

1-2-3 March, 2018 • Miami Beach, USA

Linda Fried ICFSR Life Achievement Award : the 12 major advances in the field of frailty

Currently, the International Conference on Frailty & Sarcopenia Research (ICFSR) and is held at Miami, Florida, United States of America. ICFSR brings together researchers from academy, agencies and industry to share their news results from clinical (including pre-clinical), drug trials nutrition physical and other interventions on frailty and sarcopenia.

The meeting began by the award ceremony of the "ICFSR Lifetime Achievement" to Dr. Linda Fried. She is a public health leader in the fields of epidemiology and geriatrics. She has dedicated her career to the science of healthy aging and defining how to transition to a world where greater longevity benefits people of all ages. An internationally renowned scientist, she has done seminal work in defining frailty as a clinical syndrome and illuminating both its causes and the potential for prevention as keys to optimizing health for older adults. Her scientific discoveries have transformed medical care and public health globally, and our understanding of how to build successful societies of longer lives.

Thereafter, Dr. Fried has made a communication entitled "Frailty: what's been done and what needs doing". In a first part, she introduced the history of frailty concept and how clinicians and researchers have begun to focus on this geriatric syndrome. She also highlighted the potential value of understanding frailty as a syndrome: "simultaneously understand risk and pathobiology; improved detection, targeting, prevention and treatment". Subsequently, Dr. Fried illustrated in 12 points how have these hypotheses played out:

1. A distinct, validated phenotype is prevalent: 7-12% per year over 65, and 25% over 85 years
2. Predictive validity of frailty phenotype: 3 criteria present predict high risk of adverse outcomes
3. The whole is greater than the sum of the parts: to aggregate phenotype (3 or more criteria) predicts mobility disability and other outcomes better than any 1 or 2 markers
4. Frailty is not the same as disability or multi-morbidity (although they may cause each other)
5. Frailty phenotype goal: to offer measure for clinical screening linked to biology
6. Dysregulation / deficits of multiple physiologic systems are associated with frailty
7. The syndrome of frailty conforms to the characteristics of a complex, dynamical nonlinear system
8. Complex dynamical nonlinear systems are notable for "silent success of stability" until there are sufficient multisystem losses to downgrade function
9. Complex dynamical system of frailty and homeostasis principles lead us to the need to understand dynamics between systems that underpin frailty; not just abnormal biomarker levels
10. Complex dynamical nonlinear systems that are functioning at a lower level in resting or steady state will not show their fragility until stressed
11. Potential biological causes of frailty's multisystem dysregulation: mitochondrial dysfunction, genetic mutations, circulating oxidative stress, ...
12. Clinical implications of the medical syndrome of frailty: screening, diagnosis, prognosis, prevention, treatment, health system

From ICFSR, Miami - Bertrand Fougère, MD, PhD -CHU de Toulouse – Gérontopôle, France Saint Louis University School of Medicine, USA