Danish Diabetes Academy

Annual Report 2020

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Cambridge University, United Kingdom

Kiel University, Germany

Lund Diabetes Center, Sweden

Cambridge Metabolic Network, United Kingdom

University of Graz, Austria

Lausanne University Hospital, Switzerland

International collaborators 2020

Executive Summary

The mission of the DDA is to educate and train the next generation of researchers in the field of diabetes. To achieve this mission, the DDA offers a broad range of activities within education and talent development, networking and collaboration and recruitment and grants. In 2020, we wish to highlight the following activities:

- Online educational and networking activities within diabetes research and career development reaching a large international audience and with high participant satisfaction
- Collaborations with the life science industry, the Danish Diabetes Association and international partners for organising the activities
- Establishment of the DDA Alumni Network
- Recruitment of high-quality candidates across educational backgrounds, research topics and disciplines, research institutions and international borders
- Strengthening of the DDA communications profile

These many activities have characterised the DDA in 2020 – a year of turbulence due to the challenges of the Covid-19 pandemic. The DDA demonstrated agility and resilience ensuring that the organisation delivered on its mission and strategic objectives of serving as a national hub within diabetes research to strengthen educational activities and talent development within the field. The DDA's main accomplishments and reflections for 2020 are described below.

For the DDA Educational Activities and Talent Development, the DDA swiftly shifted focus from being a provider of only face-to-face educational activities to being an established professional provider of online training within diabetes research. The shift resulted in a higher outreach of the educational and networking activities to researchers abroad. The programme in 2020 included a wide variety of topics within diabetes research presented through the PhD and postdoc courses, symposia and webinars and included methods courses relevant to diabetes research and transferable skills courses. The DDA also established a closer collaboration with the life science industry and an encouraging new partnership of mutual benefit with the Danish Diabetes Association. All 32 educational activities in 2020 supported the DDA's ambition to be recognised for world-class and internationally oriented educational activities.

For the DDA Networking and Collaboration Activities, the DDA established the DDA Alumni Network for former and currently DDA-funded researchers. The DDA Alumni Network acts as a dynamic knowledge base to strengthen the existing bottom-up process and ensures alignment between the strategy and the actual needs junior researchers within diabetes research face in their career development. In 2020, the DDA organised 11 networking and collaboration activities with a wide variety of topics, ranging from workshops on diabetes and metabolism research to workshops on how junior researchers can further develop their careers. The workshops were organised as both face-to-face and online events. The DDA acknowledges the challenges with the online format when it comes to facilitating new networks among participants. For the activities, the DDA also established an exciting collaboration with the National Junior Faculty of Sweden. All networking and collaboration activities support the DDA's ambition to serve as a national hub within diabetes research unifying universities, hospitals and life science industry.

For the grant and recruitment activities, the DDA awarded more than 30 million DKK to 14 PhD scholarships, 10 postdoc fellowships and eight visiting professorships in a transparent and well-governed recruitment process, and in an open and free competition. The grant allocation included a distribution of funding across educational backgrounds, research topics and disciplines, countries and research institutions in Denmark. The DDA-funded researchers reported a high output through publications, collaborations, dissemination activities and additional funding, supporting the DDA's ambition to recruit outstanding junior researchers and visiting professors.

Looking into 2021, the DDA will continue to be a strong and professional provider of online training for junior researchers with the opportunity to attract researchers worldwide. Furthermore, the future focus will be to continue the strong setup of the educational and networking activities with a high variety of topics, a high rate of international speakers, collaboration with international research organisations and pointing out the career opportunities for junior researchers in life science industry. The DDA will continue to highlight its activities and the activities of the junior researchers funded by the DDA on the DDA website and social media.

In agreement with the Novo Nordisk Foundation (NNF), in May 2021, the DDA will submit a self-evaluation report demonstrating the impact of the DDA activities from 2018 to 2021 and a strategy document for a potential DDA version 3.0. The DDA will invite DDA-funded researchers, relevant members of the DDA bodies and other relevant collaborators to take part in this process.

The DDA appreciates the large commitment and involvement demonstrated by the members of the DDA bodies, the DDA-funded researchers and other collaborators in Denmark and abroad to support the DDA in providing high-quality educational and networking activities that unify universities, hospitals and life science industry.

Tore Christiansen
Managing Director

Dansk Resumé

DDA's mission er at uddanne og træne den næste generation af diabetesforskere. For at opnå denne mission, har DDA i 2020 udbudt en bred vifte af aktiviteter inden for uddannelse og træning, netværk og samarbejde samt rekruttering og bevillinger. Følgende aktiviteter kan især fremhæves:

- Online uddannelses- og netværksaktiviteter inden for diabetesforskning og karriereudvikling, der er nået ud til et stort internationalt publikum og har haft stor deltagertilfredshed
- Samarbejde med life science-industrien, Diabetesforeningen og internationale partnere med henblik på organisering af aktiviteterne
- Etablering af DDA Alumni Network
- Rekruttering af kandidater af høj kvalitet på tværs af uddannelsesmæssige baggrunde, forskningsemner og discipliner, forskningsinstitutioner og internationale grænser
- Styrkelse af DDA's kommunikationsprofil

Disse aktiviteter har præget DDA i 2020 - et turbulent år på grund af Covid-19-pandemiens udfordringer. DDA har i 2020 demonstreret agilitet og modstandsdygtighed for at kunne leve op til sin mission og det strategiske mål om at fungere som et nationalt knudepunkt for diabetesforskning og derved styrke kommende forskergenerationers kompetencer. DDA's vigtigste refleksioner og resultater for 2020 er beskrevet nedenfor.

I forhold til DDA's uddannelsesaktiviteter og talentudvikling skiftede DDA fokus fra kun at være udbyder af uddannelsesaktiviteter med fysisk tilstedeværelse til at være en etableret professionel udbyder af online undervisning inden for diabetesforskning. Resultatet af denne ændring var, at aktiviteterne fik større rækkevidde og nåede ud til forskere i hele verden. Programmet for 2020 omfattede en bred vifte af emner inden for diabetesforskning, der blev præsenteret på ph.d.- og postdoc-kurser, symposier og webinarer samt på omfattende metodekurser, der er relevante for diabetesforskning, og 'transferable skills'-kurser. DDA etablerede desuden et tættere samarbejde med life science-industrien og et lovende nyt 'win-win'-partnerskab med Diabetesforeningen. Alle 32 uddannelsesaktiviteter udbudt i 2020 understøttede DDA's ambition om at blive anerkendt for uddannelsesaktiviteter i verdensklasse og med internationalt fokus.

I forhold til DDA's netværks- og samarbejdsaktiviteter etablerede DDA et alumnenetværk for tidligere og nuværende forskere, som har været eller er finansieret af DDA. DDA's alumninetværk skal være med til at skabe en dynamisk base af videnskabelig ekspertise, som kan styrke den eksisterende nedefra-og-op-proces og sikre overensstemmelse mellem strategi og de faktiske udfordringer, som juniorforskere inden for diabetesforskning står over for i deres karriereudvikling. I 2020 organiserede DDA 11 netværks- og samarbejdsaktiviteter inden for en bred vifte af emner - fra workshops om diabetes og metabolisme til workshops om, hvordan juniorforskere kan videreudvikle deres karriere. Disse workshops blev arrangeret både med fysisk tilstedeværelse og som online aktiviteter. I den forbindelse anerkender DDA udfordringerne med onlineformatet, især i forhold til at facilitere nye samarbejder og netværk blandt deltagerne. DDA etablerede også et spændende samarbejde med the National Junior Faculty of Sweden. Alle netværks- og samarbejdsaktiviteter understøttede DDA's ambition om at fungere som et nationalt knudepunkt inden for diabetesforskning, der forener universiteter, hospitaler og life science-industrien.

I forhold til aktiviteterne inden for rekruttering og bevillinger tildelte DDA mere end 30 mio. kroner til 14 ph.d.-stipendier, 10 postdoc-stipendier og otte gæsteprofessorater via en gennemsigtig og velorganiseret rekrutteringsproces, der fandt sted i åben og fri konkurrence. Bevillingerne blev uddelt på tværs af uddannelsesmæssige baggrunde, forskningsemner og -discipliner, forskningsinstitutioner og landegrænser. Forskere finansieret af DDA rapporterede et højt output via publikationer, samarbejder, formidlingsaktiviteter og yderligere finansiering, der understøtter DDA's ambition om at rekruttere fremragende juniorforskere og gæsteprofessorer.

I 2021 vil DDA fortsætte med være en stærk og professionel udbyder af online uddannelse til yngre forskere, som samtidig giver mulighed for at tiltrække forskere fra hele verden. Desuden vil DDA's fokus i fremtiden stadig være på at sikre et stærkt format af bredspektrede uddannelses- og netværksaktiviteter med et højt antal internationale foredragsholdere og samarbejde med internationale forskningsorganisationer. Derudover vil DDA lægge vægt på at fremhæve karrieremulighederne for yngre forskere i life science-industrien. DDA vil fortsætte med at fremhæve sine aktiviteter samt DDA-finansierede forskeres aktiviteter via DDA's hjemmeside og sociale medier.

Novo Nordisk Fonden har anmodet DDA om i foråret 2021 at udarbejde en selvevalueringsrapport, der omhandler DDA's aktiviteter fra 2018 til 2021 samt et strategidokument for et potentielt DDA 3.0. DDA vil invitere DDA-finansierede forskere, relevante medlemmer af DDA's komitéer samt andre centrale samarbejdspartnere til at deltage i denne proces.

DDA vil gerne takke medlemmerne af DDA's komitéer, DDA-finansierede forskere og samarbejdspartnere i Danmark og i udlandet for deres store engagement og motivation. Dette er en værdifuld støtte, der er med til at sikre, at DDA kan udbyde uddannelses- og netværksaktiviteter af høj kvalitet, der forener universiteter, hospitaler og life science-industrien.

Tore Christiansen
Managing Director

DDA at a glance

The Funding

- Received in 2012-2017: 201 million DKK from the NNF to establish the DDA
- Received in 2018-2022: Additionally, 156 million DKK from the NNF for another five-year funding of the DDA

Main Collaborators: Nationally and Internationally 2020

- The DDA collaborated with Danish universities, university hospitals, the life science industry and the Danish Diabetes Association when organising educational activities
- The DDA organised online and face-to-face educational activities and networking activities in collaboration with DDA visiting professors, researchers from Cambridge University, United Kingdom, University of Graz, Austria, and Lausanne University Hospital, Switzerland
- The DDA and DDA-funded researchers established 63 collaborations

Scientific Publications, Dissemination and Further Funding by DDA-funded researchers

- DDA-funded researchers published 50 unique publications
- DDA-funded researchers reported a total number of 59 dissemination activities with most talks at conferences and participations in workshops
- DDA-funded researchers reported further funding of 7.4 million DKK in total

DDA on Social Media

- Twitter (DDA-Denmark): Number of followers 912
- LinkedIn (Danish Diabetes Academy): Number of followers 2,511
- Instagram (danish_diabetes_academy): Number of followers: 216
- Youtube (Danish Diabetes Academy): Number of views: 1,762

The DDA uses the following hashtags:

#Danishdiabetesacademy
#DDA_education
#DDA_network
#DDA_grant

In 2020, the number of the Organisation was

140



DDA Educational Activities and Talent Development 2020

14
14 PhD and postdoc courses and symposia

18
webinars

Around
1000
participants in total

Around
35%
of the invited speakers at the DDA PhD and postdoc courses and symposia/seminars were from abroad

Vision

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

Mission

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

DDA Networking and Collaboration Activities 2020

The DDA allocated more than 30 million DKK to the following grants in open and free competition in 2020:

11
networking and collaboration activities

Around
400
participants in total

DDA Recruitment and Grant Activities 2020

The DDA allocated more than 30 million DKK to the following grants in open and free competition in 2020:

14
PhD scholarships (2/3-financed and 1/3-financed), including one industrial PhD scholarship

10
postdoc fellowships (two-year and three-year)

8
visiting professorships

The DDA presented the two DDA Awards:

The DDA-Funded Scientist Award
25,000
DKK

The Young Investigator Award
25,000
DKK

Organisation and Operations

The DDA has a supportive, active and high-calibre governance structure and an Executive Management Team that ensures that the organisation is effective and delivers on its mission and strategic objectives. In 2020, the DDA demonstrated the agility and resilience of the organisation as it quickly pivoted its approach to ensure the delivery of high-quality online education and networking activities facing the challenging conditions related to the Covid-19 pandemic.

Organisation and Management

A Board of Directors (BoD) heads the DDA and is responsible for defining and implementing the overall strategy of the DDA. The Executive Management Team and the four bodies (the International Advisory Board (IAB), the Committee for Education, the National Advisory Forum and the Committee for Talent Development) support the BoD.

The organogram below (**Figure 1**) shows the organisation of the DDA.

Detailed information about the tasks and responsibilities, meetings and the members of each of the DDA's bodies is at the DDA website

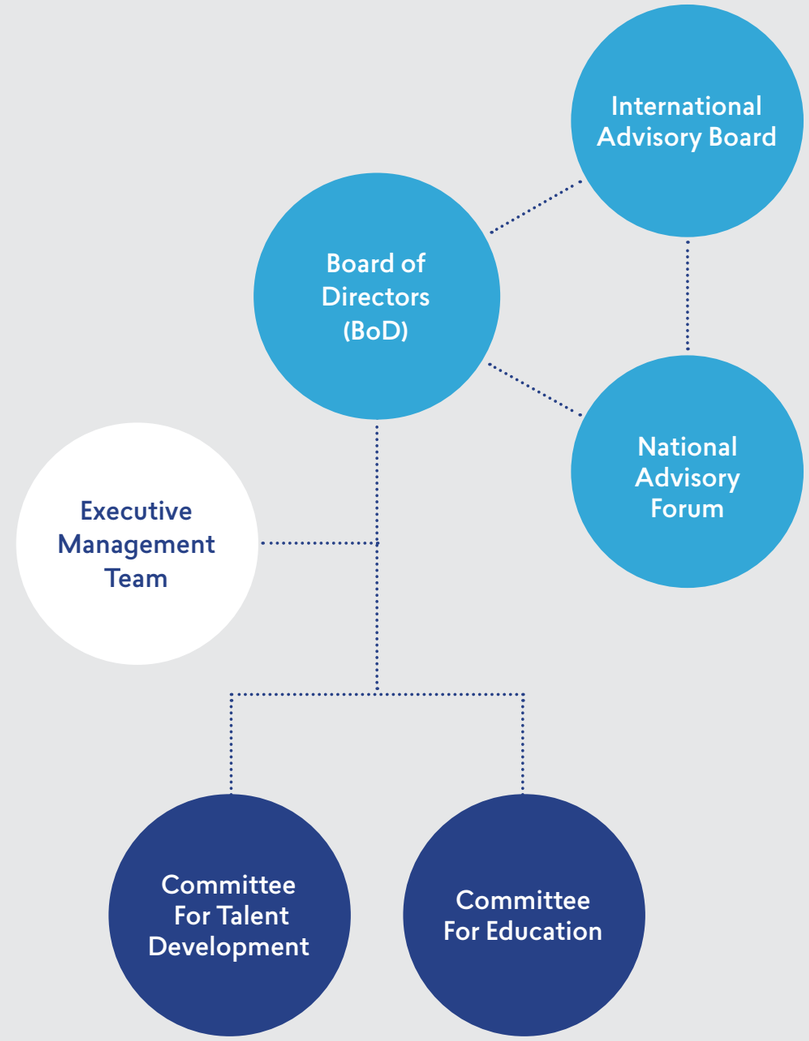


Figure 1. Organogram of the DDA

Strategic Focus and Activities 2020

Depending on their tasks and responsibilities, the boards and committees had different strategic focuses for their work and meetings in 2020.

On the five occasions when the BoD met in 2020, they focused on the strategic approach for how the Executive Management Team should manage the Covid-19 pandemic in relation to the management of the educational and networking activities. Further, the BoD focused on the strategic approach to the self-evaluation report and the strategy document for a potential DDA version 3.0, which the DDA must submit to the NNF in May 2021.

The two planned meetings of the IAB, at the Annual Sessions of the American Diabetes Association (ADA) in Chicago, USA, and at the Annual Meeting of the European Association for the Study of Diabetes (EASD) in Vienna, Austria, were cancelled owing to the Covid-19 pandemic. However, the DDA engaged continuously with the chair of the IAB to discuss the strategic approach to the self-evaluation report and the strategy document (see above) and to receive feedback and recommendations for the DDA activities.

The National Advisory Forum met only once (online) in 2020 owing to the Covid-19 pandemic. The Forum focused on what the narrative about the DDA is today, and what the DDA narrative should look like in 10 years, e.g. what should be optimised and which initiatives should be developed.

In 2020, the Committee for Education held only one meeting focusing on developing the educational programme taking into consideration the Covid-19 pandemic. In particular, the strategic focus was on discussing how to implement and strengthen the DDA online educational and networking activities.

The Committee for Talent Development did not meet in 2020, but the BoD held two videoconferences with the two chairs of the committee to discuss and evaluate DDA grant applications and the grant review process. The committee was expanded in 2020 to include more members within clinical research and technology to address the issue of recruiting more clinical researchers. The committee now consists of 93 well-esteemed international peer reviewers with a robust scientific background.

In 2020, the seven members and the two student assistants of the Executive Management Team focused on establishing the DDA as a professional provider of online courses and webinars within diabetes research, as the restrictions on public assembly called for a conversion of the face-to-face events into online courses. Further, the Executive Management Team focused on providing service and support to the members of the DDA bodies, the main target groups (junior diabetes researchers and senior researchers at Danish research institutions) and other main collaborators from Denmark and abroad. In addition, the team concentrated on increasing communications through the DDA website and social media.

Overall, despite the challenges related to the Covid-19 pandemic in terms of restrictions on public assembly, the DDA organisation managed to run agilely and efficiently, and the DDA appreciates the flexibility, commitment and involvement demonstrated by the members and chairs of the DDA bodies.

Reflections and Future Focus

The focus of the DDA organisation in 2021 will be to continue to deliver high-profile educational and networking activities, including further strengthening the online profile based on the experiences gained in 2020. Another focus point will be to strengthen the national hub within diabetes research through digital outreach and communications on the DDA website and social media.

In 2021, the Executive Management Team and the BoD, together with relevant members of the DDA bodies, will pay special attention to the self-evaluation report and the strategy document, which the DDA must submit in May 2021.

In conclusion, the Executive Management Team will continue to maintain the agile and efficient day-to-day management of the DDA activities and ensure implementation of suggestions from the DDA bodies and the overall strategy decided by the BoD. An important point of attention will also be to maintain the excellent collaboration with the members of the DDA bodies, the junior diabetes researchers and the DDA's main collaborators, and to establish a collaboration with the newly established Danish Cardiovascular Academy.

Budget and Accounts 2020

The DDA is financed by the NNF and is hosted by Odense University Hospital (grant holder). In 2020, the grant budget amounted to 47,292,216 DKK. The budget and accounts for 2020 can be seen in **Table 1** and **Figure 2**. The DDA experienced a surplus in 2020 of 9.1 million DKK, mainly due to the effect of Covid-19 on the educational and networking activities (rescheduling, cancellation or transfer to online activities) and due to unallocated industrial postdoc fellowship grants.

The majority of the DDA's educational and networking activities were indirectly co-funded by Danish and international research institutions by providing speakers or extra funding for conducting the activities. An exact overview of this co-funding is not available.

DDA-funded researchers reported additional funding of more than 7.4 million DKK in total, based on their grants from the DDA (see page 69 and DDA Dialogue Report 2020).

Financial report (Amounts are stated i 1,000 DKK)	Budget	Result	Difference
Educational Activities and Talent Development	4,350	1,645	2,705
Networking and Collaboration Activities	700	225	475
Grants	35,550	29,969	5,581
Executive Management Team (salary)	4,154	4,376	-222
Running Costs	1,830	1,276	554
Host institutions' direct costs associated with DDA	708	709	0
Total	**47,292**	**38,199**	**9,093**

Table 1. The 2020 budget compared with the results for 2020, including the difference between the budget and the results. Amounts are in 1,000 DKK.

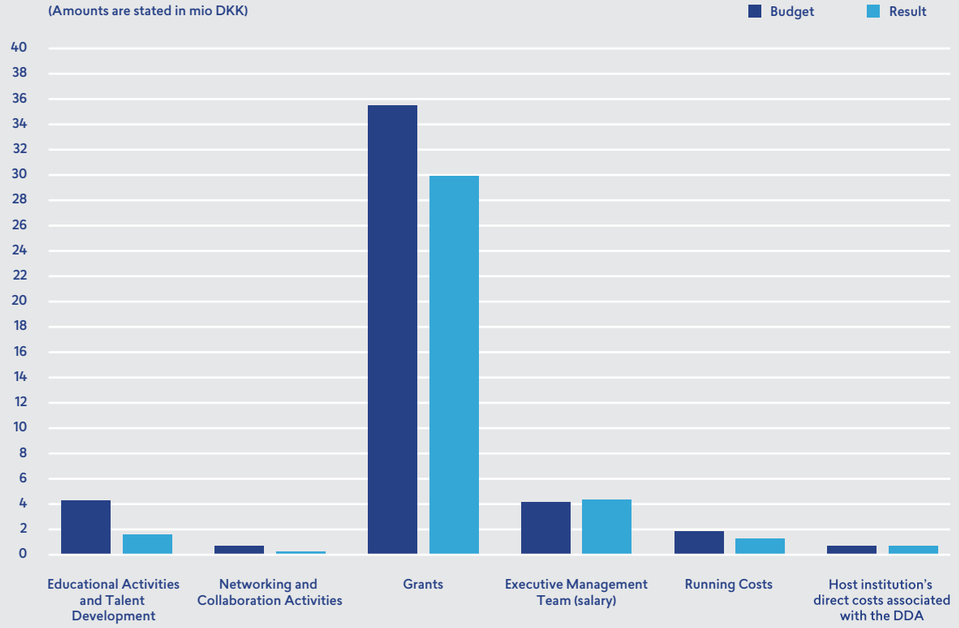


Figure 2. The 2020 budget compared with the results for 2020. Amounts are in 1,000 DKK.

Communications

The overall aim of the DDA's communications activities is to create measurable visibility around the DDA's value-creating work in educating and training junior researchers as well as highlighting the DDA's unique network spanning the diabetes field.

This ambition is achieved by explaining the value of the DDA within education, networking and recruitment to target groups and stakeholders and by making the DDA's activities visible to those target groups and stakeholders.

The main target groups of the DDA's communications and outreach activities are junior and senior diabetes researchers at universities, hospitals and in the life science industry in Denmark. Secondary target groups include diabetes researchers and collaborators from abroad, professional organisations, politicians and European Union (EU) research consortia.

The DDA's communications rely on five primary channels: the DDA website, newsletter, Twitter, LinkedIn and press. Of these, the website plays a central role and has the highest priority in terms of resources.

Further information about the DDA communications activities is in the DDA Communications Strategy.

Strategic Focus and Activities 2020

In 2020, the strategic focus of the DDA's communications activities has been to implement the revised DDA communications strategy (see above).

In line with this, the strategic focus has been to work towards functioning as a national hub within diabetes research through digital outreach and communications (website, newsletter, Twitter and LinkedIn) and by posting events and stories based on the DDA's activities, junior researchers' publications and collaborators' education and networking activities.

The DDA increased its activities on LinkedIn and Twitter in 2020. The DDA posted 119 status updates on LinkedIn - 2.28 on average per week - and 100 status updates on Twitter - an average of 1.92 per week throughout the year. The number of followers increased by more than 50% as compared with 2019 on both channels (see **Figure 3**). In 2020, the DDA also launched an Alumni Network LinkedIn profile and a newsletter for members of the DDA Alumni Network (55 followers) (see page 49). The DDA posted 20 status updates on LinkedIn and issued five newsletters.

The new initiative, the DDA Instagram profile, is growing and has reached around 220 followers. The DDA closed its Facebook group in 2020, as an audit of the membership list revealed only a few members in the DDA target group, and the effort involved in keeping the site regularly updated was too great.

In 2020, another focus point was the launch of a revamped website, which included a refreshed graphic profile and a more user-friendly design. The DDA used the DDA website and the monthly DDA newsletter to disseminate information about the DDA's activities. The newsletter was received by around 2,400 subscribers, and total page views at the DDA website in 2020 (60,486) were similar to 2019 (58,315).

Finally, based on interviews with newly DDA-funded PhD students, postdocs, visiting professors and DDA grant awardees, the DDA achieved media coverage 76 times in 2020 in media including newspapers, electronic periodicals and Danish university and university hospital websites. This is a slight decrease compared to data from 2019, where the DDA achieved media coverage 93 times.

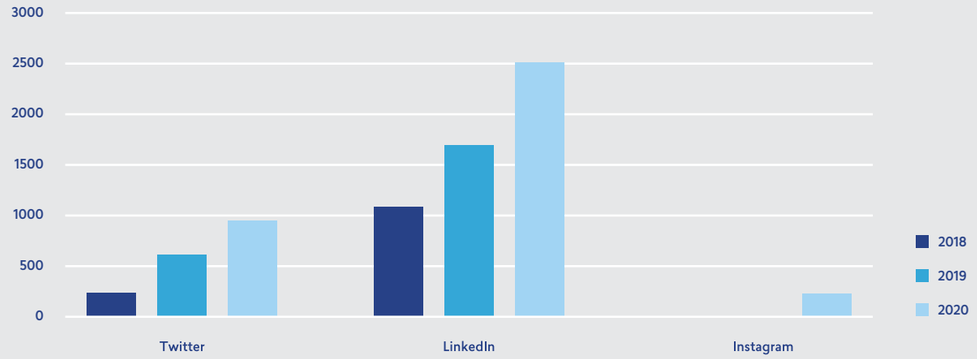


Figure 3. Number of followers of the DDA social media channels (Twitter, LinkedIn and Instagram) as per 31 December 2018, 2019 and 2020, respectively.

Reflections and Future Focus

A future focus point will be to highlight the three main strategic communication messages through the DDA website and social media (LinkedIn, Twitter and Instagram), namely that the DDA:

- offers education and training, networks and financial resources for research grants
- is career-promoting
- facilitates and enables networking and collaboration across the diabetes area as well as arranging workshops, courses and seminars

Thus, the future focus of the DDA's communications activities is to maintain and strengthen the use of social media (LinkedIn, Twitter and Instagram) for dissemination of relevant information to the DDA's main target groups. Digital outreach and communications on the DDA website and social media, e.g. regarding DDA activities, stories based on DDA-funded researchers' publications and upcoming activities organised by national and international research groups, will also support the DDA's ambition to strengthen its role as a national hub within diabetes research. In line with this, another point of attention will be to give junior diabetes researchers the opportunity to disseminate their research or recently published peer-reviewed articles through webinars on the DDA channels.

In conclusion, in 2020, the DDA implemented the revised DDA communications strategy, launched a new website, and, in 2021, the DDA will focus on maintaining and strengthening the use of social media (LinkedIn, Twitter and Instagram) and website for dissemination of relevant information to the DDA's main target groups.

Educational Activities and Talent Development

The overall aim of the DDA's Educational Activities and Talent Development programme is to strengthen the research training available to PhD students and postdocs within the field of diabetes at research institutions in Denmark. A close and strong collaboration with national and international universities, university hospitals and the life science industry is the prerequisite to success.

The DDA's ambition is to be recognised for world-class, internationally oriented PhD and postdoc courses, symposia and seminars within diabetes that have an interdisciplinary focus. Furthermore, the ambition is to strengthen PhD students' and postdocs' critical reflection and their ability to put the acquired competences to use.

This ambition is achieved by organising a number of well-attended activities including national and international speakers from a wide range of research disciplines and receiving high participant satisfaction ratings for the scientific programme and the management of the activities.

Strategic Focus 2020

Because of the Covid-19 pandemic, the DDA expanded its strategic approach in 2020 for organising the Educational Activities and Talent Development programme.

The restrictions on public assembly due to the outbreak of the Covid-19 pandemic in Denmark in March called for a conversion of face-to-face events into online events. Therefore, the DDA prioritised establishing itself as a professional provider of online courses and webinars within diabetes research.

A particular focus in 2020 was on building closer collaborations with the life science industry. Thus, the DDA strove to include scientific presentations from the life science industry at the PhD and postdoc courses and symposia, but also organised a series of webinars to highlight junior researchers' career opportunities in the life science industry.

Another strategic focus was on establishing a stronger collaboration with the Danish Diabetes Association to enable interaction between junior researchers and people living with diabetes.

A continuous strategic focus was to ensure variety in the programme. Thus, the programme included courses and sessions on a broad range of diabetes topics with elements of basic, translational, clinical, qualitative and epidemiological research. The programme also included courses on transferable skills, such as presentation and leadership skills, and methods courses relevant to diabetes research, such as R-programming and reproducibility of data.

The incorporation of interdisciplinary research into the educational activities presented by junior and senior researchers from national and international research institutions at universities, hospitals and the life science industry remained a strategic focus in 2020.

The strategic approach for planning the educational and talent development activities involved a bottom-up process with suggestions from members of the DDA faculty and the DDA committees and boards. Importantly, junior researchers were included in the organisation of the activities. An example of this is on page 24.

Behind the scenes of the DDA Summer School

Sophia Metz, MSc, PhD student, University of Copenhagen, Novo Nordisk Foundation Center for Basic Metabolic Research

I attended the DDA summer school the first time in 2019 as a first-year PhD student. It was an impressing event with engaging lectures, interesting people and great networking. Therefore, I did not have to think twice when the DDA looked for a PhD student to join the summer school organizing team. Being on "the other side of the fence" has been an amazing experience and outstanding opportunity of various reasons:

Without doubt, I can say that I have learned a lot about the "behind the scenes" processes of such an event: Brainstorming the sessions, topics to discuss, speakers to invite and how to combine all of it into a four-day long event with great content and networking opportunities. I absolutely admire the passion that the organizing team invests every year into making the summer school a great experience for the students. Especially, this past year has been a challenge for all of us, but the Summer School 2020 is still one of my highlights in a year full of uncertainty – both, by being an organizer and a participant.

Altogether, it was a great chance to sneak-peek into the preparation efforts of the DDA Summer School and it was, and still is, a pleasure to work together with group leaders from all over Denmark and the wonderful and motivated team from the DDA to create yet another exciting Summer School in 2021.
I am looking forward to some exciting and inspiring days next summer!



Educational Activities and Talent Development 2020

In 2020, the DDA organised a total of 32 PhD and postdoc courses, symposia and webinars, which attracted around 1,000 participants, mostly junior diabetes researchers (master's students, PhD students and postdocs) from universities, university hospitals and the life science industry in Denmark and abroad. Up to 75% of all activities in 2020 were online as compared to previous years where all activities were face-to-face.

Three planned symposia, one PhD course and the Winter School for postdocs were cancelled or rescheduled for 2021 because of Covid-19.

The face-to-face and online programme spanned a wide variety of topics and included PhD courses, postdoc courses, symposia and webinars within diabetes research (**Tables 2** and **3**), methods courses relevant to diabetes research (**Table 4**), transferable skills courses (**Table 5**) and webinars on what working in the life science industry is like (**Table 6**). The programme received generally high satisfaction scores (**Figures 4** and **5**) from participants for the scientific programmes, the composition of the programmes and their organisation.

Importantly, the junior researchers reported that the courses widened their network with colleagues across universities in Denmark and abroad and gave them a unique opportunity to discuss their research and career opportunities with national and international researchers from universities, university hospitals and the life science industry. An example of the output reported by a participant at the DDA Summer School for PhD students is on page 28.

Despite last-minute reorganisation, cancellation of presentations and restructuring of the planned face-to-face educational programme into online events, satisfaction with the scientific programmes, the composition of the programmes and the organisation of the activities was relatively high (**Figure 4**).

PhD and Postdoc Courses and Symposia on Diabetes and Metabolism Research

The DDA organised five PhD and Postdoc courses and symposia on diabetes and metabolism research, one face-to-face and four as online events (**Table 2**). Three of the events included one or more scientific presentations by researchers from the life science industry. Around 35% of the invited speakers at the DDA PhD and postdoc courses and symposia/seminars on diabetes and metabolism research were from abroad.

Participants were introduced to, and gained increased knowledge and understanding of, the variety of ongoing basic, clinical, qualitative and translational research in topics such as circadian rhythm and metabolism, the brain muscle axis, obesity, diabetes and heart disease, hypoglycaemia, retinopathy screening, drug development and personalised medicine.

Activity	Format	Participants	Life science industry represented?	Invited speakers from abroad
DDA Summer School for PhD students	Face-to-face	52	Yes	26%
DDA & Cambridge University: PhD and postdoc course on Metabolic Aspects of the Brain Muscle Axis	Online	37	No	45%
PhD course on Basal Metabolism and Molecular Mechanisms in Diabetes	Online	39	Yes	0%
Symposium: Will Future New Technology Solve Retinopathy Screening Challenges?	Online	31	No	13%
Symposium on Resetting the Clock to Mitigate Cardiometabolic Diseases by Timing of Food, Exercise and Sleep (no further description available online)	Online	77	Yes	90%

Table 2. The DDA's PhD and postdoc courses and symposia on diabetes and metabolism research, showing activity, format (face-to-face vs. online), number of participants and whether the life science industry was represented. Further descriptions and programmes of the activities can be found by clicking on the title links.

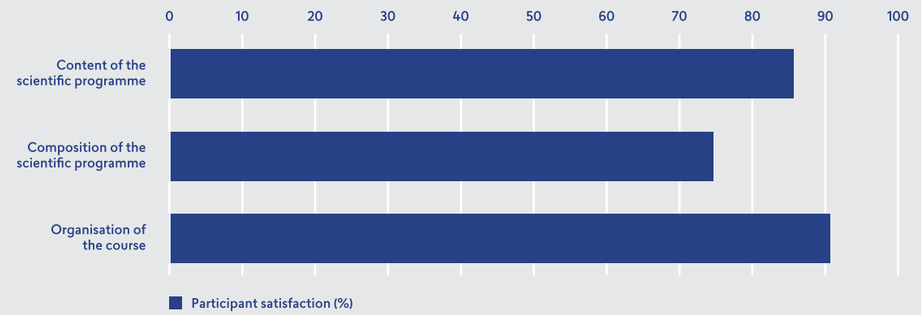


Figure 4. The average participant satisfaction (%) with the DDA PhD and postdoc courses and symposia/seminars on diabetes and metabolism research in 2020. Participants (%) stated that they were satisfied to either a very great (5) or a large (4) extent (on a five-point scale) with the composition and the content of the scientific programme and the overall organisation of the course.

What I gained from participating in the DDA Summer School

Malene Revsbech Christiansen, MSc, PhD student, University of Copenhagen, Novo Nordisk Foundation Center for Basic Metabolic Research

As a participant at the DDA Summer School for PhD students in 2020, I have only positive memories of the four days spend in the beautiful landscape of Funen. The academic content of the summer school was unique and I learned a lot of new aspects on diabetes, different from the aspects I am usually exposed to and working with in my own research. Despite most physical international borders were closed due to the corona situation, the DDA succeeded in engaging multiple international speakers via online streaming. This yielded the feeling of an international conference even though the circumstances did not allow for physical presence.

Personally, my boundaries got challenged by the mandatory 1-minute poster pitch that all PhD students had to present in front of a big crowd, and I improved my competences by telling others about my research from the poster sessions.

Besides a great scientific programme, one of the best things about the summer school was the networking in great surroundings. Meeting PhD students from other institutions was highly valuable to me. Not only did I learn a lot about other exciting PhD projects from oral presentations, but I also expanded my network and found potential collaboration partners for future projects. I am outermost satisfied with this excellent event organised by the DDA, and I left four intense days with a feeling of excitement, new inspiration and reawakened motivation.



Webinars on Diabetes and Metabolism Research

The DDA organised 12 webinars on diabetes and metabolism research (**Table 3**). The presenters were mainly DDA-funded junior researchers and DDA-funded visiting professors. The structure of the webinars were a 20-25 minute presentation and 10-15 minutes for questions and discussion.

With the implementation of webinars that attracted nearly 400 participants, the DDA gained flexibility and a cost-effective way to educate and train junior researchers on diabetes and metabolism-relevant topics. It also gave the DDA the opportunity to attract researchers worldwide to join the webinars (more than 20 countries were represented). As an important additional benefit, the webinars branded the DDA worldwide and showed the DDA as an institution with an ambition to train and educate the next generation of researchers in diabetes and metabolism at the highest international level. In addition, the webinar platform gave the DDA the opportunity to introduce the DDA-funded visiting professors and their projects to the Danish research community, also highlighting the DDA's visiting professor programme for those potentially interested. Recording webinars gave the opportunity to build an online DDA library of scientific educational sessions, which is available at the DDA webpage and on the DDA YouTube channel.

An example of a junior researcher presenting at one of the DDA webinars is on page 32.

Activity	Presenter	Participants	Participants from
Cost of Treating Skin Problems in Patients with Diabetes Who Use Insulin Pumps and/or Glucose Sensors	DDA-funded PhD student Anna Korsgaard Berg, University of Copenhagen	26	Denmark, Belgium, Sweden and Switzerland
Glucose-Insulin Axis in First Trimester of Pregnancy and Foeto-Placental Growth	DDA-funded visiting professor Gernot Desoye, Medical University of Graz, Austria	28	Denmark, United Kingdom, Australia, USA, Sweden and Germany
The Unidentified Hormonal Defense against Weight Gain	DDA-funded PhD student Jens Lund, University of Copenhagen	62	Denmark, United Kingdom, Australia, USA, Sweden, Germany, Estonia Norway, the Netherlands, China, Portugal, Italy and Brazil
Oxyntomodulin and Glicentin May Predict the Effect of Bariatric Surgery on Food Preferences and Weight Loss	Postdoc (former DDA-funded PhD student) Mette Søndergaard Nielsen, University of Copenhagen	8	Denmark, United Kingdom, Sweden and Germany
High Prevalence of Gestational Diabetes Mellitus in Rural Tanzania	Postdocs (previously and currently DDA-funded) Louise Groth Grunnet, Steno Diabetes Center Copenhagen, and Line Hjort, Rigshospitalet	15	Denmark, United Kingdom, Sweden and Tanzania
The Dialogue between Target Tissues and the Immune System in Type 1 Diabetes and Other Autoimmune Diseases	DDA-funded visiting professor Decio Eizirik, Université Libre de Bruxelles, Belgium	24	Denmark, Sweden, Canada, Norway, Portugal, India, Spain, China and Finland
3D Imaging Diabetes with Light Sheet Microscopy	Principal scientist Jacob Hecksher-Sørensen, Gubra	33	Denmark, United Kingdom, the Netherlands and Germany
Lost in Translation: How to Improve the Translatability of Rodent Models of Diabetic Kidney Disease	Senior scientist Mette Viberg Østergaard, Gubra	18	Denmark, Sweden, United Kingdom and USA
Is It Time to Question Euglycaemic Hyperinsulinaemic Clamps for Muscle Insulin Sensitivity?	DDA-funded visiting professor Glenn McConell, Institute of Health and Sport, Victoria University, Australia	55	Denmark, United Kingdom, Australia, USA, Sweden, Germany, the Netherlands, China, Portugal, Chile and Switzerland
Adapting Gestational Diabetes Mellitus Diagnosis to the COVID-19 Pandemic	DDA-funded visiting professor David McIntyre, Mater Health and University of Queensland, Australia	28	Denmark, United Kingdom, Australia and Germany
Sex, Drugs and Exercise: Studies Investigating the Metabolic Side Effects of Antipsychotic Drugs	DDA-funded visiting professor David Wright, University of Guelph, Canada	35	Denmark, United Kingdom, Canada, Sweden, Germany, Ireland, Japan, Italy and India
Exploring Islet Cell Sub-Types in Health and Type 2 Diabetes.	DDA-funded visiting professor Patrick MacDonald, University of Alberta, Canada	48	Denmark, United Kingdom, Canada, USA, Sweden, France, Austria, India, Spain, Belgium Germany, Brazil and Switzerland

Table 3. The DDA's webinars on diabetes and metabolism research, showing activity, presenters, number of participants and country of participants. Further descriptions of the activities can be found by clicking on the title links.

Presenting at a DDA webinar can lead to international network

Jens Lund, MSc, PhD student, University of Copenhagen, Novo Nordisk Foundation Center for Basic Metabolic Research

In June 2020, the DDA gave me the opportunity to present an 'Unsolved Mystery'-paper that I had first-authored in PLoS Biology a few months earlier. The paper discussed the existence of an unidentified hormonal defense system against weight gain, and the webcast hosted by the DDA allowed me to present our thoughts - not just to international colleagues and group leaders in metabolic research, but also to lay people with an interest in the obesity epidemic. Importantly, the advertisement of the webcast on Twitter caught the attention of a prominent obesity biologists, John Speakman, and thus helped highlighting myself as an junior researcher within the field of body weight regulation. To me, this is a great example of how the DDA provides opportunities for junior researchers to establish an international network.



Methods Courses Relevant to Diabetes Research

The DDA organised four PhD and postdoc methods courses relevant to diabetes research in collaboration with current or former DDA-funded PhD students or postdocs (**Table 4**).

As the ability to generate massive amounts of data increases and calls for transparent data analysis and improved reproducibility grow stronger, researchers need modern tools to handle these growing demands and tasks. There is therefore a growing realisation among researchers, especially junior researchers, that there is a need for training in methods courses on the reproducibility challenges in diabetes research.

Increased competencies in processing and wrangling datasets; improved proficiency in using the R-statistical computing language; and know-how on writing reusable and well-documented code were some of the outcomes reported by participants on the R-programming course. Additionally, participants indicated that skills in R are in demand in the life science industry, and thus improved proficiency in R increases their ability to succeed in this sector.

The DDA will bear in mind the increased need for the above competences when planning the future DDA educational programmes.

Activity	Format	Participants	Presenter/organiser
What happens when research results cannot be reproduced	Online	29	Kristian Hvidtfeld Nielsen, Aarhus University
PhD & postdoc course on Reproducible Research in R: An introductory course	Face-to-face	23	DDA-funded postdoc Luke W. Johnston, Steno Diabetes Center Aarhus
PhD & postdoc course on Intermediate Course on Reproducible Research in R	Face-to-face	20	DDA-funded postdoc Luke W. Johnston, Steno Diabetes Center Aarhus
PhD & postdoc course on Meeting the Reproducibility Challenges in Research - Importance of Quality Assessment in the Laboratory	Face-to-face	17	Former DDA-funded PhD student Rikke Hjortebjerg, Odense University Hospital, and Assistant Professor Mette Bjerre, Aarhus University Hospital

Table 4. The DDA PhD and postdoc courses on methods relevant to diabetes research, showing the activity, format (face-to-face vs. online), number of participants and presenters/organisers. Further descriptions and programmes of the activities can be found by clicking on the title links.

Transferable Skills Courses

The DDA organised five PhD and postdoc courses on transferable skills, including an event organised in collaboration with the Danish Diabetes Association (**Table 5**).

For scientists, dissemination of knowledge to fellow researchers and clinicians and to the general public is necessary to collaboratively develop solutions to today's challenges in diabetes and diabetes research for the benefit of people living with diabetes. The majority (90%) of the participants at the course on Presenting Powerfully reported that their presentation skills improved compared with their competences prior to the course. Further, the videos produced by the participants at the course on How to Present Your Research to the Public and published at the Danish Diabetes Association's website and on social media in general gained a lot of attention and comments. Watch the videos and read the output of a participant on page 38.

In general, the scores for participant satisfaction with the courses on methods relevant to diabetes research and the transferable skills courses were high (**Figure 5**), even though the last-minute reorganisation and restructuring of the courses affected their implementation.

Activity	Format	Participants
Personal Performance Course I and II	Face-to-face	23
Presenting Powerfully – PhD & Postdoc Presentation Course	Face-to-face	16
Project Management in Research for Postdocs	Face-to-face & online	20
How to Present Your Research to the Public	Face-to-face & online	8
Poster Presentation Workshop for DDA-Funded Researchers (no further description available online)	Online	12

Table 5. The DDA PhD and postdoc transferable skills courses, showing the activity, format (face-to-face vs. online) and number of participants. Further descriptions and programmes of the activities can be found by clicking on the title links.

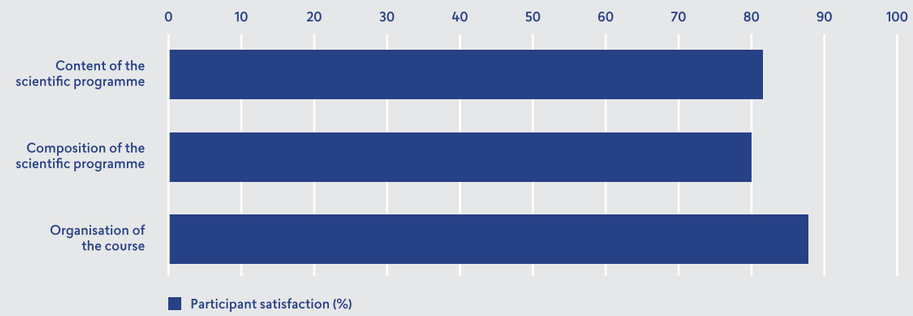


Figure 5. The average participant satisfaction (%) with the DDA PhD and postdoc courses and transferable skills courses 2020. Participants (%) stated that they were satisfied to either a very great (5) or a large (4) extent (on a five-point scale) with the composition and the content of the scientific programme and the overall organisation of the course.

Do I dare?

Maria Hornstrup Christensen, Midwife, PhD student, University of Southern Denmark, Steno Diabetes Center Odense

Do I dare? I asked myself that question quite a few times… Leaning sometimes a little bit towards the shy, introvert spectrum, the idea of attending the DDA course 'How to present your research to the public' – with the aim of putting myself in front of a camera and telling 'the whole world' about my research – felt very scary AND very appealing at the same time… But I DID dare! And I not only attended, but also very much enjoyed an inspiring and 'push-myself-out-of-my-comfort-zone' course! I, and my fellow attendees, were given insights and tools as to how to frame and deliver an important message in a meaningful and catchy way. Quite a gift to be given, actually! It didn't come without costs, though, as I nearly ended up putting myself in a position of bad standing at home because of countless re-takes of the 3-minute video we were asked to produce for the Danish Diabetes Association and the DDA, hereby pushing my family to the edge of their patience with me… But it was an important video with an important message to important people so how could it be possible to settle for less than numerous re-takes?! And I DID manage to convey my message on social media and I DID get a lot of response, which was really nice! Would I do it again? It would be a definite NO! Quickly followed by a big YES!! Because that's what a well-organized and highly relevant course like that can do: shake you if you are willing to dare to take the challenge and leave you with a great professional and personal gift to be used on numerous occasions – if you are lucky, maybe even as numerous as my video re-takes!



Webinars on Career in Life Science Industry

In collaboration with six national and international life science companies, the DDA organised a series of webinars for junior researchers with the aim of pointing out how it is to work in a life science company (**Table 6**).

The collaboration with the life science industry increased awareness in this sector of the DDA and the national and international network of junior researchers. The series of webinars attracted interest from junior researchers from over 20 different countries including Sweden, Germany, United Kingdom, the Netherlands, Austria, Switzerland, Spain and the USA. The series facilitated a dialogue between the life science sector and junior researchers about their career opportunities, what working in the life science industry is actually like and what challenges they would face if changing from academia to the industry.

Company	Participants
Zealand Pharma	48
Novo Nordisk A/S	61
Nordic Biosciences	41
Follicum	23
RSP Systems	23
Sanofi Aventis	53

Table 6. The DDA series of webinars on Career in Life Science Industry, showing the company and the number of participants. Further descriptions of the activities can be found at Career in life science industry? A series of webinars.

Reflections and Future Focus

In the light of the Covid-19 pandemic, the need for online courses and webinars is clear. The online format has several advantages over traditional face-to-face activities, e.g. cost and time, safety, less travelling, a better green profile and the opportunity to invite speakers and participants from around the world. Therefore, it is the DDA's ambition to continue to be a strong provider of online courses and webinars in addition to face-to-face- activities, also beyond Covid-19. The next step could be to establish opportunities for PhD students and postdoc researchers within diabetes and metabolism to access expert training through a Nordic or European platform in collaboration with strong diabetes research institutions and populating it with relevant courses. This could also serve as a facilitator of networking between institutions and junior researchers.

For the last couple of years, the feedback from participants has consistently shown how valued the space and time allocated for face-to-face networking at educational activities is. The main disadvantage of online courses and webinars is the challenge of facilitating fruitful networking between the participants. Consequently, the online courses have evolved to include more networking activity, e.g. the use of breakout rooms and hybrid formats where 5-10 participants are gathered in small meeting locations around in Denmark in combination with an online course, and downsizing the length of the scientific presentations. The DDA will therefore continue to adopt this approach in 2021.

The DDA tapped some of the unresolved potential in building a closer collaboration with the life science industry through a variety of educational activities where researchers from more than 10 national and international life science and biotech companies were involved. It is the DDA's ambition to continue the focus on highlighting junior researchers' career opportunities in life science and to highlight the potential in establishing collaborations between the public and private sectors.

The new partnership with the Danish Diabetes Association on the course on How to present your research to the public is encouraging and of mutual benefit. Therefore, the DDA and the Danish Diabetes Association have agreed to continue to facilitate interaction between junior researchers and people living with diabetes. The partnership may also evolve into joint events such as at the Folkemødet on Bornholm, Denmark.

Partnerships on educational and networking activities with international research institutions or individual researchers are still a prioritised focus area of the DDA. Only a few of the DDA's visiting professors were able to visit their host institution in Denmark in 2020 because of the Covid-19 pandemic. This led to the organisation of the webinar series with DDA visiting professors in 2020. The series of webinars will continue in 2021, and it remains a prioritised focus to involve the visiting professors in relevant face-to-face PhD and postdoc courses and symposia, if possible. In addition, the DDA has established partnerships for the educational activities in 2021 and 2022 with researchers from Cambridge Metabolic Network, United Kingdom; Edinburgh University, United Kingdom; Lund Diabetes Center, Sweden; Kiel University, Germany; and Maastricht University, the Netherlands. In addition, the DDA has established a partnership with the newly established Danish Cardiovascular Academy for activities in 2021 and 2022. These partnerships will strengthen the educational and talent development programme for junior researchers.

It remains a priority to include pedagogic learning approaches and teaching methods, e.g. more interactive training and group discussions, in the educational activities (both online and face-to-face) throughout the year. In 2021, it is the plan to introduce an additional initiative to improve the presentation skills of speakers/instructors and thereby increase the quality of the educational activities offered by the DDA. The initiative is a train-the-trainer concept developed by the DDA, which is an optional e-learning course for all speakers/instructors presenting at DDA activities.

In conclusion, because of the Covid-19 pandemic, the DDA shifted focus from being a provider of only face-to-face educational activities to being an established professional provider of both face-to-face and online courses and webinars within diabetes and metabolism. This shift made it possible to invite speakers and attract participants from all around the world and brand the DDA internationally. The Educational Activities and Talent Development programme in 2020 included a wide variety of topics within diabetes research presented through the PhD and postdoc courses, symposia and webinars and included methods courses relevant to diabetes research and transferable skills courses. The DDA tapped some of the unresolved potential in building a closer collaboration with the life science industry and the Danish Diabetes Association.

Networking and Collaboration Activities

The overall aim of the DDA's Networking and Collaboration activities is to position the DDA as a national hub within diabetes unifying universities, university hospitals and the life science industry in Denmark, and thereby contribute to strengthening educational activities and talent development within the area.

The DDA's ambition is to facilitate collaboration between junior diabetes researchers at Danish research institutions and researchers from Danish and international research groups across disciplines, professional societies and the life science industry or other sectors.

This ambition is achieved by organising a number of well-attended and highly rated networking and collaboration activities in close collaboration with national and international researchers from universities, university hospitals and the life science industry.

Strategic Focus 2020

As a new concept and strategy, the DDA prioritised establishing online networking activities for junior researchers, as restrictions on public assembly due to the Covid-19 pandemic called for a conversion of face-to-face events into online events.

The DDA continued the bottom-up process where the Executive Management Team invited DDA members, including PhD students and postdocs, to suggest new activities for the Networking and Collaboration programme to ensure that the networking and collaboration activities featured relevant and topical themes.

The DDA continued building bridges between DDA-funded researchers through the establishment of a DDA Alumni Network, peer-to-peer mentoring groups and the incorporation of high interactivity in the networking activities.

The DDA used the Networking and Collaboration activities and the grant applications to the EU Horizon 2020 and Erasmus programmes to facilitate collaboration with researchers and key opinion leaders from national and international research institutions.

Networking and Collaboration Activities 2020

In 2020, the DDA organised a total of 11 Networking and Collaboration activities and collaborated on five additional networking activities, which attracted around 400 participants from Denmark and abroad, with a mix of junior and senior researchers from universities, university hospitals and the life science industry.

Because of Covid-19, six planned Networking and Collaboration activities, including the DDA Annual Day, were cancelled or rescheduled for 2021, and around 50% of the activities were organised as online activities.

The face-to-face and online programme for junior researchers spanned a wide variety of activities and included Networking and Collaboration activities within diabetes research (**Table 7**), activities for DDA-funded junior researchers including the DDA Alumni Network (**Tables 8** and **9**), workshops on improving the research culture and the establishment of networks relating to applications to the EU Horizon 2020 programme.

The Networking and Collaboration programme received generally high satisfaction scores (**Figure 6**) from participants for the programme and for the opportunities for networking and creation of future collaborations.

Workshops on Diabetes and Metabolism Research

The DDA organised four workshops on diabetes and metabolism research, three face-to-face events and one online event (**Table 7**). Three of the events included collaboration with international diabetes researchers and patient advocates.

The national and international researchers used the interactive format of the workshops to discuss strengths and weaknesses of applied methods, identified appropriate new research topics and clarified potential collaborations across sectors and countries. The topics discussed at the workshop on Do-It-Yourself Diabetes Technology – Opportunity or Threat for Diabetes Research? will be published in a special issue of Diabetic Medicine in 2021. Further description of this is on page 46.

Satisfaction with the opportunities for networking and creation of future collaborations was high across the three face-to-face workshops whereas the online workshop received lower score (**Figure 6**).

Activity	Format	Participants	Organising Collaborators
Psychosocial Support Needs & Appropriate Support Initiatives in People Diagnosed with Type 1 Diabetes in Adulthood	Face-to-face	12	Steno Diabetes Center Copenhagen and Kings College London, United Kingdom
How to Improve Assessment of Nerve Fibre Damage in Diabetes? – An Interdisciplinary Hands-On Collaborative Workshop	Face-to-face	32	Center for Neuroplasticity and Pain, Aalborg University, and International Diabetic Neuropathy Consortium, Aarhus University
The Human Placenta in Diabetes and Obesity	Face-to-face	19	Visiting Professor Gernot Desoye, Medical University of Graz, Austria, and Rigshospitalet
Do-It-Yourself Diabetes Technology – Opportunity or Threat for Diabetes Research?	Online	37	Steno Diabetes Center Copenhagen, and Bastian Hauck, Dedoc Labs

Table 7. The DDA workshops on diabetes and metabolism research, showing activity, format (face-to-face vs. online), number of participants and the organising collaborators. Further descriptions and programmes of the activities can be found by clicking on the title links.

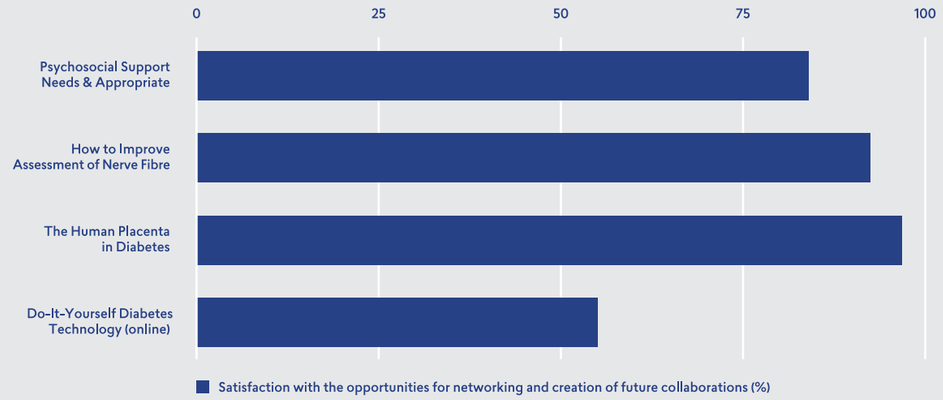


Figure 6. The participant average satisfaction (%) of the DDA workshops on diabetes and metabolism research 2020. Participants (%) stated that they were satisfied to either a very great (5) or a large (4) extent (on a five-point scale) with the composition and the content of the scientific programme and the overall organisation of the course.

‘Do-It-Yourself Diabetes Technology (DIY) – opportunity or Threat for Diabetes Research’: A webinar in 2020 organized by the DDA and researchers from SDCC

Ingrid Willaing, Head of Research
Bryan Cleal, Senior Researcher
Signe Schmidt, Senior Researcher

Steno Diabetes Center Copenhagen

On December 16th, 2020, SDCC, Diabetes Management Research, held an international webinar entitled ‘Do-It-Yourself Diabetes Technology (DIY) – opportunity or Threat for Diabetes Research’ with the support and funding of the Danish Diabetes Academy

The emergence and spread of DIY artificial pancreas systems (APS), or hybrid closed loop systems, represent an important moment in the history of diabetes. DIY is a level beyond user involvement, highlighting the remarkable user-driven innovations within the area of diabetes technology in recent years: People with diabetes have developed their own APS and today there are three different types of DIY APS available. Communication worldwide via on-line communities has made these systems available, but also made it necessary for people with diabetes using DIY to take full responsibility for their insulin treatment. Yet issues of availability, access and the adaptability of formally approved closed loop systems mean that DIY APS is a compelling alternative. DIY APS also represent a challenge for healthcare systems and professionals, since although every component used in these systems (insulin, pump and continuous glucose monitoring) has regulatory approval, the way in which they are being used does not; something which has various potential ramifications in the medical encounter.

Approximately 40 participants, healthcare professionals, researchers and people with diabetes from across the globe were invited to participate in the webinar, including representatives from Australia, Austria, Belgium, France, Germany, New Zealand, United Kingdom and USA. As the topic is one that is still relatively new within the Danish context, the Danish participants in the webinar were exposed to a range of new and challenging perspectives, engaging with the people with diabetes, who have been global pioneers in this field in a spirit of great curiosity and mutual respect.

As a direct outcome of the webinar, we (Ingrid Willaing and Bryan Cleal) have been commissioned by Diabetic Medicine to serve as Guest Editors of a special issue focusing on DIY Diabetes Technology and related research. Several presenters and participants in the webinar have, moreover, subsequently accepted invitations to contribute to the special issue.
The special issue is expected to be published online before the end of 2021 and will include original research papers, commentaries, podcasts with leading figures in the emergence of DIY Diabetes Technology - as an example of Citizen Science - protocols and an editorial. Topics covered will include: research into barriers and facilitators for DIY among people with diabetes and healthcare professionals, safety issues/risk perceptions, legal and ethical aspects of DIY, the role of peer support and online communication, patient-reported outcome measures for DIY and more.



Photo by Lizette Cabré

Networking and Collaboration Activities for DDA-Funded Junior Researchers

The DDA organised two Networking and Collaboration activities for DDA-funded junior researchers, one face-to-face event and one online events (**Table 8**).

Through oral presentations, project discussions and poster presentations, the participants gained the opportunity to connect and network with other DDA-funded junior researchers. Satisfaction with the networking opportunities was higher in the face-to-face event as compared with the hybrid format (online and face-to-face in smaller groups).

Activity	Format	Participants	Satisfaction with networking opportunities (%)
Start-Up Meeting for New DDA-Funded Researchers	Face-to-face	25	96
Annual Networking Meeting for DDA-Funded Researchers	Hybrid (face-to-face and online)	34	67

Table 8. The DDA Networking and Collaboration activities for junior DDA-funded researchers, showing activity, format (face-to-face vs. online), number of participants and satisfaction with the networking opportunities. Further descriptions and programmes of the activities can be found by clicking on the title links.

DDA Alumni Network

The DDA established an Alumni Network for former and currently DDA-funded researchers, and over 100 researchers have so far joined.

The DDA organised five activities for the alumni, focusing on job searching strategies and transferable skills courses (**Table 9**).

The creation of the DDA Alumni Network forged new links between former and newly DDA-funded junior researchers. The events facilitated knowledge sharing between the alumni on experiences of finding jobs, job-searching strategies and advice on career development.

Activity	Format	Participants
Be so good they will hire you – job searching strategies for PhDs	Online	17
How to make a great elevator pitch using storytelling techniques	Online	19
Finding jobs in the hidden job market	Online	18
How to pitch your science to the public	Online	8
Tools to further develop your career	Face-to-face	8

Table 9. The DDA Alumni Network activities, showing the activity, format (face-to-face vs. online) and number of participants. Further descriptions and programmes of the activities can be found by clicking on the title links.

Improving Research Culture

In an initiative of the National Junior Faculty (NJF) of Sweden, the DDA was represented by junior researchers and the Executive Management Team at five online workshops on how to improve the research culture in the future (**Table 10**).

The workshops, initiated by the National Junior Faculty of Sweden, were a follow-up initiative to the discussions and the publication written by participants at the DDA Winter School for postdocs in 2019 (read article), where the next generation of diabetes scientists discussed how to shape global research culture. The workshops prompted the formation of a group of junior researchers that will disseminate ideas and reflections on how to improve the research culture in scientific debate communications to relevant journals and magazines in 2021.

Activity	Format	Participants
Team Science & Research Assessment	Online	33
Hyper-Competition for Resources	Online	31
Positive Influence of Failure	Online	28
Open Science & Open Access	Online	25
Public Trust & Perception of Science	Online	29

Table 10. The DDA and NJF webinars on Improving Research Culture, showing the activity, format (face-to-face vs. online) and number of participants. Further descriptions and programmes of the activities can be found at Improving Research Culture

Reflections and Future Focus

Covid-19 had an impact on the DDA Networking and Collaboration programme. The number of planned activities completed was reduced, even though efforts were made to convert planned face-to-face events into online events. In particular, workshops with the DDA visiting professors were cancelled owing to travel restrictions.

The feedback from the participants at the online networking events also reflected the fact that the online format is a challenge when it comes to facilitating new networks among the participants. The DDA gradually implemented initiatives to increase the interaction between the participants, e.g. pre-recorded presentations so the time spent online focused on discussions and questions, the use of breakout rooms to facilitate interactions between the participants, the use of moderators to facilitate the discussions and the introduction of a hybrid format (online and small face-to-face groups). The DDA will further explore how to combine digital solutions and face-to-face interaction for organising the networking activities. Future online workshops and networking activities will for example use the *Do It Yourself* online workshop conducted in December as a model for inspiration. At this successful online workshop with 37 participants from nine countries, participants had access to webcasts by the speakers prior to the workshop. This allowed the questions raised in the webcasts to be discussed in the actual workshop by the presenters and the audience, facilitated in a virtual framework with breakout groups and plenary discussions. The composition of the participant group, e.g. healthcare and other professionals as well as people with diabetes, took the elaboration and discussions to a new level, and the output will published in a special edition of *Diabetic Medicine* (as mentioned above).

It is the intention to engage the newly established DDA Alumni Network for former or currently DDA-funded researchers as a dynamic knowledge base – a base with over 100 members, all of whom have been or are a part of the DDA education, networking and grants programme since the establishment of the DDA in 2012. The experience accumulated by the alumni members will be implemented in the future DDA strategy to strengthen the existing bottom-up approach and ensure alignment between the strategy and the actual needs that junior researchers within diabetes research face in their career development. Thus, the DDA Alumni Network will help the Executive Management Team and the affiliated bodies to capture synergies across sectors and countries and implement new initiatives within the three main areas: education, networking and grant activities.

The DDA plans that the DDA-funded visiting professorship programme in 2021 will be a focal point of the Networking and Collaboration activities, if Covid-19 allows. The involvement of the DDA visiting professors has previously prompted new collaborations and opportunities for exchange visits for junior researchers.

The DDA will also put efforts into inviting junior researchers from abroad to the DDA's educational and networking activities to facilitate synergy and interaction among junior researchers across borders. The series of workshops on *How to improve the research culture in the future* was initiated by the National Junior Faculty of Sweden after input from the Executive Management Team and with presentations by DDA-funded junior researchers. The initiative and the collaboration highlight the fact that junior researchers across borders and research institutions face the same challenges in securing funding, publishing unbiased data, accessing data and research results through open databases, and increasing the public's trust in science. These topics were also discussed in the DDA publication *Next generation diabetes scientists shape global research culture* (see above). It is the intention that the workshop series will lead to dissemination of the ideas and reflections in scientific debate communications in relevant journals and magazines in 2021.

In conclusion, the DDA organised Networking and Collaboration activities in 2020 with a wide variety of topics, ranging from workshops - both online and face-to-face - on diabetes and metabolism research, to workshops on how junior researchers can further develop their careers. The DDA established the DDA Alumni Network for former and currently DDA-funded researchers. Finally, the collaboration with the National Junior Faculty of Sweden highlighted the fact that junior researchers across borders and research institutions are facing the same challenges.

Recruitment and Grant Activities

The overall aim of the DDA Recruitment and Grant activities is to recruit outstanding national and international PhD students, postdocs and visiting professors with an international, interdisciplinary and cross-sectoral focus within the field of diabetes and metabolism.

The DDA's ambition is that, through a combination of the DDA's educational and networking activities and their research projects, the DDA-funded junior researchers will obtain national and international recognition for their research (e.g. publications in high-impact journals and awards), will make impact on society and are attractive to future employers across sectors.

Strategic Focus 2020

The strategic approach in 2020 for the Recruitment and Grant activities involved open calls posted through the DDA communications channels and national and international job portals with standardised evaluation forms. It also involved an expansion of the Committee for Talent Development to support the Executive Management Team's efforts to match the submitted applications with appropriate reviewers and thus secure a scientifically rigorous, in-depth and high-quality peer-review assessment of all applications by three individual reviewers. Finally, the approach involved a quality check of the peer-review evaluations by the two chairs of the Committee for Talent Development. As in previous years, the BoD took the decisions on the grant allocations based on the recommended list forwarded by the chairs.
The Executive Management Team notified applicants by grant or rejection letters including the peer reviewers' comments on the application. Further, the DDA released a public announcement of grant allocations through the DDA's communications channels, national newspapers and email, and the DDA invited all grant recipients to attend a mandatory 1.5-day course to ensure cohesion within the newly recruited group of DDA-funded researchers and to create a connection between the recruited DDA-funded researchers and the DDA.

Recruitment and Grant Activities 2020

In 2020, the DDA awarded more than 30 million DKK to national and international applicants for PhD scholarships (14), postdoc fellowships (10) and visiting professorships (8) in free and open competition. This financial support to projects will nurture and develop talented young diabetes researchers and Denmark's research centres.

The scholarship and fellowship awardees in 2020 had a variety of educational backgrounds, e.g. medical doctor, dietician, veterinarian, psychologist and Master of Science. Furthermore, the grant awardees were of different nationalities e.g. Denmark, USA, United Kingdom, Turkey, Portugal and Australia, and were employed at research institutions across Denmark. Finally, the funded projects covered a wide variety of topics (see **Figure 7)** and included research disciplines within basal, epidemiological, clinical and translational research.



Figure 7. Examples of research topics covered by the projects funded by the DDA in 2020.

PhD Scholarships

The DDA awarded a total of 14 PhD scholarships (2/3-financed and 1/3-financed), including one industrial PhD scholarship, in 2020. As shown in **Figure 8**, the majority of the 14 PhD scholarships were allocated to students enrolled at the University of Copenhagen, Faculty of Health and Medical Sciences (7) and Faculty of Science (1), and Aarhus University, Faculty of Health Sciences (3).

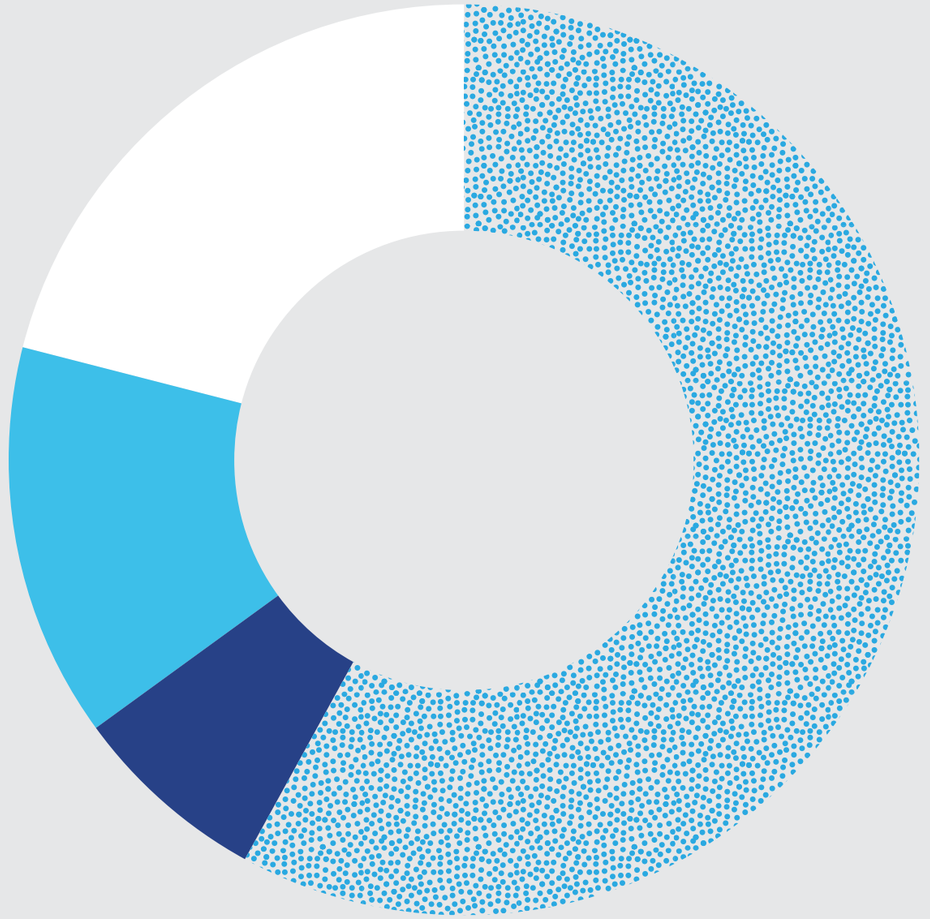
The 14 PhD scholarships showed a wide variety of topics, as illustrated by the following examples.

Laura Linnea Määttä, MD, Aarhus University and Steno Diabetes Center Aarhus, will investigate a potential biomarker for diabetic neuropathy. A biomarker will offer a practicable, uniform method of early detection and follow-up of diabetic neuropathy that can make early intervention possible and should help boost motivation to achieve good overall diabetes care for the individual.
Read more

Daniel Hansen, MSc, University of Southern Denmark, will study the molecular changes that occur around the small blood vessels of the liver in non-alcoholic steatohepatitis (NASH). Metabolic liver damage can cause defects in the normally well-organised structure of the tissue, including its blood vessels, and it has a major impact on liver function.
Read more

Carolina Coimbra de Brito Lobato, MD, University of Copenhagen, will study patients after a gastric bypass surgery to gain a better understanding of why hypoglycaemia occurs. The ambition is that the outcome of the research will lead to a more effective treatment and improved quality of life for patients who have had a gastric bypass.
Read more

Kristine Stoltenberg, MSc, Steno Diabetes Center Copenhagen, will study how the 24,000 people with diabetes in the 18-45 age group are faring, e.g. in terms of characteristics, resources and needs, to develop a tailor-made programme to improve the group's quality of life and prevent aggravation of the disease.
Read more



University of Copenhagen, Faculty of Health and Medical Sciences	57%
University of Copenhagen, Faculty of Science and Engineering	7%
University of Southern Denmark, Faculty of Science	14%
Aarhus University, Faculty of Health Sciences	22%

Figure 8. The distribution of grants for PhD scholarships allocated by the DDA in 2020 by host institution. The funding rate of applications for 2/3-financed PhD scholarships was 13%.

Postdoc Fellowships

The DDA awarded a total of 10 postdoc fellowships (five two-year financed and five three-year financed) in 2020. As shown in **Figure 9**, the majority of the 10 postdoc fellowships were allocated to postdocs employed at the University of Copenhagen (four) and to postdocs employed at Steno Diabetes Center Aarhus and Steno Diabetes Center Copenhagen (two each).

The 10 postdoc fellowships showed a wide variety of topics, as shown by the following examples.

Jonas Salling Quist, MSc, PhD, Steno Diabetes Center Copenhagen, will investigate the significance of the time of day at which food is eaten. Time-restricted eating is an eating pattern in which food intake is limited to a window of, say, 10 hours per day. For the rest of the time, you fast. The results of the project may be important for future recommendations on the treatment of overweight and type 2 diabetes.
Read more

Lene Ring Madsen, MD, PhD, Steno Diabetes Center Aarhus, will study pregnancy following obesity surgery and the short- and long-term consequences of the operation for mother and baby. With this knowledge, healthcare professionals can advise women who are considering, or have undergone, bariatric surgery with regard to pregnancy, and ensure better treatment of mothers and babies alike.
Read more

Jonas Borup Roland, MSc, PhD, University of Copenhagen, will study the underlying mechanisms that increase the formation of GLUT4-containing storage vesicles after physical activity and the mechanisms that regulate a possible reduced formation of storage vesicles in insulin-resistant conditions. Such an understanding is key to the development of new drugs to prevent insulin resistance and type 2 diabetes.
Read more

Hannah Louise Zakariassen, MSc, PhD, University of Copenhagen, will study the effect that occurs when the gastrointestinal hormones neurotensin and GLP-1 are administered at the same time. Hannah has recently investigated this and shown that the intestinal hormone neurotensin is important to appetite regulation and plays a part in the beneficial effects achieved by obesity surgery.
Read more

Read an example of a junior researcher from abroad receiving a DDA postdoc fellowship on page 60.



University of Southen Denmark, Department of Biochemistry and Molecular Biology	10%
Rigshospitalet, Centre for Physical Activity Research	10%
Steno Diabetes Center Copenhagen	20%
Steno Diabetes Center Aarhus	20%
University of Copenhagen, Department of Biomedical Sciences	10%
University of Copenhagen, Department of Nutrition, Exercise and Sports	10%
University of Copenhagen, Center for Metabolic Basal Reseach	20%

Figure 9. The distribution of grants for postdoc fellowships allocated by the DDA in 2020 by host institution. The funding rate of applications for two- and three-year postdoc fellowships was 18%.

The DDA offers much more than funding

Peter Aldiss, BSc, PhD, University of Copenhagen, Novo Nordisk Foundation Center for Basic Metabolic Research

It is safe to say that 2020 was a mixed bag for most of us. The year started with me finishing up a fairly unsuccessful first post-doc and moving to start an in-vivo physiology post at the University of Edinburgh in March. But, just three weeks later, I was sent home on furlough till May for the foreseeable future. As time passed, and the extent of the pandemic was realised, May soon became October, and the prospect of 7 months at home with no work was hard to comprehend. One week later I was finally awarded my PhD (post-corrections) but, with limited celebrations, this proved incredibly underwhelming. However, successful fellowship awards from both Ludwig Maximillian University and the DDA during these first few months proved to be the light amongst the dark. After over 3 years and ~15 unsuccessful fellowship applications, I could not believe my luck. Moving abroad during a pandemic is probably not something I would recommend, particularly in hindsight. But working in Copenhagen had been a dream for years and, even with conditions as they were, was an offer I could not turn down. Having spent a couple of years trying to make the switch from 'physiologist' to the field of neurobiology, I am eternally grateful to Professor Matt Gillum, Center for Basic Metabolic Research, and the DDA for taking a leap of faith where many others didn't. As many of us do, I aspire to start my own research group further down the line and saw a switch to neurobiology as being central to my future plans. Now, thanks to the DDA, I can finally realise this by gaining experience in human genetics, the neuroendocrine regulation of appetite and addiction and, using new, exciting rodent models and lab techniques understand the role of FGF21 in regulating sucrose and alcohol intake. But the DDA has offered much more than just 'funding', they have offered a platform, or springboard to future success. Being awarded the Lundbeck Experiment grant to identify G-protein coupled receptors upstream of the obesity gene ADCY3 at the end of last year was as much a shock to me as anyone else. With no neurobiology experience at the time, there is no doubt in my mind that the presence of DDA funding in the area will have contributed significantly to this. There can be no way of knowing what the future holds, for myself, or for the DDA as they look to a potential DDA 3.0. I have an exciting few years ahead doing truly translational science, in a wonderful department with a fantastic group, which is more than most can say in the current circumstances. And, I hope that the DDA will be around for years to come so they can continue offering people like myself the opportunities they have given me and others like me.



Visiting Professorships

The DDA awarded a total of eight visiting professorships in 2020. Four of the eight visiting professorships were allocated to Steno Diabetes Center Copenhagen (**Figure 10**).

The eight visiting professorships showed a wide variety of topics, as highlighted in the following examples.

Carlos Salomon, MPhil, DMSc, PhD, University of Queensland, Australia, will make visits to Aalborg in the next two years to collaborate with Aalborg University Hospital and several other Danish research centres on building a network around research into extracellular vesicles. The collaboration, which will also include researchers from Roskilde University and Steno Diabetes Center Aarhus, will focus on the potential of extracellular vesicles as biomarkers and a means of monitoring metabolic changes in people who are overweight or otherwise at risk of, or living with, type 2 diabetes.
Read more

Khalida Ismail, Professor of Psychiatry and Medicine, Institute of Psychiatry, Psychology and Neuroscience, King's College London, United Kingdom, together with her host, Professor Ingrid Willaing of Steno Diabetes Center Copenhagen, will raise awareness of disordered eating among people with type 1 diabetes and among healthcare professionals. In the longer term, the collaboration will lay a scientific foundation for effective research-based treatment offers in Denmark and build a collaborative environment and network linking British and Danish researchers and practitioners.
Read more



Steno Diabetes Center Copenhagen	50%
University of Southern Denmark, Department of Biochemistry and Cell Biology	12.5%
Aalborg University, Department of Clinical Biochemistry	12.5%
University of Copenhagen, Department of Nutrition, Exercise and Sports	12.5%
University of Copenhagen, Mental Health Centre Glostrup	12.5%

Figure 10. The distribution of grants for visiting professorships allocated by the DDA in 2020 by host institution. The funding rate of applications for visiting professorships was 47.1%.

Reflections and Future Focus

The DDA has continued the high quality of the transparent and well-governed recruitment process, which includes posting calls in open and free competition and using international reviewers and standardised evaluation forms.

The competition for the DDA grants is hard, with funding rates for PhD scholarships and postdoc fellowships around 13-16%. This strong competition ensures the high quality and the potential of the recruited junior researchers, as recognised by the reviewers in the DDA Committee for Talent Development.

The Committee for Talent Development was expanded by 13 members and now includes 93 members, mainly with clinical research expertise. The IAB suggested this expansion in 2019 to support the Executive Management Team's efforts to match the submitted applications with appropriate reviewers.

Further, the IAB advised the DDA to increase interest in the visiting professorship scheme. Through direct communications to national and international research groups and through several social media postings, including recorded videos of previous DDA-funded visiting professors (watch videos), the Executive Management Team highlighted this opportunity to researchers abroad. The number of applications for DDA visiting professorships increased by over 100% in 2020.

It was the ambition to continue to bridge the gap between the life science industry and junior researchers from universities and hospitals through industrial PhD and postdoc grants. However, the number of applicants for these grants was relatively low in 2020, and three applicants who were offered an industrial PhD or postdoc grant declined the offer due to other opportunities. The Executive Management Team will explore the possibilities for increasing awareness of the PhD and postdoc industrial scheme programme.

The Covid-19 pandemic may have caused a delay in DDA-funded research projects. The DDA has retained some funds to support junior researchers whose projects have been delayed, and will, in 2021, clarify how these funds can be realised. It is obvious that the DDA Visiting Professorship scheme has been affected by the Covid-19 pandemic owing to travel restrictions that prevented the DDA visiting professors from coming to Denmark in 2020. Many of the visiting professors, however, report that they were able to start up collaborations with their hosts using the opportunities for meeting virtually, and they have given webinars at the DDA platform during 2020 (see page 31). The Executive Management Team will explore the opportunities for the visiting professors to come to Denmark in 2021 and 2022.

In conclusion, in 2020, the DDA awarded more than 30 million DKK to PhD scholarships, postdoc fellowships and visiting professorships in a free and open competition. The competition for the DDA grants was hard, with relatively low funding rates, which ensured the high quality of the recruited researchers, as also recognised by the reviewers in the DDA Committee for Talent Development. The 2020 grant allocation included a distribution of funding across educational backgrounds, countries and research institutions in Denmark; it also spanned a wide variety of topics and research disciplines.

Scientific Publications, Collaborations, Dissemination and Further Funding

The DDA's ambition is that the researchers receiving grants for PhD scholarships, postdoc fellowships and visiting professorships are outstanding with an international, interdisciplinary and cross-sectoral focus. This is, among others, demonstrated by the researchers' publications, dissemination activities and their abilities to establish collaborations and obtain further funding for their research (see DDA Dialogue Report 2020).

Scientific Publications

DDA-funded researchers reported 50 unique publications attributed to their DDA grant (pre-dominantly in peer-reviewed journals).The increase of over 50% as compared to the number of unique publications reported in 2019 (**Figure 11**) reflects that the number of researchers funded by the DDA has increased (by 32 in 2020 with 14 PhD students, 10 postdocs and eight visiting professors, see page 54), but also that researchers who received a DDA grant in 2018 and 2019 are starting to obtain results from their research and are starting to publish these (35% of DDA-funded researchers report at least one publication in 2018-2020).

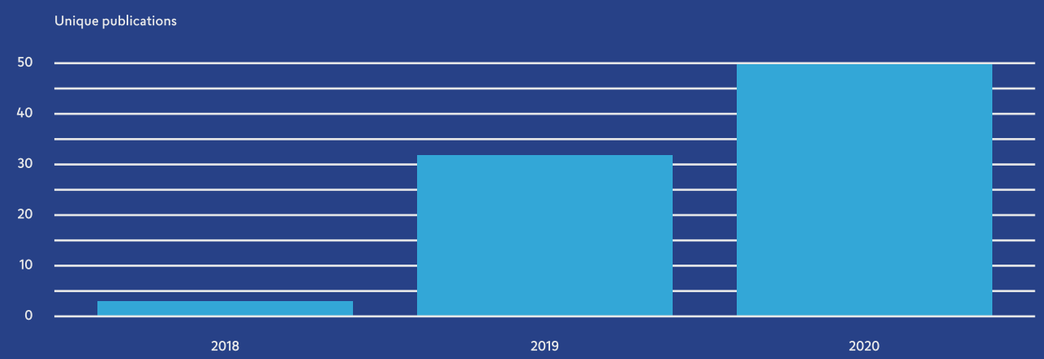


Figure 11. The number of unique publications reported by DDA-funded researchers in 2018, 2019 and 2020.

Collaborations

The number of unique collaborations established since 2018 by the DDA or DDA-funded junior researchers and visiting professors are over 150. The collaborations are across sectors with the majority within academia (universities) (47%), but also a high percentage of collaborations with hospitals (27%) and the private sector (17%) is observed, as shown in **Figure 12**.

The number of unique collaborations (n=63) started in 2020 was slightly decreased as compared to 2019, as shown in **Figure 13**. The decrease may be explained by the restrictions in travelling and assembly entailed by the Covid-19 pandemic with a reduced number of laboratorial visits and conference participations as a result.

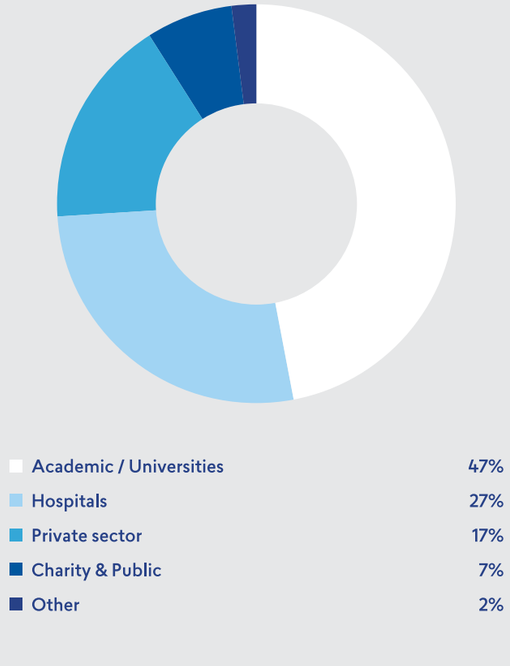


Figure 12. The number of unique collaborations across sectors reported by the DDA or DDA-funded researchers in 2018, 2019 and 2020

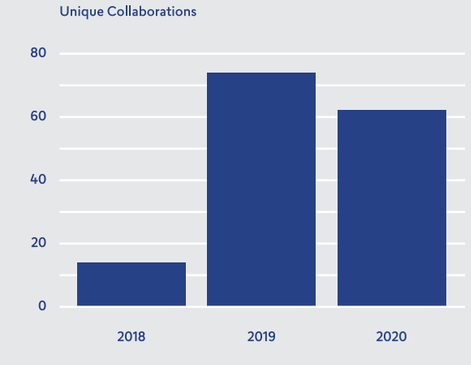


Figure 13. The number of unique collaborations reported by the DDA or DDA-funded researchers in 2018, 2019 and 2020

Dissemination Activities

The number of dissemination activities reported by the DDA or DDA-funded researchers since 2018 is over 200 with the majority of these as national and international press releases, press conferences and response to media inquiries, but also participation in national and international workshops and talks at national and international conferences were reported. The number of dissemination activities were slightly increased in 2020 as compared to 2019, as shown in **Figure 14**.

The increase may reflect that the DDA has funded additional researchers throughout 2020 (as described above) and that the researchers who received a DDA grant in 2018 and 2019 are starting to obtain results from their research and are starting to disseminate these – also to the public and other audiences in addition to scientific dissemination to peers (see above). On the other side, the Covid-19 pandemic may have had a negative influence on the dissemination rate due to travel and assembly restrictions hindering conference participation and outreach activities and restricting access to perform research in laboratories and in the clinic.

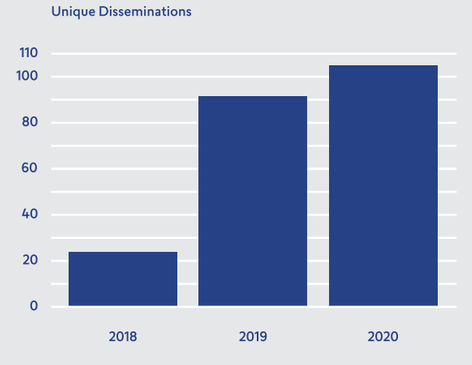


Figure 14. The number of unique disseminations reported by DDA-funded researchers in 2018, 2019 and 2020.

Further Funding

Since 2018, DDA-funded researchers have reported any additional funding received for their project (e.g. additional funding for their PhD scholarship, postdoc fellowship or travel grants) corresponding to a value of 19.4 million DKK in total. In 2020, DDA-funded researchers reported additional funding of 7.4 million DKK in total. This is a decrease of approximately 4.5 million DKK as compared to 2019, as shown in **Figure 15**. In 2019, the DDA received funding for three industrial postdoc grants from Astra Zeneca to a total value of 4.6 million DKK, corresponding to the deficit in funding between 2019 and 2020.

In conclusion, DDA-funded researchers published 50 unique numbers of publications – a more than 50% increase compared to 2019. The number of collaborations and dissemination activities in 2020 were comparable to 2019 and may reflect the negative impact of the Covid-19 pandemic due to travel and assembly restrictions leading to few opportunities for researchers to present their results to colleagues at e.g. conferences and restricted access to perform their research in laboratories and the clinic. The DDA expects that the number of dissemination activities for 2021 will also be relatively lower than anticipated due to the effects of the Covid-19 pandemic.

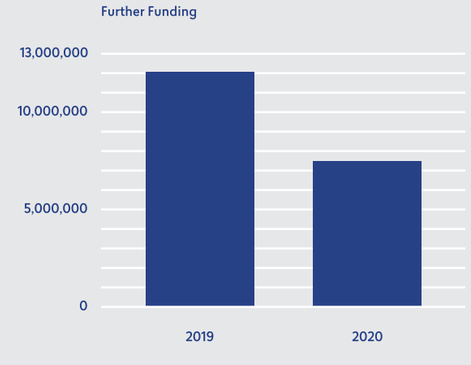


Figure 15. The amount of further funding reported by the DDA or DDA-funded researchers in 2019 and 2020.

Closing remarks

The DDA successfully delivered on its major work streams in 2020 and continued to meet its mission and strategic objectives. Despite very challenging conditions related to the Covid-19 pandemic, the DDA remained agile and pivoted its approach to ensure the delivery of high-quality education and networking activities with increased international outreach and attraction of an internationally competitive field of high-quality candidates to the grant programme. A number of improvements were made to optimise each programme of activity in 2020 alongside a continued focus on internationalisation, interdisciplinarity and collaboration across sectors.

In 2020, the DDA shifted from being a provider of only face-to-face educational and networking activities to being an established provider of both face-to-face and online activities within diabetes research. In 2021, the DDA will further develop its online activities to attract participants from all around the world. The DDA will continue to include a wide variety of topics in the educational and networking activities from diabetes research to career development of junior researchers, and further strengthen the collaborations established in 2020 with the life science industry, the Danish Diabetes Association and national and international researchers and research institutions worldwide, including the newly established Danish Cardiovascular Academy. The DDA will further consolidate the DDA Alumni Network and facilitate to networking among DDA-funded junior researchers to support junior researchers in their career development.

The junior researchers recruited by the DDA are starting to show the impact of their research by publication of peer-reviewed articles in high-impact journals and additional funding obtained to carry out their project. The interest of junior researchers to present their research to the public on social media and other public channels reveal that junior researchers acknowledge the importance of bringing their research to the end-users, individuals with diabetes, relatives and citizens at risk.

After eight years of activity, the DDA has cemented its well-deserved position as a unifying hub for junior researchers in Denmark and is starting to reach international recognition. It has set up a long-term pipeline for talent for the diabetes research community and the wider impact and influence of the DDA's and DDA-funded junior researchers' work can now be captured.

