

FUTURAGE

Research Priorities on Ageing in Europe. Query Results in Spain

Vicente Rodríguez Rodríguez

Researcher at Centro de Ciencias Humanas y Sociales
FUTURAGE Scientific Officer. Ministerio de Ciencia e Innovación
vicente.rodriguez@cchs.csic.es

Summary

FUTURAGE was created aiming at drawing the map of the European research on Ageing. Through a consultation and scientific events approach, FUTURAGE seeks consensus with European researchers and experts about the future research on aging priorities, focusing on five large section: Biogerontology, social and economic resources, environments of aging, healthy aging, and user involvement in research.

Palabras clave

Ageing, Biogerontology, Social and Economic Resources, Environments of Aging, Healthy Aging, User Involvement, Gerontology research, Europe



Antes de imprimir este informe, piensa bien si es necesario hacerlo. Una tonelada de papel implica la tala de 15 árboles. Ayúdanos a cuidar el medio ambiente.

How to cite this article: RODRÍGUEZ RODRÍGUEZ, Vicente (2011). "Futurage. Research Priorities on Ageing in Europe. Query Results in Spain". Madrid, Informes Portal Mayores, nº 107. [Publication date: 05/01/2011].

<http://www.imersomayores.csic.es/documentos/documentos/rodriguez-futurage-02.pdf>



INDEX

1. Introduction.....	2
2. The consultation in Spain.....	3
3. Results.....	3
4. Conclusions.....	9
5. Annexes.....	10

About FUTURAGE

FUTURAGE is a two-year project funded by the European Commission to develop a roadmap for the European ageing research for the next 15 years. It will be set up after an extensive consultation with researchers and experts from a multidisciplinary perspective and a discussion of the priority proposals in various scientific events.

(<http://www.futurage.group.shef.ac.uk/>)

1. Introduction

Concern about and interest in studies on the ageing of the Spanish population have been strengthening with the growing number of people over 65 years old (over 7.5 million in 2008, according to *Informe 2008. Las personas mayores en España*), given that Spain already finds itself among the six countries with the oldest population (*UN. World Population Prospects 2008*).

In response, research done in Spain by Spanish scientists on ageing has been growing over the past 25 years to reach 1% of Spain's total scientific production, constituting a significant portion of medical-biological and social studies, within which the psychological approach has emerged strongly in recent years. The first type of studies reflects the traditional medical view of ageing and the latter depicts scientists' perspective on ageing as a multi-factorial human and social phenomenon to be analysed in relation to the social welfare state in Spain since the 80s (*Informe 2008. Las personas mayores en España*).

As it has increased in prominence, research on ageing has gained a place in the government's R&D&I agenda. In recent years the Ministry of Science and Innovation has funded nearly 100 research projects on ageing, most of them in biology and medicine (60%), with psychology (22%) and social sciences (10%) in second and third positions. While these projects are in related fields, it is not always clear that they succeed in joining forces to become interdisciplinary. The Instituto de Salud Carlos III (Carlos III Health Institute) and the Instituto de Mayores y Servicios Sociales (Institute for the Elderly and Social Services) also fund research in the fields of health and social studies.

Future prospects for research on ageing in Spain include several opportunities outlined in the National Strategy for R&D&I. These research areas stand out:

- Among the areas in which medical-biological research is already consolidated, several fields stand out: biomarkers to aid in clinical diagnosis, sequencing, genotyping, proteomics, biomarkers that allow researchers (a) to identify genetic markers and molecules that are currently or that may become pathological and (b) apply these markers to more precise diagnosis and prognosis of pathologies and of their response to drugs. Among the areas of biomedical research that are expected to be developed strategically are studies related to regenerative medicine and cellular therapies for the functional regeneration of organs and tissues, as well as genetic, molecular, cellular and tissue research on metabolic diseases, chronic inflammatory diseases and human ageing in general.

- In social studies, two trends are notable. One set of studies focuses on cohesion, equity and the exclusion of groups through analysing the social, psychological and educational impacts of change on different demographic groups, with a particular focus on older people. Another group examines social policies related to the welfare state and to the legal protection of individual and social rights as the basis for public and private decisions.

- Many psychologists are focusing on the impacts of changes over the course of life and on the cognitive and psychosocial aspects of ageing.

- Technological research is oriented to the development and application of sensors and monitoring techniques, stimulation and robotics in telecare and telemedicine as well as to communication technologies and developing domestic applications and services and applications in health, caretaking, and social inclusion.

2. The consultation in Spain

In the Spanish context, this FUTURAGE consultation represents an essential opportunity to set down Spanish researchers' scientific priorities in ageing. Details of the consultation were made

available on Dec. 15th 2009 to the 500 researchers, professional associations and other entities included in the directory of Spanish researchers in geriatrics and gerontology (Portal Mayores, www.immersomayores.csic.es). through the dissemination of the document prepared for gathering data for the FUTURAGE consultation (Annex I)¹.

Over 50 responses were received (from some 10% of the people and entities contacted), of which we used 46 here, after discarding those with serious inconsistencies in the interpretation of some of the consultation's sections and lacking data on the informants' identities. The distribution of the respondents' scientific backgrounds is very similar to the disciplinary distribution of the research projects funded in recent years. It can be broken down into three main areas: medical sciences (a fourth of the respondents); 'human' sciences that are directly involved with people's matters, such as psychology (with the most practitioners in this second general area), education, gerontology and social work (40% of the respondents); and social sciences (20% of the respondents). The information gathered from Spanish researchers was analysed using the Atlas.ti programme for analysis of qualitative data, through coding the contents (Annexe II and III) and developing conceptual networks in each of the 6 sections, the first 4 being thematic and the last 2 organizational, joined in a single diagram.

3. Results

In general, we can say that the answers may be biased depending on respondents' academic training and professional development with significant differentiation between biogerontological aspects on one hand and human and social rights on the other. In this case, the priority distribution tends to be interdisciplinary, and a higher concentration is found in social sciences than in biogerontology, to the extent that three of the four research areas targeted in the query can be 'recognized' as being closer. About 70% of respondents selected 'healthy ageing' as a priority, while only 47% opted for biogerontology, with contributions from neurologists, geriatricians,

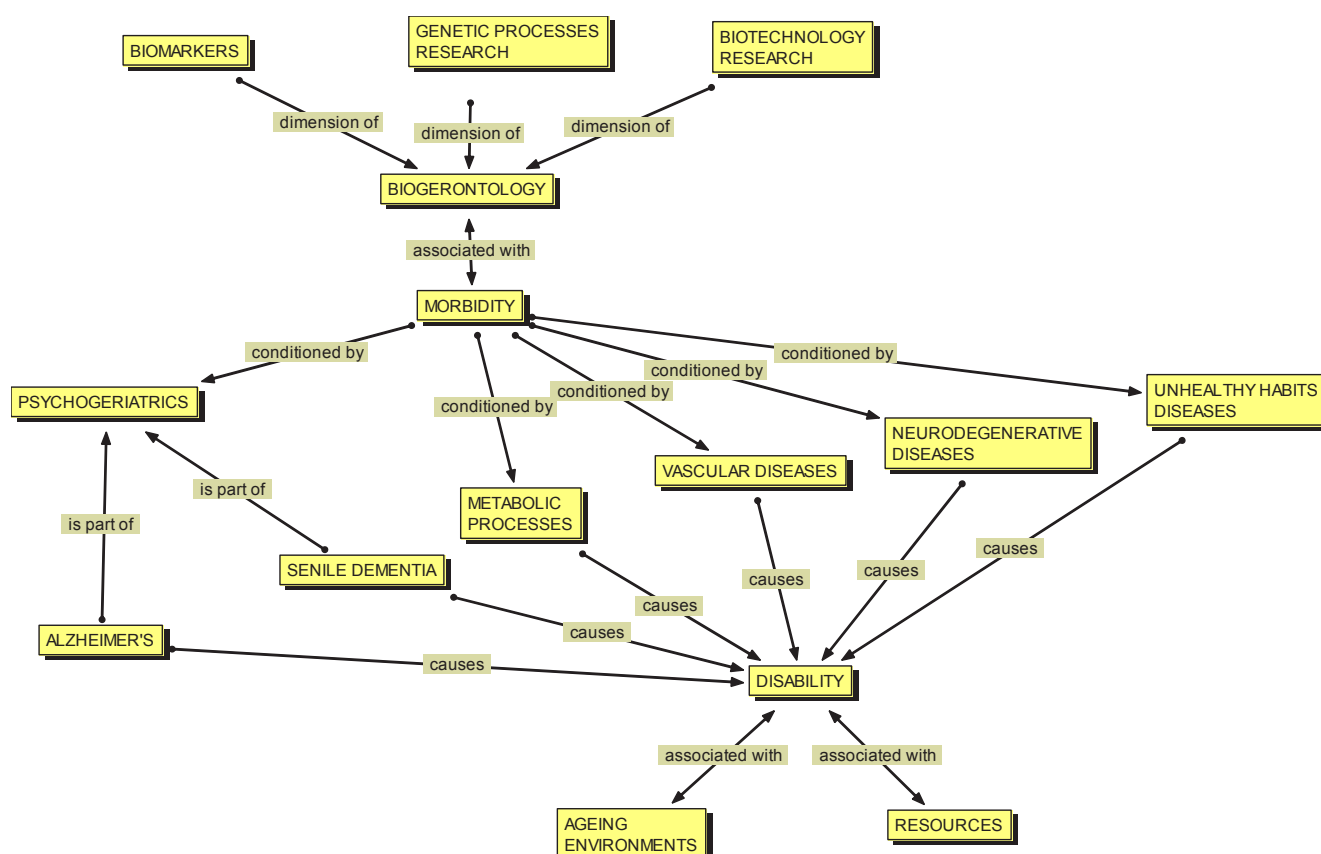
¹ Available on:
<http://www.immersomayores.csic.es/seniinv/formulario-futurage.htm>

nutritionists, physiologists and health professionals standing out. In the social sciences, psychologists predominate (one fourth in total), followed by economists, geographers, political and education scientists and social workers. Finally, some respondents work in public administration, NGOs and companies.

The answers provided by scientists about **biogerontology research** over the next few years (Diagram 1) follow a double line of interest in connection with two social phenomena specific to the ageing process, the *morbidity* associated with older peoples' diseases and the resulting *disabilities* that condition their activities of daily living. On one hand, respondents highlighted research on physical diseases (metabolic, vascular and neurodegenerative), linked to diagnosis

through biological and genetic markers, essential in the biological ageing process as a research dimension, and going to an applied interest through the biotechnological applications. In the near future we need to fill a great lacuna in effective therapies for the elderly. On the other hand, some informants expressed as much interest in a psycho-geriatric approach, i.e. Alzheimer's disease and senile dementia, as in a biological approach. Some respondents mentioned diseases due to unhealthy habits. All are processes of tremendous biological significance in understanding the degenerative process and malfunctions leading to disability, and their impact on the daily lives of affected people and families. Disability is associated with ageing environments and the social and economic resources needed to assist elderly people.

DIAGRAM 1. BIOGERONTOLOGY RESEARCH

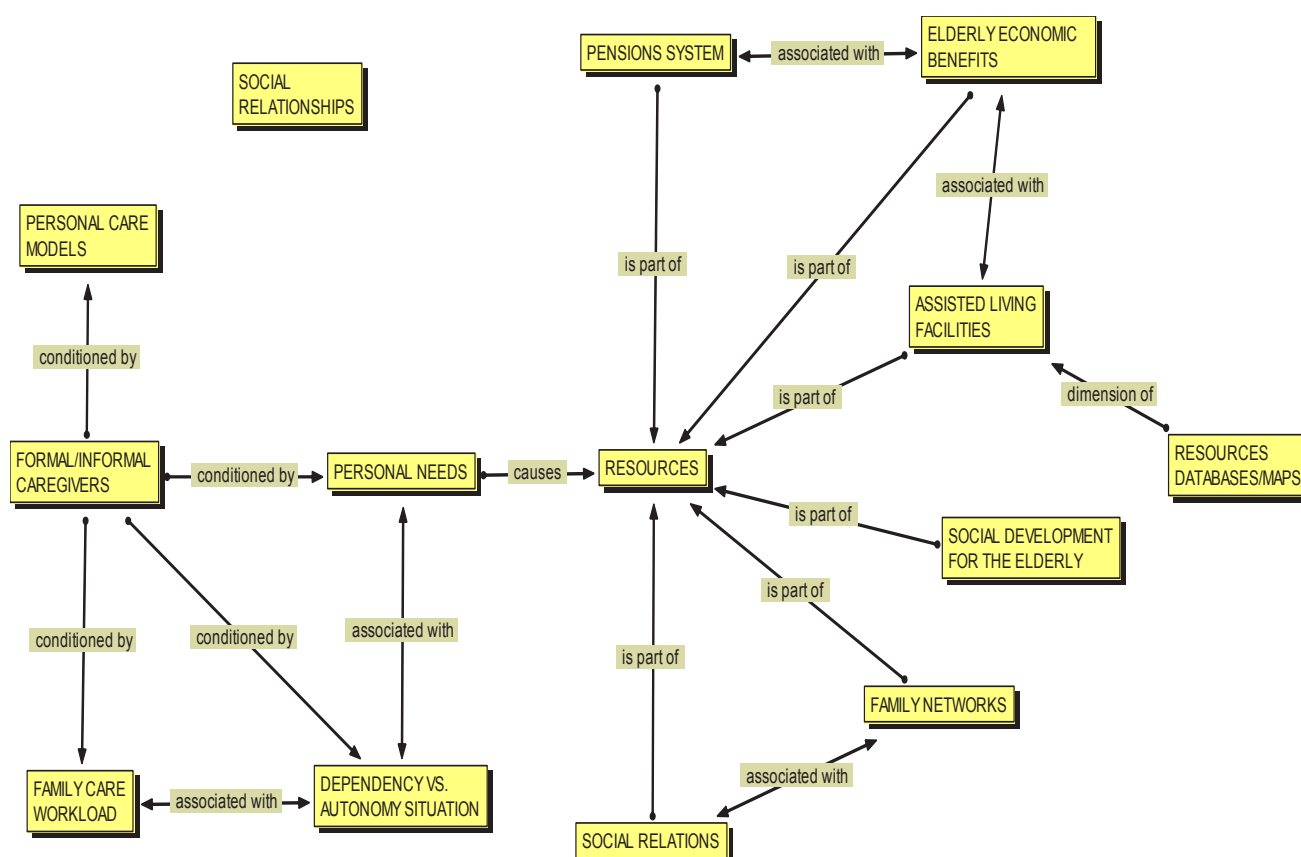


Fuente: Own elaboration

The lines defined for the **resources sector** follow a clear argument: many Spanish researchers are interested in linking the implementation of resources for older people to determining their needs in relation to the evaluation of their health and foreseeable demands due to disability and dependency situations (Diagram 2). This is the obvious response to the fact that the process of ageing, which is lengthening with increased life expectancies, can cause various physical and biological deteriorations of health that necessitate caretaking and resources devoted to older peoples' needs. Respondents see family, and family caregivers, as an area of vital interest to Spanish society. Informants mention two related points of concern: the workload of family members caring for their elders and the model of care that the state makes available to families as a supplement or a replacement, and aspects associated to it. As many international studies have shown, family and state, in that order,

are considered the essential elements in Mediterranean societies' systems of taking care of their elderly. As the informants also reported, future research on the resources provided to the elderly has a *dual social and economic component*. In the first case, the family and social network stands out as Spanish society's basic tool for older peoples' personal care and social development and their immediate environment. In the second case, respondents mention the design of a suitable economic model for older people, essentially a sustainable pension system and other economic benefits, and a more extensive system of senior residences and assisted living facilities with better coverage than the current one. Critical here are adequate instruments for managing the physical resources available to the elderly (databases, resource maps). Although it is not explicitly stated, these social and economic resources would be connected to a deepening of the Spanish social welfare state.

DIAGRAM 2. RESOURCES SECTOR

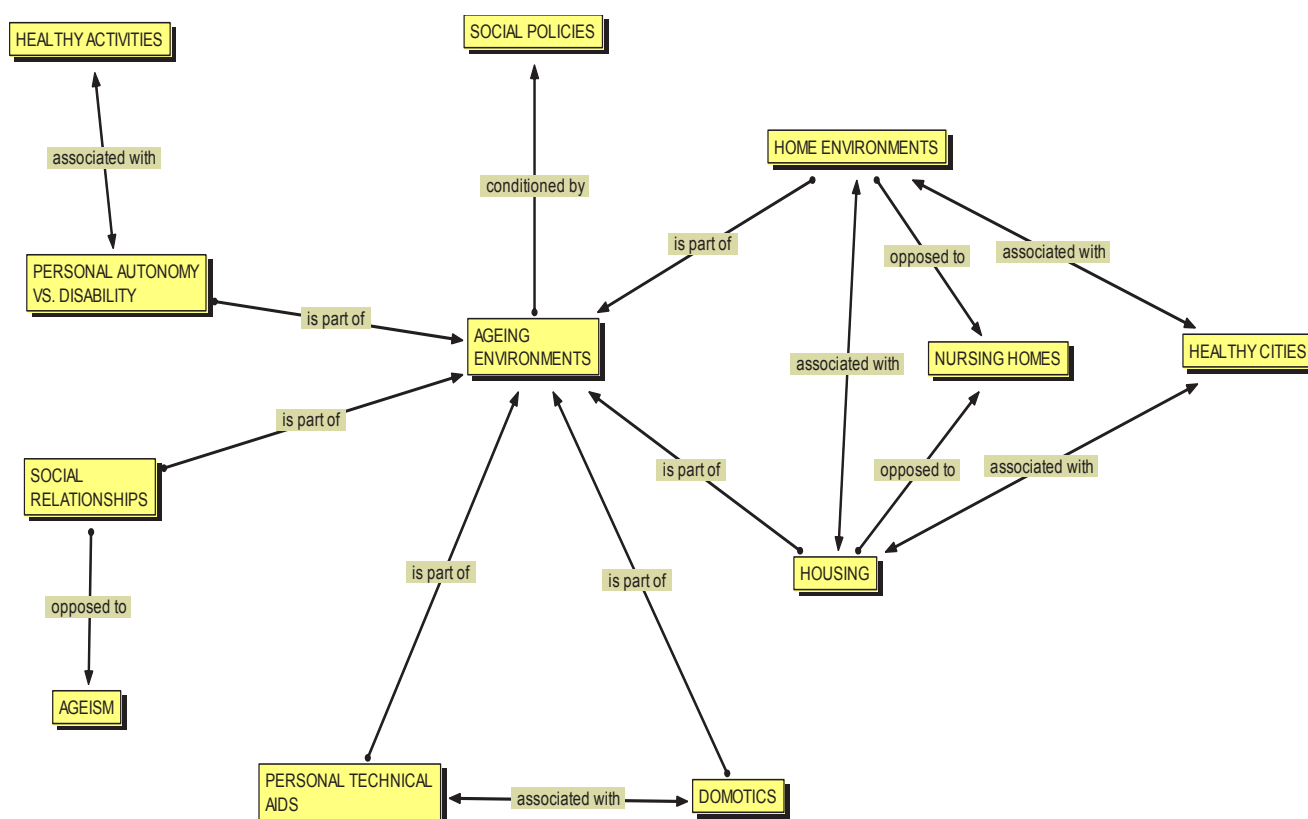


Fuente: Own elaboration

The **environments of ageing** have been interpreted in the questionnaire as an interaction between the personal sphere and other vital dimensions in the search for conditions for *active ageing* and *good quality of life* in old age (Diagram 3). Informants' response suggested various lines for future research. On the *personal level*, research should address issues related to changing health conditions by developing healthy activities to promote more autonomous living and to alleviate the dependency process. Informants also emphasise the need to improve older people's status in society by avoiding discriminatory images (ageism) or violent situations, and enhancing social relations in the living environment. Concerning the *residential aspects*, respondents recommended studying the home environment itself (ageing at home) as an instrument of quality of life among elderly Spaniards through improving material conditions in homes and buildings, fostering the importance of the neighbourhood

as a central reference for their life, and the urban environment (healthy cities). Informants did not, however, address the rural spaces in which a substantial number of Spain's elderly live and in which the issues facing the elderly may be very different. Another subject in which respondents showed much interest is the improvement of *residential areas* specifically for the *institutionalized elderly*—a different (perhaps opposed) way of thinking about older people's environments. In a related area, Spanish researchers have a growing interest in developing technology initiatives in the personal and domestic areas, such as technical aids and domotics to improve quality of life. Finally, it is interesting to note the emphasis on improving *social policies* regarding the elderly as part of a social welfare state that combines personal and domestic (private) with public resources and that can have a considerable effect on environments of ageing.

DIAGRAM 3. ENVIROMENTS OF AGEING



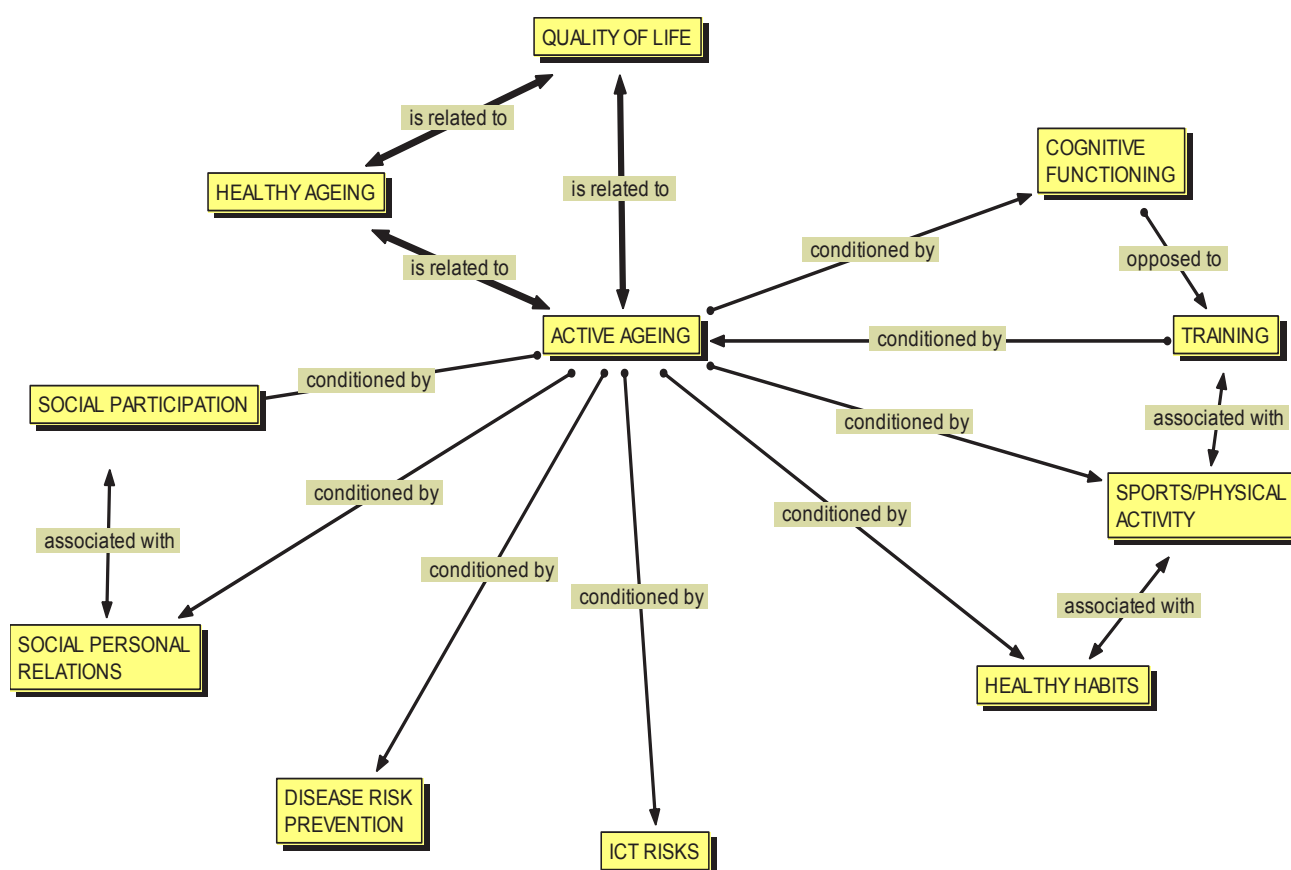
Fuente: Own elaboration

Future research on **healthy ageing** will concentrate on some of the issues already considered (Diagram 4). *Quality of life* is mentioned as an important issue in future research related to active and healthy, ‘successful’ ageing: researchers have taken these three concepts as concomitant aspects of a new way of understanding ageing in a stable society from a demographic point of view. Older age these days can offer diverse opportunities for a longer life in better conditions. Many dimensions are highlighted in this process.

On the personal side, informants list (i) improving older people’s *cognitive functioning* by strengthening active behaviours that empower

them to engage in healthy activities central to their lives, and (ii) developing *healthy habits*, not only in nutrition, but also in the practice of physical activities or sports, leading to new challenges for gaining adapted skills through training. In healthy behaviours, researchers emphasise (iii) *preventing risks* of disease or loss of autonomy, including those induced by the appearance and use of new technical tools in the elderly daily lives. Finally, (iv) respondents show interest in *enriching older peoples’ social life* by increasing (or at least maintaining) systems of social and intergenerational relations that facilitate greater and more active participation in their living environment.

DIAGRAM 4. HEALTHY AGEING

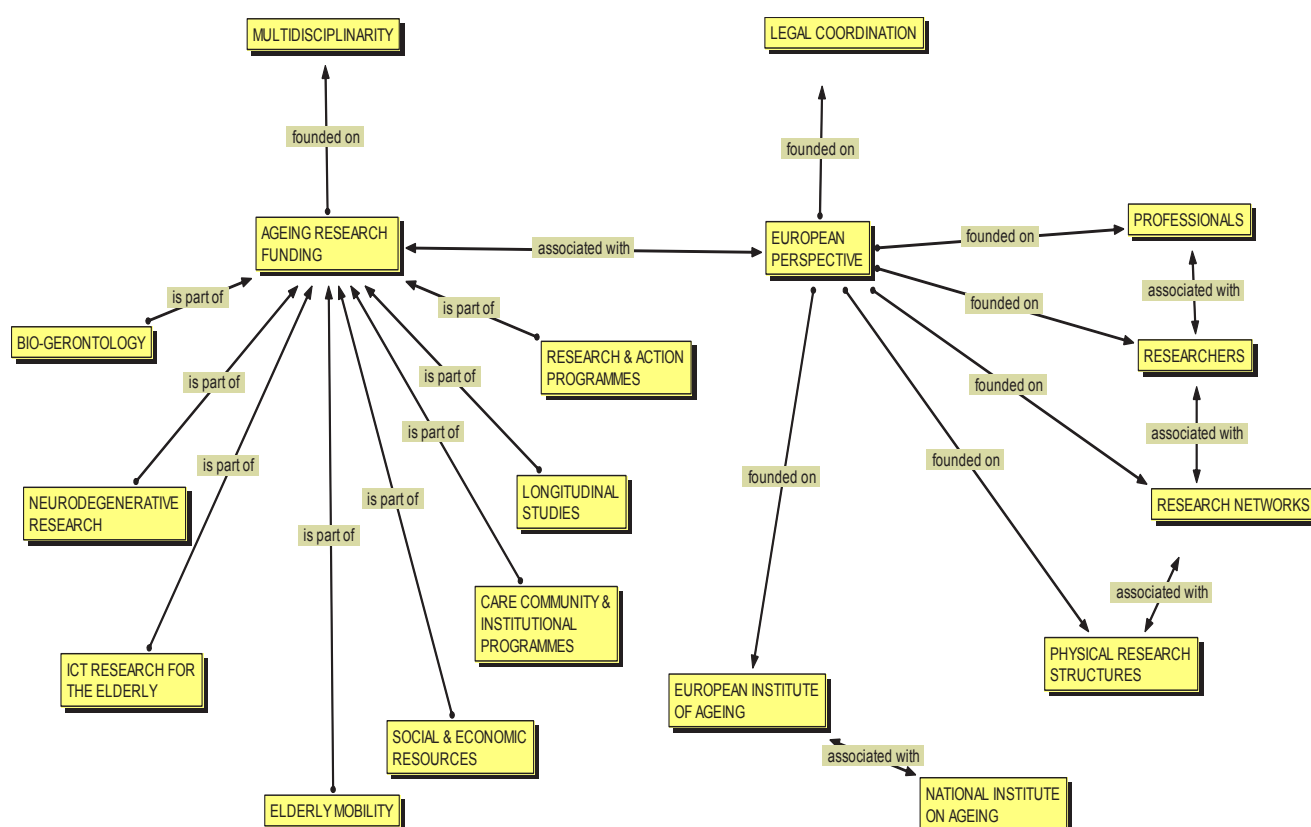


Fuente: Own elaboration

What are the **priorities** that require a more vigorous European collaboration? What **infras-structures** would be needed for its development? These two major issues must be addressed, according to the Spanish informants, with an acknowledgement of their obvious interdependence, the more so since respondents themselves have not always been able (or willing) to differentiate

them clearly (Diagram 5). The basic idea, then, is that there is a clear relationship between the need for greater commitment to funding research on the ageing process in general and the advisability of adopting a European perspective in defining the research to be done and the instruments needed to carry it out.

DIAGRAM 5. PRIORITIES FOR EUROPEAN COLLABORATION



Fuente: Own elaboration

Undoubtedly, *adequate funding* is a very important priority/need for many informants, and in both major types of scientific interests: (i) research on physical diseases (biomedicine, biogerontology) and mental diseases, especially senile dementia and Alzheimer's disease and care procedures and the quality of that care, and (ii) other social aspects of research, such as the social policies oriented to these people (community and institutional programmes, research & action programmes), the available resources (residential, social, economic, equipment and adaptation technologies, programmes of information about

resources), and some process-oriented approaches (ageing and life course, lifestyle, mobility/migration). The strategy some informants suggest to strengthen our knowledge in this area is multidisciplinary and longitudinal studies of cohorts, with specific attention to certain issues.

To develop these priorities, those who participated in the questionnaire made it clear that an essential prerequisite in the future is a '*European collaboration*' with a global approach that emphasises the differences between countries. It is conceived as a multicentre collaboration between basic and applied researchers that uses



consensus as a basis for scientific agreements under the umbrella of common supranational norms for action and legal coordination.

Beyond these general principles, the Spanish consultation proposes two *types of entities* to structure future research on ageing. At the physical level, informants mention the *structures that support research* (databases, bio-banks, diagnostic equipment). In the area of relations, most informants mention *knowledge structures* such as networks that would be robust and based on new or existing resources, or institutes (for example, to promote autonomy and on dependence and ageing, which were explicitly mentioned as singular and strategic initiatives to take in the near future). To fill some present gaps, we also need to share theoretical backgrounds and methodological approaches among researchers and professionals as well as to increase the critical mass of research-all of which would reinforce the efficiency and efficacy of European research.

4. Conclusions

This exploration of the Spanish science system shows the multiplicity of initiatives and strategies

that researchers and research groups have developed to study ageing. Spanish scientists have many opportunities to carry out their research with funding from the central administration and regional governments. However, research on ageing is still dominated by 'disciplinary' research with a clear separation between the 'biological' sciences and the social sciences and psychology. For this reason it is not easy to establish interdisciplinary research structures, although scientific practices in some research communities may allow such shared structures to emerge. In this area we have a long way to go.

Secondly, future prospects for research on ageing in Spain identified in this consultation are mostly already underway. The information available in the National Strategy for Science and Technology and recently developed research projects seem to confirm this. Similarly, the ageing process of the Spanish population in recent decades and its future prospects ensure the demand for biological and social research as Spanish society calls for a broader and deeper understanding of this reality, which the public administration also needs in order to better plan and develop public policies.

5. Annexes

ANNEX 2. CONSULTATION ABOUT PRIORITIES FOR AGEING RESEARCH

Futurage. Consulta nacional sobre prioridades de investigación en envejecimiento

FUTURAGE

FUTURAGE es una red científica financiada por el 7º Programa Marco de la Comisión Europea (7PM) y continuación de ERA-AGE, que tiene entre sus funciones contribuir a definir las prioridades de la investigación sobre envejecimiento en Europa para los próximos 10-15 años. Para ello realiza una consulta en cada país, entre ellos España, a la que Usted está invitado a participar rellenando el cuestionario como se indica abajo. **Portal Mayores** ofrece su plataforma a esta iniciativa. Muchas gracias por su participación.

Nota: Se publicará un análisis de las respuestas, y una lista de los investigadores que respondieron a la consulta.

Descarga de la consulta:

- Información sobre la consulta: [versión pdf](#) [En inglés]
- Cuestionario de la consulta: [versión word](#) [En inglés]

Opciones para participar en la consulta:

Elija **una** de las dos opciones siguientes:

- Opción 1: Rellenando el documento "Cuestionario de la consulta: [versión word](#) [En inglés]", y enviándolo a <portalmayores@cchs.csic.es>
- Opción 2: Rellenando el formulario on-line siguiente:

Formulario on-line

Para responder a las siguientes preguntas, por favor:

- 1) considerar no sólo las tendencias actuales, sino también las que, en su opinión, podrían surgir en el futuro próximo;
- 2) explicar brevemente sus respuestas;

Consulta 1

Dentro de cada uno de los siguientes temas clave ¿cuáles son las tres prioridades de investigación para los próximos 10 años? Nota: no es necesario rellenar todas las prioridades.

Biogerontología:

prioridad uno

prioridad dos

prioridad tres

Recursos sociales y económicos:

prioridad uno

prioridad dos

prioridad tres

Entornos de envejecimiento:

prioridad uno

prioridad dos

prioridad tres

Envejecimiento saludable:

prioridad uno

prioridad dos

prioridad tres



Consulta 2

¿Existen prioridades de investigación más importantes fuera de estos temas? Si es así, ¿cuáles son?

Consulta 3

¿Qué prioridades, en su opinión, requieren la colaboración europea?

Consulta 4

¿Qué infraestructuras son necesarias para realizar dichas prioridades a nivel europeo?

Nombre

Correo electrónico

☐ Si quiere recibir el análisis de las respuestas

Institución

Para evitar envíos masivos de este formulario, es obligatorio realizar el siguiente paso. Si tiene problemas para leer la imagen, use el botón 'Refrescar Imagen'.

Por favor, **confirme que su correo esté bien escrito** antes de enviar el formulario.



ANNEX 2. CONSULTATION RESULTS IN RESEARCH KEY THEMES AND PRIORITIES

CONSULTATION 1 & 2 (RESEARCH KEY THEMES AND PRIORITIES)	CITATIONS
BIOGERONTOLOGY	21
ALZHEIMER'S	8
BIOMARKERS	6
MORBIDITY	5
SENILE DEMENTIA	5
DISABILITY	4
NEURO-DEGENERATIVE DISEASES	4
BIOTECHNOLOGY RESEARCH	2
GENETIC PROCESSES RESEARCH	2
PSYCHOGERIATRICS	2
UNHEALTHY HABITS DISEASES	2
VASCULAR DISEASES	2
METABOLIC PROCESSES	1
SOCIAL & ECONOMIC RESOURCES	26
PERSONAL NEEDS	10
PERSONAL CARE MODELS	7
DEPENDENCY VS. AUTONOMY SITUATION	6
FORMAL/INFORMAL CAREGIVERS	5
ELDERLY ECONOMIC BENEFITS	4
SOCIAL RELATIONS	4
FAMILY NETWORKS	3
PENSIONS SYSTEM	3
ASSISTED LIVING FACILITIES	2
FAMILY CARE WORKLOAD	2
RESOURCES DATABASES/MAPS	2
SOCIAL DEVELOPMENT FOR THE ELDERLY	2
AGEING ENVIRONMENTS	25
PERSONAL TECHNICAL AIDS	11
HOME ENVIRONMENTS	8
HOUSING	7
HEALTHY CITIES	5
NURSING HOMES	4
SOCIAL POLICIES	4
AGEISM	4
SOCIAL RELATIONSHIPS	3
DOMOTICS	3
PERSONAL AUTONOMY VS. DISABILITY	2
HEALTHY ACTIVITIES	1
HEALTHY AGEING	33
QUALITY OF LIFE	8
DISEASE RISK PREVENTION	6
ACTIVE AGEING	5
COGNITIVE FUNCTIONING	5
SPORTS/PHYSICAL ACTIVITY	5
TRAINING	4
ICT RISKS	3
SOCIAL PARTICIPATION	3
SOCIAL PERSONAL RELATIONS	3
HEALTHY HABITS	2



ANNEX 3. CONSULTATION RESULTS IN EUROPEAN COLLABORATION FOR RESEARCH AND INFRASTRUCTURES

CONSULTATION 3 & 4 (EUROPEAN COLLABORATION FOR RESEARCH AND INFRASTRUCTURES)	CITATION
EUROPEAN PERSPECTIVE	9
CARE COMMUNITY & INSTITUTIONAL PROGRAMMES	9
PHYSICAL RESEARCH STRUCTURES	8
RESEARCH NETWORKS	7
RESEARCHERS	7
RESEARCH & ACTION PROGRAMMES	6
SOCIAL AND ECONOMIC RESOURCES	5
MULTIDISCIPLINARITY	3
BIOGERONTOLOGY	3
PROFESSIONALS	3
SENIOR MOBILITIES	2
NATIONAL INSTITUTE ON AGEING	2
EUROPEAN INSTITUTE OF AGEING	2
LONGITUDINAL STUDIES	2
NEURO-DEGENERATIVE RESEARCH	2
AGEING RESEARCH FUNDING	1
ICT RESEARCH FOR ELDERLY	1
LEGAL COORDINATION	1

Los Informes Portal Mayores son publicados por el **Laboratorio Portal Mayores** del Centro de Ciencias Humanas y Sociales del CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS (CSIC), dentro del convenio de colaboración IMSERSO-CSIC.

Son documentos elaborados con un objetivo de divulgación, abordándose **cuestiones estadísticas, demográficas, legales, psicológicas, sanitarias, sociales** entre otras. Algunos son elaborados por el propio equipo del Portal y por profesionales especialistas de distintos campos de la **Gerontología y la Geriatría**.

La serie se inició en 2003 sin periodicidad fija. Son gratuitos y se presentan en formato digital.

Portal Mayores no se responsabiliza de las opiniones vertidas por los autores de estos informes. Es obligatorio citar la procedencia en cualquier reproducción total o parcial que se haga de los mismos.

Una iniciativa del Imsero y del CSIC © 2003

Informes Portal Mayores

Director: Antonio Abellán García

Redacción técnica y maquetación: Isabel Fernández Morales, Juan Carlos Mejía Acera, Ana Sevillano Bermejo

Dirección postal: CSIC / Portal Mayores
Albasanz 26, 28037 Madrid, España

Teléfono: 0034 916 022 391 / 92

Fax: 0034 916 022 971

Correo electrónico: portalmayores@cchs.csic.es

Web: www.imseromayores.csic.es