

Título del Proyecto	Understanding obesity (Ob), metabolic syndrome (MetS), type 2 diabetes (T2DM) and fatty liver disease (FL): a multidisciplinary approach.
Nº de expediente asignado	PIE 14/00031
Breve descripción del objetivo o finalidad de la ayuda	<p>Metabolic syndrome (MetS) is a multiplex risk factor that arises from insulin resistance accompanying abnormal adipose tissue deposition and function. It is a risk factor for coronary heart disease (CHD), as well as for diabetes, fatty liver, and several cancers. The clinical components of this syndrome may include hypertension, hyperglycaemia, hypertriglyceridaemia, reduced high-density lipoprotein cholesterol (HDL-C) and abdominal obesity. Complex interactions of environment (lifestyle factors), drug side effects (antipsychotic drugs), neuroendocrine systems and genetic effects directly contribute to MetS. Previous data suggest that patients meeting these diagnostic criteria are at greater risk for significant clinical consequences, the worst of these being the development of diabetes mellitus and CHD. MetS also increases the risk of stroke, fatty liver disease, and cancer. MetS is a worldwide problem. Approximately one-quarter of the adult European population is estimated to have MetS, with a similar prevalence in Latin America, and it is considered an emerging epidemic in developing East Asian countries. For the first time, our generation will now have a shorter life expectancy than the previous one due in part to the high prevalence of metabolic diseases leading to a higher mortality rate. Therefore there is a medical and economic imperative to identify those individuals with metabolic syndrome early, so that lifestyle interventions and treatment may prevent the development of diabetes and/or non-alcoholic fatty liver disease (NAFLD).</p> <p>Initial laboratory studies in patients suspected of having MetS should include standard chemistries to assess for hyperglycaemia and renal dysfunction, and lipid studies for hypertriglyceridaemia and low HDL-C levels. In view of the various associations between MetS and other conditions, additional helpful tests may include blood thyroid, hemoglobin A1C, and uric acid levels and, as a critical parameter, liver function tests. Exploration of the clinical determinants and the common molecular mechanisms involved in these highly prevalent diseases, including most vulnerable populations, should be considered a priority for modern biomedical research. Our proposal aims to serve as a backbone for recommending a multidisciplinary and integrative “bench-to-bedside” approach. A multidimensional approach to the investigation of causes and consequences of obesity and MetS is warranted. The project</p>

	would be a unique opportunity to simultaneously study all the components related to the pathogenesis of a very timely clinical problem with important socioeconomic consequences. Identification of diagnostic and prognostic biomarkers would be included in the recommendations for future clinical guidelines.
Entidad Financiadora	ISCIII
Convocatoria:	Proyectos Integrados de Excelencia – Convocatoria AES2014
Importe de la ayuda	660.000 €
Fechas de ejecución del proyecto	01/01/2015-31/03/2018
Mención expresa a la cofinanciación de la ayuda y frases publicidad adicionales (si la hubiera)	Estas ayudas están financiadas por el Instituto de Salud Carlos III y cofinanciadas por el FEDER, Programa Operativo Crecimiento Inteligente 2014-2020 “Una manera de hacer Europa”
Logotipo correspondiente (de ser necesario)	<p>The image shows a composite logo for the funding sources. At the top, there is a yellow banner with the Spanish flag on the left, the Spanish coat of arms in the center, and the text 'GOBIERNO DE ESPAÑA' and 'MINISTERIO DE ECONOMÍA, INDUSTRIA Y COMPETITIVIDAD' on the right. To the right of the banner is the logo of the Instituto de Salud Carlos III, which consists of the letters 'i+D' in a stylized blue font and the text 'Instituto de Salud Carlos III' below it. Below the banner is the flag of the European Union (a blue rectangle with twelve yellow stars in a circle). To the right of the flag is the text 'UNIÓN EUROPEA' in bold, and 'Fondo Europeo de Desarrollo Regional' below it. At the bottom center, the text 'Una manera de hacer Europa' is written in a cursive font.</p>

+ información (en este campo se incluiría link a la página web del proyecto (proyectos europeos) y en caso de carecer de ella enlace a la página del grupo del IP.	http://www.ciberisciii.es/areas-tematicas/grupo-de-investigacion?id=16109