The Swedish National Graduate School for Competitive Science on Ageing and Health

Programme Description

Background
In Sweden, research on ageing and health has expanded during the latest decades and engages researchers from a broad variety of disciplines. Researchers working at different higher education institutions (HEIs), university hospitals and research institutes collaborate on specific projects, but they do not often share common Graduate School programmes. PhD students and postdocs already involved in research on ageing and health are an important resource for knowledge development, and they represent an impressive array of disciplines, constituting a unique source for development of excellent, multi- and cross-disciplinary research on ageing and health of great national and international scientific importance. The heterogeneity of disciplines that conduct research related to ageing and health presents a unique asset and challenge compared to other fields. No single discipline or research orientation can address the complex demands that the ageing population places on health care and social service systems, and on society at large. Consequently, there is a great need for coordinated collaborative efforts regarding Swedish national third cycle education and training related to research on ageing and health. Seriously considering the international mandate for such endeavours, the new Graduate School will apply multi- and cross-disciplinary perspectives to this field of research.

Mission & Goal
The mission of the Swedish National Graduate School for Competitive Science on Ageing and Health is to develop efficient and creative cooperation among relevant Swedish HEIs and international partners. This cooperation will increase the recruitment base of researchers who can increase the healthy life years (HLY; the average remaining years spent free of activity limitation) of our ageing population while improving the efficiency of our health care and social service systems. Building upon our extensive experience in developing third cycle (research level/graduate level) education related to research on ageing and health integrated with existing initiatives, we will provide the best possible cross-disciplinary third cycle education. With teaching and learning activities tailored to accommodate different research traditions, we will apply modern social and practice-oriented theories of learning.

The recruitment base are PhD students and postdocs already involved in research on ageing (representing a broad array of disciplines across the academic spectrum) as well as those with backgrounds in epidemiology, public health and research on diseases and disorders that are typically related to ageing but as yet not explicitly linked to research on ageing and health. The key to success is the fusion of researchers not only with preclinical, clinical and health sciences backgrounds but also those from social and behavioural sciences, humanities and law, demography, engineering and architecture.

The overarching long-term goal is to develop and strengthen the recruitment base of future leaders in research on ageing and health by creating a sustainable multi- and cross-
disciplinary national graduate school for competitive science, which will ultimately lead to improved quality of life, health, medical treatment, and care for our ageing population.

**Components of the Programme**

During the first three-year period there will be five main types of activities to establish the Graduate School Programme, described below. All activities will be designed to allow maximum participation by PhD students and postdocs from different backgrounds. The activities will create opportunities for them to learn from each other, thus taking advantage of their diverse backgrounds. Regarding courses, they will by necessity be administered in a flexible manner to enhance participation by full-time as well as part-time PhD students, particularly those working in clinical settings. Ensured by PhD student and cross-disciplinary researcher participation in decision bodies and working groups, content will also be tailored for different research traditions.

**Recruitment of Graduate School Curriculum Students**

A maximum of 50 PhD students will be recruited from any of the partner HEIs, initially through an open competitive call with expected affiliation of 20-25 students in the first year. Additional annual calls will be held to reach the maximum number. Only students who are registered at their home faculties, following the formal requirements of the respective HEI and at midway review (or equivalent) or earlier in their studies will be considered. Thus, these students will all follow the regular third cycle curricula of their home HEI and may also be affiliated to other Graduate Schools.

**The Graduate School Curriculum**

Four cross-disciplinary courses on ageing & health that have a broad theoretical and methodological nature and target the needs expressed by students and supervisors constitute the Graduate School Curriculum. The Graduate School Curriculum will be open to the PhD students recruited as described in the previous section. Most important, the first cohort of PhD students will take an active role in the development of the courses. The courses will consist of a distance learning component facilitated in a flexible way over 12 months, to allow for students with different circumstances to participate. Each annual course will include a three-day workshop for the students and their supervisors, hosted by any of the partner HEIs. Providing a creative learning environment, the workshop format will promote the formation of new research networks, strengthen research collaboration and provide a deeper understanding of the different scientific approaches characteristic of a sustainable multi- and cross-disciplinary Graduate School. The participants will receive 3 ECTS for each annual course completed. Commonly, each PhD-student will participate in two of the four courses during their study time.

**Nationally and Internationally Advertised Courses**

We will provide financial and expert support for the development of new/optimised courses, following open advertisement for competitive funding among partners to cover development costs and running cost the first time the course is given. Free of cost, these courses will be open for PhD students in Sweden as well as abroad. Course initiatives explicitly based on needs expressed by PhD students will be encouraged. To enhance collaboration, proposals engaging two or more partners will be prioritized. Courses may be of a broad theoretical or methodological nature or have a more intensive or specialized focus, mirroring state-of-the-art approaches to research on ageing and health. The
portfolio of courses consists of courses with a specific focus on ageing and health as well as those that are indirectly related to ageing and health, e.g. in terms of specific diagnoses or health problem areas.

National web portal

Newly developed courses within the Graduate School become available through open advertisement and are presented on the national web portal accessible by way of Lund University. The Graduate School will advertise all national courses about ageing and health on this web portal, with links to information provided by the HEI responsible, other than partners.

The International Summer School on Ageing (ISSA)

An International Summer School will be hosted by the new Graduate School and CASE within the International Summer School on Ageing (ISSA) initiative (partners: CASE at LU; the National Institute of Health and Science on Ageing, INRCA, Italy; the University of British Columbia (UBC), Canada). ISSA was held for the first time in Italy in 2012 and will be arranged at LU in 2014. What makes ISSA unique is the focus on cross-disciplinary and longitudinal studies on ageing, including lectures on areas spanning from preclinical over clinical to health science research as well as facets from related disciplines in social and behavioural sciences, demography, economics, etc. All PhD students/postdocs present their on-going research in seminars and are given feedback by their fellow students and assigned personal senior researcher mentors. Twenty participants will be recruited based on merits but with the intention to secure the greatest possible spread over disciplines and countries (10 from the ISSA partner countries; 10 from other countries). The ISSA will be hosted in Vancouver in 2015, including participants from Sweden.

Postdoc Programme

A two-part Postdoc Programme will be developed. Part 1 is a course open to postdocs from across Sweden and abroad, with the overall objectives of promoting and planning their own scientific careers by developing skills for future work as senior researchers, as well as building their own research groups. The course will consist of readings and assignments completed through web-based learning management system, followed by a three-days workshop. The course also includes information about the various positions of trust that come with an academic career, the development of skills to participate in and subsequently be responsible for PhD student supervision, identification of national/international networks for future academic careers, and strategies for interaction with society at large. Examination is in writing and orally, including a defence of the individual research programme and qualification portfolio. Part 2 is a non-formalised mentor programme exclusively for postdocs of the Graduate School partners. By engaging postdocs in the execution of the Graduate School Curriculum and other activities, and the management and administration of the Graduate School, we aspire to facilitate their socialization as researchers and teachers in third cycle education and training. In addition to engaging them as lecturers and supervisors, we will form pairwise course leadership constellations with one senior and one postdoc-level researcher.
Significance
With the establishment of the new Graduate School, Sweden will strengthen its position regarding research on ageing and health and offer novel opportunities for international collaboration, within Europe and beyond. We will promote the networking and development of junior researchers, creating a sustainable collaborative research network on ageing and health. The activities will open more international networking opportunities and expand the recruitment base for future researchers on ageing and health beyond Sweden. Conscious efforts on collaboration between scientific disciplines can ultimately create a better health and social care system that promotes active and healthy ageing. The junior researchers that will receive their training in the new Graduate School will be attractive and employable in societal sectors beyond those of academia and clinical settings, in Sweden and abroad.