associated with multidimensional paper-and-pen measures of apathy, including the default mode and the cingulo-opercular networks. We will also show how dimensional reduction (functional principal component analysis) of 3 days actimetry measures are associated with both FC and inflammatory measures (diffusion and multicompartment indices such as free water and neurite orientation dispersion), providing arguments for different pathophysiological mechanisms underlying goal-oriented behaviors and reinforcing actimetry as a good candidate for individual biomarker of cognitive decline in LLD. Finally, machine learning approaches using combination of different, yet correlated, indices of actimetry will be presented and discussed with their corresponding classifying accuracies (outside of cerebral imaging). Altogether, this presentation aims at bridging the gap between cerebral imaging and digital phenotyping to enhance personalized medicine in the field of oldage psychiatry and cognitive decline prevention.

Disclosure of Interest: None Declared

#### S0017

### The role of dysregulated ghrelin/LEAP-2 balance in eating disorder: a translational study in anorexia nervosa.

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Abstract: The ghrelin system is a key regulator of appetite and food intake across species. LEAP-2, a recently discovered ghrelin antagonist, appears to be up-regulated in obesity and opposes to the orexigenic drive of ghrelin. The evolution of LEAP-2 levels could be an interesting insight to reflect the regulation of appetite in eating disorders such as anorexia nervosa (AN). We provide the first study exploring the ghrelin and LEAP-2 regulation in long-term food restriction followed by refeeding in both mice and patients suffering from AN.

Using a translational strategy, we compared the regulation of ghrelin and LEAP-2 concentrations in blood during food restriction and after refeeding in female mice exposed to a 14 days protocol combining quantitative food restriction and running wheel activity followed by progressive refeeding. We compared these results to clinical data fom in an ongoing longitudinal study of patients with AN evaluated before and after refeeding as well as 6 months after hospital discharge.

Long-term food restriction in mice was associated with increased ghrelin and decreased LEAP-2 concentrations compared to ad libitum fed controls. Refeeding led to an increase in LEAP-2 concentrations. Patients with AN displayed increased ghrelin levels but also higher LEAP-2 concentrations on admission than after refeeding. LEAP-2 decreased with refeeding. On 17 patients re-evaluated 6 months after discharge, patients with unstable weight gain exhibited a greater decrease of LEAP-2 concentrations during refeeding compared to patient with stable weight gain. Decreasing LEAP-2 concentrations was able to predict a negative outcome (i.e. unstable weight gain) in 80% of the cases.

We provide evidence that the ghrelin/LEAP-2 system is not regulated according to the nutritional status in AN as it is in the case of a physiological adaptation to food restriction. Our clinical data suggest that the evolution of LEAP-2 concentrations during refeeding is opposed to data from preclinical model and could give new insights on the outcome of weight gain in AN.

Disclosure of Interest: None Declared

#### S0018

#### Clinical correlates of stress, immune and metabolic markers in major depression

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Abstract: The hormonal mediators of the stress response, such as glucocorticoids and catecholamines, have both protective and damaging effects on the body. In the short term, they are essential for adaptation, maintenance of homeostasis, and survival; but chronic exposure to stress or abnormalities in the modulation of the stress response can become maladaptive, leading to a broad range of physical and mental problems.

Allostatic load refers to the activation of physiological regulatory systems in response to stress and "the cost" of the effects of these systems on the body. Results from isolated biomarkers and allostatic load measures based on the stress response system (hypothalamic-pituitary-adrenal axis, autonomic nervous system and immuno-metabolic biomarkers) and its relationships with clinical outcomes, such as cognition, in a clinical sample of major depression patients will be presented. The usefulness and relevance in the clinical practice of those biomarkers and the allostatic load concept will be discussed. The integration of several biomarkers translating the biological and psychological impact of stress on depression development and its clinical trajectories could contribute toward understanding how to prevent and improve outcomes in major depression.

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#### S0019

#### Contribution of neuroimaging in late-life depression

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Abstract: Late-life depression (LLD) is currently a hot topic for neuroimaging studies, while an increasing number of imaging modalities are now available for the characterization of brain structure and function. Changes in brain volumes, including

hippocampal volume, have been observed in LLD, although results are inconsistent. Vascular lesions are more consistently associated with LLD and may constitute factors of poor prognosis. More recent MRI modalities, including fMRI and DTI, also show interesting results, notably to assess treatment response in LLD. Molecular Imaging also has the potential to improve our understanding of the pathophysiology of LLD, using imaging such as PET-FDG and Amyloid PET. Finally, there are emerging studies with novel neuroimaging modalities such as Ultrasound to measure subtle mechanical properties in the brain of patients with LLD. Finally, we contend that neuroimaging has the potential to provide markers for the identification of subcategories of LLD (vascular depression, amyloid depression, etc.) as well as prognostic values and markers for treatment response.

Disclosure of Interest: None Declared

#### **S0020**

## Comorbidity between physical illness, infection diseases and mental disorders

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Abstract: A paradox of the modern world is represented by the increasing rate of comorbidities, although the life expectancy is increasing worldwide, the number of disease-free years is not improving consequently. Physical comorbidities are often overlooked in people with severe mental disorders, although this problem needs to be adequately managed since it is associated with a worse quality of life and a poorer personal and social functioning. In particular, in people with severe mental disorders is very common the contemporary presence of infectious diseases (mainly TBC and HIV) and other physical conditions, which worsen the long-term prognosis.

Disclosure of Interest: None Declared

#### **S0021**

# Novel pharmacological treatment options for people with eating disorders

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Abstract: The current scientific literature has increased our understanding of how medication could be beneficial for patients with eating disorders (EDs) on a molecular, functional, and behavioural level. Based on theoretical considerations about neurotransmitters, hormones and neural circuits, possible drug targets for the treatment of EDs may include signal molecules and receptors of the selfregulatory system such as serotonin, norepinephrine and glutamate; the hedonic system including opioids, cannabinoids and dopamine; and the hypothalamic homeostatic system including histamine, ghrelin, leptin, and insulin. The currently approved pharmacological treatments for EDs are limited to fluoxetine for bulimia nervosa (BN) and - in some countries – lisdexamfetamine (LDX) for binge eating disorder (BED). Topiramate might be an additional option for people with BN and BED.

There are no approved pharmacological options for anorexia nervosa (AN), even though study results for olanzapine and dronabinol are promising. Psilocybin, ketamine, and metreleptin have recently been considered and tried in AN.

Case reports and studies regarding the drug treatment of the new DSM-5 EDs include the use of mirtazapine for avoidant restrictive food intake disorder (ARFID); fluoxetine for pica; and levosulpiride and baclofen for rumination disorder.

This talk is based on a comprehensive review of the scientific literature regarding the pharmacological treatment for EDs and will include a preview of the 2023 update of the World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for the pharmacological treatment of eating disorders.

Disclosure of Interest: None Declared

#### **S0022**

## High impact psychiatric publishing – gender parity within reach?

#### A. Gmeiner

Social Psychiatry, Medical University of Vienna, Vienna, Austria doi: 10.1192/j.eurpsy.2023.59

**Abstract:** Andrea Gmeiner<sup>1</sup>, Melanie Trimmel<sup>1</sup>, Amy Gaglia<sup>1,2</sup>, Beate Schrank<sup>3</sup>, Stefanie Süßenbacher-Kessler<sup>1</sup>, Michaela Amering<sup>1</sup>

<sup>1</sup>Division of Social Psychiatry, Department of Psychiatry and Psychotherapy, Medical University of Vienna, Austria <sup>2</sup>Division of Psychology, Bangor University Wales, UK <sup>3</sup>Department of Psychiatry, Karl Landsteiner University for Health Sciences, Austria Gender parity, authorship, geographic and subject matter diversity are declared goals in the academic publishing world. Recent data on the progress towards these goals suggest that changes and a shift towards diversity have been happening over the last decades. Examples include significantly increasing numbers of female first and senior authors between 2008 and 2018 (Hart et al, 2019) over a wide range of journals. Our own data on trends in three highimpact psychiatric journals over a 25-year time period from 1994 until 2019 suggest that female first, female senior, and female overall authorship have increased significantly over the quarter of a century covered. Results do indicate that gender parity in first authorship was reached in the category of original research articles for the first time in 2019 (Gmeiner et al, 2022). However, data also showed the remaining underrepresentation of women in senior authorship positions in line with the leaky pipeline phenomenon. Gender differences in publication trends with regards to subject matters and topics in the 2004/14/19 part of this sample showed the percentage of female first authors exceeding 50% in the two most frequent subject matters 'basic biological research' and 'psychosocial epidemiology' in 2019 (Trimmel et al, submitted for publication). Although the percentage of female first authors in the three most common target populations under study (mood disorders, schizophrenia, general mental health) increased from 2004 to 2019, gender equality has not yet been achieved in these fields. Consistent