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ITN-TREATMENT
OTM-R

Innovative **T**raining **N**etwork -**TREATMENT**

Open, **T**ransparent and **M**erit-based **R**ecruitment

Metabolic Dysfunctions associated with Pharmacological Treatment of Schizophrenia

Grant Agreement number: 721236

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZON 2020

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SUMMARY

ITN-TREATMENT (Innovative Training Network-TREATMENT) endorses Open, Transparent and Merit-based recruitment (OTM-R) of researchers which ensures equal opportunities for all candidates and brings benefits not only researchers but also institutions https://www2.iib.uam.es/mpmonsalve_lab/public/ITN-TREATMENT-OTMR.pdf

1. INTRODUCTION

Open, Transparent and Merit-based Recruitment (OTM-R) is a top priority of the European Research Area and it is one of the pillars of the European Charter for Researchers and in particular of the Code of Conduct for the Recruitment of Researchers (C&C), launched in 2005. https://euraxess.ec.europa.eu/jobs/charter.

European Institutions have been encouraged to carry out an initial review of their current system and all of them should have their OTM-R system. It is strongly recommended to develop and implement an OTM-R policy that encourages, in particular, external applicants by,

- Providing clear and transparent information on the whole selection process, including selection criteria and an indicative timetable
- Posting a clear and concise job advertisement with links to detailed information on, for example, required competencies and duties, working conditions, entitlements, training opportunities, career development, gender equality policies, etc.
- Ensuring that the levels of qualifications and competencies required are in line with the needs of the position and not set as a barrier to entry, e.g., too restrictive and/or requiring unnecessary qualifications
- Considering the inclusion of explicit pro-active elements for underrepresented groups
- Keeping the administrative burden for the candidate (proof of qualifications, translations, number of copies required, etc.) to a minimum
- Reviewing, where appropriate, the institutional policy on languages

Each Institution should identify measurements of the effectiveness of its OTM-R policy which should be reviewed on a regular basis and, where necessary, adapted accordingly. The OTM-R policy should be published in an easily accessible place on the institution's website and should address a minimum set of requirements while respecting institutional autonomy and diversity. Quality control system is recommended to establish a quality control mechanism, including supervision of the whole recruitment process, to be administered by the designated staff. This should be combined with a periodical, external review by an independent observer.

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2. OTM-R GUIDE

To monitor and assess the extent to which the OTM-R system is being implemented, European Commission (EC) recommends internal reporting for all phases of the recruitment process. Establish an internal OTM-R guide is strongly recommended to set up an internal guide setting out clear and explicit rules and procedures for the recruitment of all researcher positions.

In this regard, it is recommended to use the European Framework for Research Careers which identifies four broad career profiles for researchers including the R1 First Stage Researcher (up to the completion of PhD). While the basic principles of openness, transparency and merit should apply to all positions, it is a common practice to adapt the procedures according to the level, nature and type of position. The key point is to ensure that the various procedures or derogations are clear, objectively justified and transparent.

The OTM-R guide should in principle address all the issues in the toolkit which sets out, in chronological order, the whole recruitment process, from the job advertising/application phase through to the appointment phase. In line with the principle "Recognition of qualifications" of the Code of Conduct for the Recruitment of Researchers, the guide needs to provide for appropriate assessment and evaluation of the academic and professional qualifications, including non-formal qualifications, skills and competences of all researchers, as well as international and professional mobility.

3. OTM-R PACKAGE

It is also available a OTM-R Package which is very usefully and includes principles and guidelines on what an OTM-R system should look like, a checklist or list of questions for institutions as a self-assessment tool to benchmark their current practices on the principles as well as a toolkit similar to a step-by-step guide to improve the organization's OTM-R practices. All the building blocks of the recruitment process, from the advertising phase to the appointment phase can be scrutinized in a simple way. The resulting revised recruitment process has to be made public.

The step by step guide comprises:

- The preparatory block (advertising positions, assembling panels, etc.)
- Evaluation/selection block (defining 'merit' and designing the procedures accordingly)
- The 'OTM routine' block (training staff, briefing panels, limiting bureaucracy to the minimum)

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3. PREPARATORY BLOCK

Consortium Members of ITN-TREATMENT has established recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised. In order to avoid discriminating against candidates based on their geographical location "e-recruitment" has been proposed. Advertisements have given a broad description of knowledge and competencies required, and have not been so specialized as to discourage suitable applicants. The time allowed between the advertisement of the vacancies for Early Stage Researchers (ESRs) or the call for applications and the deadline for reply has been realistic.

Eligibility Criteria

The ESRs for ITN-TREATMENT may be a national of a Member State, of an Associated Country or of any other third country. However, the ESRs must not have resided or carried out his/her main activity (work, studies, etc.) in the country of his/her host organization for more than 12 months in the 3 years immediately prior to his/her recruitment. Short stays, such as holidays, are not taken into account. Eligible ESRs must not have spent more than 12 months in the 3 years immediately prior to the date of selection in the same appointing international organization. ESRs shall at the time of recruitment by the host organization, be in the first four years* (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree. Duration of appointment: 3 - 36 months (typical appointment: 36 months).

* is measured from the date when a researcher obtained the degree which would formally entitle him or her to embark on a doctorate, either in the country in which the degree was obtained or in the country in which the researcher is recruited or seconded, irrespective of whether or not a doctorate is or was ever envisaged

Advertising Positions

The 15 ITN-TREATMENT Open Positions Advertisement was published on the **EURAXESS Jobs** portal using the common profiles established in the European Framework for Research Careers and to comply with the open, transparent and merit based recruitment procedures in a way that conform to the level of the position and in line with the basic principles of the C&C and including non-EU nationals https://euraxess.ec.europa.eu/jobs/158974. The advertisement included a document containing general information on the ITN-TREATMENT positions and the recruitment procedure and an Application Form (AF). These documents can be found in **Annex I** and **Annex II.**

In order to further ensure the international visibility of TREATMENT Positions Offer, the announcement has also been published in **NATURE Jobs**.

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4. SELECTION

The Consortium Members of ITN-TREATMENT has offered 15 PhD Fellowship or ESRs in Spain, Portugal, Sweden, Israel, Ireland and Slovenia related to Metabolic Dysfunctions associated with Pharmacological Treatment of Schizophrenia.

Selection Committee

A Selection Committee has been appointed that brings together diverse expertise and competences and has an adequate gender balance and includes members from different sectors (public and private) and disciplines, including from other countries and with relevant experience to assess the candidate. Full information on the ITN-TREATMENT Selection Committee can be found at: https://www2.iib.uam.es/mpmonsalve_lab/public/ITN-TREATMENT%20Selection%20Committee.pdf

Judging merit

The selection process takes into consideration the whole range of experience of the candidates. While focusing on their overall potential as researchers, their creativity and level of independence are also considered. This means that merit are judged qualitatively as well as quantitatively, focusing on outstanding results within a diversified career path and not only on the number of publications. Teaching, supervision, teamwork, knowledge transfer, management of research and innovation and public awareness activities are also taken into account. Candidates from an industrial background receive particular attention. Candidates are informed after the selection process about the strengths and weaknesses of their applications.

Recognition of mobility experience

Any mobility experience, e.g. a stay in another country/region or in another research setting (public or private) or a change from one discipline or sector to another, whether as part of the initial research training or at a later stage of the research career, or virtual mobility experience, are considered as a valuable contribution to the professional development of a researcher.

Recognition of qualifications

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Supervisors provide for appropriate assessment and evaluation of the academic and professional qualifications, including non-formal qualifications, of all ESRs, in particular within the context of international and professional mobility.

Recruitment procedure

The call for application opened the 1st of December 2016 and closed by 5.00pm on 28th February 2017. Candidates were asked to submit completed AFs to the e-mail list **itn-treatment@listas.iib.uam.es** that included all the members of the Selection Committee and the Consortium Manager. The AF included a field where the candidates had to pick three out of the 15 positions in preference order. The Consortium Manager sent to all candidates a confirmation e-mail and requested them to submit complementary information, in particular, a complete CV and recommendation letters. When the information was not forwarded, the Consortium Manager sent the candidates remainder e-mails to request missing information/documents.

Management of applications

The Project Manager generated a data-base that included all the contact information and documents of all candidates. This data-base was then used by the Manager to generate a **Google Drive** shared Drive folder system where all candidates and the submitted documents pertaining to their application were included. Candidates were initially classified according to their first position preference as well as all the documents. Once the candidates had been evaluated for their first choice position, their information was moved so that they would be evaluated for their second choice position and eventually to their third choice.

Sharing information

All the documents for candidates that identified the ESR position they wanted to apply to were loaded on the **Google Drive** shared folder and all members of the Selection Committee had full access wrights to which all of supervisors had access. The data-base was updated on weekly basis.

Personal Interview and Summary Record

Relevant members of the Selection Committee for each position contacted all the candidates whose training and expertise conformed to the positions offered and invited them to a skype interview. In these interviews, the candidates were given detailed information on the program and the positions and prompted to provide detailed information on their career interests, training, expertise, justify their interest in for their positions and on how they think their participation in the program would boost their career development. Summaries of these

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interviews were forwarded to the Consortium Manager and were part of the candidate evaluation.

For each candidate an evaluation form was completed by the Selection Committee that included qualitative and quantitative evaluation of each candidate. This information was used to comply with the final evaluation record by the Selection Committee https://www2.iib.uam.es/mpmonsalve_lab/public/. The evaluation form and score system can be found in **Annex III**.

This evaluation document will be Open Access https://www2.iib.uam.es/mpmonsalve_lab/public/, and it will be directly reported to the EU and to each of the candidates. Complete evaluation sheets will be made available upon request. The candidates will then have 10 natural days to request a second review of their application that will be granted whenever this is justified by an evaluation score error.

The top candidates for each position will be requested to provide scanned copies of documents that support for their CV claims in English. When the originals need to be translated, these translations must be notarized translations of the originals.

The TREATMENT Consortium is committed to keep a gender balance and will ensure that gender ratio of selected candidates does not offset that of the applications.

The final revised evaluation will be Open Access https://www2.iib.uam.es/mpmonsalve_lab/public/Final-Score.pdf and it will be directly reported to the EU and to each of the candidates (see **Annex IV).** Following the publication the candidates will receive a formal invitation by the Beneficiary Institutions to join the project in strict priority order. Failure to respond to this invitation in 5 working days will abort the process and the following candidate listed will be invited.

The final hiring process can take from days to several months, this variation depends on the internal procedures of each Beneficiary Institution, and personal considerations of the recruited candidates such as VISA applications, but the Consortium is committed to have it completed by September 30th.

4. OTM ROUTINE BLOCK

Adequate recruitment and working conditions will be ensured for all candidates at all stages. All Beneficiary Institutions will appoint each eligible ESR under an employment Contract. The following checklist is used for internal verification of compliance with the OTM-R requirements.

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OTM-R System					
	Open	**Transparent**	**Merit-based**	**Answer**	**Indicators**
1. Have we published a version of our OTM-R policy online in English?	X	X	X	Yes	**https://www2.iib.uam.es/mpmonsalve_lab/public/ITN-TREATMENT-OTMR.pdf**
2. Do we have an internal guide setting out clear OTM-R procedures and practices for all types of positions?	X	X	X	Yes	**https://www2.iib.uam.es/mpmonsalve_lab/public/ITN-TREATMENT-OTMR.pdf**
3. Is everyone involved in the process sufficiently trained in the area of OTM-R	X	X	X	Yes	**OTM-R Documents have been circulated to all the members of the Selection Committee and used to prepare this document that shows prove of OTM-R awareness.**
4. Do we make use of e-recruitment tools?	X	X		Yes	**The Application Form and Information Leaflet were available through a web based URL, the applications and documents were submitted electronically using an e-mail list: itn-treatment@listas.iib.uam.es**
5. Do we have a quality control system for OTM-R in place?	X	X	X	Yes	**The H2020-MSCA-ITN rules have been followed. A member of the External Advisory Board participates in the Selection Committee. All members of the Selection Committee had full access rights to all the information at all stages to that end we used the e-mail list: itn-treatment@listas.iib.uam.es and the shared Google Drive Folder.**
6. Does our current OTM-R policy	X	X	X	Yes	**The Ad was posted in two internationally awarded sites: Euraxes and Nature Jobs. Applications were received from 38**

encourage external candidates to apply?					different countries.
7. Is our current OTM-R policy in line with policies to attract researchers from abroad?	X	X	X	Yes	The Ad was posted in two internationally awarded sites: EURAXES and Nature Jobs. Applications were received form 38 different countries.
8. Is our current OTM-R policy in line with policies to attract underrepresented groups?	X	X	X	Yes	The Ad was posted in two internationally awarded sites: EURAXES and Nature Jobs. Applications were received form 38 different countries. Advertising for ESR Positions did not restrict in any way the access of underrepresented groups
10. Do we have means to monitor whether the most suitable researchers apply?	X	X	X	Yes	The Ad included a summary of each ESR position and there were a significant number of candidates with the corresponding expertise profile.
Advertising and application phase					
11. Do we have clear guidelines or templates (e.g., EURAXESS) for advertising positions?	X	X		Yes	https://euraxess.ec.europa.eu/jobs/158974
12. Do we include in the job advertisement references/links to all the elements foreseen in the relevant section of the toolkit? [see Chapter 4.4.1 a) of the OTM-R expert	X	X		Yes	https://euraxess.ec.europa.eu/jobs/158974

report2]					
13. Do we make full use of EURAXESS to ensure our research vacancies reach a wider audience?	X	X		Yes	https://euraxess.ec.europa.eu/jobs/158974
14. Do we make use of other job advertising tools?	X	X		Yes	http://www.nature.com/naturejobs/science/jobs/603589-innovative-training-network-15-phd-positions-in-spain-portugal-sweden-israel-ireland-and-slovenia
15. Do we keep the administrative burden to a minimum for the candidate? [see Chapter 4.4.1 b) 45]	X			Yes	We kept requirements to a minimum and documents had only to be provided in electronic format. Documents requested were: Application Form, CV, Supporting letters and Certificates.
Selection and evaluation phase					
16. Do we have clear rules governing the appointment of selection committees? [see Chapter 4.4.2 a) 45]		X	X	Yes	They are part of the GA and published as an Open Access document. https://www2.iib.uam.es/mpmonsalve_lab/public/ITN-TREATMENT%20Selection%20Committee.pdf
17. Do we have clear rules concerning the composition of selection committees?		X	X	Yes	They are part of the GA and published as an Open Access document. https://www2.iib.uam.es/mpmonsalve_lab/public/ITNTREATMENT%20Selection%20Committee.pdf
18. Are the committees sufficiently gender-balanced?		X	X	Yes	There are 5 female members in the Selection Committee. https://www2.iib.uam.es/mpmonsalve_lab/public/ITNTREATMENT%20Selection%20Committee.pdf

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19. Do we have clear guidelines for selection committees which help to judge 'merit' in a way that leads to the best candidate being selected?			X	Yes	Rules on how to score the candidate's merits have been stablished, and are shown here as part of Annex III https://www2.iib.uam.es/mpmonsalve_lab/public/ITN-TREATMENT%20Selection%20Committee.pdf

Appointment phase

20. Do we inform all applicants at the end of the selection process?		X		Yes	At the end of the evaluation period, the results and information on procedures will be published Open Access. Candidates will also receive a personal e-mail to direct them to the URL that hosts the evaluation results and procedures.
21. Do we provide adequate feedback to interviewees?		X		Yes	Following the publication of the preliminary evaluation report, all candidates will have 10 days to request the reevaluation of their merits. Full evaluation forms will be sent to requesting candidates.
22. Do we have an appropriate complaints mechanism in place?		X		Yes	Together with the preliminary evaluation report, a document describing the complete complaint procedure will be published on line.

Overall assessment

23. Do we have a system in place to assess whether OTM-R delivers on its objectives?	X	X	X	Yes	Yes we have set up a tentative calendar for all the stages of the process and informed candidates. Application 2 months, Evaluation 6 weeks. 10 days to receive complaints, 2 weeks for the final evaluation to be published. Actual recruitment is expected to be completed by May.

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ANNEX I

15 PhD Fellowship positions available in the Marie Skłodowska-Curie actions Innovative Training Network "TREATMENT" (H2020-MSCA-ITN -721236)
European Training Network: Metabolic Dysfunctions associated with Pharmacological Treatment of Schizophrenia

Located in
Spain, Portugal, Sweden, Israel, Ireland, and Slovenia

Project background and goal: TREATMENT is a Marie Sklodowska Curie Innovative Training Network proposal directly addressing the need for high-level training and career paths in risk evaluation of drug induced metabolic dysfunctions, a relevant aspect, so far unexplored by traditional toxicology studies, but urgently needed to challenge current severe limitations of health care interventions in mental disorders. These patients require life-long medications that subsequently trigger metabolic diseases with a strong negative impact on their health and well-being. To achieve this, and improve adherence to treatments, we will evaluate how short-term antipsychotic drug responses impact long-term metabolic control to identify and validate biomarkers with clinically predictive value for targeting drug induced metabolic dysfunctions. This effort will have added commercial value by enabling the design of predictive marker kits for testing adverse secondary metabolic effects of drugs to be used in pharmacological and medical practice. TREATMENT will provide multidisciplinary knowledge, capabilities and tools to implement this ambitious strategy by the training of young scientists in a program that combines pharmacology, metabolism and mental health research with strategies for product and tool design and validation. Our ultimate goal is to empower the intersectorial and trans-national employability of young scientists across academic, public and private sectors to foster the development and implementation of personalized medicine tools that will provide effective treatment

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regimens for life long health-care interventions and decrease the risk for development of chronic metabolic diseases.

Career Stage
Early Stage Researcher (ESR) or 0-4 yrs. (Post Graduate)
Qualifications required for entry into the PhD program in each partners country can be found on each partners website or by contacting the partner by email (see links in the project descriptions section)**. Completion of a Master Programme is not required for application but, the applicants should have a Master degree granted before the 30th of September, 2017.**

Benefits and Salary
The MSCA programme offers a highly competitive and attractive salary and working conditions. The successful candidates will receive a salary in accordance with the MSCA regulations for early stage researchers. Exact salary will be confirmed upon appointment [Living Allowance = 3110 €/month (correction factor to be applied per country) + mobility allowance = 600 €/month. Researcher's may also qualify for a family allowance of 500 €/month depending on the family situation].
In addition to their individual scientific projects, all fellows will benefit from further continuing education, which includes scientific skills courses, transferable skills courses, as well as active participation in workshops and conferences and the opportunity to go on secondments to partner labs.

Applicants need to fully comply with the three eligibility criteria:
1) **Early-stage researchers** (ESR) are those who are, at the time of recruitment by the host, in the first four years (full-time equivalent) of their research careers. This is measured from the date when they obtained the degree which formally entitles them to embark on a doctorate, either in the country in which the degree was obtained or in the country in which the research training is provided, irrespective of whether or not a doctorate was envisaged. Please note applicants cannot already hold a PhD.
2) **Conditions of international mobility of researchers**: Researchers are required to undertake trans-national mobility (i.e. move from one country to another) when taking up the appointment. At the time of selection by the host organisation, researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation for more than 12 months in the 3 years immediately prior to their recruitment. Short stays, such as holidays, are not taken into account.
3) **English language**: Network fellows (ESRs) must demonstrate that their ability to understand and express themselves in both written and spoken English is sufficiently high for them to derive the full benefit from the network training.

Application procedure:

All applications <u>must be made on the TREATMENT APPLICATION FORM</u>

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https://www.iib.uam.es/drive/smb/usuario/info_services/Documentos_Internos_II Bm/Anuncios_y_Ofertas/

This form should be completed and emailed to itn-treatment@listas.iib.uam.es by 5.00pm on 28th February 2017. The email should clearly state your top three projects in order of preference (e.g., 1ST ESR8, 2nd ESR1 and 3rd ESR5).

Eligible applications will be forwarded to the relevant partners in charge of each project and each partner will shortlist their applicants and conduct interviews from mid-April to mid-May. Applicants will be informed of the outcome by end of May 2017 (timelines may vary a little between partners). Successful applicants will need to prove that they are eligible (three aspects: respect ESR definition, mobility criteria, and English language proficiency). The selected ESRs are expected to start May-Sep. 2017.

PhD Projects

ESR1 will analyze tissue-specificity of schizophrenia and antipsychotic drugs on insulin sensitivity in order to unravel the tissue specificity of the critical nodes of insulin signalling that are dysregulated by the schizophrenia per se or as a consequence of the impact of the pharmacological treatment with olanzapine/aripriprazol catabolism on whole body metabolic control.

The ESR will examine the selective modulation of the critical nodes of insulin signalling (IR, IRS1/2, PTP1B, Akt) during schizophrenia *per se* and under antipsychotic therapy and the impact on whole body glucose homeostasis and energy expenditure. We expect to find differences in insulin-sensitive cells and tissues from mice treated with drugs for short or long time-periods. Secondly, the ESR will conduct studies in genetically modified (GM) mice bearing tissue-specific insulin resistance (IRS2 KO) or hypersensitivity (PTP1B KO). This approach will be relevant for the design of combined therapies aimed to ameliorate metabolic disturbances linked to antipsychotic treatments.

Host: Instituto de Investigaciones Biomédicas "Alberto Sols", IIBm (CSIC-UAM). *Supervisors*: Professor Ángela M. Valverde and Dr. María Monsalve (For information on this lab and more detail of the project please see https://www.iib.uam.es/portal/ and contact avalverde@iib.uam.es or mpmonsalve@iib.uam.es).

ESR2 will study the effect of antipsychotic drugs in the pancreas in order to analyze the impact of schizophrenia per se and its pharmacological treatment with olanzapine or aripiprazol in the molecular machinery that modulates the endocrine pancreas.

The ESR will study the effects of schizophrenia *per se* and its treatment with antipsychotic drugs in the endocrine pancreas. By using cellular models of pancreatic alpha and beta cells, we expect to unravel alterations in the molecular mechanisms of insulin/glucagon secretion and cell plasticity due to antipsychotic drugs. It is expected to find altered responses to gastrointestinal peptides, particularly GLP1R agonists. In the *in vivo* mouse models of schizophrenia or its pharmacological treatments, the ESR

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will analyse if and how islet morphometry may be altered together with increased ER stress (PERK, ATF6, IRE1α) and apoptosis (Bax/Bak, caspase-3), limiting the first and second phase of insulin secretion.

Host Instituto de Investigaciones Biomédicas "Alberto Sols", IIBm (CSIC-UAM) *Supervisors* Professor Ángela M. Valverde and Professor Francisco Abad (For information on this lab and more detail of the project please see https://www.iib.uam.es/portal/ and contact avalverde@iib.uam.es or francisco.abad@salud.madrid.org).

ESR3 will evaluate Drug-induced mitochondrial dysfunction to unravel how antipsychotic drug catabolism in the liver alters mitochondrial activity, and how the ensuing modified activity of master transcriptional regulators controlling oxidative metabolism may led to general metabolic dysfunctions including fibrosis.

The ESR will study drug specific differences on mitochondrial activity, as well as different capacity of the model animals to cope with the alterations in mitochondrial activity. The ESR will analyse background and drug specific differences in the induction of mitochondrial biogenesis (PGC1α/β, TFAM, SIRT3) as a compensatory response of the liver to mitochondrial dysfunction and in the capacity to fully recover mitochondrial function that if limited, would result in the accumulation of dysfunctional mitochondria and elevated ROS. The final aim of the study would be to determine how these limitations in the mitochondrial oxidative capacity contribute to long term metabolic dysfunctions following chronic drug administration.

Host Instituto de Investigaciones Biomédicas "Alberto Sols", IIBm (CSIC-UAM) *Supervisors* Dr. María Monsalve and Dr. Juan Cigudosa (For information on this lab and more detail of the project please see https://www.iib.uam.es/portal/ and contact mpmonsalve@iib.uam.es or jccigudosa@nimgenetics.com).

ESR4 will analyze the role of mitochondrial dysfunction in drug-induced cardiovascular disease in order to evaluate to what extent drug induced mitochondrial dysfunction may result in the development of cardiovascular disease.

The ESR will evaluate the genetic basis for variability on drug induced mitochondrial dysfunction on cardiovascular disease. Mitochondrial dysfunction is associated with cardiovascular disease, hence the putative impact of drug induced mitochondrial dysfunction on the cardiovascular system will be studied analyzing both macrovascular and microvascular complications. To that end the ESR will test the effects of psychotropic drugs on endothelial dysfunction, atheroma plaque formation, angiogenesis and retinopathy.

Host Instituto de Investigaciones Biomédicas "Alberto Sols", IIBm (CSIC-UAM) *Supervisors* Dr. María Monsalve and Professor Santiago Lamas (For information on

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this lab and more detail of the project please see https://www.iib.uam.es/portal/ and contact mpmonsalve@iib.uam.es or slamas@cbm.csic.es).

ESR5 will study the effects of the antipsychotic drugs on human adipose tissue insulin signalling, glucose and lipid metabolism.

The ESR will: i) investigate the in vitro effects on glucose uptake in human adipose cells and its interactions with insulin signalling. ii) Elucidate the effects on lipolysis, lipid storage and the expression genes regulating lipid metabolism (including fatty acid synthesis and storage as well as oxidation).

The ESR will analyse alterations in insulin-stimulated glucose uptake, insulin signalling and lipid handling that may contribute to the development of insulin resistance following antipsychotic drug treatment. These may contribute to lipid deposition in other organs, such as liver and muscle, leading to dyslipidemia. These studies will provide biomarkers on drug induced metabolic dysfunction of the adipose tissue.

Host Uppsala Universitet (Uppsala, Sweden) *Supervisors* Professor Jan Eriksson and Professor Angela M. Valverde (For information on this lab and more detail of the project please see http://katalog.uu.se/profile/?id=N13-487 and contact jan.eriksson@medsci.uu.se or avalverde@iib.uam.es).

***ESR6 will study drug-induced low-grade chronic inflammation in human adipose tissue including interaction with other tissues in order to investigate effects of antipsychotic drugs on adipose tissue hormones, adipokines and chemochines, inflammatory markers, and other factors of potential importance for the development of T2D and obesity**.*

Human volunteers will have short term drug treatment, and in vivo and in vitro analyses will be performed., Assessments will include changes in hormonal (adipokines, dopamine, cortisol) and inflammatory factors, eg lipid species (fatty acid profiles, eicosanoids, leukotrienes), cytokines (eg TNFα, IL6, IL1β) and immune cells in adipose tissue. These factors may contribute to low-grade systemic inflammation, changes in macrophage polarization, whole body insulin resistance, liver steatosis and pancreatic beta cell dysfunction. Furthermore, samples from healthy, prediabetic and type 2-diabetes subjects will be compared, to identify putative differences in the drug effects depending on the metabolic milieu.

Host Uppsala Universitet (Uppsala, Sweden) *Supervisor* Professor Jan Eriksson (For information on this lab and more detail of the project please see http://katalog.uu.se/profile/?id=N13-487 and contact jan.eriksson@medsci.uu.se).

ESR7 will evaluate the integrative metabolic effects of antipsychotic treatment in a rat model in order to evaluate global alterations in metabolic fluxes induced by in vivo treatment with olanzapine or aripiprazol in a rat model.

The ESR will develop non-invasive methods for characterizing hepatic expression of albumin, ApoB100, ApoJ and PON-1 and to apply these to rats treated with anti-

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schizophrenic drugs. The ESR will aim to integrate these methods with established stable isotope tracer protocols for characterizing changes in intermediary metabolic fluxes in the rat model administered with anti-schizophrenic drugs. The ESR will evaluate alterations in the insulin-signalling pathway (IR, IRS1/2, AKT) in isolated fat cells, BAT, muscle and skin. The ESR will identify the best set of biomarkers (plasma and urinary metabolites/proteins) that are correlated with changes in drug-induced metabolic fluxes and changes in activation of insulin signalling mediators at the level of these tissues. Finally, the ESR will validate the predictive efficacy of these biomarkers with the development of insulin resistance and cardiovascular disease in a population of anti-schizophrenic drug users.

Host Centre for Neuroscience and Cell Biology, CNC (Coimbra, Portugal) *Supervisors* Dr. John Jones and Dr. Eugenia Carvalho (For information on this lab see http://www.cnbc.pt/research/department_show.asp?iddep=1138 and for more project detail please contact john.griffith.jones@gmail.com or eugeniamlcarvalho@gmail.com).

ESR8 will study the metabolic impact of antipsychotic drugs on the CNS and in the regulation of whole body metabolism (hypothalamic-periphery axis) in order to evaluate the alterations in behaviour and in hypothalamic neurogenesis, as well as the effects on glucose and lipid metabolism in peripheral tissues after in vivo treatment with olanzapine or aripiprazol in rodents*.*

The ESR will study the two different models of schizophrenia, the transgenic mouse DISC1 and the neurodevelopmental rat model of neurogenesis disruption with prenatal administration of the cytostatic agent methylazoxymethanol (MAM). Besides behavioral and neurogenic alterations, we will evaluate insulin action in the CNS and peripheral tissues. The ESR will measure insulin-stimulated 14C-glucose uptake and lipolysis in isolated fat cells. In addition, the ESR will use High resolution respirometry to study mitochondrial respiration as well as cellular "fitness" in BAT, WAT, skeletal muscle and the different isolated brains regions. The ESR will identify altered pathways in the CNS that may correlate with the changes observed in the periphery and validate the findings through human studies on antipsychotic drugs.

Host Centre for Neuroscience and Cell Biology, CNC (Coimbra, Portugal) *Supervisor* Dr. Eugenia Carvalho (For information on this lab see http://www.cnbc.pt/research/department_show.asp?iddep=1138 and for more project detail please contact eugeniamlcarvalho@gmail.com).

ESR9 will evaluate Drug-induced activation of the Unfolded Protein Response (UPR) in the liver in order to explore the effects of olanzapine/aripriprazol on ER stress signalling in the liver and whether mitochondrial UPR is activated by the drugs; to find molecular connections between drug catabolism and ER stress responses in the liver in vitro *and* in vivo*.*

The ESR will aim to delineate molecular interconnectivities between drug catabolism and the extent of UPR (PERK, ATF6, IRE1 α) in the liver. This will be achieved by

TREATMENT

testing the drug effects in the ER stress responses in genetically modified hepatocytes by CRISPR/Cas9 editing followed by the study of their metabolic responses. Animals with liver specific impaired UPR will be evaluated.

Host Hebrew University Jerusalem Israel, HUJI (Jerusalem, Israel) *Supervisors* Professor Boaz Tirosh and Professor Afshin Samali (For information on this lab and more detail of the project please see http://medicine.ekmd.huji.ac.il/en/publications/researchersPages/pages/boazt.aspx and contact boazt@ekmd.huji.ac.il or afshin.samali@nuigalway.ie).

ESR10 will study the effects of antipsychotic drugs in the immune system in order to characterize alterations in the immune system in schizophrenia and following olanzapine/aripriprazol treatment.

The ESR will examine the direct effect of the antipsychotic drugs on immune cell activation in vitro in co-culture settings, as well as the secondary response of the immune system to hepatic drug catabolism in vivo. The lymphocyte/macrophage infiltration into liver and adipose tissues following antipsychotic treatment will also be evaluated in animal models of schizophrenia as well as metabolic dysfunctions. Considering the association between the immune responses with obesity and metabolic adaptations, we should establish the cause-effect relationships between the innate and chronic immunity with drug induced metabolic dysfunctions using mice that are immunodeficient.

Host Hebrew University Jerusalem Israel, HUJI (Jerusalem, Israel) *Supervisors* Professor Boaz Tirosh and Professor Afshin Samali (For information on this lab and more detail of the project please see http://medicine.ekmd.huji.ac.il/en/publications/researchersPages/pages/boazt.aspx and contact boazt@ekmd.huji.ac.il or afshin.samali@nuigalway.ie).

ESR11 will analyze the interferences of antipsychotic drugs on hepatocyte adaptive responses that determine loss of function, compromised survival and induction of fibrosis in order to determine how the drugs alter the adaptive responses of liver cells and how they impact hepatocyte functionality and their capacity to survive in response to stressors.

The ESR will test the acute effect of antipsychotic drug treatment on primary hepatocytes and liver slices Rats treated with antipsychotic drugs will be used to investigate how the putative loss in hepatocyte functionality impacts on the induction of steatosis, fibrosis and steatohepatitis and evaluation of increased liver sensitivity to damage. To establish the links between the short-term impairement of hepatic functionality following drug administration with long-term enhanced sensitivity to liver stressors, likely to be associated with increased liver fat accumulation and development of fibrosis.

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Host Univerza V Ljubljani, UL (Ljubljani, Slovenia) *Supervisor* Professor Irina Milisav (For information on this lab and more detail of the project please see http://www.mf.uni-lj.si/en/index.html or contact irina.milisav@mf.uni-lj.si).

ESR12 will evaluate the polymorphisms associated with antipsychotic responses in order to identify patients that under antipsychotic treatment could develop alterations on glucose and lipid metabolism.

The ESR will use pharmacogenetics to predict which patients will respond and who will develop the metabolic syndrome. Particularly, we aim 1) To identify polymorphisms associated to metabolic syndrome after antipsychotic administration 2) To identify possible drug targets. The ESR will identify polymorphisms associated to metabolic syndrome induced by antipsychotics. This will allow the establishment of genetic biomarkers to predict drug response. Genotyping patients before treatment will help physicians to decide therapy.

Host Fundación para la Investigación Biomédica del Hospital Universitario La Princesa, FIBHUP (Madrid, Spain) *Supervisor* Professor Francisco Abad (For information on this lab and more detail of the project please see http://www.iis-princesa.org/infraestructuras/unidad-de-investigacion-clinica/ or contact francisco.abad@salud.madrid.org).

ESR13 will carry out a translational Integrative genomic analysis on human patients samples using bioinformatic strategies.

The ESR will study the genomic and expression profiles of a cohort of patients and controls where short term responses to antipsychotic administration have been studied by other participant groups. ESR13 will characterize the different genomic patterns that predict long term metabolic side effects in human patients with the purpose of designing predictive tests for personalized medicine in antipsychotic treatment. The design of a rapid, economic and reliable predictive test for quantification of parameters that predict long-term metabolic dysfunctions that may result from chronic drug administration will be useful for application on diagnosis and follow up of schizophrenic patients and/or other related pathologies.

Host NIMGenetics, Genómica y Medicina S.L., NIMGenetics Company (Madrid, Spain) *Supervisor* Dr. Juan Cigudosa (For further information on the company see https://www.nimgenetics.com/ or contact jccigudosa@nimgenetics.com)

ESR14 will study of the pathological metabolic adaptations in the CNS in response to antipsychotic administration and development of an animal model based design of rapid predictive test for metabolic dysfunctions due to drug administration in order to evaluate the impact of antipsychotic drugs in the CNS and its regulation of metabolic function through the hypothalamic-periphery axis. Two different animal models of schizophrenia will be used: the transgenic mouse

TREATMENT

model of DN (dominant negative) human DISC1 (Disrupted-in-schizophrenia 1) and the neurodevelopmental rat model of neurogenesis disruption with prenatal administration of the cytostatic agent methylazoxymethanol.

The ESR will analyze how the antipsychotic drug treatment alters metabolic regulators in the CNS that will have an effect on neural activity and impact the neurodegenerative profile of the schizophrenic mice. We also expect to find differences in the metabolic drug response profile in the CNS of schizophrenic mice relative to controls, whose potential value as biomarkers will be validated in the human part of the study for tool development.

Host Bn'ML Behavioral & Molecular Lab **(**Braga, Portugal), (company) *Supervisors* Professor Joao Bessa and Dr. Eugenia Carvalho (For information on the company see http://www.bnml.eu/ and contact joaobessa@med.uminho.pt)

ESR15 will perform cell data integrative analysis, biomarker validation and tool development. The ESR will carry out an integrative omic analisis of cellular stress responses to antipsychotic treatment, following validation of identified protein biomarkers, implementation of methodological standarization protocols and tool development based on protein analysis.

The ESR will use cellomics data from drug stressed cells and human blood samples to identify protein biomarkers of drug induced metabolic stress and the analysis of the biomarkers will be validated by the ESR on independent samples. The ESR will also work on the standarization of the analysis protocols and will develop a prototype diagnostic tool and test its applicability to other drug induced metabolic effects.

Host Cell Stress Discoveries (Galway, Ireland), (company) *Supervisors* Professor Afshin Samali and Professor Boaz Tirosh (For information on the company see https://cellstressdiscoveries.com/ and for detail of the project please contact afshin.samali@nuigalway.ie or eugeniamlcarvalho@gmail.com).

TREATMENT

ANNEX II

TREATMENT APPLICATION FORM

Selected PhD Projects (ESR positions 1-15)

1st	
2nd	
3rd	

Applicant details

Name	
Date of Birth	
Address	
Email address	
Phone Number	
Country of Citizenship	

Please state your country of residence in the past 4 years

Year	from	to	Country
2016			
2015			
2014			
2013			

(Modify as needed if years are split between countries)

Please note: regulations of the MSCA program stipulate that researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation for more than 12 months in the 3 years immediately prior to their recruitment.

Academic Qualifications

Primary degree			
Institution	e.g. Universidad Autónoma de Madrid	Country	Spain
Year registered from:	2010	Year registered to:	2014
Qualification	BSc	Grade (or Grade point average or %)	1st class honours
Number of students in class	60	Ranking in class (if known or applicable)	3rd
Description of degree	e.g. Major focus on Biomedicine with minor focus on biochemistry		

TREATMENT

	and molecular biology
Has this degree been awarded and when	Yes 2014
Email address of institution for verification	E.g. the registration or admissions office of your university where your registration can be verified (Please note students with provisional offers will be required to provide transcripts)

Details of your degree program

Year of program	Subjects	Grade/grade point average or % for that year	Place in class (if known/if applicable)
2014	e.g. biochemistry, pharmacology, microbiology	73%	2nd
2013	biochemistry, pharmacology,		
2012	biochemistry, pharmacology, microbiology,		
2011	biochemistry, pharmacology, microbiology, physiology		

Postgraduate qualifications (e.g. Masters)			
Institution		Country	
Year registered from:		Year registered to:	
Qualification		Grade (or Grade point average or %)	
Number of students in class		Ranking in class (if known or applicable)	
Description of degree			
Has this degree been awarded and when			
Email address of institution for verification			

(You can copy and paste this box again if you have more than 1 postgraduate qualification)

Please note Applicants cannot already have been awarded a PhD

TREATMENT

Please respect the word limits in the following sections –material exceeding the word limit will not be considered.

Other) education (max 500 words)

TREATMENT

Please include any additional information relevant to your academic background or the projects you are applying for (e.g. training courses- please provide name location and dates)

TREATMENT

Work experience

Employer name	Job Title	from	to	Duties and responsibilities

Insert or delete lines as needed

Academic prizes, scholarships and awards

Provide details of any such awards you have received indicating the name of the award and basis of which the award was given. (e.g. University Entrance Scholarship - awarded to students with over 560 points in final school exam).

Name	Date	Description

Insert more lines as needed for more awards

Research Achievements (max 500 words – any excess will not be considered)

In this section please describe:
- Your research experience to-date e.g. Research projects, publications, abstracts at meetings, patents etc
- Details of any skills you have which prepare you for this training programme.

Personal Statement (max 1000 words)

TREATMENT

This provides you with the opportunity to highlight information that has not been provided elsewhere. The following topics should be addressed:

- Why do you wish to pursue a higher degree by research?
- Why have you selected these 3 projects?
- Why do you believe that you are suited to this field of research?
- Please describe how a PhD will assist you in achieving your career goals.
- Discuss any additional aspects which you feel will provide a better picture of your capability, motivation and interests.

References

Please provide the details of 3 people that can be contacted to provide a reference for you

Name	Email address	Phone number	Institutional address	Relationship to you
				Eg final year project supervisor

TREATMENT

ANNEX III

Evaluation Form:

Education	*Score: max 30*
Bsc degree	*10 points*
MSc degree	*10 points*
BSc Grades top 10%	*5 points*
MSc Grades top 10%	*5 points*

Expertise   *Score: max 30*

Experience in general techniques of relevance for the project (i.e., western blotting)

Additional relevant technical expertise of relevance for the project (i.e., animal handling)

Other relevant expertise (i.e., work in R&D in the non-academic sector)

Other capabilities	*Score: max 30*
Motivation (i.e., clearly shows a personal interest in the project)	*10 points*
Mobility (i.e., internship in foreign country)	*10 points*
Communication (i.e., has participated in Outreach activities)	*10 points*

Personal interview & references:	*Score max 10*
Interview (i.e., good communication skills, fluent in English)	*5 points*
Positive recommendations	*5 points*

TREATMENT

The following criteria were used to assess the candidates:

1. Education

2. Previous job experience/performance

3. His/her expectations for working on the project

4. Management attitudes

5. Analytical/problem solving skills

6. Interpersonal/communication skills

7. Motivation/goal orientation

8. Overall job performance

9. Initiative/creativity and innovation

9. Adaptability/ability to learn

10. Dependability

11. Cooperation

TREATMENT

ANNEX IV

SURNAME	NAME	ESR	Not Eligible	No Matching	Interview	Score
Abbas Abadi	Sareh		NE			
Abed	Maad		NE			
Absi	El Hadi		NE			
Ahmed	Bissan		NE			
Ahmed	Arif	ESR5	NE			
Akkurt	**Murat**	**ESR5**			**I**	**55**
Alam	Naveed	ESR6		NM		
Ali	Yeasmeen	ESR5		NM		
Anand	Ria	ESR5		NM		
Annie	**Okram**	**ESR10**			**I**	**70**
Anubha			NE			
Patel	Gaurangkumar	**ESR4**			**I**	**95**
Aroca	**Ester**	**ESR14**			**I**	**68**
Arribas	Felix	ESR1		NM		
Asad Mumtaz	Rao	ESR8		NM		
Asadollahi	Kazem	ESR15		NM		
Asghar	Faiza		NE			
Assis Loureiro	Guilherme	ESR7		NM		
Asiedu	Bernice	ESR5		NM		
Badillo Vazquez	José Antonio		NE			
Bassetto	**Marco**	**ESR14**			**I**	**66**

TREATMENT

Bathini	Praveen	ESR7		NM		
Bayo Jimenez	Maria Teresa	ESR7		NM		
Blanco Perera	**Amaya**	**ESR12**			**I**	**90,98**
Blanco Santero	Javier		NE			
Bulnes Ramos	Ángel		NE			
Buglia	**Germana**	**ESR14**			**I**	**41**
Bupalan	**Sangeetha**	**ESR9**			**I**	**85**
		ESR15			**I**	**74**
Camacho Nieto	Nicolás		NE			
Cardoso Carneiro	**Ana Filipa**	**ESR12**			**I**	**51,7**
Castaño Fernández	Elisa	ESR6		NM		
Castillo Mancho	Vicente		NE			
Cebrián García	Soledad		NE			
Choy	**David**	**ESR15**			**I**	**57**
Cisternas Ramírez	Franco Luciano		NE			
Clement	**Amelie**	**ESR14**			**I**	**50**
Collins	Offor	ESR7		NM		
Copado Ruiz	Blas Jesús		NE			
Corradi	**Laura**	**ESR3**			**I**	**82,5**
Cortez Villalba	Lucia Del Carmen	ESR6		NM		
Dai	**Yuaniguan**	**ESR3**			**I**	**88**
da Silva Ferreira	**Vitor**	**ESR1**			**I**	**92**

TREATMENT

	Manuel					
de la Torre Gordo	María	ESR8		NM		
Debas Belew	**Getachew**	**ESR8**			**I**	**36**
Dhakan	**Chetan**	**ESR6**			**I**	**57**
Dhele	**Narendra**	**ESR3**			**I**	**76**
Dilcan	Gonca	ESR15			**Withdrew**	
Di Nunzio	**Giada**	**ESR8**			**I**	**93**
Dipta	**Priya**	**ESR10**			**I**	**75**
Domínguez Redondo	**Carlos**	**ESR4**			**I**	**80**
Drychta	**Joanna**	**ESR3**			**I**	**89**
Duarte	Christian	ESR7		NM		
Dubay	Bhumika	ESR1	NE			
Douaki	Ali	ESR5		NM		
Edo	Carlos		NE			
Elsamani	**Leena**	**ESR5**			**I**	**76**
Escandell	Mireia		NE			
Eskandari	Ebrahim	ESR12		NM		
Fernandes Pereira	**Anyse Sofia**	**ESR6**			**I**	**67**
Ferreira	Nicole Yolanda	ESR5		NM		
Ferreira Garcia Rodrigues	Daniela	ESR6		NM		
Ferry	Aurélie	ESR1		NM		
Fluks	Monica	ESR4		NM		

TREATMENT

Forno	Francesca	ESR9			I	90
Franceschini	Alessandra	ESR1		NM		
Francis	Gilu		NE			
Gabrielyan	**Anna**	**ESR6**			**I**	**62**
Galluzo	Viviana	ESR5		NM		
Gallina	**Alessandro**	**ESR13**			**I**	**74**
Gallinat O'Callaghan	Alex	ESR15		NM		
Garcia del Vello Moreno	Maria del Pilar	ESR15			No answer	
García Galán	Sandra	ESR8		NM		
García-Junceda	Isabel	ESR5		NM		
García Muñoz	**Virginia**	**ESR2**			**I**	**91**
García Ruíz	Ricardo		NE			
García	Mª Angeles		NE			
García Junceda	Isabel	ESR5		NM		
Garrido	Diana Patricia		NE			
Gayatri Kadim	Geeta	ESR2		NM		
Gazzetta	Federico	ESR6		NM		
Ghiasi	Sara	ESR15		NM		
Ghimire	**Samriddhi**	**ESR6**			**I**	**50**
Gil de Biedma	Leticia		NE			
Gómez	Cecilia		NE			
Gonzalez Valero	Jose Maria		NE			
González Borja	Maria	ESR7		NM		

TREATMENT

	Iranzu					
Gopaiah	**Talari**	**ESR15**			**I**	**62**
Gorjão da Silva	**Neuton Pedro**	**ESR4**			**I**	**85**
Gou	Wenqiang	ESR5		NM		
Grajales	**Diana**	**ESR2**			**I**	**92**
Granero Expósito	Laura María		NE			
Gregorio Martins	**María**	**ESR13**			**I**	**78**
Guardia Carrión	**Ana María**	**ESR15**			**I**	**59**
Gutierrez Nogues	Angel		NE			
Haridas	Namitha		NE			
Hegazy	**Mohamed Mostafa Mohamed Ali**	**ESR6**			**I**	**59**
Heringer Boucas	Mariana	ESR6		NM		
Hermelo	Ismail	ESR6		NM		
Hribar	**Urša**	**ESR11**			**I**	**71**
Iacobucci	Simona	ESR2		NM		
Ibáñez de Aldecoa	Paula	ESR6		NM		
Ilas	Claudia Renata		NE			
Illanes	**Ramiro**	**ESR14**			**I**	**50**
Irala	Carlos	ESR8		NM		
Iturriaga Calvo	María		NE			
Izadi	Nasim	ESR5		NM		

TREATMENT

Jahandideh	**Arghavan**	**ESR5**			**I**	**69**
Jia	Haixue	ESR5		NM		
Jiménez Montes	Carmen María		NE			
Joya	Ana	ESR8		NM		
Justo Sanz	Raúl	ESR5		NM		
Kailash Prasad	Prajapati		NE			
Kamal Hossain	Muhammad	ESR1		NM		
Kamal Pasha	Mustafa	ESR8		NM		
Kargar MohammadiNazhad	Aylar	ESR5		NM		
Kaur	**Tavleen**	**ESR10**			**I**	**69**
Khalid	Umar	ESR5		NM		
Khezri	Banafsheh Seyyed		NE			
Kioroglou	**Dimitrios**	**ESR13**			**I**	**85**
Koller	**Dora**	**ESR12**			**I**	**91,5**
Kollia	**Antonia-Eleni**	**ESR11**			**I**	**92**
Krivokapić	**Miloš**	**ESR4**			**I**	**87,5**
Kramar	**Barbara**	**ESR11**			**I**	**86**
Kucharczyk	**Patrycja**	**ESR1**			**I**	**91**
Kulkarni	Shruti	ESR6		NM		
Kumar	Nandha	ESR5		NM		
Le Thi	Hien	ESR1		NM		

TREATMENT

Li	**Wei**	**ESR5**			**I**	**56**
Lin	**Lisha**	**ESR5**			**I**	**55**
Linares Pérez	Rocío	ESR8		NM		
Loa	Diana		NE			
López	Ysabel		NE			
López Álvarez	Marina	ESR6		NM		
López Ojeda	María	ESR15		NM		
Madrazo Béjar	Elena		NE			
Maestro Inarejos	**Inés**	**ESR3**			**I**	**80**
Maggiorelli	**Federica**	**ESR12**			**I**	**87,35**
Maher Ali Zeeshan	Hafiz		NE			
Maity	**Ritwik**	**ESR4**			**I**	**87,5**
Majnaric	Mislav	ESR1		NM		
Makovšek	**Vesna**	**ESR2**			**I**	**70**
Manouchehri	Marjan	ESR15		NM		
Marques Santos	**Cátia Marília**	**ESR5**			**I**	**78**
Maroti Madrewar	Dnyanoba	ESR7		NM		
Marques Silva	**Teresa**	**ESR1**			**I**	**60**
Matos Vila Verde	**Diogo Miguel**	**ESR6**			**I**	**70**
Mazhar	Faizan		NE			
McCormack	Olivia	ESR15		NM		
Miguélez Rivera	Laura		NE			
Miric	**Alma**	**ESR4**			**I**	**82,5**

TREATMENT

Mischitelli	Morena		NE			
Montoya	Laura		NE			
Mu	**Wei**	**ESR5**			**I**	**49**
Naslazi	Emi	ESR4		NM		
Natthuji Wankhade	Atul		NE			
Nawabjan	Shaik Abdullah	ESR5		NM		
Navarro Carrasco	Elena	ESR7		NM		
Nesteruk	**Kateryna**	**ESR6**			**I**	**56**
Niazi	Abida	ESR5		NM		
Nikolic	**Margareta**	**ESR11**			**I**	**71**
Pablo Gómez	**Montserrat**	**ESR14**			**I**	**51**
Palomino	Alejandra		NE			
Panjala	Shivaprased		NE			
Patra	**Souvik**	**ESR6**			**I**	**61**
Patil	Mohan		NE			
Pejenaute Ochoa	María Dolores		NE			
Peng	**Di**	**ESR15**			**I**	**79**
Petric	Zvonimir		NE			
Pereira	Glaucia		NE			
Peršić	**Dora**	**ESR14**			**I**	**60**
Pons	Vicent	ESR15		NM		
Popović	Mitar	ESR12		NM		

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Prasad	**Deepti**	**ESR2**			I	**68**
Prakash Chowath	Rashmi	ESR1		NM		
Priya	**Ruchika**	**ESR10**			I	**85**
Puglisi	Angelo		NE			
Pulido Sanz	Verónica		NE			
Punzón	**Eva**	**ESR14**			I	**45**
Ramalho dos Santos	Andreia Sofia	ESR6		NM		
Ravichandran	**Keerthiraju Ethiraju**	**ESR15**			I	**48**
Reddy	J Sruthi		NE			
Rocha Oliveira	**Rita Maria**	**ESR1**			I	**70**
Rodríguez Relaño	Ignacio		NE			
Regan	Sarah	ESR6		NM		
Rahman	**Md Shafiqur**	**ESR12**			I	**69**
Ramachandran	**Eashwar**	**ESR5**			I	**63**
Rasheed	**Ameer Abu Bakr**	**ESR4**			I	**90**
Rehman Talpur	Barirah	ESR1		NM		
Rivero Cazorla	Juan José	ESR5		NM		
Ruíz Ruíz	**Cristina**	**ESR3**			I	**87,5**
Ruíz Rosario	**Mónica**	**ESR13**			I	**87**
Saeidi	Mozhgan	ESR13		NM		
Saez García	Gonzalo	ESR15		NM		

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Samir Moussa Moussa Adelrahman	Ahmed	ESR1		NM		
Sánchez Alegre	Yaiza Rebeca	ESR15		NM		
Sánchez Martínez	**Rafael**	**ESR6**			**I**	**70**
Santamaría	**Rafael**	**ESR7**			**I**	**87**
Sarsenbayeva	**Assel**	**ESR6**			**I**	**78**
Senthivel	**Vigneshwar**	**ESR4**			**I**	**67**
Shang	**Velma Owusua**	**ESR5**			**I**	**55**
Sharma	Akshay	ESR5		NM		
Silva	Ana Isabel	ESR3		NM		
Silvanus Arulmanivannan	**Andrew**	**ESR11**			**I**	**56**
Singin	**Öznur**	**ESR15**			**I**	**55**
Sirtoli	Raphaël Thomas-Noël	ESR3		NM		
Sorokin	**Oleksandr**	**ESR9**			**I**	**77**
Srivastava	Pragya	ESR5		NM		
Stevanović	**Jelena**	**ESR12**			**I**	**68,7**
Stojanović	**Anita**	**ESR15**			**I**	**75**
Suárez Vega	Ana		NE			
Tagaram	Israiel		NE			
Tahmasbi	**Hamed**	**ESR5**			**I**	**59**
Taiwo Adewale	David	ESR6		NM		

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Tefera Temesgen	Tamirat	ESR5		NM		
Tesfaye Ayane	Amene	ESR1		NM		
Thangaraj	Pradeep		NE			
Torres Moral	Teresa	ESR6		NM		
Ullah	Haseeb	ESR13		NM		
Urbina	**Lidia**	**ESR14**			**I**	**85**
Valério	Patrícia		NE			
Vallejo Yagüe	Enriqueta	ESR6		NM		
Vasudev	**Anup**	**ESR6**			**I**	**58**
Vázquez Díaz	Mª Rocío		NE			
Ventura Rodrigues	Marina		NE			
Verma	Ambarish	ESR15		NM		
Vittaladevaram	Viswanath	ESR6		NM		
Vicencio	**Jeremy**	**ESR12**			**I**	**85,4**
Vidosavljević	Marija	ESR13		NM		
Vilaró Palacín	Cristina		NE			
Vinod Shah	Lekha	ESR6		NM		
Vukovic	**Natasa**	**ESR12**			**I**	**80**
Vy Nguyen	Tuong	ESR6		NM		
Weis	Janine	ESR5		NM		
Wolf	Sebastian	ESR15			**Withdrew**	
Yildiz	**Ramazan**	**ESR3**			**I**	**91**
Yuzbashian	Emad	ESR6			**No reply**	
Zaplatic	**Elizabeta**	**ESR5**			**I**	**65**

TREATMENT

Zayny	Farah		NE			
Zdravkovic	Nina	ESR5		NM		
Zdouc	**Mitja Maximilian**	**ESR3**			**I**	**70**
Zvonimir	Petric		NE			