

# Perspectivas

en Derecho y Genoma Humano

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Inter-University Chair - Provincial Government of Biscay  
in Law and the Human Genome

University of Deusto, University of the Basque Country UPV/EHU

Director: Prof. Dr. iur. Dr. med. Dr. h.c. mult. Carlos María Romeo Casabona

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**The Law and the Human Genome Review, a pioneer review in the Spanish language dealing with legal and ethical issues posed by human genetics**



Back in 1994 the first issue of the *Law and the Human Genome Review / Revista de Derecho y Genoma Humano* was edited. The Review itself recorded that it was born under the patronage of administration (the Provincial Government of Biscay), university (the University of Deusto and also, some years later in 1997, the University of the Basque Country UPV/EHU) and private business (the BBV Foundation): «Designed with a purely scientific spirit to serve as a showcase and sounding board for the multidisciplinary research issues and reflections which may arise from any perspective, without prejudice or glasses of any kind (...)».

Since publication of the first issue, twenty years have passed and forty numbers have appeared, one every six months. With this background, the Review has been fully consolidated as a reference at European and international level, with a more than significant impact on Latin America, for the study of the legal and ethical issues posed by human genetics, combining doctrinal articles and other information of interest for professionals from various disciplines and geographical areas. The scientific communication which the Review intends to channel is twofold: that the most significant foreign authors are recognised in our country and, conversely, that Spanish authors are recognised and read both in Spain and abroad. This extensive publication, backed up by the fact that it is a bi-

lingual publication (with work in Spanish and English), aims to bring different perspectives together.

The Review, with about 250 pages in each issue (over 10,000 published pages in total), has the following permanent sections: Opinion, Articles, Case Law Notes (with comments), Reports, Documents and Bibliography (with reviews and references to books, articles and other documents) in which over one hundred authors from European countries, the Americas, Asia and Oceania, with training in various disciplines, have worked. A section of particular interest is the Document, where periodically the statements, opinions and reports from international organizations, ethics committees, scientific associations and working groups, as well as other laws and regulations are included. Finally, we also maintain sections of bibliographical, documentary and web links to sites of interest.

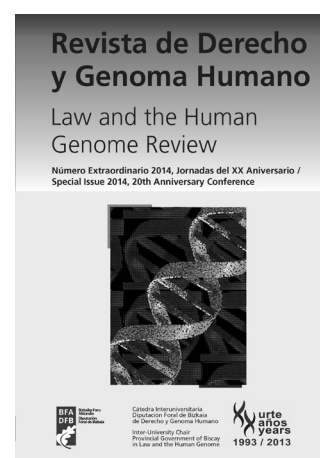
As well as the publication of the Review, the Chair edits its correlative "Index" (the following have been published: 1–10, 11–20 and 21–30), which aims to facilitate the consultation of the contents included in the different editions. They contain an index of summaries; a detailed list of the most relevant terms that appear more frequently (word index), indicating the number and pages of the Review in which they are mentioned; a list of the main thematic blocks, indicating work preferably dealing with these issues (subject index); and a list of all authors who have contributed to the different sections of the journal (author index).

All in all, and consistent with the scientific quality required nowadays, the Review publishes its contents following the "Open-Access Policy", available at a website which was created *ad hoc*: [www.bioderecho.eu](http://www.bioderecho.eu); previously submitted work receives two anonymous evaluations, both internal and ex-

ternal; also, the editorial committee subject all work to two anonymous evaluations—internal and external—and decide on the acceptance or rejection of work received ("peer-reviewed journal"); and it is currently indexed in the rankings of greater international impact such as: SCOPUS, MEDLINE [PubMed], IN-RECJ, RESH, MIAR, LATINDEX, ISOC, DIALNET SCIMAGO, DICE, SJR, SHERPA/ARXIV, DULCINEA.

The special issue of this Review has been intended to record the 20th Conference on Law and the Human Genome held on 21 and 22 May 2013, to commemorate the twentieth anniversary of the Chair's establishment, which

had a special significance, arising as a great opportunity to celebrate two decades of the Chair's work, which was promoted by the International Congress on Law and the Human Genome in 1993. It is therefore, an edition that is intended to reflect on the evolution and legal and ethical implications of human genetics and biotechnology, and to discuss new challenges that arise. Indeed, since its birth, the work of this Chair has attempted to develop near the heat of the debates that some research milestones (such as the Human Genome Project, mammalian cloning or the technology of stem cells) have generated. We really hope that the role of the Chair and its periodical publications, which we pay tribute to in these pages, have been a tool to help those who have been interested in these debates.



## Opinion

## Genetics and criminal dangerousness

A few decades have passed since the assessments related to the impact of certain genetic characteristics in human behaviour stormed into legal discussions concerning the assessment of criminal liability and, of course, criminal dangerousness. Indeed, beyond the use of analysis and genetic studies in order to identify the perpetrators of certain crimes, or rule out possible suspects, judicial practice has begun to make use of the results of these studies supporting, directly or indirectly, some of its findings and decisions regarding the degree of guilt or criminal responsibility of the offender. Perhaps it is worth noting that the Italian courts have been pioneers in this matter and they have made two statements (2009/2011) in which the decision to reduce the criminal liability of the accused is based, more or less averagely, on the impact that they had imputed genotypes in their ability for guilt. However, the implications that these studies could have for the modern tools that experts use to issue a report to the judge to help in drafting the judgment of dangerousness have also been focus of attention.

In this regard, it should be noted that contemporary criminal legal doctrine has reflected on the impact that studies related to the so-called "gene for aggression", also called the "warrior gene", could have on the criminal categories mentioned (culpability and dangerousness). In this regard we have to indicate that the mentioned "gene" identifies with a variant genotype of the gene Monoamine oxidase A (MAOA), known as the low intensity allele MAOA-L, which would be responsible for triggering a malfunction of the system responsible for regulating serotonin levels. In this line of ideas, we should note that studies in neuroscience have shown the close relationship between this dysfunction and the manifestation of a series of aggressive and impulsive behaviours (note that, particularly in males, such dysfunction could trigger increased sensitivity to threat agents, as well as an increase in the tendency to experience anger), frustration and anger, as well as reduced sensitivity to the causative factors of pacific/social behaviour.

There is no doubt that the discussion on this issue of Spanish criminal doctrine will intensify, gradually making its way to the extent that we become spectators of the emergence of a new model of imposition of the legal consequences of an offence; quite possibly medium term will allow standardization of genetic testing, at least once, indicating support for the assessment of the legal categories of guilt and, perhaps principally, hazard. Indeed, both interesting reform sentencing and safety and social reintegration made in 2010, such as the Criminal Code Reform Project currently before Parliament, reflected in articulating a series of rules that expand the spectrum of persons who may be subject to judgments of risk in order to determine the appropriate legal consequences for the individual case. As we know the possibility of imposing security measures and social rehabilitation for offenders who, being responsible can be held criminally dangerous, is one of the most exciting developments in terms of crime policy of recent years. We note that, although the 2010 reform introduced the possibility of imposing new measures on people convicted of crimes

against sexual freedom and integrity, as well as those convicted of crimes of "probation" terrorism, in the draft reform currently discussed in Parliament, the possibility of expanding the list of crimes committed by fully responsible criminals which can give rise to the imposition of this security measure, though taxation raises additional requirements, required that the repeated commission of criminal offences of the same nature is found to be a recurring condition.

However, the doctrine has found the incorporation of Measure Security Custody (eventually withdrawn from the Reform Project) to be a much more contentious proposal. Indeed, the huge cost entailed in the incorporation of this measure for those subject to it is fundamental (remember that this measure is the maintenance of the deprivation of liberty of the subject sentenced after the fulfilment of the penalty, based on verification that the subject carries a high level of criminal and serious danger and therefore might be expected, if released, to commit crimes against the interests of the highest-life / sexual freedom and indemnity). Value again, is one of the most important factors to consider when analyzing the constitutional and political feasibility of such criminal action, and it is at this point that there is a need to reframe the discussion about genetic factors which may result in the judge reconsidering and, therefore, declaring a subject as criminally dangerous.

The discussion is not trivial. The first thing we have to clarify to affirm the constitutional and political-criminal feasibility of incorporating the measure consists in precisely measuring the reliability of the judgment of dangerousness (remember that in criminal matters there are two areas where, traditionally, use has been made of the judgment of dangerousness: first, in the investigation and prosecution of crimes and, second, in periodic inspections of prison headquarters). Proper evaluation and determination of criminal dangerousness must be carried out following a series of steps that can be grouped into two distinct stages: 1 Diagnosis of danger, which is nothing but checking symptomatic hazardous quality, which takes into account various factors, some consisting of mere factual assessment, e.g. prior commission of a crime, while others consist of evaluating a number of difficult to assess indications; 2 Criminal prognosis, through which the Judge tries to establish an appraisal about the likelihood that a given individual will commit a crime in the future. A particularly important aspect is related to the rate of accuracy and reliability of the forecast of risk developed by the judge or court. That assessment plays a role of such importance that no criminal legal consequence may not apply if you do not have full assurance that the subject is indeed a dangerous criminal. In order to develop a prognosis which has a high degree of reliability, traditionally three methods or, if you will, means of processing the aforementioned prediction have been used jointly: the intuitive method, the scientific or experimental method and, finally, the statistical method.

For the purposes of the issue before our attention, it should be noted that genetic analysis related anomalies, although, we appreciate, do not lead to an assumption of lack of

criminal liability or absence of guilt capacity, can actually have an impact on the behaviour of a given subject and will have to be carefully assessed both by the experts, for the judge who, at the slightest hint of doubt or possible configuration of a false positive has to consider that the subject is not criminally dangerous and therefore has to abstain from implementing a security measure. The results of these tests constitute only one factor to consider in developing the respective dangerousness judgment. In no way are they to be taken as a definitive test for the assessment of criminal dangerousness in a given subject, because to do so they have to be weighed and assessed a number of circumstances and elements of various kinds.

In this sense, we believe this is the path that discussion about the reliability of the judgment of dangerousness should be oriented towards, not the *ab initio* denial of the validity of this procedure, except that our position is also sceptical about the hazard assessment of (lack of criminal liability) subjects. To be clear, we cannot deny the validity and reliability of the judgment of dangerousness when we face an attributable offender, while reaffirming the idea that security measures are appropriate to address the hazards of persons who lack criminal liability or the criminally responsible mechanism. Nor can we deny the reliability of the judgment of dangerousness in the three scenarios (which, in the end, were placed in a highly critical system level with safety measures as a whole) or take it for valid in the cases mentioned, clear is, whenever developed according to the highest standards and wary of those who have so far quality and, in any case, considering that when in doubt we must work favouring the accused.

Since then, a number of ratings regarding the qualifications we have to do in relation to the joint criminal and constitutional principles that could be affected by attempts to consolidate the dual system (among which are, in the pipeline, the principles of *ne bis in idem*, proportionality, necessity, fitness for purpose, respect for human dignity as well as the question of the prohibition of cruel, inhuman and degrading treatment). Not being relevant, we do not address these issues, although we would like to take this opportunity to extend to readers a cordial invitation to the Workshop to promote the "Recommendation concerning dangerous offenders" (whose production has participated as a member of the Working Group, our Director, Prof. Dr. Dr. Carlos María Romeo Casabona), jointly organized by the Inter-University Chair in Law and the Human Genome and the Council of Europe. This Workshop is to be held in Bilbao on 16 September 2014, with the participation of national and international experts, and they will not only carefully consider the issues on which we have spoken in this short publication, but also those we could only list because of the requirements regarding the length of the texts included in this publication, as well as the difficulty of fitting all of these issues in our *Perspectivas en Derecho y Genoma Humano Newsletter*.

## Inter-University Chair News

### Second meeting of the Executive Committee of the E-ENERCA Project

The second meeting of the Executive Committee of the Project concerning European Network for Rare and Congenital Anaemias (E-ENERCA) held in Barcelona, in April 2014. Prof. Dr. Carlos María Romeo Casabona and Prof. Dra. Pilar Nicolás attended this second meeting of E-ENERCA Project. A report on the ethical and legal implications of the development of an electronic platform for professionals from different European countries to share their experiences and to ask for collaboration in order to improve the diagnosis of rare anaemias, was presented. This report will be made public in the coming months. The basis of the study about the challenges for the implementation and harmonization of the European diagnostic reference centers for rare diseases were also presented.

### XXI Conference in Law and the Human Genome

The Inter-University Chair in Law and the Human Genome annually holds since 1993 the Conference in Law and the Human Genome, a tradition that is rooted in the university life of the Basque Country and each time more in other parts of Spain and abroad. In fact, as novelty of this edition is that the title of "International" has been awarded. In this sense, the XXI Conference were organized by the Chair—they were coordinated by Prof. Dr. Emilio José Armaza Armaza— along with two partners: one from Brazil: *CAPES –Coordenação de Aperfeiçoamento de Pessoal de Nível Superior* and the other one from Mexico, that is to say, the Mexican *Instituto de Investigaciones Jurídicas de la Universidad Nacional Autónoma*. Another of the recent developments is the call for presentations, counting this year with more than a dozen proposals.

These international conference were held on May 14, 2014 at the Auditorium "Bizkaia Aretoa" of the University of the Basque Country UPV/EHU. The opening and presentation of the conference was given by Prof. Dr. Carlos María Romeo Casabona (Director of the Chair) and then the inaugural conference was undertaken by Prof. Dr. Emilio Muñoz Ruiz (Chairman of the Scientific Advisory Committee on Radio Frequencies and Health or CCARS, Professor of Research and former Chair of the CSIC) around the "Emisiones electromagnéticas y salud genética: su abordaje multidisciplinar. La experiencia del CCARS" which was followed by the juridical comments delivered by Prof. Dr. Ricardo Angel Yagüez (Emeritus Professor of Civil Law at the University of Deusto and a member of the CCARS).

The Conference were assembled into three sessions. The first session was devoted to "Las implicaciones jurídicas de la evolución de las técnicas de secuenciación genética", having the following speakers: PD Dr.med.

Dr.phil.Eva Winkler (Attending – Medical Oncology National Center for Tumour Diseases (NCT), Head of the programme "Ethics and Patient-oriented Care in Oncology", Heidelberg); Prof. Dr. Carlos Lema Añón (Professor in Philosophy of Law at The Charles III University of Madrid and Director of the Master in Advanced Studies in Human Rights) and Prof. Dr. Javier Sánchez Caro (Former Director of the Bioethics and Health Law Unit of the Ministry of Health of the Community of Madrid). In the second session, which focused on "Reproducción humana asistida" the following speakers intervened: Prof. Dra. Fátima Freire de Sá (Assistant Professor of Civil Law and the Post-Graduation Program in Law from the Catholic University of Minas Gerais, Belo Horizonte, Brazil), Prof. Dra. Pilar Nicolás Jiménez (Researcher at the Inter-University Chair in Law and the Human Genome) and Prof. Dra. Ingrid Brena Sesma (Coordinator of the Center for Health Law Studies at the Institute for Legal Research of the National Autonomous University of Mexico). The third and final session devoted to "Derecho Penal y Genética", had the following speakers: Prof. Dr. Carlos Augusto Canedo Gonçalves da Silva (Assistant Professor of Criminal Law and International Law at the Pontifical Catholic University of Minas Gerais and Federal University of Minas Gerais, Belo Horizonte, Brazil), Prof. Dra. Flaviane Barros de Magalhães (Professor of Procedural Law at the Pontifical Catholic University of Minas Gerais, Belo Horizonte, Brazil) and Prof. Dra. Carmen Gómez Rivero (Professor of Criminal Law at the University of Seville). There were also parallel communication sessions, being awarded a prize to the research work entitled "Framing the Debate on Genetic Resources in an Information-Based Economy" presented by the researcher of the Jönköping International Business School, Dr. Nicola Lucchi, according to the decision of an external jury panel, which consisted of four members: Prof. Dr. Ricardo Chueca, Professor of Constitutional Law at the University of La Rioja (Chairman of the Jury), Prof. Dr. Carlos Lema Anon, Professor in Philosophy of Law at The Charles III University of Madrid, Prof. Dra. Ingrid Brena Sesma, Coordinator of the Center for Health Law Studies at the Institute and Legal Research of the National Autonomous University of Mexico, and Prof. Dra. Fátima de Sá Freire, Associate Professor of Civil Law at the Pontifical Catholic University of Minas Gerais.

### 9th International Cancer Genome Consortium Scientific (ICGC) Workshop

The 9th workshop of the ICGC was held in Beijing from 17 to 19 May. Prof. Dra. Pilar Nicolás and Prof. Dr. Carlos María Romeo Casabona are part of the Ethics and Policy Committee (EPC) Consortium and also part of the Spanish Project for sequencing the genome of chronic lymphocytic leukemia, which is being coordinated by Dr. Elías Campo and Dr. Carlos Lopez Otín. Among other issues,

the document "Framework for Responsible Sharing of Genomic and Health-Related Data", promoted by the Global Alliance for Genomics and Health, in which the ICGC has collaborated, was discussed at this workshop of the EPC, directed by Prof. Bartha Knoppers. The Framework is a proposal with principles and guidelines for the promotion of the sharing use of genetic data concerning health in a responsible manner and being respectful of human rights. The document is available in several languages at: <http://genomicsandhealth.org/about-the-global-alliance/key-documents/framework-responsible-sharing-genomic-and-health-related-dat>

### Report on the Protecting victims' rights in the EU: the theory and practice of diversity of treatment during the criminal trial

The Interuniversity Chair in Law and the Human Genome, in cooperation with Professor Arantza Libano Beristain (Autonomous University of Barcelona) has elaborated the Spanish Report on the situation of the victims in the criminal trial. This report corresponds to the Project "Protecting victims' rights in the EU: the theory and practice of diversity of treatment during the criminal trial" (Agreement Number: JUST/2011/JPEN/AG/2919), which was awarded a grant by the European Commission. It is led by the Institute of Advanced Legal Studies of London together with the Centre for European Constitutional Law, based in Athens, Greece. It started on 2014 and will be finished on 2015.

## Publications of the Chair

**Law and the Human Genome Review.** Number 40. *Ethical and legal issues concerning the use of whole genome sequencing in basic research and clinical studies* (WINKLER); *Genetic counseling and tort liability: wrongful conception, wrongful birth and wrongful life* (ANTUNES DE SOUZA); *Reflexiones críticas acerca de la Ley de identificación genética brasileña* (DE OLIVEIRA E SILVA / DE MAGALHÃES BARROS); *Notas sobre la admisibilidad de la prueba neurofisiológica (P300) en el proceso penal español* (LIBANO BERISTAIN); *Consentimiento del adulto frágil al tratamiento de muestras biológicas y datos genéticos con fines de investigación biomédica: comparación entre el derecho español e italiano* (VIVAS-TESSÓN); *Maternidad subrogada ¿Autonomía o sumisión?* (BRENA); *Maternidad subrogada llevada a cabo en el extranjero: una mirada normativa y jurisprudencial de la realidad en España* (GARCÍA AMEZ); *La gestación por sustitución necesita un cambio legislativo en España. A propósito de la*

*sentencia del Tribunal Supremo español nº 835/2013 sobre la gestación por sustitución* (IGAREDA GONZÁLEZ); *La donación de gametos y el anonimato de los donantes* (FREIRE DE SÁ); *Radiofrecuencias y salud genética. Reflexiones sobre la experiencia del Comité Científico Asesor en Radiofrecuencias y Salud* (MUÑOZ).

**Law and the Human Genome Review. Special Issue 2014, 20th Anniversary Conference.** *La construcción del Derecho aplicable a la genética y a la biotecnología humanas a lo largo de las dos últimas décadas* (ROMEO CASABONA); *Cuarenta años de revolución biotecnológica* (SOUTULLO); *Perspectives of Medical Law under the challenges of modern biotechnology* (ESER); *Science and Freedom* (HARRIS); *¿Libertad versus determinismo en Derecho penal?* (DEMETRIO CRESPO); *Libre albedrío y ciencias penales* (MUÑOZ CONDE); *La cuestión de la libertad humana desde las neurociencias* (RUBIA VILA); *La identificación de personas mediante pruebas genéticas y bancos de*

*perfiles de ADN: evolución normativa en el contexto europeo* (ETXEBERRIA GURIDI); *La identificación de personas mediante pruebas genéticas y bancos de perfiles de ADN* (V.V.A.); *Estado de la cuestión y problemas éticos en medicina regenerativa* (BELLVER CAPELLA); *Test genéticos y salud humana* (BERGEL); *La protección de la información genética* (LUCAS MURILLO DE LA CUEVA); *Genoma y Derecho: un encuentro en Bilbao veinte años después* (DE MENDIZÁBAL ALLENDE); *La Declaración de Bilbao de 1993: la gestación de una propuesta innovadora* (BAUTISTA PARDO GARCÍA); *Presentación de la Segunda Declaración de Bilbao* (CHUECA RODRÍGUEZ); *Un testimonio de las XX Jornadas sobre Derecho y Genoma Humano* (VIDAL MARTÍNEZ).

**Synbio and Human Health. A Challenge to the Current IP Framework?** DE MIGUEL BERIAIN, Iñigo / ROMEO CASABONA, Carlos María (Eds.). Springer, Germany, 2014, X + 229 pp.

## Activities of the members of the Chair

**Carlos María Romeo Casabona** attended the plenary sessions of the Bioethics Committee of Spain; during this period the Report on the *Anteproyecto de Ley Orgánica para la protección de la vida del concebido y de los derechos de la mujer embarazada* was approved. The result was nine votes in favour and three dissenting votes (incorporated into the report), one of these was presented by Prof. Romeo; one of the two dissenting votes was also signed by two members who voted in favour of the report. He has also attended the regular meetings of the following bodies (bodies the Professor Romeo is a member of): the Committee on Bioethics of the Council of Europe in Strasbourg; Guarantees Commission for the Donation and Use of Human Cells and Tissues (Institute of Health Carlos III); The Code Farmindustria Compliance Monitoring Committee. He has participated in various working sessions of the following European projects: SYNERGENE- *Responsible Research and Innovation in Synthetic Biology*, as a speaker at the conference which took place in Brussels, with the lecture "Legal Aspects of Synthetic biology"; ERINHA final general meeting of the project (European Research Infrastructure on Highly Pathogenic Agents) *Fondation Mérieux* (Les Pensières, Annecy, France); Second Meeting of the Executive Committee of the E-ENERCA Project (European Network for Rare and Congenital Anaemias) held in Barcelona. He has participated in a workshop organized by the Council of Europe (MEDICRIME Working Group) in Paris. He coordinated a training workshop for "Myriad Genetics" on the basis of the Seminar on Insurance which was organized by the Chair in November 2013. He took part as a speaker in the Homage to Prof. Dr. Javier Sánchez Caro (National School of Health, Madrid). Teaching as a visiting professor: several classes in the Masters in Criminology at the University Pablo de Olavide of Seville, and in the Master of Telecommunications and TIC of the Carlos III University of Madrid. Regarding his publications, he is author of the article "¿Ciudadanos transparentes?: la privacidad genética entre los intereses de la ciencia y los derechos de las personas", *Revista Investigación y ciencia* and "La construcción del Derecho aplicable a la genética y a la biotecnología humanas a lo largo de las dos últimas décadas", *Law and the Human Genome Review. Special Issue 2014, 20th Anniversary Conference*.

**Aitziber Emaldi Cirión** as a member of the Committee on Research of the University of Deusto, has been invited to the "XI Foro Internacional sobre Evaluación de la calidad de la investigación y la educación superior". Also, at the Law Faculty, she has directed four Law degree's final projects, one Master's degree final project, she has been a member of the Jury of nine Law degree's

final projects and a member of the Jury of three Master's degree final project. As a member of the "European Research Council Executive Agency" has made the last July the ethical-legal report of four proposals for research projects. He has been appointed to the Scientific Committee of 2015 UNIJES Congress "Derecho y Pobreza". He has presented two proposals for research projects as Principal Researcher: to the Basque Government "Implicaciones jurídicas de la realización de análisis genéticos y del tratamiento de muestras biológicas y datos personales en el ámbito deportivo. Especial consideración de la prevención y control del dopaje" and "Personal data protection issues in exceptional legal framework" to the European Commission. He has given a lecture on "Análisis Genéticos" at the Master in Bioethics, in Tenerife.

**Pilar Nicolás Jiménez** has delivered the following lectures: "Reproducción asistida, paternidad y maternidad. Tendencias jurisprudenciales" in the XXI Conference on Law and the Human Genome, and "Una carta de Derechos para una Medicina a la Carta" at the 9th International Meeting on translational research and personalized medicine (Roche Institute, Fundación Jiménez Díaz, Madrid). He has presented the communication "Donación de óvulos. Cuando los cimientos del consentimiento se tambalean" at the 12th World Congress on Bioethics (Mexico DF). She has participated in the round table "Consejo genético en cáncer: cómo, quién y cuánto" at the I Workshop on *Programa Educativo sobre Cáncer de ovario y BRCA* (Sociedad Española de Oncología Médica, Barcelona). She has participated in the 9th ICGC (International Cancer Genome Consortium) Scientific Workshop (Beijing). She has published, along with D. Chalmers, D. Nicol and Nik Zeps, "A Role for Research Ethics Committees in Human biospecimens Exchanges of Transfer/Agreements Through Material" in *Bioethical Inquiry*.

**Iñigo de Miguel Beriain** has published two works co-authored with A. Marcos del Cano: "La segunda generación de derechos humanos: derechos económicos, sociales y culturales", in Marcos del Cano, A. (Coord.), *Derechos Humanos y trabajo social*, Madrid, Universitas, 2014, pp. 97-112, and "Globalización, multiculturalismo y derechos humanos", in the same monograph, pp. 243-256. Co-authored with M. Meskus: "Embryo-like features of induced pluripotent stem cells defy legal and ethical boundaries", *Croatian Medical Journal*, 2013, pp. 589-591. "Animal Research Ethics: Is Directive 2010/63 / EU speciesist?", In: Els. John Wiley & Sons Ltd, Chichester. <http://www.els.net> [doi: 10.1002/9780470015902.a0024190]. He has also pronounced the lecture entitled

"Dignity and value", at the *Workshop Open Questions about dignity in bioethics*, March 27, 2014, Institute of Philosophy CSIC, Madrid.

**Emilio José Armaza Armaza** has published "El tratamiento jurídico-penal de la producción de armas biológicas", *Las medidas preventivas de conflictos jurídicos en contextos económicos inestables*, co-authored with E. ATIENZA MACÍAS, X. ABEL LLUCH (Coord.), Bosch, Barcelona, 2014 and he has participated in the drafting of the report referred to the "Aspectos jurídicos de la Telemedicina en la UE" within the framework of the European Project e-ENERCA (New e-Health Services for the European Reference Network on Rare anaemias). He has also participated as a guest at the Masters in Bioethics and Biolaw (University of La Laguna and Las Palmas de Gran Canaria) to teach part of the subjects: "Ética de la Investigación" and "Bioética y Biotecnología". At the Faculty of Law of the University of Deusto has taught "Potestad Sancionadora y Estado de Derecho" and "Delitos, Faltas y sus Penas", the last one as a substitute professor. He has been incorporated into the project of the European Commission: EDEN Project (End-user driven Demo for Chemical, Biological, Radiological and Explosive) as a research staff.

**Elena Atienza Macías** has published «Gestión democrática de la diversidad cultural. Reflexiones en torno a la opción canadiense por el 'acomodo razonable' de derechos», *Gestión de la diversidad cultural en las sociedades contemporáneas*, Tirant lo Blanch; (co-authored with M.J. Parejo) «Derecho a decidir sobre la propia salud ante el final de la vida humana», La protección de la salud en tiempos de crisis, Tirant Lo Blanch and (co-authored with E. Armaza) «El tratamiento jurídico-penal de la producción de armas biológicas», *Las medidas preventivas de conflictos jurídicos en contextos económicos inestables*, Bosch Editor. «Doping and health protection. A review of the current situation in the Spanish legislation», *The International Sports Law Journal*, Springer; «The Fight against Doping: Controversies over 'Operation Puerto' and Recent Spanish Legislation», *Sport&EU Review* and «La protección de los derechos fundamentales del deportista en el ámbito de la lucha contra el dopaje», *Boletín Mexicano de Derecho Comparado*, UNAM. She has conducted a research internship (April-June) at the Center for Biomedical Law, University of Coimbra (Portugal). During this stay, she has participated at the *Seminário sobre Direito, Neurociências e Psiquiatria* with the lecture «Dopaje y protección del derecho a la salud del deportista. Especial consideración de la salud mental» and at the Faculty of Pharmacy she has given the lecture: «Dopaje genético: una aproximación ético-jurídica».

## Inter-University Chair in Law and the Human Genome

### Members:

Prof. Dr. Dr. Carlos M<sup>a</sup> Romeo Casabona (Chair Director)  
Prof. Dra. Aitziber Emaldi Cirión (Periodical and Conference Coordinator)  
Prof. Dra. Pilar Nicolás Jiménez (Research Projects Coordinator)  
Dr. Iñigo de Miguel Beriain (Researcher)  
Dr. Emilio José Armaza Armaza (Researcher)  
Lic. Elena Atienza Macías (Researcher)

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Prof. Dr. Asier Urruela Mora (Advisor)  
Prof. Dr. Sergio Romeo Malanda (Advisor)  
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