together with a poster session giving young researchers the opportunity to present their newest research.

Table 1 shows the number of participants, mean satisfaction ratings and number of speakers from abroad of the DDA educational and talent development activities 2018.

Table 1. The DDA PhD courses and seminar/symposia 2018:
Number of participants, mean satisfaction ratings and number of speakers from abroad

	Number of participants	Percentage of speakers from abroad	Participant satisfaction with the scientific programme (mean) from 1 (lowest) to 5 (highest)
The DDA PhD Summer School	50	82%	4.46
PhD course on Basal Metabolism and Molecular Mechanisms in Diabetes	51	0%	4.29
5th BBDC-Joslin-UCPH Conference	140	75%	4.41

Success criteria and outcome 2018

Table 2 shows the success criteria for the PhD course, postdoc course and symposium/seminar programmes in relation to the outcome 2018. A detailed description of the success criteria in relation to the specific activities and the outcome 2018 is included in Appendix 8a.

Table 2. Success criteria for the DDA PhD course, postdoc course and symposia/seminar programme and outcome 2018

Success criteria	Outcome PhD courses 2018 (n)	Outcome postdoc courses 2018 (n)	Outcome symposia/ seminars 2018
The DDA arranges annually ≥ six PhD courses, including two organised in collaboration with research institutes outside Denmark, annually ≥five postdoc courses and annually four symposia or seminars	Not achieved	Not achieved	Not achieved
Participant satisfaction with the scientific programmes of each PhD course, each DDA postdoc course and each DDA symposia/ seminar is 4.0 on a scale from 1 (unsatisfactory) to 5 (very satisfactory)	Achieved	Inapplicable – as no activities in 2018	Achieved
≥ 50% of the invited teachers and speakers at 50% of the DDA PhD and postdoc courses and symposia/ seminars are from abroad	Achieved	Inapplicable – as no activities in 2018	Achieved
The success rate of a written evaluation testing the students' critical reflection and ability to put the acquired competences to use is 80% (a test must be included in 30% of the DDA PhD courses and 30 % of the DDA postdoc courses).	Inapplicable – as no evaluations were made	Inapplicable – as no activities in 2018	Inapplicable for seminars and symposia
Upon completion of their PhD/postdoc study, the DDA-funded PhD students/postdoc fellows rate their learning outcome of the DDA PhD/ postdoc courses as a whole to be 4.0 on a scale from 1 (unsatisfactory) to 5 (very satisfactory)	Inapplicable - no PhD students have yet completed their studies	Inapplicable - no postdocs have yet completed their studies	Inapplicable for seminars and symposia

Reflections on the DDA educational and talent development activities 2018 in relation to the DDA success criteria

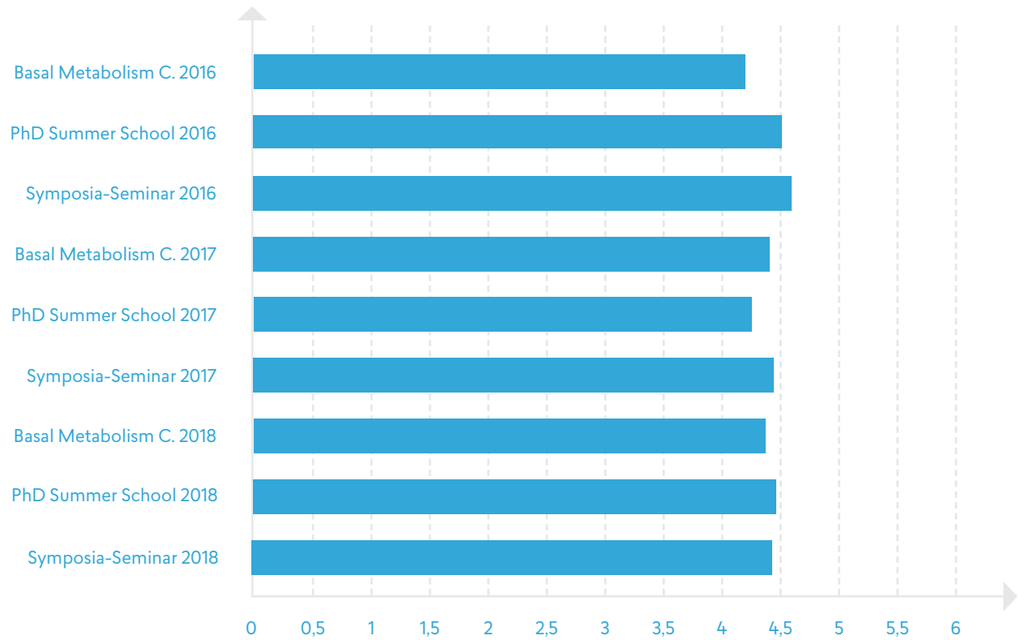
The DDA succeeded in organising two out of six PhD courses and one out of four seminars/symposia in 2018, but organised no postdoc courses (success criterion was five). The success criterion relating to the number of educational and talent development activities organised by the DDA in 2018 was therefore unmet, mainly as a consequence of the late establishment of both the Executive Management Team and the Committee for Education, which were both fully established during in August 2018. The first meeting of the Committee for Education was held on September 4th, 2018, and focused on planning the DDA educational and talent development activities for 2019 in order to achieve the success criteria for 2019 with regard to the number of activities.

On the other hand, the educational activities organised met the success criteria on participant satisfaction and the number of speakers from abroad.

The mean participant satisfaction with the scientific programmes of the two PhD courses ranged between 4.2-4.46 on a scale from 1 (lowest) to 5 (highest), as shown in Table 1. Also, the mean participant satisfaction with the scientific programme of the conference was high (see Table 1).

As shown in Figure 3, the mean participant satisfaction average scores with the scientific programme of the two PhD courses and the conference are comparable to mean average scores of the DDA PhD courses and symposia and seminars organised during the first grant period from 2012 to 2017. This indicates that the DDA has maintained the high quality of previous years' PhD course and seminar/symposia programmes.

Figure 3. Participants' average satisfaction score of the DDA PhD Course on Basal Metabolism and Molecular Mechanisms in Diabetes, the PhD Summer School and the DDA symposia and seminars during in 2016, 2017 and 2018



Both PhD courses were fully booked (Table 1) with waiting lists bearing witness of a scientific programme of great interest. The number of participants in these two courses was restricted to around 50 due to logistics reasons and due to the experience that a larger attendance will have possible negative impact on the learning outcome. Also, the attendance to the conference was high (Table 1) attracting participants from different sectors, research disciplines and from abroad, which was expected thanks to a strong scientific programme with 75% of the prominent speakers coming from abroad.

Also, both PhD courses included teachers and speakers from four different research disciplines (basal research, clinical research, translational research and epidemiology). However, the participant survey indicated, at least at the PhD Summer School, a demand for more human studies and translation of the research and a better balance between basic and clinical research and more targeted presentations. This was also addressed by the members of the DDA committees (Appendix 9). The DDA will solve this issue by obtaining learning objectives from the organisation committees and speakers for their lectures to be able to improve the balance between basic, clinical and translational research.

As the DDA aims to establish an international educational scientific environment for young diabetes researchers, the DDA seeks to invite internationally recognised speakers to give lectures at the PhD and postdoc courses. This has been a long tradition of the DDA PhD Summer School where the majority of the speakers are from abroad (this year more than 82% (Table 1)). In contrast, the majority of (all) speakers at the PhD Course on Basal Metabolism and Molecular Mechanisms in Diabetes are traditionally from Danish research institutions. The Education Manager and the Committee for Education will consider whether the learning output of these two PhD courses can be increased by challenging these traditional concepts e.g. by inviting speakers from abroad or from the life science industry to the PhD Course on Basal Metabolism and Molecular Mechanisms in Diabetes and the PhD Summer School. Furthermore, the newly appointed DDA visiting professors will be included in the educational activities in 2019 and prospectively, and collaboration with internationally recognised research institutions for setting up activities will be further prioritised.

Furthermore, both PhD courses included new educational technologies and learning methods to support higher interactivity between the speaker and the participants and to facilitate adaptive learning, critical thinking and knowledge. This is a prioritised focus area for the DDA in order to strengthen the PhD students' critical reflection and their ability to put the acquired competences to use. The initiatives were in general well received by the participants that found the new workshop formats beneficial as they increased their opportunities to interact with the speakers and discuss scientific questions. Small adjustments such as increasing the time for each workshop and maybe increase the number of workshops will be implemented in next year's PhD course programme. A specific evaluation testing the participants' critical reflection was not introduced in any of the PhD courses, and this success criterion was therefore unmet. To develop meaningful evaluations capturing the content of the course is a timely and complicated process requiring significant input from the Committee for Education, the National Advisory Forum and other educational experts, and it was therefore not possible to implement this in the educational activities for 2018. However, this task will be prioritised in 2019, and the first evaluations are expected to be implemented in the educational activities at the end of 2019.

Even though, the mean participant satisfaction with the scientific programme of the two PhD courses and the conference in 2018 met the success criteria, the scientific programmes can still be improved. Based on the participant evaluations, the DDA will, for future educational activities, be more stringent to obtain learning objectives from the speakers for their lectures to be able to improve the content of the course and to avoid too many repetitions and overlaps (see report from the chairman of the Committee for Education, Appendix 10). Also, more breaks in the programmes and more interactive exercises as panel discussions, reflections, and discussions in small groups, group work, energizers and networking activities, for example, will be implemented, as requested by the participants. The DDA will also encourage the speakers to ask the students questions or include other interactive exercises during their talks, and to adjust their lectures according to a student audience. Finally, the DDA will focus on training the teachers in order to improve the teachers' teaching skills. For the seminars and symposia, the DDA will also invite more young researchers to present their research in order for the activities to represent different levels of knowledge, ensuring that both senior and young researchers have influence on the course and opening up for networking, career development and discussions/interactive sessions.

Finally, the success criterion on strengthening the PhD students' and postdoc fellows' competences cannot be measured until the PhD students and postdoc fellows complete their studies, and this criterion is therefore inapplicable for 2018.

Conclusion

Despite the timing of committee set-up and late establishment of the Executive Management Team, the DDA delivered two PhD courses and one scientific conference in 2018. These were very well attended and included national and international diabetes experts as both participants and speakers. With a focus on learning approaches that include more engagement, involvement and interaction between course participants, the activities were well received and scored highly on evaluation.

The feedback from the participants, the members of the DDA and the DDA committees will be used by the Education Manager and the Committee for Education to optimise the educational and talent development programme for 2019, including collaboration with internationally recognised research institutions and the life science industry.

Furthermore, the DDA wants to put even more focus on the learning outcome and on the implementation of new educational technologies and learning methods to support higher interactivity between the speaker and the participants and to facilitate adaptive learning, critical thinking and knowledge.

Networking and Collaboration Activities

Objectives

The overall aim of the DDA networking and collaboration activities is to serve as a national hub within diabetes, unifying academia, hospitals and the life science industry in Denmark, to strengthen educational activities and talent development within the area.

For the DDA networking and collaboration activities, the DDA has defined the following specific objectives:

- **The DDA is recognised for world-class and internationally oriented networking and collaboration activities;**
- **The DDA establishes collaborations with Danish and international research groups and professional societies, including the life science industry or other sectors and interdisciplinary research disciplines, with a view to facilitate young diabetes researchers' collaboration with Danish or international researchers**

For the specific objectives, the DDA has defined a number of success criteria, which are described later in this chapter in relation to the activities and outcome in 2018.

Strategy

The DDA´s strategy for developing networking and collaboration activities involves a bottom-up process inviting suggestions from the DDA members, members of the DDA committees and boards and participants and speakers at the DDA PhD and postdoc courses, symposia/seminars and networking and collaboration activities. In addition, the Executive Management Team calls for applications for funding of workshops within diabetes two times annually (one time in 2018).

The DDA has defined a workshop to be an interactive event where the participants (researchers or clinicians within diabetes) are involved in discussions, "hands-on-practice" or laboratory activities. Thus, the workshop must be clearly collaborative and thus include researchers or clinicians from at least two diabetes groups in Denmark, and preferably also one from abroad.

The Executive Management Team considers the incoming suggestions and applications and decides on which workshops should be included in the annual DDA networking and collaboration programme, ensuring that the activities are aligned with the DDA's overall aim and objectives for networking and collaboration activities.

Before, during and after an event, the Executive Management Team collaborates with national and/or international researchers (networking course leaders/organisation committee) from universities (including the DDA PhD Research Training Network), hospitals and the life science industry in relation to the format of the networking or collaboration activity.
In collaboration with the Education Manager, the course leaders or organisation committee are responsible for setting up a programme facilitating discussion and interdisciplinary collaborations and for ensuring that young researchers are provided with an arena and a space for exchanging ideas with senior national and international researchers. For each activity, the target group, the purpose, aim and success criteria are defined.

The Executive Management Team is responsible for advertising the event, and all networking and collaboration activities are advertised via the DDA social media, relevant websites (including the DDA website: www.danishdiabetesacademy.dk), the DDA newsletter, university electronic bulletins and the websites of relevant professional bodies. In general, the DDA´s networking and collaboration activities are open to all interested diabetes researchers, but in some cases the number of seats is limited and the seats are thus allocated on a first-come, first-served basis with priority to DDA-funded researchers and the defined main target group.

The Executive Management Team is also responsible for registration of participants, speakers' travel and accommodation and evaluation of each activity. The Education Manager draws up a final evaluation after the event based on the participants' evaluations, evaluations from the course leaders or the organisations committee and an internal evaluation in the Executive Management Team. This final evaluation works as feedback to the Executive Management Team and is used as tool for planning and improving future activities.

Networking and Collaboration activities 2018

In 2018, the DDA organised six networking and collaboration activities including participants from academia, hospitals and the life science industry and from abroad (five of the events). The activities are described below, and the programmes of each activity (if available) and an overview of the participants of each activity are included in Appendices 11 and 12.

In addition, the Managing Director participated in several networking and collaboration events at Danish research institutions. The DDA also took part in an application to the EU's Horizon 2020 framework programme "Innovative Training Networks" in collaboration with Aalborg University Hospital, organised several meetings with the DDA committees and boards, including Danish and international researchers from academia, hospitals and the life science industry, and succeeded in establishing the DDA PhD Research Training Network with the heads of the PhD schools of the Danish universities' faculties of science and health sciences as representatives. Finally, the DDA established collaboration with the life science company MedImmune including collaboration on three postdoc projects in collaboration with University of Copenhagen and University of Southern Denmark

See Researchfish® report, Appendix 13, and page 43) and see the video regarding the DDA and MedImmune collaboration

Click here

June 24th, 2018:

Networking dinner, American Diabetes Association 78th Scientific Sessions, Orlando, USA

The target group for this networking dinner event was young diabetes researchers from Danish research institutions attending the 78th annual Scientific Sessions of the American Diabetes Association (ADA) in Orlando, USA. In total, 16 young diabetes researchers attended the event (Appendix 12).

The purpose of the event was to meet and discuss the scientific data presented during the ADA Scientific Sessions including their own oral or poster presentation. The aim was to give the young diabetes researchers an opportunity to present their work and get feedback in an informal and relaxed environment.

October, 1st-5th, 2018:

Booth exhibition, 54th Annual Meeting of the European Association for the Study of Diabetes, Berlin, Germany

The target group for this networking event was national and international diabetes researchers attending the 54th Annual Meeting of the European Association for the Study of Diabetes (EASD) in Berlin, Germany. More than 500 attendees of the EASD 54th Annual Meeting visited the booth.

The purpose with the DDA booth exhibition at the EASD 54th Annual Meeting was to present the DDA to the international diabetes research environment as an institution offering educational, networking and grant opportunities for diabetes researchers worldwide. The aim was to facilitate interaction between the Executive Management Team and young national and international PhD students, postdoc fellows and other relevant collaborative partners, such as the members of the DDA committees and boards, and to present the tentative DDA educational, networking and recruitment/grant programme for 2019.

October 3rd, 2018:

Networking dinner, 54th Annual Meeting of the European Association for the Study of Diabetes, Berlin, Germany

The networking dinner was a joined, informal dinner organised by the DDA in collaboration with Deutsche Zentrum für Diabetesforschung. The target group was young researchers from Danish and German research institutions. In total, 40 Danish researchers and 40 German researchers attended the event (Appendix 12).

The purpose of the event was to facilitate acquaintance between Danish diabetes researchers and German diabetes researchers. The aim was to facilitate future research collaborations between the young researchers from Germany and Denmark.

October 25th, 2018:

The DDA Training Day, Mærsk Tower, Copenhagen, Denmark

The target group of this networking event was young researchers from Denmark, Joslin Diabetes Center, Boston, USA, and Banting and Best Diabetes Center, Toronto, Canada. In total, 31 young diabetes researchers from Denmark, USA and Canada attended the event (Appendix 12).

The purpose of the DDA Training Day was to bring together young PhD students and postdoc fellows from Banting and Best Diabetes Center, Joslin Diabetes Center, research institutions in Denmark and invited senior researchers. The aim of the DDA Training Day was to provide the attendees with the opportunity to receive feedback on own research and discuss and interact with fellow PhD students and postdoc fellows from BANTING AND BEST DIABETES CENTER, Joslin Diabetes Center and Danish research institutions and with invited senior researchers.

The programme (Appendix 11a) included short keynote lectures, questions & answers using padlet (online posting of questions), interactive workshops, meet & greet exercise, networking bingo and poster sessions.

See a video from the event

Click here

November 12th, 2018:

The DDA Annual Day, Hotel Storebælt, Nyborg, Denmark

The DDA Annual Day was a celebration of the high quality of diabetes research in Denmark and abroad with focus on young diabetes researchers. In total, 142 diabetes researchers attended the event (Appendix 12).

The purpose of the DDA Annual Day was to give diabetes researchers in Denmark the opportunity to create fruitful networks and to give and/or listen to inspirational talks. The aim of the DDA Annual Day was to facilitate feedback on the attendees own research and discuss and interact with fellow young and senior diabetes researchers from Danish research institutions.

The programme (Appendix 11b) included keynote lectures, oral presentations, two poster sessions and time for networking and collaboration among the participants. Also, the DDA handed out the DDA Young Investigator Award and the DDA Scientist Award.

December 11th, 2018:

2nd Danish Muscle Metabolism Network Workshop Comwell, Holte, Denmark

The DDA organised the workshop in collaboration with University of Copenhagen, Steno Diabetes Center Odense and Steno Diabetes Center Aarhus.

The target group was all interested researchers within muscle metabolism. In total, 45 diabetes researchers attended the workshop (Appendix 12).

The purpose of the workshop was to maintain a forum for exchange of knowledge and knowhow by interaction and exchange of students among the involved research groups. The aim was to sustain a high level of interaction between researchers within muscle metabolism by facilitating environments allowing for networking and collaboration.

The programme (Appendix 11c) included lectures, short participant presentations and discussion of the challenges that the participants struggle with.

Success criteria and outcome 2018

Table 3 shows the success criteria for the networking and collaboration activities in relation to the outcome in 2018. A detailed description of the success criteria in relation to the specific activities and the outcome 2018 is included in Appendix 8b.

Table 3. Success criteria of the DDA networking and collaboration activities and outcome 2018

Success criteria	Outcome networking and collaboration activities 2018
The DDA arranges at least six workshops and other networking activities per year in collaboration with national and international research groups , including the life science industry or other sectors and interdisciplinary research disciplines such as e.g. engineering, IT, health economics, anthropology and health science	Achieved
The DDA takes part in at least two annual applications to the EU's Horizon 2020 framework programme focusing on Innovative Training Networks – joint PhD programmes and educational networks	Not achieved
Acceptance from at least 8 postgraduate research schools (health/science) at the Danish universities to participate in the DDA PhD Research Training Network	Achieved

Reflections on the DDA networking and collaboration activities in relation to the DDA success criteria

The DDA succeeded in organising six networking and collaboration activities in 2018, thus achieving the success criterion relating to the number of networking and collaboration activities organised by the DDA in 2018.

The six organised networking activities attracted researchers with different diabetes research profiles from academia, hospitals, the life science industry and individuals from abroad (Appendices 12 and 13). Also, two of the networking and collaboration activities were organised in collaboration with three internationally recognised research institutions.
the DDA therefore succeeded in establishing collaborations with Danish and international research groups (mainly in Denmark, Europe and North America, see Researchfish® report Appendix 13) with a view to facilitate new collaborations fostering a new holistic and innovative, cross-sectional and interdisciplinary mind-set and creating new approaches to the work.
It isw not yet possible to assess the DDA's networking and collaboration activities according to an actual output, e.g. joint publications or joint grant applications. However, in the years to come, the DDA will attempt to monitor (e.g. using Researchfish®) whether the DDA's networking and collaboration activities result in the establishment of new collaborations among Danish and international researchers (focusing on the DDA-funded researchers). Yet, the DDA already has evidence that at least one of the networking activities organised, the booth and the networking dinner during the 54th Annual Meeting of the EASD, resulted in a new collaboration between a former DDA-funded postdoc and researchers from Germany (see Appendix 14).

It is the DDA's ambition to take advantage of the nascent collaborations with international research institutions to create joint educational and talent development programmes and to submit joint applications for the EU's Horizon 2020 and 2025 programmes, among others the Innovative Training Networks under the Marie Skłodowska-Curie Actions. Already in 2018, the DDA was involved in the preparation of one application submitted to this programme in collaboration with national and international research institutions and the life science industry. The ambition is to be involved in two applications to the EU Horizon 2020 programme annually, as indicated in the DDA success criteria for networking and collaboration activities.

A strong collaboration between the DDA and national research institutions, and the Danish universities and hospitals in particular, is also essential for the DDA to succeed in strengthening the research training available to PhD students and postdocs within the field of diabetes. Thus, the DDA has highly prioritised the establishment of a national PhD research training network within diabetes, the DDA PhD Research Training Network, including the heads of the PhD schools of the Danish universities' faculties of science and health sciences (Appendix 15). The DDA will use this network to strengthen the collaboration with national and international research institutions, to coordinate PhD and postdoc courses, meetings and symposia, and most importantly to build bridges between the DDA and the young researchers at the universities.

Furthermore, to ensure that the workshops supported by the DDA facilitate interdisciplinary collaboration and networking among researchers and clinicians within the field of diabetes, the DDA will put more emphasis on only supporting workshops that are clearly collaborative and include researchers or clinicians from several diabetes groups, and preferably also from abroad.

In 2018, the DDA also succeeded in establishing collaboration with the life science company MedImmune with the hope that this new collaboration will lead to and provide inspiration for further collaboration with the life science industry. Collaboration with the life industry will provide PhD students and postdoc fellows with the opportunity to spend an extended period of their studies within the life science industry. It will also give the DDA the opportunity to include contributions from the life science industry to the content and form of the DDA educational and talent development activities to ensure that the PhD students' and the postdoc fellows' competences are in line with the requirements of the industry, thus leading the way for future job opportunities for PhD students and postdoc fellows. In the years to come, the DDA will focus on further developing the collaboration with the life science industry, also in connection with funding of industrial PhD projects and industrial postdoc projects (see page 43).

Finally, in the years to come, the DDA will focus on monitoring the output for DDA-funded researchers in terms of joint publications, joint applications and recruitment.

Conclusion

The DDA organised six networking events in 2018 in collaboration with national and international research institutions, and a variety of diabetes researchers from academia, hospitals and the life science industry, and from abroad, attended the events. These activities demonstrate the DDA's ability to act as a national hub within diabetes unifying young researchers from different research disciplines, sectors and from abroad. The participant evaluations suggest that the events were well received, and some activities even contributed to the set-up of new international research collaborations. The feedback from the young researchers also confirms that there is a demand for interactive interdisciplinary workshops with an opportunity for maximal interaction between them and the senior researchers in order to facilitate the establishment of new collaborations across disciplines. Furthermore, a growing collaboration with internationally recognised research institutions and the life science industry in connection with the organisation of networking, collaboration and educational activities is expected to encourage new cross-sectoral and international collaborations. Finally, the establishment of the DDA PhD Research Training Network will help the DDA to strengthen the collaboration with national research institutions and unify the DDA and the young researchers at the universities. In the years to come, the DDA will put more focus on monitoring the output of the DDA networking and collaboration activities in terms of the establishment of new collaborations.

Adam Hulman, a researcher with an international vision

In May 2018, my manuscript was published in Diabetes Care on pathophysiological characteristics underlying glucose response curves during the oral glucose tolerance test (OGTT). The paper was supplemented by an online application, so that the classification algorithm can be applied in other cohorts. One month after publication, I was contacted by Robert Wagner, an endocrinologist and researcher from the University Hospital of Tuebingen supported by the German Center for Diabetes Research (DZD). Robert was interested in using the application to assess glucose response patterns in a cohort from Tuebingen. That time, I was looking for a large external cohort for the validation of the model, so setting up a collaboration was a natural next step. We planned our first meeting in person at the annual meeting of the European Association for the Study of Diabetes (EASD), where the Danish Diabetes Academy (DDA) and the DZD had a common booth.

We confirmed our common interest during the first meeting and outlined an analysis plan and a timeline for the project. The day after, we met again at the networking event of the DDA and the DZD, where I introduced Robert to the rest of the team from Aarhus. The process went smoothly after EASD. Robert prepared the German dataset, while I prepared the analysis script that I had already used to develop the models. As Robert has excellent skills in statistical programming using R, we agreed on that he would do the analysis and then send me the results.

Then, I combined them with our findings from the development cohort. Our paper was already submitted to Diabetes Care in November and soon after accepted for publication (PMID=30692243). Since then we planned another project, where we will examine glucose response patterns in pregnant women and how they are associated with pregnancy outcomes (e.g. birthweight). To carry out this project, I will visit Tuebingen later this month (March 2019), when I will also give a seminar talk at the University Hospital of Tuebingen. We are planning *to submit an abstract of our new results to EASD 2019.

”One month after publication, I was contacted by Robert Wagner, an endocrinologist and researcher from the University Hospital of Tuebingen supported by the German Center for Diabetes Research (DZD)”



Postdoc Adam Hulman,
Steno Diabetes Center Aarhus

Recruitment and grant activities

Objectives

The overall aim of the DDA recruitment and grant activities for PhD scholarships, postdoc fellowships and visiting professorships is to recruit outstanding national and international PhD students, postdocs and visiting professors within the field of diabetes in open and free competition.

For the recruitment and grant activities, the DDA has defined the following specific objectives:

- Researchers receiving DDA grants for PhD scholarships, postdoc fellowships and visiting professorships are outstanding national and international PhD students, postdoc fellows and visiting professors with an international, interdisciplinary and cross-sectoral focus;

- The DDA visiting professors should strengthen the research environment in Denmark within a specific research area and strengthen the core activities within the DDA (educational activities, talent development, networking and collaboration activities)

For each of the specific objectives, the DDA has defined a number of success criteria, which are described at later in this chapter in relation to the activities and outcome in 2018.

Strategy

The strategy for the DDA recruitment and grant activities 2018 is outlined below.

The Executive Management Team announced the DDA grants for PhD scholarships, postdoc fellowships and visiting professorships in open and free competition through the DDA website, the DDA social media channels, Danish research institutions, national and international job portals and national and international collaborators. Applicants applied for the grants through the DDA website.

The Executive Management Team conducted a pre-screening of all applications received for completeness and eligibility (administrative check) and then rejected incomplete applications or applications not meeting the DDA requirements for grants (as stated in the call for applications) without further review.

All applications for PhD scholarships and postdoc fellowships that were not rejected administratively went through a pre-review. The Committee for Talent Development conducted an external pre-review and submitted their pre-reviews via the DDA web-based electronic reviewing system. The reviewers assessed the applications according to the evaluation criteria decided by the BoD and gave an overall score on a scale from 1 to 5 (5 being highest) and noted major points of criticism. All applications with an average score below 3.0 were rejected.

The remaining applications for PhD scholarships and postdoc fellowships went through a full review. The applications for visiting professorships were only given a full review. Each application was assessed by three individual reviewers, who submitted their reviews via the DDA web-based electronic reviewing system.

The reviewers assessed the applications according to the evaluation criteria decided by the BoD and gave separate scores for each of the four evaluation criteria (applicant, project, research environment and the DDA major strategic areas) and an overall impact score on a scale from 1 to 5 (5 being highest). The reviewers also described strengths and weaknesses for each criterion and overall.

The Executive Management Team sent all applications having received full review to the chairmen of the committee (according to the type of grant applied for) for final review and recommendations to the BoD.

The chairmen performed a final recommendation to the BoD including a summary of the assessments made by the reviewers and a prioritised list of the applications. The chairmen recommended 25% more candidates for each type of grant than the number of grants available.

During a meeting, the BoD made the final decision on which applications should receive funding based on the recommendations made by the two chairmen of the Committee for Talent Development.

The Executive Management Team provided all applicants receiving a full review with the reviewers' comments within three months of receipt of the grant notification letter or the rejection letter.

Recruitment and grant activities for PhD

The PhD scholarship programme

In December 2018, the DDA granted 12 PhD 2/3-financed PhD scholarships. See Appendix 16a for a list of grants recipients including project titles, educational background, affiliation and name of principal supervisors.

The success ratio was similar for males and females (Table 4) whereas the success ratio was almost the double for applicants with an educational background of Master of Science as compared to applicants with a medical degree (Table 5).

16,2%

The DDA received 74 applications and the success ratio was 16.2%.

Table 4. Overview of applications for DDA PhD scholarships 2018 according to gender

Gender	Applications (n)	Granted (n)	Success ratio (%)
Male	24 (32%)	4 (33%)	16.7
Female	50 (68%)	8 (66%)	16.0

Table 5. Overview of applications for DDA PhD scholarships 2018 according to educational background

Education	Applications (n)	Granted (n)	Success ratio (%)
Master of Science	54 (73%)	10 (83%)	18.5
Medical doctor	20 (27%)	2 (17%)	10.0

The DDA received applications from applicants applying for enrolment at nine different faculties at the Danish universities. As shown in Table 6, the majority of grants (67%) were granted to applicants applying for enrolment at the Faculty of Health, University of Copenhagen.

Table 6. Overview of applications for DDA PhD scholarships 2018 according to place of enrolment

Gender	Applications (n)	Granted (n)	Success ratio (%)
Aarhus University, Health	10 (14 %)	1 (8%)	10
University of Southern Denmark, Health	9 (12 %)	3 (25%)	33.3
University of Southern Denmark, Science	3 (4 %)	0 (0%)	0
University of Copenhagen, Health	35 (47 %)	8 (67%)	22.8
University of Copenhagen, Science	8 (11 %)	0 (0%)	0
Aalborg University, Health and Technology	5 (7 %)	0 (0%)	0
Aalborg University, Engineering and Science	1 (1 %)	0 (0%)	0
Technical University of Denmark	2 (3 %)	0 (0%)	0
Roskilde University	1 (1 %)	0 (0%)	0

The majority of applications came from applicants with Danish nationality or from foreigners already enrolled as master students at Danish universities. Only one foreign applicant staying abroad at the time of application received a DDA PhD scholarship, as shown in Table 7.

Table 7. Overview of applications for DDA PhD scholarships 2018 according to nationality

Nationality	Applications (n)	Granted (n)	Success ratio (%)
Danish	62 (84%)	10 (83%)	16.1
Foreign	12 (16%)	2 (17%)	16.6
Foreign who were already employed by a Danish institution before receiving the grant (of applications from candidates with foreign nationality)	10 (83%)	1 (50%)	Not relevant

The majority of applicants applied for enrolment at the same faculty where they had done their master studies, as shown in Table 8.

Table 8. Overview of applications for DDA PhD scholarships 2018 according mobility

Mobility	Applications (n)	Granted (n)
Candidates carrying out their PhD studies in the same institution where they have done their Master studies	70 (95%)	9 (75%)
Candidates carrying out their PhD studies in another institution	4 (5%)	3 (25%)

The postdoc fellowship programme

In December 2018, the DDA granted 10 postdoc fellowships (six three-year and four two-year fellowships), and in October 2018 the DDA also recruited two postdoc fellows in collaboration with University of Copenhagen thanks to a grant from the life science company MedImmune (see page 32 and report from Researchfish®, Appendix 13). See Appendix 16b for a list of grants recipients including project titles, educational background, affiliation and name of principal investigators.

The success ratio was higher for females as compared to males (Table 9), whereas the success ratio was almost similar for applicants with an educational background as Master of Science and applicants with a medical degree (Table 10).

20%

For the 10 postdoc fellowships, the DDA received 50 applications and the success ratio was 20%.

Table 9. Overview of applications for DDA postdoc fellowships 2018 according to gender

Gender	Applications (n)	Granted (n)	Success ratio (%)
Male	23 (46%)	3 (30%)	13.0
Female	27 (54%)	7 (70%)	25.9

Table 10. Overview of applications for DDA postdoc fellowships 2018 according to educational background

Education	Applications (n)	Granted (n)	Success ratio (%)
Master of Science	38 (76%)	8 (80%)	21
Medical doctor	12 (24%)	2 (20%)	16.7

The DDA received applications from applicants applying for employment as postdoc fellow at twelve different Danish research institutions. As shown in Table 11, the majority of postdoc fellowships (70%) were granted to applicants applying for employment at University of Copenhagen.

Table 11. Overview of applications for DDA postdoc fellowships 2018 according to place of employment

	Applications (n)	Granted (n)	Success ratio (%)
Aarhus University, Health	8 (16%)	0 (0%)	0
University of Southern Denmark, Health	4 (8%)	0 (0%)	0
University of Southern Denmark, Science	1 (2%)	0 (0%)	0
University of Copenhagen, Health	18 (36%)	5 (50%)	27.8
University of Copenhagen, Science	6 (12%)	2 (20%)	0
University of Copenhagen, Social Science	1 (2%)	0 (0%)	0
Aarhus University, Health and Technology	3 (6%)	0 (0%)	0
Rigshospitalet, Copenhagen	2 (4%)	1 (10%)	50
Bispebjerg Hospital, Copenhagen	1 (2%)	0 (0%)	0
Steno Diabetes Center Copenhagen	2 (4%)	1 (10%)	50
Steno Diabetes Center Aarhus	1 (2%)	0 (0%)	0
Technical University of Denmark	2 (4%)	0 (0%)	0
Roskilde University	1 (2%)	1 (10%)	100

The majority of applications came from applicants with Danish nationality or from foreigners already employed at a Danish research institution. Only three (30%) foreign applicants staying abroad at the time of application received a DDA postdoc fellowship, as shown in Table 12.

Table 12. Overview of applications for DDA postdoc fellowships 2018 according to nationality

Nationality	Applications (n)	Granted (n)	Success ratio (%)
Danish	34 (68%)	7 (70%)	20.5
Foreign	16 (32%)	3 (10%)	18.8
Foreign who were already employed by a Danish institution before receiving the grant (of granted applications from candidates with foreign nationality)	14 (87%)	3 (100%)	Not relevant

The majority of applicants applied for employment at the same research institution where they had done their PhD studies, as shown in Table 13.

Table 13. Overview of applications for DDA postdoc fellowships 2018 according to mobility

Mobility	Applications (n)	Granted (n)
Candidates carrying out their postdoc research in the same institution where they have done their PhD studies	47 (94%)	9 (90%)
Candidates carrying out their postdoc research in another institution	3 (6%)	1 (10%)

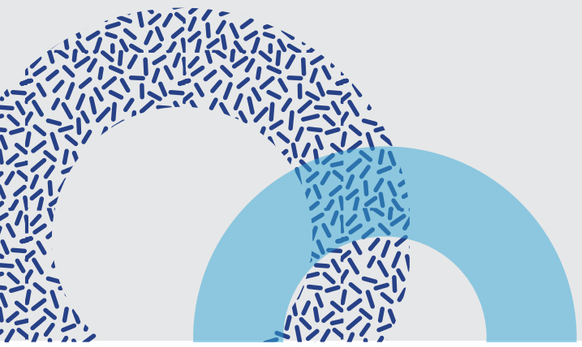
The visiting professorship programme

In December 2018, the DDA granted four visiting professorships. See Appendix 16c for a list of grant recipients including project titles, educational background, affiliation and name of host principal investigators.

The DDA received four applications for visiting professorships, and all four applicants were found qualified to receive a grant. Table 14 shows an overview of the applications according to place of employment.

Table 14. Overview of applications for DDA visiting professorships 2018 according to place of employment

	Applications (n)	Granted (n)	Success ratio (%)
Aarhus University Hospital	1 (25%)	1 (25%)	100
University of Copenhagen, Science	1 (25%)	1 (25%)	100
Steno Diabetes Center Copenhagen	1 (25%)	1 (25%)	100
Roskilde University	1 (25%)	1 (25%)	100



Success criteria and outcome 2018

Table 15 shows the success criteria for the DDA PhD scholarships, postdoc fellowships and visiting professorships in relation to the outcome in 2018. A detailed description of the success criteria in relation to the specific activities and the outcome 2018 is included in Appendix 8c.t.

Table 15. Success criteria for the DDA PhD scholarships, postdoc fellowships and visiting professorships recruitment and grant activities and outcome 2018

Success criteria	Outcome 2018
DDA-funded researchers publish in high-impact journals (bibliometric analysis) (10% in top 10 within diabetes)	Inapplicable
Annually, at least one DDA-funded PhD student and one DDA-funded postdoc fellow receive an award for their scientific skills (besides the DDA Awards)	Inapplicable
85% of the DDA-funded PhD students and postdoc fellows stay abroad for at least three months	Inapplicable
15% of the DDA-funded PhD students and postdoc fellows have spent time within life science industry or other sectors (e.g. general practice)	Inapplicable
85% of the DDA-funded PhD students and postdoc fellows have joint publications and/or funded joint applications with researchers abroad	Inapplicable
15% of the DDA-funded PhD students and postdoc fellows have joint publications and/or funded joint applications with researchers within life science industry or other sectors (e.g. general practice)	Inapplicable
25% of the DDA-funded PhD students and postdoc have publications and/or applications that are interdisciplinary	Inapplicable
1/3 of the DDA-funded PhD students and 1/3 of the DDA-funded postdoc fellows are recruited from abroad	Not achieved
90% of all DDA-funded PhD students and postdocs obtain employment at research institutions or clinical research units within diabetes at Danish universities/hospitals, internationally or in the life science industry	Inapplicable
95% of all DDA-funded PhD students finish their PhD project	Inapplicable
Time to completion is averagely 3 years and 4 months for PhD students (excluding maternity leave)	Inapplicable
A total of 15% of all DDA PhD scholarships are industrial PhD scholarships and 15% of all postdoc fellowships are industrial postdoc fellows2hips	Achieved for postdocs
DDA contributes to recruitment of 15 PhD students through the EU Horizon 2020 framework programme focusing on Innovative Training Networks	Inapplicable
At least five PhD students and five postdoc fellows are recruited through co-funding of regional, national and international programmes (COFUND) under the Marie Skłodowska-Curie Actions (Horizon 2020)	Inapplicable
100 % of the DDA Visiting Professors are co-organisers of at least one DDA PhD or postdoc course, seminar, symposium, workshop or other networking activity	Inapplicable

Reflections on the DDA recruitment and grant activities in relation to the DDA success criteria

The DDA succeeded in recruiting outstanding national and international PhD students, postdoc fellows and visiting professors in the field of diabetes, as 12 2/3-financed PhD scholarships, 12 postdoc fellowships (including two industrial fellowships) and four visiting professorships were granted in 2018 to high-quality candidates. The overall recruitment and grant process, including receipt and review of applications, ran smoothly, and the grant programme was ranked as "outstanding" with "vetting that is rigorous and well-considered" by the chairmen of the Committee for Talent Development (Appendix 5).

As the grants for all three programmes (PhD scholarships, postdoc fellowships and visiting professorships) were only allocated in October and December 2018, it is, however, not possible to perform a thorough evaluation of the success criteria. Most of the criteria relate to output and impact of the granted scholarships and fellowships, and these data are not yet available. Although precautions must be taken due to the relatively low number of grants allocated, a number of important issues can be addressed in relation to the allocation of the grants. The below reflections are based on feedback from the Danish and international diabetes research environment and evaluations from the chairman of the International Advisory Board (Appendix 17) and the members (performing reviews of the applications) and the chairmen of the Committee of Talent Development (Appendix 5).

In relation to the granted PhD scholarships, applicants with an educational background as Master of Science tended to have a higher chance to receive a grant compared to applicants with a medical degree. This tendency merits further consideration as applicants with a Master of Science degree and a medical degree should have the same opportunities of receiving funding from the DDA if they are equally qualified. Therefore, the Executive Management Team will examine the evaluation criteria and calls for applications to consider whether these favour one type of research (basal as compared to clinical). Another point of attention will be the composition of the Committee for Talent Development, where, at present, the majority of members (39 out of 61) have an educational background as Master of Science. The Executive Management Team will therefore invite more researchers with a clinical background to be members of the committee to hopefully ensure better understanding of applications from clinical researchers and thus a more fair review of these applications.

A challenge pertinent to both the PhD and postdoc applications was the lack of mobility of Danish applicants. The vast majority (95% of PhD applicants and 94% of postdoc applicants) applied from the institution where they had completed their Master's or PhD programme. This lack of mobility reflects socio-demographic and cultural trends in Denmark. As its underpinning values include interdisciplinarity, internationality and enhanced collaboration across sectors, the DDA should seek ways to encourage applications from more mobile candidates (see report from the Chairman of the International Advisory Board, Appendix 17), among others by stressing in the evaluation criteria that mobility, including plans for stays abroad, should affect the reviewers' scores positively.

The success criterion in relation to attracting 1/3 of the DDA-funded PhD students and postdoc fellows from abroad was unmet. There were relatively low numbers of international PhD (16%) and postdoc candidates (32%), of whom the majority (83% PhD and 87% postdoc) were already based at a Danish institution at the time of application. An obvious reason for the lack of international candidates may be the lack of knowledge of the DDA funding. Another reason, at least for the PhD scholarships, may be related to the model only providing 2/3 of financing. It is often challenging for the principal investigators to find the extra year of funding to offer a three-year PhD scholarship and this may deter some principal investigators from recruiting candidates from abroad. Even though the DDA funding opportunities have been well advertised, both in Denmark and internationally, the Executive Management Team will strive to increase the knowledge abroad through international postings at research institutions and job portals and through international collaborators. This will hopefully also increase awareness about the visiting professorship programme where the DDA only received four applications in 2018.

Furthermore, the DDA aim to contribute to recruitment of a number of international PhD students and postdoc fellows through the EU Horizon 2020 framework programmes: The Innovative Training Networks and COFUND (co-funding of regional, national and international programmes) under the Marie Sklodowska-Curie Actions. In 2018, the Executive Management Team participated in one application to the Innovative Training Networks programme, but the application was unfortunately rejected. The team submitted no application to the COFUND programme. The above-mentioned success criterion was therefore not achieved in 2018, mainly due to the late establishment of the Executive Management Team. The DDA aims to submit applications to the above-mentioned programmes in 2019.

With regard to recruitment of industrial PhD students and industrial postdoc fellows, the DDA succeeded in recruiting two postdoc fellows (16.7% of all postdocs recruited) in collaboration with University of Copenhagen thanks to a grant for three postdoc fellowships from the life science company MedImmune (see page 25, Researchfish® report (Appendix 13). The last of these three fellowships will be granted in 2019 in collaboration with University of Southern Denmark. The process of allocating specific DDA grants to industrial PhD students and industrial postdoc fellows has, however, not been initiated in 2018. Calls for applications for these grants will be announced early in 2019.

Conclusion

The aim of the DDA recruitment and grant activities is to recruit outstanding national and international PhD students, postdocs and visiting professors within the field of diabetes. In this endeavour, the DDA has been very successful as 12 PhD 2/3financed PhD scholarships, 12 postdoc fellowships (of which 16.7% were industrial fellowships) and four visiting professorships were granted in 2018 to high-quality candidates. The majority of PhD scholarships and postdoc fellowships were allocated to applicants with an educational background of Master of Science, and the majority of applicants will be enrolled or employed by University of Copenhagen. There is a lack of mobility among the applicants as the vast majority of these (95% of PhD applicants and 94% of postdoc applicants) were already employed by the institution where they had completed their Master's or PhD programme. In addition, the DDA has not been very successful regarding to attract international candidates and recruit industrial PhD students. The important issues raised by the national and international diabetes research environment and the DDA committees and board will be addressed by the Executive Management Team in 2019, and the DDA-funded researchers' activities in relation to the success criteria will be evaluated in next year's annual report.

Anupa Rijal, PhD student,
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Preventing premature deaths in low-income countries

Why is the risk of dying prematurely – under the age of 70 – from high blood pressure, type 2 diabetes and cardiovascular disease much greater in low-income countries than in wealthy countries? And what is the least expensive and most effective way to prevent these deaths?

Anupa Rijal, 27, will be grappling with these questions in the next few years while completing her PhD at the University of Southern Denmark on a grant recently awarded by the Danish Diabetes Academy.

Specifically, Anupa Rijal will be developing new systematic reviews to identify the most effective strategy for the treatment of high blood pressure and type 2 diabetes as well as the prevention of cardiovascular disease. The ultimate goal is to design and conduct a large randomized clinical trial of the treatment of these diseases based on the results of the systematic reviews.

'It is my personal opinion that our results will be important not only for low-income and middle-income countries, but also for wealthy countries where the focus on risks, prevention and treatment is far from perfect, especially in socially disadvantaged areas', she says. Underlying her study is the fact that cardiovascular disease is the most frequent cause of death globally, and that high blood pressure is the risk factor most amenable to modification.

'Different parts of the world use different prevention methods and treatments, and there is no agreement as to which strategy is most effective', she says. The RESOLVE initiative focuses primarily on identification and treatment of high blood pressure, while the WHO includes additional elements and identifies and treats cholesterol and diabetes as well as high blood pressure.

'The different approaches reflect weaknesses in current knowledge of what is most effective', she says – and she believes that her reviews, combined with the extensive research going on in both low-income and high-income countries, will generate the information needed to solve this significant health and social problem.

Anupa Rijal expects the next few years to be busy, but she is used to that: she completed her Master of Science degree at the University of Southern Denmark's Faculty of Health Sciences while also putting in almost 5 years as editor of the Nepalese medical students' journal Health Prospect: Journal of Public Health - where her other responsibilities included the quality of its peer review process – and conducting research. Her commitment to societal issues becomes clear when you consider her research: ethical aspects of sex trafficking in Nepal, the mental health situation in Nepal, and student engagement and mobilization in disease prevention. Her last publication was 'The Economic Impact of Non-Communicable Diseases Among Households in South Asia and their Coping Strategy: A Systematic Review'.

Read the Research article
Click here

This is her Master's thesis, which she defended at the University of Southern Denmark and which forms part of the basis of her PhD project. In 2015-2017, Anupa Rijal completed a Master's degree in public health at the University of Southern Denmark, Esbjerg Campus, supported by a grant from the Danish government. She is completing her PhD studies – supported by a grant of 1.1 million Danish kroner from the Danish Diabetes Academy – at the Faculty of Health Sciences, University of Southern Denmark. Her primary supervisor is Professor Michael Hecht Olsen, Holbæk Hospital, Odense University Hospital, and University of Southern Denmark.



Communications and Outreach Activities

Objectives

The overall objective of the DDA communications and outreach activities is to support the DDA's mission and vision and ensure that the DDA accomplishes its overall aims and objectives.

For the DDA communications and outreach activities, the objectives are as follows:

- **The DDA makes known publicly the DDA educational and talent development activities, networking and collaboration activities and recruitment activities;**
- **The DDA makes known publicly the DDA-funded researchers' publications**

Strategy

The DDA communications and outreach activities are based on the DDA's Communications Strategy and Action Plan (Appendix 18) including a strategy and action plan for internal, external and crisis communication to ensure that the DDA communications and outreach activities support the DDA's aims and objectives.

The primary target groups for the DDA communications and outreach activities are national and international young clinicians, researchers and other stakeholders within diabetes in academia, hospitals and the life science industry. The secondary target groups are public authorities, politicians, non-governmental organisations and the Danish population in general.

The DDA uses the following channels for dissemination of the DDA activities:

- The DDA homepage - with weekly updates
- The DDA Facebook profile - two own posts weekly
- The DDA LinkedIn profile -with two own posts weekly
- The DDA Twitter profile - with two own posts weekly
- The DDA youtube channel
- The DDA newsletters with one distribution monthly
- DDA press releases with up to 12 releases per year
- Presence at the following annual events: Scientific Sessions of the American Diabetes Association and Annual Meeting of the European Association for the Study of Diabetes

In addition, the Managing Director disseminates information about the DDA activities through his own social media profiles on Facebook, LinkedIn and Twitter on a weekly basis.

The DDA homepage
Click here

The DDA Facebook profile
Click here

The DDA LinkedIn profile
Click here

The DDA Twitter profile
Click here

The DDA youtube channel
Click here

Communications and outreach activities in 2018

In 2018, the DDA Communications Officer prepared the DDA's Communications Strategy and Action Plan (Appendix 18) forming the basis of the DDA's communications and outreach activities. The activities in 2018 are described below and in the Researchfish® report (Appendix 13).

In 2018, the DDA was active on the DDA social media platforms and created a Twitter profile and a Youtube channel.

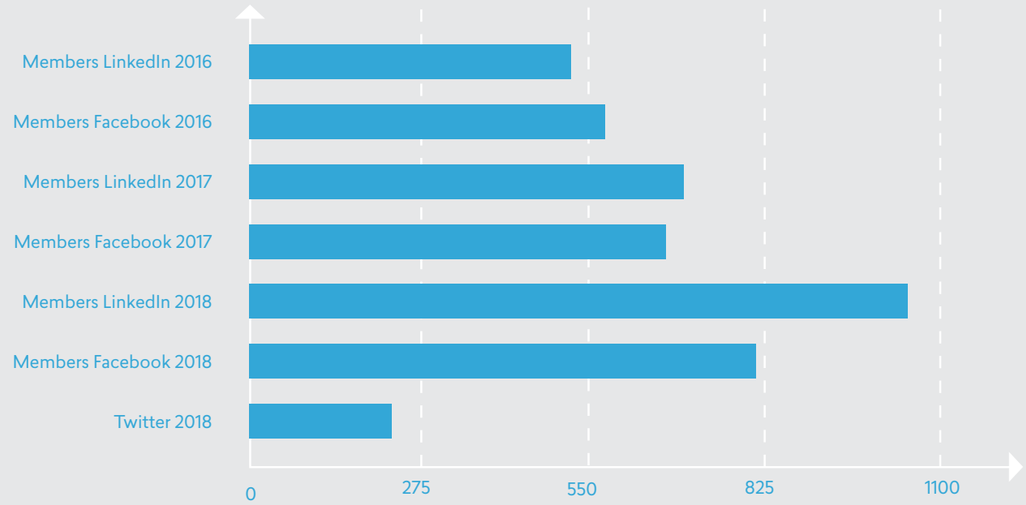
Table 16 shows the DDA activities on the DDA social media platforms in 2018.

Table 16. Activities on the DDA social media platforms in 2018

	Facebook (n)	LinkedIn (n)	Twitter (n)
Number of followers	803	1,050	218
Posts (own)	76	72	86
Likes (on DDA own posts)	1,352	924	387
Shares/retweets (on DDA own posts)	104	118	137
Mentions (on DDA own posts)	Inapplicable	Inapplicable	160

As shown in Figure 4, the strategy with two weekly updates on LinkedIn and Facebook has increased the awareness about the DDA. The number of members of the DDA LinkedIn site has increased with 50%, and the number of followers of the DDA Facebook site has increased with 18% as compared to 2017.

Figure 4. Members and followers on the DDA Facebook, LinkedIn and Twitter profiles 2016-2018



In 2018, the DDA also released a number of newsletters and press releases (see Table 17). The DDA issued 10 press releases, which mainly described stories about the researchers receiving DDA grants in December 2018 (Appendix 19). The DDA obtained press coverage on eight of these press releases. For information about the DDA media coverage, see report from Infomedia in Appendix 20.

Finally, the DDA's Communications Officer carried out interviews with previously or presently DDA-funded researchers and some of the DDA members for dissemination through the DDA website, social media and the press. Also, the Executive Management Team was present at the annual meetings of the ADA and the EASD (see page 32), where the team posted on the DDA social media platforms.

Table 17. DDA communications and outreach activities in relation to press coverage and newsletters in 2018

Newsletters (n)	Press releases (n)	Media coverage (n)
13	10	60

Success criteria and outcome 2018

The DDA has not yet defined success criteria for the specific objectives relating to the DDA communications and outreach activities, but these will be defined on the basis of the DDA's Communications Strategy and Action Plan (Appendix 18) together with the BoD and the International Advisory Board with input from the DDA committees and relevant external collaborators.

The DDA has, however, in 2018 operated with a number of specific measurements showing evidence of the DDA's communications and outreach activities in 2018 (see above).

Reflections on the DDA communication and outreach activities in relation to the DDA success criteria

In 2018, the DDA Communications Officer prepared a communication strategy including internal, external and crisis communication to ensure that the DDA communication and outreach activities support the DDA's aims and objectives (Appendix 18). Elements of this communication strategy have been implemented in the end of the year.

A strong communications strategy will support the area for improvement suggested by the Chairman of the International Advisory Board where the Chairman emphasises that the DDA should "continue to build the DDA brand both nationally and internationally to ensure that the organisation is understood as a world leader in educating and training the next generation of diabetes researchers" (Appendix 17).

The DDA's activities on the social media platforms in 2018 mainly focused on re-establishing the DDA's identity on LinkedIn and Facebook and creating an identity on Twitter and a Youtube channel. While the DDA's postings on LinkedIn mainly focused on educational and networking activities and grant opportunities, the Facebook profile was used to tell the more personal story of the DDA-funded researchers. The DDA Twitter account was mainly used to support relevant DDA activities and highlighting relevant diabetes news. The DDA will continue to use these platforms for dissemination of the DDA activities in 2019, together with the other communication channels mentioned above.

With an increase of 50% on LinkedIn and 18% on Facebook as compared to 2017 and over 200 new followers on Twitter, the Executive Management Team has succeeded in creating renewed attention to the DDA's activities.

In 2018, the DDA also used press releases to create awareness of the DDA activities, and the DDA succeeded in obtaining press coverage based on a majority of the press releases (8 out of 10). However, the International Advisory Board suggests that the DDA reconsiders whether issuing a high number of press releases is the best and most appropriate method to communicate the DDA's work (Appendix 17). This will be considered by the Executive Management Team when defining the success criteria together with the BoD and the International Advisory Board with input from the DDA committees and relevant external collaborators.

The International Advisory Board also finds it critically important that the DDA defines a number of success criteria and metrics and ensures that these are meaningful and supports the DDA's aims and objectives (Appendix 17). This will be addressed by the Executive Management Team in 2019 with a focus on setting up success criteria that are both qualitative and quantitative. In addition, the International Advisory Board recommends the DDA to refresh the DDA website to ensure that it reaches key audiences and communicates core messages.

Conclusion

The DDA re-established its identity in 2018 on the social media platforms LinkedIn and Facebook and created an identity on Twitter and a Youtube channel. In 2018, the DDA released 10 press releases, of which press coverage was obtained on eight, and overall the DDA obtained 60 media coverages. Furthermore, the DDA used the DDA website and the DDA newsletters to disseminate information about the DDA activities. As suggested by the International Advisory Board, the DDA will refresh the DDA website in 2019 to ensure that it reaches key audiences and communicates core messages. In addition, the Executive Management Team will set up new success criteria to monitor whether the DDA's communications and outreach activities on the different communication channels increase awareness of the DDA activities among representative young diabetes researchers from academia, hospitals and the life science industry, and awareness of the DDA overall.

Overall conclusion

The DDA organisation was successfully re-established during 2018 with a BoD supported by an Executive Management Team and four bodies, namely the International Advisory Board, the Committee for Education, the National Advisory Forum and the Committee for Talent Development.

The DDA delivered two very well attended and highly rated PhD courses and one scientific conference in 2018. The key learnings from these educational activities were that the participants appreciated the involvement and interaction between course participants and speakers, and the international level of diabetes science. In 2019, the DDA will optimise the collaboration with internationally recognised research institutions and the life science industry, and the DDA will put even more focus on the learning outcome and on the implementation of new educational technologies and learning methods to support higher interactivity between the speaker and the participants.

The DDA also succeeded in delivering six networking events in 2018 in collaboration with national and international research institutions. These activities demonstrate the DDA's ability to act as a national hub within diabetes unifying young researchers from different research disciplines, sectors and from abroad. Based on the positive participant evaluations, the DDA will in 2019 continue to offer interactive interdisciplinary workshops in collaboration with national and internationally recognised research institutions and the life science industry, thus offering the opportunity for maximal interaction between young and the senior researchers to facilitate the establishment of new collaborations across disciplines. Also, more focus will be put on monitoring the output of the DDA networking and collaboration activities in terms of establishment of new collaborations.

In 2018, the DDA granted 12 2/3-finaced PhD scholarships, 12 postdoc fellowships (of which 16.7% were industrial fellowships) and four visiting professorships in open and free competition to high-quality candidates. In 2019, the DDA will focus on the lack of mobility among the grant applicants as, in 2018, the vast majority of these were already employed by the institution where we the DDA will draw attention to attracting more international candidates and allocating specific grants for industrial PhD students and industrial postdoc fellows. Another focus area will be to recruit more members to the Committee for Talent Development (clinical researchers in particular) and to evaluate the DDA-funded researchers' activities in relation to the success criteria.

The DDA identity Son the social media platforms LinkedIn and Facebook was re-established in 2018. In 2019, the DDA will refresh the DDA website to ensure that it reaches key audiences and communicates core messages. In addition, the Executive Management Team will set up new success criteria to monitor whether the DDA's communications and outreach activities on the different communication channels increase awareness of the DDA activities among representative young diabetes researchers from academia, hospitals and the life science industry, and awareness of the DDA overall.

Despite the late establishment of the Executive Management Team and the DDA committees and boards, the DDA has delivered successfully in all three main focus areas: Educational activities and talent development, networking and collaboration activities and recruitment and grant activities, and has even set up a new strategy for communications and outreach activities. All success criteria were not achieved in 2018, but the activities and the newly setup organisation will provide fertile ground for future high-quality activities.

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