their medical encounters. Narrative and its analysis plays a central role in such processes that require empathy and self-reflection. The interdisciplinary practice of teaching medical students concepts and theories from literary studies as well as discussing literary texts with them can expand their scientific medical understanding. This paper explores the concept of narrative in the context of geriatric medical humanities and narrative medicine, looking at how narrative competence translates into medical practice. Presenting findings from a seminar on Narrative medicine at the Medical University of Graz, Austria, it also addresses some methodological and didactic challenges of this interdisciplinary approach.

SESSION 3590 (SYMPOSIUM)

NEAR: NEW OPPORTUNITIES FOR AGING RESEARCH
Chair: Debora Rizzuto Co-Chair: Scott Hofer

The global increase in life expectancy is one of the greatest achievements of the last half century. However, the demographic developments towards an older population also challenge many parts of the society, especially the health care. Promoting healthy ageing is therefore one of the most important commitments of the 21st century and to succeed, scientifically based knowledge of older individuals’ health and care requirements are needed. To better understand the individual and population aging process, the National E-infrastructure for Aging Research (NEAR) was founded in 2018 to build and run a national infrastructure by integrating existing databases from the 15 major longitudinal studies on aging and health in Sweden. To show the added value of NEAR, this symposium will present results from four ongoing NEAR projects: 1) Developing a metric of global brain integrity in multiple Swedish studies with different scanners; 2) Functional aging trajectories and drug interactions; 3) Long-term prediction of dementia using machine learning algorithms; 4) The new aging – how different aspect of ageing has changed over half a century. The creation of national infrastructures is needed to achieve broad, multidisciplinary research perspectives that cannot be achieved by individual databases. Moreover, to address the increased health demands of an older population and enhance new opportunities for aging research, a critical mass of data is needed to increase sample sizes, variations, representativeness, and generalizability. Ultimately, this can lead to the identification of sustainable intervention strategies for better health and care for older persons during the coming decades.

FUNCTIONAL AGING TRAJECTORIES AND DRUG INTERACTIONS
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Markers of functional aging can be used to track biological aging longitudinally and how it changes in response to the environment, e.g., drugs. We aimed to investigate how different drug classes may alter functional aging trajectories using data from the National E-infrastructure of Aging Research (NEAR) in Sweden. Data were harmonized across several longitudinal cohorts of aging for general cognitive performance, grip strength, walking speed, sensory ability (visual and hearing), lung function and assessment of frailty using the accumulation deficit model known as the frailty index. Selected drug classes were lipid lowering, glucose lowering and blood pressure lowering medications that are commonly used in old adults. Preliminary analysis using data from one longitudinal cohort shows that using glucose lowering drugs was associated with lower frailty. Additional analyses are ongoing to increase sample sizes. We anticipate that several drug classes may be important for changing functional aging trajectories in late life.

THE NEW AGING: HOW DIFFERENT ASPECTS OF AGING HAVE CHANGED OVER HALF A CENTURY. THE H70 STUDIES WITHIN NEAR
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The number and proportions of older people are increasing worldwide. The Gothenburg H70 Birth Cohort Studies started in 1971 and are still on-going. The studies include representative birth cohorts born 1901-02, 1906-07, 1911-12, 1922, 1923-24, 1930, and 1944 followed longitudinally from age 70 until death. The studies include psychiatric, somatic, audiological, ophthalmological, psychological, social, genetic, dietary, functional, and psychometric examinations, personality, collection of blood, plasma, serum, and cerebrospinal fluid, and examinations with MRI. During the study period, cognitive and physical functions, and hearing, has improved considerably, the prevalence and incidence of dementia has decreased, the prevalence of depression and psychotic disorders has decreased, and sexual activity and alcohol consumption has increased considerably. Even personality has changed. Present older people are less neurotic and more extrovert. Our study shows that aging is a changing concept, and that previous knowledge needs to be continuously updated, as new generations reach old age.

LONG-TERM PREDICTION OF DEMENTIA USING MACHINE LEARNING ALGORITHMS
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The core interest of this project is the development of predictive estimates and the identification of modifiable risk factors for the development of neurocognitive disorders based on multifactorial data from multiple health databases. We are conducting epidemiological research on predicting neurocognitive diseases of older adults included in the National E-Infrastructure on Aging Research (NEAR) using deep learning and other AI methods. Exploring the impact of lifestyle and environment on dementia development in the subjects together with biomarkers and images and predicting dementia using machine learning techniques would give insights into the long-term development. In addition, the possibility of screening a large number of persons and consequent early prediction of dementia based on optimized machine learning techniques could be of great importance for early treatment.