

ERACOL| Research lines Universitat Pompeu Fabra, Spain

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General information

Institution:	UPF
City:	BARCELONA
Country:	SPAIN

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1. research line 1:
Health Services Research
2. general description of the research line:
<ol style="list-style-type: none"> 1. Methodology of measurement of perceived health outcomes 2. Estimation of the burden of diseases 3. Evaluation of health services efficiency and effectiveness
3. specific subtopics within the research line:
<ol style="list-style-type: none"> 1.1. Development, application, and validation of a new tool for the standardized evaluation of patient reported outcome measures (EMPRO) 1.2. Health status evaluation of the general Spanish population using the International Classification of Functioning, Disability and Health (ICF) <ol style="list-style-type: none"> 2.1. The EU Contribution to the World Mental Health (WMH) Surveys Initiative (EU-WMH; SANCO EU Commission) 2.2. Population estimates of unmet need for mental health care 2.3. Stigma and mental disorders 2.4. Burden of comorbidity (mental-physical, and mental-mental comorbidity) 2.5. Complex analytical methods to assess individual and population burden of mental disorders. <ol style="list-style-type: none"> 3.1. Cost effectiveness and cost utility main treatments for localized prostate cancer: 7 years follow-up study. 3.2. Health-Related Quality of Life and Psycho-social needs in a cohort of patients diagnosed urological cancer (bladder and prostate): a multi-centre, coordinated study. 3.3. Use of services and economic evaluation of pandemic influenza A(H1N1)v 2009.
4. contact person for interested students/teaching staff:
Jordi Alonso, (jalonso@imim.es); Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Health Services Research, Epidemiology and Public Health
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-Doctorate / Teaching Staff

1. research line 2:
OCCUPATIONAL HEALTH CENTER FOR RESEARCH IN OCCUPATIONAL HEALTH (POMPEU FABRA UNIVERSITY, TRADE UNION INSTITUTE OF WORK, ENVIRONMENT AND HEALTH, AND CORPORACION MUTUA INSSURANCE COMPANY)
2. general description of the research line:
The Center for Research in Occupational Health (CiSAL in Spanish) seeks to become a center of excellence, recognized academically, professionally and socially for the generation and transfer of useful knowledge to improve the health of workers. To accomplish this, CiSAL serves as a unique academic venue where science and society interact, producing and disseminating useful scientific knowledge to inform policy with the ultimate goal of improving the health of all workers.
3. specific subtopics within the research line:
a) Occupational injury and disease (musculoskeletal disorders and sickness absence) b) Vulnerable worker populations (precarious employees, and immigrants) c) Information system in occupational health (job-exposure matrix, and working conditions surveys) d) Evaluation of occupational risk preventive intervention (quality of occupational health services)
4. contact person for interested students/teaching staff:
Fernando G. Benavides / Emily Felt fernando.-benavides@upf.edu emily.felt@upf.edu
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Epidemiology, statistics, and qualitative methods
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, doctorate, post-doctorate/teaching staff

1. research line 3:
HEALTH INEQUALITIES (GREDS) / EMPLOYMENT CONDITIONS NETWORK (EMCONET)
2. general description of the research line:
<p>This group is currently a leading research group in the global study of employment conditions and health inequalities. In addition to its scientific research, GREDS/EMCONET also develops knowledge transfer regarding the origins, mechanisms and policies necessary to understand and reduce social inequalities in health.</p> <p>Although GREDS/EMCONET became a single research group at the end of 2009, over the past five years, the research activities of its constituent groups and members have focused on health inequalities and their relationship with employment and work. The group's research on health inequalities has largely been focused on the social determinants of health, which are a key global determinant of health worldwide. EMCONET's work for the World Health Organization delves deeper into the questions raised by its research on health inequalities by examining the degree to which social factors interact with employment conditions and working conditions to generate health inequalities.</p>
3. specific subtopics within the research line:
<ul style="list-style-type: none"> -Precarious and informal work -Health information and surveillance systems for employment conditions and health inequalities -Policy interventions on issues related to employment conditions, working conditions and health inequalities -Social determinants of health inequalities and cross-cutting axes -Methods of health inequalities analysis research -Analysis of privatization of the health system and its impact on health inequalities
4. contact person for interested students/teaching staff:
Joan Benach; Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Public Health
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, post-doctorate

General information

Institution:	UAB
City:	BARCELONA
Country:	SPAIN

1. Research line 1:

CLINICAL AND MOLECULAR EPIDEMIOLOGY OF CANCER

2. General description of the research line:

We believe that studies on the causes and mechanisms of cancer in humans:

- must integrate the laboratory, clinical and population approaches, using a scientifically rigorous methodology (usually, in our case, molecular-epidemiological and other integrative methods).
- must try to get "closer to the bedside", and their usefulness for clinical practice must be assessed properly.
- may often be integrated with studies on the environmental causes of cancer, and may thus contribute to improve the effectiveness of primary prevention programs.

3. Specific subtopics within the research line:

– Clinical and molecular epidemiology of pancreatic cancer, chronic pancreatitis and other pancreatic and biliary diseases. Role of gene-environment interactions with organochlorine compounds in the etiopathogenesis of pancreatic diseases.

– Assessing the impact on human health of Persistent Organic Pollutants (POPs) and other environmental chemical agents.

– Analysis of out-patient and in-patient 'diagnostic delay', the "symptom to treatment interval", and their impact on cancer survival. Early detection of cancer.

4. Contact person for interested students/teaching staff:

Dr. Miquel Porta (yrovira@imim.es) , Regina Arquimbau (salut.publica@upf.edu)

5. Field of research (for example: epidemiology, public health, statistics, medicine):

Epidemiology, public health, oncology, environmental health.

6. For which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)

Master and Post-doctorate

1. research line 3:
Evidence-Based Medicine and Clinical Epidemiology Research
2. general description of the research line:
To investigate the determinants of human disease and to evaluate the efficacy and effectiveness of interventions in health care and in the prevention of illness using evidence-based methods such as meta-analysis and systematic reviews.
3. specific subtopics within the research line:
Systematic reviews, guidelines, epidemiology of chronic diseases and infectious diseases, environmental epidemiology, prevention programs, healthcare epidemiology
4. contact person for interested students/teaching staff:
Dr. Maria Teresa Puig , Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Public Health, Epidemiology
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master and Post-Doctorate

General information

Institution:	ASPB
City:	BARCELONA
Country:	SPAIN

1. research line 1:

HEALTH DETERMINANTS AREA

2. general description of the research line:

The Health Determinants Area groups together three main lines of research. The first corresponds to the identification of determining factors for the adoption of high-risk behaviours associated with lifestyle (toxic habits, physical activity, dietary habits). The second corresponds to health determinants according to age groups. And the third, to the study and control of those environmental factors that determine population's health (water, air, zoonoses, etc.), hygiene and food safety.

1 To study the main risk factors related to lifestyles, such as smoking, abuse of psychoactive substances such as alcohol and non-institutionalised drugs, dietary habits and physical activity, with the aim of identifying trends and to analyse the associated environmental and behavioural factors in order to design preventive interventions.

2 To assess how to reduce the adverse consequences of substance consumption.

3 To provide programs / strategies for individuals at risk of substance abuse who are identified at school, the community and the healthcare network.

4 To analyse risk factors for HIV and hepatitis C in consumers of injection drugs.

5 To analyse the characteristics and evolution of the population of consumers of psychoactive substances in Barcelona.

6 To design interventions for primary prevention of risk factors associated with lifestyles by working on the environment and other factors that predispose and facilitate use and strengthen risk behaviours.

The Health Determinants Area groups together three main lines of research. The first corresponds to the identification of determining factors for the adoption of high-risk behaviours associated with lifestyle (toxic habits, physical activity, dietary habits). The second corresponds to health determinants according to age groups. And the third, to the study and control of those environmental factors that determine population's health (water, air, zoonoses, etc.), hygiene and food safety.

1 To provide a reliable and fast response to the demand for testing of water, air and food processing, as well as any abnormal situation detected in relation to animals in Barcelona, and to guarantee the quality of these analysis.

2 To carry out in-depth study of enteropathogens in food and water.

3 To identify the effects of environmental pollution on population health, including tobacco smoke and various air pollutants.

3. specific subtopics within the research line:

-Behaviours and Lifestyles

-Determinants of health according to age groups

-Environmental health, hygiene and food safety

4. contact person for interested students/teaching staff:

Carme Borrell , Regina Arquimbau (salut.publica@upf.edu)

5. Field of research (for example: epidemiology, public health, statistics, medicine):

Public Health

6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)

Master, Doctorate, Post-Doctorate / Teaching Staff

1. research line 2:
HEALTH PROBLEMS AREA
2. general description of the research line:
<p>The Health Problems Area encompasses the line of research into sexual and reproductive health, occupational health and psychosocial risk, research into some infectious diseases, research into injuries caused by accidents and research into cancer.</p> <p>Sexual and reproductive health is a line of research around which several studies on inequalities in sexual and reproductive health revolve.</p> <p>Another important area is the identification of risk factors related to the psychosocial health status of different groups of workers, and analysis of the possible interaction between mental health, psychosocial risk factors and the work sphere.</p> <p>Research in infectious diseases was encouraged in 1986, coinciding with the implementation of a system making the reporting of certain diseases mandatory (especially HIV / AIDS, tuberculosis, meningococcal disease, imported diseases, etc.). This heading also covers the studying and management of epidemic outbreaks, community actions related to the Vaccination Plan and an entire group of contagious diseases grouped under the name of other communicable diseases (<i>Haemophilus influenzae</i>, meningococcal disease, etc.).</p> <p>Finally, integrating actions carried out by community organisations through grants and those that are self-financed, within health problems are accidents and injuries. Work has recently been restarted on research into cancer, linked to providing more information and consolidating primary and secondary prevention actions.</p>
3. specific subtopics within the research line:
Sexual and Reproductive health Occupational Health and Psychosocial Risk factors in the Workplace Infectious Diseases Accidents and Injuries Cancer
4. contact person for interested students/teaching staff:
Carme Borrell, Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Public Health
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-Doctorate / Teaching Staff

1. research line 3:
HEALTH INEQUALITIES AREA
2. general description of the research line:
<p>Within the context of innovation in public health policies aimed at reducing social inequalities in health, the ASPB works fundamentally on the study of socioeconomic inequalities in health, both in Barcelona as well as Catalonia and Spain. It also analyses inequalities in health between men and women derived from the social roles assigned by sex and carries out in-depth study of the interaction between gender, family roles, employment status and social class. The study of geographical inequalities in small areas is another area to highlight.</p>
3. specific subtopics within the research line:
<p>Gender Inequalities Socioeconomic and Geographic Inequalities</p>
4. contact person for interested students/teaching staff:
Carme Borrell, Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Public Health
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-Doctorate / Teaching Staff

1. research line 4:
HEALTH POLICY, HEALTH SERVICES AND COMMUNITY SERVICES AREA
2. general description of the research line:
<p>This research area focuses on collaboration with various healthcare areas in the city, especially with regard to services to the community: hospital services, primary care and care for drug addiction.</p> <ul style="list-style-type: none"> à Analysis of the impact of policies on population health. à Determination of the factors influencing the utilisation of hospital services by the population. à Assessment of the impact of the reform of primary healthcare. à Analysis of the effectiveness of preventive measures implemented from primary care. à Designing of intervention strategies, in different spheres, aimed at care for drug addicts: territorialisation, policy of risk reduction, protocols of cooperation with institutions and programmes, evaluation of the effectiveness of short-term interventions, etc. à Evaluation of the effectiveness of the support network for care for drug addicts. à Measuring of the performance of health services in the city of Barcelona. à Monitoring of the health situation in the city of Barcelona through health surveys, the annual health report, the analysis of vital statistics and the annual production of indicators for basic health areas and healthcare sectors, among others.
3. specific subtopics within the research line:
4. contact person for interested students/teaching staff:
Carme Borrell, Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Public Health
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-Doctorate / Teaching Staff

1. research line 5:
INTERNATIONAL HEALTH, IMMIGRATION AND EMERGING DISEASES AREA
2. general description of the research line:
<p>This heading covers research oriented towards the study of all imported diseases (migrants, aid workers, travellers), as well as the health situation of immigrants in the city. It also includes research projects carried out in low-income countries.</p> <ul style="list-style-type: none"> à Evaluation of priority health needs in certain areas and in developing countries, refugee camps, etc. à Study of the differential characteristics of diseases such as tuberculosis and HIV / AIDS in foreign immigrants living in the Barcelona area. à Description and control of imported diseases (migrants, aid workers, travellers, etc.). à Study of the epidemiology of emerging diseases in Barcelona
3. specific subtopics within the research line:
4. contact person for interested students/teaching staff:
Carme Borrell, Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Public Health
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-Doctorate / Teaching Staff

1. research line 6:
METHODOLOGY AREA
2. general description of the research line:
<p><u>Strategic objectives</u></p> <p>1 Evaluation of scientific publication in the research process. 2 Assessment of public health interventions.</p> <p><u>Research lines</u></p> <p>This sphere includes research into methodological aspects of the practice of public health and the various disciplines it involves.</p>
3. specific subtopics within the research line:
4. contact person for interested students/teaching staff:
Carme Borrell, Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Public Health
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-Doctorate / Teaching Staff

General information

Institution:	CREAL
City:	BARCELONA
Country:	SPAIN

Per research line, please fill in the following table (use a new format per research line):

1. research line 1:
CANCER
2. general description of the research line:
<p>Cancer is a major cause of death worldwide and numerous environmental and occupational exposures have been shown to cause cancer. These include air-pollution, water contaminants, numerous occupational chemical exposures, other occupationally related factors such as shift work, ionising radiations and other. In addition, cancer research is among the leading fields in the application of biomarkers and genetics to evaluate mechanisms of disease and susceptible populations.</p> <p>Researchers at CREAL have extensive experience in cancer research. Their main aim is to identify environmental and occupational causes of cancer. Among the main exposures examined are drinking water disinfection by-products and ionising and non-ionising radiation and among the main cancer sites evaluated are bladder cancer, brain tumours, colon cancer and also lymphomas, childhood cancers, breast and prostate cancer.</p>
3. Subtopics within the research line:
<ul style="list-style-type: none"> - To complete GWAS analysis on bladder cancer and promote international collaboration in bladder cancer. - To strengthen knowhow in molecular epidemiology. - To identify funds for follow-up of studies on genotoxicity and cancer in children.
4. contact person for interested students/teaching staff:
Dr. Manolis Kogevinas ; Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Epidemiology
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-doctorate

1. research line 2:
RESPIRATORY
2. general description of the research line and specific subtopics:
<p>The research area about respiratory diseases includes the study of environmental and occupational determinants of respiratory diseases in children and adults including chronic obstructive pulmonary disease (COPD) and asthma, in national and international projects. The main focus is on the next topics:</p> <ul style="list-style-type: none"> • effects of chronic exposure to environmental pollution on respiratory and cardiovascular morbidity • effects of indoor home exposure on respiratory morbidity • study of occupational risk factors, in particular respiratory effects of exposure to cleaning products • study of the interactions of the environmental exposures with genetic factors in asthma and COPD • study of levels and effects of the physical activity in chronic respiratory diseases (asthma and COPD) <p>The respiratory health area also focuses on the measurement of the burden and the impact of respiratory diseases and the determinants of their appearance and evolution. We have to emphasize:</p> <ul style="list-style-type: none"> • The European Community Respiratory Health Survey studies the variations in the prevalence and incidence of asthma and its risk factors across Europe. Now CREAL participates in ECHRS III. • The multicentric project PAC-COPD studies the fenotypic variability in the COPD and its relation with evolution of the disease. <p>In collaboration with networks of research:</p> <ul style="list-style-type: none"> • The Respira Network is a network of biomedical research in collaboration with the Spanish Ministry of Health that involves researchers of 18 centres of Spain about respiratory diseases. • The Global Allergy and Asthma European Network aims to integrate epidemiological, basic and clinical research on allergy and asthma throughout Europe.
3. Subtopics within the research line:
<ul style="list-style-type: none"> - To develop large profile biomarker and genomic tools to epidemiological studies. - To study of respiratory health effects of occupational exposures in nurses and cleaners
4. contact person for interested students/teaching staff:
Dr Josep M Antó; Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Epidemiology
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-doctorate

1. research line 3:
CHILDHOOD
2. general description of the research line:
<p>The evaluation of the effect of environmental contaminants on children's health is considered a priority at an international level. Research will be centred on the evaluation of intrauterine and postnatal development including the maturation of the neurobehavioural system of children and the evaluation of other reproductive effects. The main exposures evaluated will be air pollution, water pollution focusing on chlorination byproducts, exposure to organochlorinated agents such as PCBs, hexachlorobenzene and dioxins, heavy metals, indoor environments and nutrition. One of the most important projects of this programme is INMA, with the aim to study the paper of the more relevant environmental pollutants in the air, water and diet during the pregnancy and beginning of life, and their effects in the growth and development. The physical, social and intellectual development of the children, from the conception to end of the adolescence, requires an atmosphere protected and protective of its health. The increase of diseases is related to non-healthy atmospheres. The prenatal and in the beginning of the life exposures, including diet, are associated to the children's health and human development and ready later effects in adults. Ambient air pollution is one of the most prevalent environmental hazards, affecting up to 100% of the population from womb to death. Barcelona and other Spanish cities belong to the most polluted urban areas in Western Europe, not even in compliance with the lax European regulations. The main aim is to understand the contribution of air pollution sources, in particular traffic, to the pre-and post-natal development of pathologies and functional deficits in the cardiorespiratory system and the brain. Also they want to identify factors related to high susceptibility to or protection against the adverse effects of ambient air pollution and the methods and applications of comprehensive risk and health impact assessment translating research findings into policy relevant information.</p>
3. Subtopics within the research line:
<ul style="list-style-type: none"> - To develop methods in neurodevelopmental epidemiology as well as asthma epidemiological research. - To set up the study of environmental determinants in congenital malformations.
4. contact person for interested students/teaching staff:
Dr. Jordi Sunyer; Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Epidemiology
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-doctorate

1. research line 4:
AIR POLLUTION
2. general description of the research line:
<p>Ambient air pollution is one of the most prevalent environmental hazards, affecting up to 100% of the population from womb to death. Barcelona and other Spanish cities belong to the most polluted urban areas in Western Europe, not even in compliance with the lax European regulations.</p> <p>The main aim is to understand the contribution of air pollution sources, in particular traffic, to the pre-and post-natal development of pathologies and functional deficits in the cardiorespiratory system and the brain.</p> <p>Also they want to identify factors related to high susceptibility to or protection against the adverse effects of ambient air pollution and the methods and applications of comprehensive risk and health impact assessment translating research findings into policy relevant information.</p>
3. Subtopics within the research line:
<ul style="list-style-type: none"> - To strengthen the knowledge in the field of exposure, health, mechanisms, and risk assessment of air pollution. - To boost the transdisciplinary area of active transportation and health. - To perform exposure assessment, epidemiology and health impact assessment of active transportation (cycling, walking) - To develop the study epidemiological/statistical methodology applied to air pollution research.
4. contact person for interested students/teaching staff:
Jordi Sunyer; Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Epidemiology
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-doctorate

1. research line 5:
WATER POLLUTION
2. general description of the research line:
<p>Safe and clean drinking water is essential for human life and nowadays water is an important exposure pathway for some environmental risk factors related to cancer and reproductive outcomes.</p> <p>The most important objective is to investigate the relationship between water contaminants, particularly disinfection by-products, and various adverse health outcomes including cancer, reproductive and respiratory outcomes.</p> <p>The CREAL researchers have an international reputation in this field and are leading important international studies.</p> <p>The work provides an important evidence base for policy setting, in particular in the field of water disinfection which is one of the pillars of public health.</p>
3. Subtopics within the research line:
<ul style="list-style-type: none"> - To examine new outcomes such as time to pregnancy or semen quality, and focus further on the mechanistic side of the by-products. - To examine other water contaminants (metals, nitrates, pesticides, pharmaceuticals) A specific angle for further research will be changes in water treatment (e.g. use of desalination/reverse osmoses, re-use of water) - To study the effect of climate change on water quality parameters and related health effects.
4. contact person for interested students/teaching staff:
Dr Mark Nieuwenhuijsen; Regina Arquimbau (salut publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Epidemiology
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-doctorate

1. research line 6:
RADIATION
2. general description of the research line:
<p>Recent years have seen an unprecedented increase in the number and diversity of sources of non-ionising electromagnetic fields (EMF), used for individual, industrial, and commercial purposes. Sources of EMF include television, radio, computers, mobile telephones, wifi equipment, microwave ovens, radars, equipment used in industry, medicine and commerce and, in general, all electrically-powered devices.</p> <p>The rapid increase in use of very high-level static magnetic fields in medical imaging, in particular, is also of concern both for patients and for operators and medical staff involved in radiological intervention. Although these technologies have made our lives easier, they have brought with them concerns about possible health risks associated with their use.</p> <p>There is extensive experience at CREAL both in ionising and non-ionising radiation research.</p> <p>CREAL have the Dr Elisabeth Cardis research, currently coordinator of the Interphone study, which examines the relationship between mobile phone use and cancer, as well as Mobi-Kids, focused on the effects in children, and other studies.</p>
3. Subtopics within the research line:
<p>- Work is organized around specific questions:</p> <ol style="list-style-type: none"> 1. Ionising radiation 2. Non-ionising radiation
4. contact person for interested students/teaching staff:
Dra Elisabeth Cardis , Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Epidemiology
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-doctorate

1. research line 8:
TRANSVERSAL PROGRAMS
2. general description of the research line:
<p>This program covers all projects that are half-way between two or more of the above programs or because it's an independent research line itself as is the case of Biostatistics.</p> <p>Biostatistics Current research on statistical methods at CREAL focuses on two main blocks, methods applied to traditional epidemiology and methods used in genetic epidemiology.</p> <p>In the first block, we are developing methods to take into account the measurement error that exists, for example, when measuring individual exposure to air pollution or ultraviolet radiation, and methods to correct for differential measurement error in case-control studies. Other lines of research involve the design and analysis of longitudinal studies and statistical methods for survival analysis with complex data (nested models, recurrent events, or meta-analysis).</p> <p>As for genetic epidemiology, the main research topics are the development of new statistical methods to determine altered regions in copy number or to assess the association between illness and CNVs (Copy Number Variant).</p> <p>Educational Projects</p>
4. contact person for interested students/teaching staff:
Dr Xavier Basagaña , Regina Arquimbau (salut.publica@upf.edu)
5. Field of research (for example: epidemiology, public health, statistics, medicine):
Biostatistics
6. for which levels the research line is applicable (undergraduate, master, doctorate, post-doctorate/teaching staff)
Master, Doctorate, Post-doctorate