

## **CHESSE Forte centre evaluation, part 2**

In the following, we will present our replies and views on the issues brought up in the evaluation form. When replying to these questions, an important starting point is that we have always viewed the Forte Centre grant as a crucial part of the basic funding for CHESSE, and hence the Forte Centre is inseparable from CHESSE, and vice versa. This view of the role of the Forte Centre is strongly rooted in the way that CHESSE was initiated and funded as a national network centre for research on inequalities in health in 2000. This grant was in turn won in a national competition between the main universities in a way similar to the Forte (FAS) Centres launched in 2007, which means that CHESSE (together with ARC) in effect was a Forte Centre before we received the centre grant for the Forte Centre “Human society as a life-long determinant of human health”. When the original dedicated funding for CHESSE ended in 2005, a phase-out grant was negotiated with FAS for the years 2006-2009. The FAS/Forte Centre grant received in competition has therefore been a direct continuation of these earlier grants, and hence used as a part of CHESSE core funding (along with the faculty grant from SU and KI). This was also strongly endorsed by the evaluators in 2009.

The main focus in this evaluation is on the impact of Centre of Excellence grants, and we are certain our Forte Centre grant has been of vital importance for CHESSE, but also instrumental for the institutionalisation of health inequalities as a field of research, both at Stockholm University and more generally in Sweden. More specifically, we would like to convey three messages to the evaluators, namely 1) That the Forte Centre grant has been absolutely vital for CHESSE’ continued existence and survival; 2) That we have used the resources provided through this Centre grant effectively, in terms of research, teaching and training as well as involvement with stakeholders; and 3) That we believe that there are strong and good arguments for research councils to issue different types of grants, and that there is a need also for larger, long-term grants to research groups.

### **1) Research performed**

#### **a) *Describe the most important results of the research performed at the Centre.***

Our Forte centre grant covers a set of research questions under a common research agenda. This common agenda links a structural-individual dimension with a life-course perspective, where the differential health consequences of a number of macro, mezzo and micro level social conditions and institutions are analysed across the span of life. In 2015, a joint effort to calibrate the relative weight of the different research strands included, both against our own understanding of important knowledge gaps and the views of an international panel. The analysis was based on a comparison of the research themes emerging from our publications 2013-2015 to those established as important knowledge gaps. In this Research Positioning Exercise, nine different but

partly overlapping research areas were identified<sup>1</sup>. We will here combine those areas into five major strands of research carried out under the CHESSE Centre of Excellence grant, and present some important results under each of these five strands. We draw these results from the close to 600 peer-reviewed papers and conference presentations, and over 170 other publications, that CHESSE researchers have published during the period Forte Centre period (see Appendix 4-6). In this context, we see ‘important results’ as important contributions to the research in each of the strands, including new findings as well as crucial confirmations of earlier findings, new types of data and new explanations of empirical regularities. We report and comment on the importance of our work for society at large under Question 3c and d.

*Childhood conditions and childhood health* has been a large area of research at CHESSE, with around 29 per cent of the publications 2013-2015. Research in this area has covered a wide range of social and institutional factors that constitute key conditions of life during childhood and that are of importance for child health. These include family conditions, migration experiences, and several aspects of the school as a work environment and important social context. One set of important results concern the school as a work environment, where strong parallels to adult work environment has emerged. For example, high school demands are associated with stress-related health complaints, but less so when the students have a high level of control and support specific to school work (Modin & Östberg 2007). In addition, high effort combined with low reward, as well as over-commitment to school work, are related to an increased risk of health complaints and of poor self-rated health (Låftman et al. 2014). High school demands are in themselves associated with multiple measures of stress, including perceived activation and pressure as well as bio-markers of stress-related functioning (such as salivary cortisol) (Östberg et al. submitted).

With regard to family situation, a number of adverse conditions have been linked to poorer child health, partly confirming older findings but also providing new insights. A recent paper shows that child mortality rates are doubled in England when compared to Sweden and can, to a large extent, be attributed to preventable conditions during pregnancy (Zylbersztejn et al. 2018).

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<sup>1</sup> 1) Childhood conditions and health among children and adolescents; 2) Early origins of adult disease and later life chances; 3) Socioeconomic status/position and economic resources; 4) Welfare states, social policies and politics; 5) Migration and health; 6) Social resources, social capital; 7) Intergenerational transmission of health and social risks; 8) Work and working conditions; and 9) Other (methodological work, other themes).

More specifically, ground-breaking work has been carried out on the consequences of joint physical custody for children of separated parents. A main finding emerging from this research is that children living e.g. alternating weeks do not seem to suffer from additional stress, but rather report well-being in level with children in nuclear families (Bergström et al 2013).

*Early origins of adult disease and later life chances* and *Intergenerational transmission of health and social risks* constitute two interlinked areas of research that made up around 23 per cent of the total publication output from CHES during 2013-2015. In this strand of research different biological markers of early growth as well as social and health conditions in the childhood family are studied in relation to later life course trajectories and conditions for that child, but also across several generations.

One type of studies focuses on how different parental conditions affect birth outcomes, and how these birth outcomes are influencing health and social conditions later in life. For example, CHES researchers have demonstrated how maternal *and* paternal depression during pregnancy are risk-factors for pre-term birth (Liu et al. 2016). Other studies from CHES have shown that an effect of low birthweight on later mortality can be observed both in infancy, childhood, and early adult life (up to 44 years of age) (Juárez et al 2016).

A number of studies have focused on how different types of adverse conditions in childhood are related to poorer health and poorer social conditions later in life. For example, the loss of a parent or sibling during childhood increases the risk for depression as well as mortality later in life (Berg et al. 2016; Rostila et al. 2017), and psycho-social problem in the childhood family and school failure are linked to poorer mental health, suicide and drug abuse in early adulthood (Björkensatm et al. 2017; Björkensatm et al. 2011; Gauffin et al. 2013).

A third type of studies look at links between social and health conditions across three or more generations. Studies published by CHES researchers suggest that grandparental economic circumstances, grandparental marital status, grandparental birth weight, grandparental school achievement, early death of a grandparent, and grandparental life span all influence their children's or grandchildren's outcomes in areas such as birth weight, resilience, school marks, health and mortality (see e.g. Modin & Fritzell 2009; Modin et al. 2009; De Stavola et al. 2011; Modin et al. 2013; Vågerö & Rajaleid 2016). A new development is studies of transgenerational response, where one of the key questions concerns how to separate genetic, epigenetic

and social influences across generations. CHESS has been doing pioneering work also in this area (Vågerö & Rajaleid 2017).

*Socioeconomic status, Economic and social resources and Work and working conditions* are three areas of work that represented around 29 per cent of our publications 2013-2015. It includes studies of how education, income and/or occupational class are related to health and mortality; how social relations, networks and support as well as social capital are linked to health outcomes, and also how work, unemployment and working conditions are linked to health.

Important results include those from a series of studies addressing the theoretical understanding and empirical study of relative and absolute income for health and mortality. To put it simply, both aspects are of importance for health, the sheer lack of economic resources is more important in the lower part of the income distribution, while psycho-social effects of income appear more important in the upper part (see e.g. Åberg Yngwe & Lundberg 2007; Lundberg et al. 2010) More recently, Miething has contributed to the field by introducing 'income satisfaction' as a concept that helps to disentangle the material and psychosocial implications of income inequality for health (Miething 2013).

Regarding work and working conditions, key contributions have been made on the effects of the "new world of work" on health in men and women and on different occupational and socioeconomic groups (Lundberg & Cooper 2011). Specific studies have looked at working conditions broadly defined, in general as well as for specific groups. For example, one study found a clear association between over-education and increased risk of poor self-rated health among foreign-born workers, while this association was not evident among native-born workers (Dunlavy et al. 2016). This suggests that while employment is an important determinant of integration and migrant's health, the quality of that employment is also important, including obtaining employment that is commensurate with one's level of education or training.

*Welfare states and social policies* has emerged as an important research field over the past decade, and contributions from CHESS has been in the forefront of this development. During 2013-2015, it added up to around 13 per cent of the publications. This strand of research has formed an area where CHESS researchers has contributed novel and influential research, starting with input to the Commission on Social Determinants of Health (Lundberg et al. 2008), and continued with work for the Review of Social Determinants and the Health Divide in the WHO European Region (Lundberg et al 2016) as well as in EU-projects (Lundberg et al. 2015). One

important result is that the generosity and design of welfare state institutions, as well as the size of social expenditures, are indeed linked to better health and smaller health inequalities, despite the contradictory findings from studies based on clustering of countries into welfare regimes. Other research has suggested that social capital is an important mediating factor, where welfare state generosity is a decisive factor for social capital and social capital is of significance for health inequalities, both between and within European welfare states (Rostila 2013).

While general welfare policies are likely to be more important for health and inequalities than more specific interventions, larger welfare reforms are usually very difficult to evaluate. Still, research at CHESS has addressed these issues. For example, between 1949 and 1962 Sweden implemented a school reform where a 1-year increase in compulsory schooling was introduced. This reform was rolled out in a way that allowed quasi-experimental analysis. This showed that the experimental group had lower mortality from causes known to be related to education. In particular, lower mortality was found among the least educated, the group that clearly benefited from the reform in terms of educational length (ref).

*Migration and health* has also been an expanding field of research at CHESS, and has attracted a lot of new funding. It comprised around 10 per cent of the total publications 2013-2015, but also overlaps with other areas, not least studies concerning health among children and adolescents, the transmission of inequalities across generations and labour market conditions and health. In the former category, one of several important results is that migration to Sweden increases the risk of type 1 diabetes, at least among some groups of children born outside of Sweden (Söderström et al 2012). Work on migration and reproductive outcomes has demonstrated existence and long-lasting influence of contextual early life factors on reproductive health among migrants. More specifically, a steep gradient was found when studying offspring's birthweight by the level of human development of the mother's country of birth, with those coming from countries of low or medium HDI levels showing the largest difference in birthweight when compared to Swedes (Juaréz & Hjern 2017).

Studies of adults has demonstrated poorer health among migrants than among Swedish born. While a large part of the differences in mortality could be attributed to socio-economic position (Rostila & Fritzell), the differences found in self-reported health could not be explained by working conditions (Dunlavy & Rostila 2013).

**b) *Describe briefly the quality of the research in an international context (state of the art).***

We are confident that the research that we have produced is of high international standard, and there are several types of indicators to support this. Our research is internationally acclaimed and discussed in the areas summarised above, and it is clear that in these areas CHESS researchers have been actively involved in defining the key topics and pushing the research frontier forward. Examples of this include intergenerational transmission of social and health risks, the importance of school for childhood health and wellbeing, and the role of welfare states and social policies for health and inequalities. CHESS researchers generally publish in journals that are highly ranked in the different fields respectively, and many papers have been important for other researchers, as indicated by citations and Altmetric scores. CHESS researchers are also regularly invited to contribute with editorials or commentaries in leading journals. That the research conducted is of high international quality is also indicated by the large number of international collaborations with leading research groups and scientists from a range of highly renowned universities and research institutions around the world.

**c) *Describe the role the centre has when researchers apply for different grants.***

Strategic discussions about upcoming calls, particularly larger programme grants, have been held on a regular basis in a committee where management and professors are members. Prior to the yearly open calls for project proposals, joint application seminars have been organised where researchers comment on and discuss each other's grant applications. This internal peer review system aims to improve the quality of the research ideas and analytical strategies described in project applications, and thereby both foster an internal exchange of ideas and potentially increase the chances of applications being approved.

The centre has also played a role in co-financing research projects when grants do not fully cover the costs of the project, e.g. in cases when researchers are not allowed to apply for all indirect costs associated with the project or when the costs have been larger than expected due to e.g. unforeseeable delays in data collection.

**d) *Describe briefly how the research can be developed after the grant period. What is your strategy for maintaining a strong research environment after the grant period?***

In January 2018, the Department of Public Health Sciences was formed at Stockholm University by merging CHESS and SoRAD. By keeping CHESS as a research centre

within the new department, there will be continued strong focus on the research area of health inequalities. The centre will continue to collaborate with Karolinska Institutet, which is facilitated by a renewed agreement between Stockholm University and Karolinska Institutet. With the continued support from Karolinska Institutet and the strengthened support from Stockholm University, the research environment is secured for a long time. Still, there is a need to continue to attract external funding, and the strategy developed at CHESS involves applying for several mid-sized grants such as programme grants from Forte. This has also been a successful approach.

In 2016, researchers at CHESS were awarded two large programme grants within the research area of the former Forte centre. Both programmes run for three years, with a possibility of extension for three additional years. The RELINK programme focuses on how social, economic and health-related inequalities are reproduced in subsequent generations. The SMASH programme investigates the social determinants of health among individuals with foreign backgrounds in Sweden. Together, these two programme grants will enable continued research on determinants of health and health inequalities.

Maintaining the unique high quality data materials available at CHESS within the new department will be a continued priority. These data materials, for example the Uppsala Birth Cohort Multigenerational Study (UBCoS Multigen), the Stockholm Birth Cohort study (SBC), the School Stress and Support Study (TriSSS), and the more recently collected Teacher Survey linked to the Stockholm School Survey, provide excellent opportunities for research and will also attract talented researchers.

**e) *Are there links to educational programs at the bachelor and master levels?***

Yes, there are close links between the centre and the master level education in Public Health Sciences that was initiated at CHESS in 2008. The master's programme "Population health: Societal and individual perspectives" is offered every second year and addresses causes of health inequalities with course topics ranging from welfare states, social policy and health to psychobiological processes, stress and health. The programme also includes courses on social stratification and health, global health, population development and social change. Students are provided with a life course approach to health equity studies and more specific courses on health and health inequalities among children and the elderly population. There is a strong focus on quantitative methods in the education and many students make use of the high-quality data materials available at CHESS in their master's theses.

The majority of researchers working within the centre teach within the master's programme, mainly within their own area of expertise. Thus, the education is closely connected to the research carried out at the centre. Including the first programme start in 2008, five groups of students have been admitted. In total, 62 students have received their qualification/degree certificate. Many of these, around 40 per cent, have continued within the Academia, e.g. as PhD students or working as research assistants. Some of these have been recruited to our doctoral programme in Public Health Sciences, which began in 2013 in collaboration with the Stress Research Institute. Roughly one fourth is doing practical work within municipalities/counties, agencies or organisations. Other former students work within health care or have continued to study, e.g. within medicine or social work. Currently, 27 students are writing their master's theses and will soon complete the programme.

As a part of the new Department of Public Health Sciences being formed in January 2018, basic level courses are currently being developed.

***f) Comment upon the previous evaluations of 2009 and 2011 and what has been done in accordance to the evaluators' suggestions.***

The 2009 evaluation largely supported how the CHESS Forte Centre of Excellence had been established and how the work has developed initially. One point stressed by the evaluators, led by former Head of FAS/Forte Rune Åberg, was that there should not be double management structures; the Director of CHESS should also clearly be Director for the Centre of Excellence. This is advice that we have followed.

The review in 2011 stressed several things, and brought up directions of research they suggested should be added to our programme. At the same time, they also pointed to the risk of fragmentation that may come with too many research themes at one centre. These partly contradictory arguments were more difficult to follow, and we have largely followed the plans to expand research into uncovered areas, mainly health inequalities linked to migration and migrant's health. As it later turned out, this was a timely expansion of our combined take on health inequalities and how they evolve over the life course.

***g) What university policies relevant to the gender profile of those involved in the Forte Centre exist - particularly those related to its leadership? How have these policies been implemented in the centre?***

CHESS is guided in gender equality issues by Stockholm University's Gender Equality Policy. The University aims to achieve equal rights of women and men with



regard to studies, work, recruitment and other conditions of work as well as to development opportunities within the University. The University aspires to a balance between the sexes of 40-60 % in research and decision-making. Although the ultimate responsibility for achieving gender equality lies with the Vice-Chancellor, the concrete implementation of strategies for achieving gender equality takes place at the department and unit level.

During the Centre of Excellence period, CHESS has had a gender balanced board, chaired by a women (Nina Rehnqvist). The positions as deputy and vice-directors have been filled by women Viveca Östberg, Monica Åberg Yngwe and Jenny Eklund), and the same is true for the Directors of study positions. One of the two Professors of Health Equity Studies is a woman (Ilona Koupil), and the Professor of Medical Sociology previously held by Denny Vågerö was filled by a woman (Bitte Modin). Also, Viveca Östberg was promoted to Full Professor, and both Östberg and Modin had received University earmarked funding for female associate Professors to merit themselves for full professorships. At the end of the Centre of Excellence period, therefore, the group of active professors were gender-balanced (3 of 7). Of the active researchers at CHESS in general at the end of the Centre period, 15 were women and nine were men.

**h) *Reflect on the pros and cons of Centre of Excellence grant. How do you perceive Centre of Excellence grant? Is it a good way to finance research? If so, what is good with this type of grant?***

In our particular case, the Forte centre grant was extremely important since it was received at a time when funding ceased and our existence was threatened. Without the Forte centre grant, CHESS would have lost many of its researchers, and most likely been dissolved and/or incorporated with another university department. Most of the research and results reported here would then probably not exist.

More generally, however, we see three major advantages with Centre of Excellence grants, namely 1) they provide financing that can be applied by a larger team rather than individual researchers, 2) through the long-term perspective they provide a basis for stability and strategic risk-taking, and 3) thereby such grants provide a possibility for a group of researchers to take on a bigger challenge and to collectively develop the research programme.

First, supporting a team rather than individual researchers enhance collaboration and provides a strong basis also for more complicated, cross-disciplinary work that would

otherwise not be realised. While excellent researchers can build good teams around themselves, a strong team made up by researchers of different disciplines pursuing different but linked research interest has better chances to develop fruitful research. Explicitly cross-disciplinary research teams are also necessary to address the big societal challenges of our time, linked to inequalities, migration, ageing and sustainability, to take a few key examples. In order to build such teams, however, there is a need to establish funding mechanisms that stimulate team excellence and not only individual excellence.

Second, Centre of Excellence grants that provide a substantial annual contribution and last for long provide a research infrastructure that has a certain degree of resilience. It provides the team with opportunities to engage in fundamental research activities that are long-term or ongoing, such as initiating and collecting new data or keeping a cohort study rolling. It also provides the Director with the possibilities to support good projects that have not received all the funding needed, or support work that is important for the Centre but that is difficult to fund. This, in turn, provides researchers with the basic financial security needed to be bold and inventive.

Third, Centre of Excellence grants thereby give the research team responsible to address complex research areas, not only through the preconceived theories and analytical approaches at hand at the time for the application, but also through new ideas, data and results emerging through the work carried out at the Centre as well as more generally. This possibility for a dynamic relationship between the research planned and the results coming out of it are rarely seen otherwise.

When it comes to drawbacks, these positive aspects require a balance between individual researcher's freedom to develop their research and the need to keep the objectives of the original research plan alive over a long period of time. This, in turn, will require an active dialogue between the leaders of the centre and the researchers participating. It also requires mechanisms that ensure that the collective output is reasonably in line with the plan.

## 2) Collaboration

*Describe the impact of different types of collaborations, such as internal and external, and with different stakeholders.*

Over the years, CHESS researchers have developed a wide range of collaborations, partnerships and contacts. In the past years, researchers at CHESS have been able to

develop a truly global network. Apart from our strong collaborations with research groups in the other Nordic countries and Europe, we have links to researchers on all the continents. Our contacts have resulted in workshops, student exchanges and researcher visits in USA, Brazil, China, Japan, South Africa, Australia and Canada. Our collaboration with research groups in the other Nordic countries are fruitful and ongoing. Not only have CHESSE researchers taken part in numerous visits and bilateral research collaborations, we have also brought our Nordic colleagues together in conferences and workshops hosted in Stockholm (e.g. NODE conference). In addition, there are fruitful collaborations within Stockholm University, which resulted in the University to identify Economic, Social and Health Inequality as a leading research area, with CHESSE and SOFI taking the lead. Likewise, there are a number of collaborative efforts with other national teams, as well as with national, regional and local government and organisations.

In terms of *impact*, there are at least three different, but interrelated, types of impact from the collaborations with other actors, nationally and internationally. These include the impact on *research infrastructure*, the impact on the *research carried out*, and the impact on *processes outside academia*.

Starting with the *impact on research infrastructure*, collaborations with other researchers and research organisations nationally and internationally has created a strong global network, which in itself forms a part of the infrastructure that CHESSE researchers are part of and can draw on. For example, it has given us opportunities to be part of international applications, which has provided us with grants from e.g. NordForsk and FP7. It also provides better opportunities for teaching and training, with possibilities for both faculty and students to spend time abroad, and to meet with guest researchers.

Even more fundamentally, some of the most unique data resources at CHESSE (the Stockholm Birth Cohort study and the Uppsala Birth Cohort Study) are the result of collaborative efforts. The SBC is the result of a close collaboration with the Swedish Institute for Social Research (SOFI) at SU, where the original members of the 1953 birth cohort with detailed data from childhood on family, school and other social conditions have been linked to relevant social and health registries until 2015. Recently a linkage was made to their parents, children and grandchildren. This is therefore now a three-generation database, with great potential. Equally unique is the UBCoS study, originally a collaboration between CHESSE, Uppsala University and London School of Hygiene and Tropical Medicine, now run by CHESSE. It has identified parents, children, grandchildren and great grandchildren to all individuals

born in Uppsala Academic Hospital during 1915-29. For each generation there is rich social and health data.

In terms of the *research carried out*, it is clear that our collaborations in several ways have shaped both what we do and how we do it. However, it is also clear that it has worked the other way around; due to our international standing CHESSE researchers are often invited to collaborative projects, and researchers from around the world are more than happy to contribute when invited to take part in our projects. For example, CHESSE researchers have formed the Swedish Node in several Nordic projects on welfare and health inequalities and child health together with colleagues at University of Helsinki (Pekka Martikainen and others), Oslo Metropolitan University (Espen Dahl, Jon Ivar Elstad and others) and University of Copenhagen (Ann-Marie Nybo-Andersen and others).

Researchers at CHESSE are also engaged in collaborative work with colleagues at a range of other universities. Some of the more prominent partners include University College London (Michael Marmot, Peter Goldblatt and others), London School of Hygiene and Tropical Medicine (David Leon, Bianca De Stavola and others), University of Liverpool (Margaret Whitehead), Erasmus MC Rotterdam (Johan Mackenbach and others), Rio de Janeiro State University (Antonio Ponce de Leon and others), Harvard School of Public Health (Ichiro Kawachi). We have been engaged in a long-term collaboration around scientific meetings and staff exchange based on research groups in Helsinki (Tapani Valkonen, Eero Lahelma, Ossi Rahkonen, Pekka Martikainen and others) and Glasgow (Sally Macintyre, Patrick West and others). In addition, researchers in Copenhagen and Oslo have been important collaborators, including Finn Diderichsen, Ann-Marie Nybo-Andersen, Espen Dahl, Jon Ivar Elstad and others.

In terms of the impact on *processes outside academia* there are a number of examples where researchers from CHESSE have been engaged in work initiated or commissioned by international organisations, central and local governments, as well as NGO:s. Prominent international examples include work with the WHO Commission on Social Determinants of Health; work with the Strategic Review of Health Inequalities in England post-2010 (The Marmot Review); work for the Review of Social Determinants and the Health Divide in the WHO European Region; and work with the Norwegian Review of Social Inequalities in Health. Prominent national and local examples include work with the Commission for a Sustainable Malmö and The Swedish Commission for Equity in Health, set up by the Swedish Government. These efforts combined have made considerable impact on the way health inequalities are

perceived and addressed, globally as well as nationally and locally in Sweden. Not least the work with the Swedish Commission, led by Olle Lundberg, has influenced local and regional policies and work organisations (see e.g. Göteborgs stad (2017) and the Commission for equity in health in the Örebro region (2017)).

In addition, researchers have worked together with the Swedish public sector at all levels, as well as with NGO:s. For example, Olle Lundberg was a member of the Social Council of the Ministry of Health and Social Affairs 2008-2010, Denny Vågerö was a member of the Commission for a socially sustainable Malmö, and there are several other contacts with municipalities, regions and authorities like the National Board for Health and Welfare, the Swedish National Agency for Education, the Swedish Social Insurance Agency and the Swedish Association of Local Authorities and Regions. Anders Hjern, Viveca Östberg, Denny Vågerö and other CHESS researchers are also involved with the Royal Academy of Sciences, for example concerning mental health among youth, as well as with other NGO:s such as Save the Children and the Red Cross. More recently, researchers at CHESS has developed an on-line tool that is utilised by the Child Health Services in Stockholm (Malin Bergström, Emma Fransson, Anders Hjern, Kersti Bergqvist). It should also be pointed out that several researchers have served on boards and committees of research councils (Forte, VR).

Taken together, there has been a wide range of collaborations with stakeholders and actors outside academia, that all are characterised by clear effects. These effects include new data, new analyses and reports for public sector agencies and NGO:s, policy advice and proposals, as well as recommendations and tools for practice.

## **References to Part 2, Question 1a-h and Question 2**

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### 3) External communication/dissemination

#### a) Describe your communication strategy.

Our strategy for external communications has been to encourage communication and provide researchers with skills to do so (including media training), but to devolve to researchers themselves to decide when and what they communicate. Our web page has been an important communicative tool with an administrator actively seeking new research findings/projects within the centre which has been presented in both Swedish and English. Among the researchers at the centre, it is also generally regarded as important to take part in activities involving communication and collaboration, and such activities constitute an integrated part of work. This is clearly visible in the numerous activities the researchers at the centre have pursued. The activities include participation in work with official reports; participation in expert groups and reference groups set up by different public authorities and associations; working with authorities in specific projects; reviewing official reports and project plans (as experts or committee members); giving lectures/speeches at conferences set up by societal actors; publish research findings in books in the Swedish language (including teaching material); participation in the communication initiated by Stockholm University and the research councils; and media appearances.

#### b) What efforts have been made to communicate/disseminate information about the activities and results from the research funded by the grant to different target groups? Please note that that this question does not seek to capture details of scientific presentations made to your peers in academia.

Through direct contacts with civil servants at state agencies, governments at different levels, and other organisations and NGO:s, through contacts with different forms of media, by using the Stockholm University Communications Department, through our own web page.

#### c) Describe how the results have been communicated/disseminated to the public, policy makers, research agencies, etc.

Our strategy has involved a mix of channels where our prime focus is on scientific publication, supplemented with active participation and direct involvement with policymakers, NGO's as well as communication through different media. The latter includes debate articles, interviews in newspapers, magazines and radio/television.

A form of combination of scientific and popular science is textbooks and other material

intended for use in teaching. Several books of this kind have been produced, and one key example is a textbook in Swedish on health inequalities edited by Michael Rostila and Susanna Toivanen and published in 2012, with a new edition coming out in 2018 (Rostila M, Toivanen S (eds) *Den orättvisa hälsan: om socioekonomiska skillnader i hälsa och livslängd*. Liber).

- d) Describe the impact of the results in the research community and society in large. Please list impact through media e.g. newspapers, textbooks, popular science presentations, policies/standards, blogg, twitter and homepage.**

As described in more detail in the response to Question 2, and in particular on page 11, the impact of our efforts to reach out with our research are most clearly seen in the result of direct engagement with different actors, including new data, new analyses and reports for public sector agencies and NGO:s, policy advice and proposals as well as recommendations and tools for practice. In addition to that, there is of course a long-term impact through teaching and training of students, through popular science books and reports, and through different forms of media appearances. However, the size and durability of such effects are difficult to assess.

#### **4) Participating personnel**

- a) List the persons actively participating in the Forte centre during the grant period. Please use the Excel file named *Appendix* for presenting the persons actively participating in the Forte centre, (*Appendix 1*).
- b) Describe strategies for recruitment of researchers and research groups. Have the strategies been successful?**

Recruitment of staff is regulated by legislation and Stockholm University guidelines, and should always be focussed on recruiting the candidate with the best competence and abilities for the position. In practice, we have employed slightly different strategies for different groups of staff to accomplish this. When recruiting PhD students we follow the specific regulations for how this should be done, and have usually announced broadly but also encouraged talented students from our Masters programme to apply. We have also recruited research assistants from the Masters programme and encouraged them to apply for PhD positions that are being announced. When recruiting senior staff, such as Professors, we have both announced internationally and distributed information about the position open through our networks. We have strived to keep a mix in terms of disciplinary backgrounds, as well as to achieve gender balance. The

latter has proven difficult, primarily because the most talented that apply for our positions tend to be women.

## 6) Evaluation of Forte Research Schools

### a) Describe the organisation of the research school?

The head of the CHESS Forte Research School has been Professor Olle Lundberg. Professor Bitte Modin has been the coordinator of the Postgraduate Programme since 2008, and Cathrin Wiksell has been part-time secretary. Modin is professor of medical sociology and was appointed to this position due to her research experience in several of the areas that are central to the FORTE centre and her interest in developing PhD student training.

Before 2014, the doctoral students in the Forte research school were enrolled at their respective “mother institution” (in total six different institutions at SU and KI were represented between 2007 and 2017). One of the most important tasks of our postgraduate programme has been to serve as a “unifying organisation” or framework for the various PhD students who, through their supervisors, were affiliated to CHESS. Since 2014, CHESS has been responsible for the postgraduate programme in Public Health at Stockholm University. Doctoral students with CHESS as their “mother institution” have, together with doctoral students affiliated to CHESS, been part of the Forte centre.

The overarching purpose of this programme has been to serve as a resource for the participants of the programme by adding to existing researcher training at Stockholm University, Karolinska Institutet and other universities in the area of Human Society and Health. The programme has aimed to complement and bridge the existing supply of courses and academic training. The teaching and training activities within the postgraduate programme at CHESS have been organised under five themes:

1. Advanced level courses that complement and bridge the existing supply of courses offered by the disciplinary departments at SU and KI. These courses have often been multidisciplinary and highly relevant for our PhD students as they covered areas that are essential for multidisciplinary research and in-depth knowledge about various sources of health inequalities. The Master programme assigned priorities for admitting PhD students from the postgraduate programme at CHESS to its advanced level courses (see Appendix 8a).

2. Workshops and seminars focusing on central aspects of academic craftsmanship, mainly how to write, read, present, comment and publish academic texts and papers. *Journal Clubs* (lead by Denny Vågerö until 2016; Pekka Martikainen since 2016-) (see Appendix 8b:1), *the Higher Seminar Series* (lead by Johan Fritzell until 2014; Viveca Östberg since 2014) (see Appendix 8b:2), and a large number of *Educational Half-Days* have been arranged regularly since the start of the programme in 2008 (see Appendix 8b:3).

### 3. Advanced courses in statistical techniques.

The postgraduate programme has since 2009 arranged advanced courses, specifically focussing on statistical techniques. These courses have been tailored to meet the needs of our PhD students in order to acquire certain skills required for their doctoral work (see Appendix 8c for a complete list).

4. Nordic PhD workshops together with colleagues from Denmark and Finland (see Appendix 8d). We have had regular exchanges (in total 9 workshops) with the Danish Graduate School of Public Health at the University of Copenhagen as well as the Doctoral School in Population, Health and Welfare and the Doctoral School in Public Health at the University of Helsinki through these Nordic doctoral workshops. These workshops have been a much appreciated arena for our PhD students to get comments on their work while, at the same time, practising conference skills and creating contacts with both junior and senior researchers in their field.

Due to the positive evaluations and responses from PhD students, the Nordic workshop format expanded and in June 2016, the Postgraduate programme at CHESS arranged the first Nordic Doctoral Conference and Networking Event (NODE) at Stockholm University. The conference was built on existing collaborations and workshop meetings held between CHESS Postgraduate programme and the University of Copenhagen and University of Helsinki. This doctoral conference aims to strengthen collaborative research networks across Nordic research institutions, to connect PhD students of various disciplinary backgrounds, and will also serve as a forum for knowledge exchange on leading public health and health equity issues in the region.

5. In addition to the four points above the programme also supports various activities of importance for PhD training, including the possibility to apply for travel allowances, course- and conference fees and certain expenses related to national and international collaborations.

#### **b) What is the relation between the research school, the centre and the research done at the centre?**

The PhD students at CHESS have, to a large extent, been financed through the FORTE centre and other external grants. This means that research and PhD training are closely linked, partly since that the research work undertaken by PhD students is part of our research and output, and partly because supervision and training is integrated in the collaboration between project members. It also means that many PhD students have overlapping interests, and can discuss and give each other valuable support, not least with issues related to data and methods. The major advantage of the Research School funding has therefore been that we have been able to

support both supervisors and PhD students by offering a broad range of platforms and activities.

**c) Is there any connection between the research centre and other doctoral, undergraduate or postgraduate courses?**

The postgraduate programme collaborates closely with the Masters programme at CHESS. We also have an organised collaboration with the research school at the Ageing Research Centre (ARC) in the sense that we invite each other's PhD students to take part in seminars and courses given within our respective programmes. In addition, we have regular exchanges with the Danish Graduate School of Public Health at the University of Copenhagen as well as the Doctoral School in Population, Health and Welfare and the Doctoral School in Public Health at the University of Helsinki through the Nordic doctoral workshops.

**d) What are the future plans for the research school?**

An overarching purpose with Research School has been to establish a common ground for PhD students who work at CHESS or are supervised by CHESS researchers, but enrolled in PhD programmes at different Departments across Stockholm University and Karolinska Institutet. An important aspect of this is that the Research School has been a vital resource for our ambitions to provide PhD students with the theoretical, methodological and practical skills necessary in the cross-disciplinary area of Health Equity Studies, but having common activities for PhD students at CHESS has also been important.

With the establishment of Public Health Sciences as an academic subject at Stockholm University, and in particular after the establishment of a Department for Public Health Sciences, we have been able to develop our own PhD training programme, hence some of the needs to provide students with a 'common ground' are no longer there. Some of the ideas around PhD training developed in the Research School, such as the Monthly Journal Club, and has been included in our new programme. However, other parts of the Research School that have worked well and have been appreciated by students and supervisors alike, such as the possibility to apply for funding for conferences and summer schools and the Nordic PhD students conferences, are dependent on the availability of external funding and will therefore most likely not be continued.

## Appendices

For Appendices 1-3 use the Excel file called Appendix

*Appendix 1.* Table for presenting the persons (other than doctoral students) participating in the Forte centre, Both researchers and TA-personnel.

*Appendix 2.* Table of doctoral students participating in the Forte centre research school, or for those centres that has doctoral students but not a research school.

*Appendix 3.* Economic report and finance plan of the Forte centre

*Appendix 4.* Complete list of peer-reviewed publications in journals by researchers at the centre during the grant period.

*Appendix 5.* List of peer-reviewed conference presentations by researchers at the centre during the grant period.

*Appendix 6.* List of other types of publications by researchers at the centre during the grant period.

*Appendix 7.* Organisation chart to illustrate how the Forte centre is organised.

*Appendix 8.* Programme activities of the research school