

Curriculum Vitae Antonella MANDAS

EDUCATION AND TRAINING:

- 1987: degree in Medicine and Surgery at the University of Cagliari in the academic year 1986/1987, discussing the thesis entitled "Appearance and spread of HIV infection in Sardinia: clinical, immunological and serological framework of HIV-positive subjects. Study of a population of drug addicts from 1978 to 1986", with a grade of 110/110.
- 1991: Gastroenterology and Digestive Endoscopy Specialization at the University of Cagliari, discussing the thesis entitled "HBV-DNA in the diagnosis and anatomical-clinical evolution of type B viral hepatitis" with a grade of 50/50 cum laude.
- 13/02/91 - 01/07/2001: medical technical collaborator at the Institute of Internal Medicine, University of Cagliari.
- 02/07/2001 - 28/12/2006: confirmed researcher at the Department of Internal Medical Sciences of the University of Cagliari.
- 29/12/2006 to today: associate professor in the scientific-disciplinary sector of Internal Medicine (SSD MEDS-05/A Medicina Interna) at the Faculty of Medicine and Surgery of the University of Cagliari.

WORK EXPERIENCE

- November 1987 - January 1991: internal physician with care duties at the Institute of Internal Medicine of the University of Cagliari.
- 02/13/1991 - 04/30/1996: she performed care activities at the Department of Clinical Medicine of the Institute of Internal Medicine, later renamed Department of Internal Medical Sciences of the University of Cagliari. In particular, she performed care activities, independently, mainly for subjects with liver disease and/or HIV infection, performing liver biopsies and managing the related therapies. She also performed outpatient activities with the independent management of hundreds of patients affected by chronic hepatitis, liver cirrhosis, AIDS and the management, mainly outpatient, of antiviral and antiretroviral therapy respectively in subjects affected by chronic viral hepatitis and in subjects with HIV infection.
- 02/05/1996 - 30/04/2001: she performed care activities at the DH of the "Center for Thalassemia of the post-evolutionary age" of the Microcythemic Hospital belonging to the Department of Internal Medicine Sciences. During this period, she assisted approximately 200 subjects affected by homozygous β -thalassemia, both in the major and intermediate phenotype, and by HbH disease. In particular, she developed a medical record that facilitated the clinical management of these extremely complex patients, and managed, independently and in collaboration with the rest of the medical team, the transfusion treatment and the frequent and multiple complications that occur in these patients. She also participated in the epidemiological surveillance of acute post-transfusion viral hepatitis.
- 02/05/2001 - 31/12/2010: she performed healthcare activities as head of the " Acquired Immune Deficiency Syndrome and Immigration Diseases Operations Center ", belonging to the Department of Internal Medicine of the Cagliari University Hospital and subsequently to the AOU of Cagliari. During this period, she independently managed an average of approximately 130 subjects with chronic HIV infection, often associated with chronic viral hepatitis. These subjects came to this Center in the DH setting and were, for the most part, on antiretroviral therapy which, as is known, is a complex treatment that requires careful clinical monitoring due to the frequent onset of adverse events, sometimes very serious.

- 02/01/2005 to today: she performs outpatient care activities in Internal Medicine/Geriatric, belonging to the aforementioned Internal Medicine Department; in particular, she performs internal medicine/geriatric visits and check-ups and the comprehensive geriatric assessment, which is known to be the holistic assessment tool of the elderly subject that allows the identification of the condition of "fragility" and disability and the quantification of residual functional capacities, both physical and cognitive, in order to highlight the specific care needs of the frail elderly subject.
- 02/01/2005 to today: she performs geriatric consultations and comprehensive geriatric assessments requested by the various Departments of the AOU of Cagliari.

TEACHING ACTIVITIES:

- From 1991 to today: tutoring activities for the preparation of degree and specialization thesis, seminars and internships.
- **DEGREE COURSE IN MEDICINE AND SURGERY:**
 - From 2001 to 2002: "Infectious Diseases", fifth year.
 - From 2005 to 2014: "Geriatrics", sixth year.
 - From 2006 to 2011: "Medical Semiotics", third year.
 - From 2011 to 2016 and from 2023 to today: "Internal Medicine", third year.
 - From 2014 to today: "Internal Medicine I", fifth year.
- **DEGREE COURSE IN MOTOR SCIENCES:**
 - From Academic 2001/2002 to 2008 Internal Medicine, third year.
- **DEGREE COURSE IN NURSING:**
 - From 2005 to today: "Geriatrics", third year.
 - From 2008 to 2019: "Internal Medicine", second year.
- **DEGREE COURSE IN SPEECH THERAPY:**
 - From 2008 to 2011 and from 2012 to 2015: "Geriatrics", third year.
 - From 2018 to 2021: "Internal Medicine and Geriatrics", third year.
- **DEGREE COURSE IN PROFESSIONAL EDUCATION:**
 - From 2016 to 2017, from 2018 to 2011 and from 2021 to 2024: "Geriatrics", second year.
- **DEGREE COURSE IN PSYCHIATRIC REHABILITATION TECHNIQUES:**
 - From 2017 to 2018: "Internal Medicine", second year.
- **DEGREE COURSE IN PHYSIOTHERAPY:**
 - From A.A. 2019 to today: "Geriatrics", second year.
- **SCHOOL DIRECTED FOR SPECIAL PURPOSES FOR NURSING:**
 - From 1990 to 1992: "Infectious Diseases".
- **SPECIALIZATION SCHOOLS:**
 - Director of the School of Specialization in Geriatrics from 2007 to today.
 - From 2007 to today Internal Medicine and Geriatrics at the School of Specialization in Geriatrics and Internal Medicine in the specialization schools in: Infectious Diseases, Internal Medicine, Allergology and Clinical Immunology, Pathology and Clinical Biochemistry

SCIENTIFIC ACTIVITY:

The scientific activity of the undersigned has concerned the following topics:

- Clinical and epidemiological studies in the field of hepatitis virus and HIV infections in drug addicts and in polytransfused thalassaemic subjects. In particular, he participated in:
 - Clinical trials on the use of interferon in patients with chronic viral hepatitis.
 - National research project of the Istituto Superiore di Sanità "ISS PART intermittent therapy with structured interruptions versus continuous therapy in subjects with HIV infection on antiretroviral treatment with persistent suppression of viral replication".

- Multicenter study “PhenGen on the different viro-immunological and clinical response to the change of antiretroviral therapy based on genotypic or phenotypic resistance in HIV-positive patients in therapeutic failure”.
- Project “Master for the standardized management of antiretroviral therapy”.
- Multicenter studies, as a member of the Antiviral Response Cohort Analysis (ARCA) group, on patients with HIV infection, which have highlighted how “HIV-1 genotype interpretation systems (GISs)” are useful tools for choosing the appropriate antiretroviral therapy in subjects with HIV infection.
- Multicenter epidemiological study, as a member of the Italian Delirium Study Group (ISGoD), on the incidence of delirium in different healthcare settings. This study demonstrated an incidence of this condition greater than 1:5 among subjects assisted in acute hospitalization and rehabilitation.
- Multicenter epidemiological study, entitled "Prevalence and attitude of the elderly patient regarding the use of equivalent drugs in Italy" (SurFE).
- Multicenter epidemiological study entitled "YES I consent". Investigation on the use of supportive administration in patients hospitalized in the departments of Geriatrics, Orthogeriatrics and Internal Medicine ".
- She has also conducted:
 - Studies on oxidative stress in geriatric subjects and in subjects with HIV infection, in which the correlation between oxidative stress, presence of comorbidities and nutritional status in the elderly have been highlighted. An increase in oxidative stress has been highlighted in subjects with HIV infection on antiretroviral therapy.
 - Studies on cholesterol metabolism in peripheral blood lymphomonocytes (PBMCs) of subjects with Alzheimer's disease (AD). These studies have allowed us to propose the determination of cholesterol esters, in these cells, as early biomarkers of AD.
 - Studies on cholesterol metabolism in other conformational diseases, such as prion diseases (spongiform encephalopathies). Alterations in cholesterol metabolism, like those observed in Alzheimer's disease, have also been found in bovine encephalopathies (scrapie), not only in peripheral lymphomonocytes but also in the brain. Lipid accumulation, assessed by staining with Oil Red O (ORO), in PBMCs may represent an index of early neuronal damage in subjects with cognitive impairment, retinal diseases and HIV positive, known to be at high risk of diseases that induce dementia.
 - Studies on G6PD deficiency as a risk factor for proliferative diseases. These studies have shown that G6PD deficiency represents an additional risk of highly proliferative diseases such as cancer.
 - Studies on β -thalassemia and atherogenic risk. These studies have shown an increased atherogenic risk in subjects with β -thalassemia and in subjects with homozygous β -thalassemia with an intermediate phenotype who have not undergone multiple transfusions.
 - Studies on the effect of statin therapy in hypercholesterolemic subjects over the age of sixty-five and on the identification of biochemical steps in cholesterol metabolism, to be used as pharmacological targets.
 - Studies on comprehensive geriatric assessment, as an early indicator of frailty in geriatric age and a regulator of pharmacological and rehabilitative therapy in the elderly, in different care settings; in particular, in acute hospitalization (internal and surgical), in the oncological DH, to establish the most appropriate therapeutic intervention, in outpatient and community settings.
 - Studies on comprehensive geriatric assessment in elderly patients with fragility fracture.

- Studies on sleep disorders in the elderly, with particular attention to gender differences.

Finally, she participated, as a scientific manager or co-manager, in a series of finalized research projects, financed by both the Sardinia Region and the University of Cagliari.

LIST OF PUBLICATIONS OF THE LAST 10 YEARS:

1. Mandas A, Dessì S. Mononuclear Cells in Dementia. *Clin Chim Acta*. 2014 Feb 27. pii: S0009-8981(14)00092-8. doi: 10.1016/j.cca.2014.02.016.
2. Mandas A, Congiu MG, Abete C, Dessi S, Manconi PE, Musio M, Columbu S, Racugno W. Cognitive decline and depressive symptoms in late-life are associated with statin use: evidence from a population-based study of Sardinian old people living in their own home. *Neurol Res*. 2014 Mar;36(3):247-54. doi: 10.1179/1743132813Y.0000000287.
3. Mulas MF, Maxia A, Dessì S, Mandas A. Cholesterol esterification as a mediator of proliferation of vascular smooth muscle cells and peripheral blood mononuclear cells during atherogenesis. *J Vasc Res*. 2014;51(1):14-26. doi: 10.1159/000355218.
4. Mulas MF, Maxia A, Dessì S, Mandas A. Cholesterol esterification as a mediator of proliferation of vascular smooth muscle cells and peripheral blood mononuclear cells during atherogenesis. *J Vasc Res*. 2014;51(1):14-26.
5. Mandas A, Congiu MG, Abete C, Dessi S, Manconi PE, Musio M, Columbu S, Racugno W. Cognitive decline and depressive symptoms in late-life are associated with statin use: evidence from a population-based study of Sardinian old people living in their own home. *Neurol Res*. 2014 Mar;36(3):247-54.
6. Mandas A, Dessì S. Mononuclear cells in dementia. *Clin Chim Acta*. 2014 Apr 20;431:278-87.
7. Peiretti E, Mandas A, Abete C, Vinci M, Piludu S, Casu M, Caminiti G, Dessì S, Fossarello M. Age- related macular degeneration and cognitive impairment show similarities in changes of neutral lipids in peripheral blood mononuclear cells. *Exp Eye Res*. 2014 Jul;124:11-6.
8. Costaggu D., Ortu F., Pinna E., Serchisu L., Di Martino M.L., Manconi P.E., Mandas A.: RBANS: un valido strumento di valutazione cognitiva in soggetti HIV-infetti in cART. *G Gerontol* 2015;63:268-273
9. Costaggu D., Serchisu L., Abete C., Pinna E., Vascellari S., Ortu F., Manconi P.E., Pani A. and Mandas A: Determination of Neutral Lipid and Cluster Formation for Screening Neurocognitive Impairment in Human Immunodeficiency Virus Patients. *J AIDS Clin Res* 2015, 6:11
10. Serchisu L, Peiretti E, Abnormal Lipid Accumulation and Cluster Formation of Naive Peripheral Blood Mononuclear Cells: A Useful Tool for Early Detection of Central Nervous System Damage in Elderly. Costaggu D, Barcellona D, Caminiti G, Abete C, Fossarello M, and Mandas A. *J Alzheimers Dis Parkinsonism* 2017, 7:3. DOI: 10.4172/2161-0460.1000328.
11. Ruberto MF, Marongiu F, Mandas A, Mameli A, Porru M, Cianchetti E, Barcellona D. The venous thromboembolic risk and the clot wave analysis: a useful relationship? *Clin Chem Lab Med*. 2018 Feb 23;56(3):448-453. doi: 10.1515/cclm-2017-0678.
12. Barberini L, Marrosu F, Tommasini Barbarossa I, Melis M, Suri HS, Mandas A, Suri JS, Balestrieri A, Anzidei M and Saba L. Networks in the brain: from neurovascular coupling of the BOLD effect to brain functional architecture. *Neurovascular Imaging* (2017) 3:3 DOI 10.1186/s40809-017-0027-8.
13. Corgiolu S, Barberini L, Suri JS, Mandas A, Costaggu D, Piano P, Zaccagna F, Lucatelli P, Balestrieri A, Saba L. Resting-state functional connectivity MRI analysis in Human Immunodeficiency Virus and Hepatitis C Virus co-infected subjects. A pilot study. *Eur J Radiol*. 2018 May;102:220-227. doi: 10.1016/j.ejrad.2018.03.022.

14. Porcu S, Mandas A. How to evaluate Quality of Life. *Monaldi Arch Chest Dis* 2019 Mar 29; 89 (1). Doi: 10.4081/monaldi.2019.1033.
15. Scuteri A, Mandas A. The hidden treasure of 24-hours ambulatory blood pressure monitoring -Assessing BP variability. *J Clin Hypertens*. 2019;21:1795–1796.
16. Costaggu D, Pinna E, Serchisu L, Barcellona D, Piano P, Ortu F, Marongiu F, Mandas A. The Repeatable Battery for the Assessment of Neuropsychological Status as a screening strategy for HIV-Associated Neurocognitive Disorders. *AIDS Care* Mar 2020 DOI: 10.1080/09540121.2020.1742859.
17. Salis F and Mandas A. The Role of Peripheral Cells in Neurocognitive Disorders Detection. *J Alzheimer's Neurodegener Dis* 2021, 7: 052 DOI: 10.24966/AND-9608/100052.
18. Salis F and Mandas A. Cognitive Assessment with Neurocognitive Screenings Tools. *J Aging Sci* 2021 Vol 9 Iss.S5 No:1000001.
19. Salis F and Mandas A. Lipid Metabolism in Neurocognitive Disorders: Current Update. *Regen Biol Med*. 2021;3(4)1-8. DOI: [https://doi.org/10.37191/Mapsci-2582-385X-3\(4\)-075](https://doi.org/10.37191/Mapsci-2582-385X-3(4)-075).
20. Loddo S, Costaggu D, Palimodde A, Cogoni E, Putzu S, Serchisu L, Laconi R, Scuteri A, Mandas A. Emergency department: risk stratification in the elderly. *JGG Online First* 2021; Jun 15 doi: 10.36150/2499-6564-N352.
21. Loddo S, Salis F, Rundeddu S, Serchisu L, Peralta MM, Mandas A. Nutritional Status and Potentially Inappropriate Medications in Elderly: Real-World Experience. *J. Clin. Med*. 2022, 11, 3465. doi.org/10.3390/jcm11123465.
22. Salis F, Loddo S, Zanda F, Peralta MM, Serchisu L, Mandas A. Comprehensive Geriatric Assessment: Application and correlations in a real-life cross-sectional study. *Frontiers in Medicine* 2022. DOI 10.3389/fmed.2022.984046
23. Salis F, Mandas A. Physical Performance and Falling Risk Are Associated with Five-Year Mortality in Older Adults: An Observational Cohort Study. *Medicina* 2023, 59, 964. doi.org/10.3390/medicina59050964.
24. Salis F, Palimodde A, Rundeddu S, Mandas A. STOPP/START antiaggregation and anticoagulation alerts in atrial fibrillation. *Current Vascular Pharmacology* 2023. doi.org/10.2174/1570161121666230418163016
25. Salis F, Palimodde A, Demelas G, Scionis MI, Mandas A. Frailty and comorbidity burden in Atrial Fibrillation. *Frontiers in PublicHealth* 2023. DOI 10.3389/fpubh.2023.1134453
26. Salis F, Costaggu D, Mandas A. Mini-Mental State Examination: Optimal Cut-Off Levels for Mild and Severe Cognitive Impairment. *Geriatrics* 2023. 8, 12. doi.org/10.3390/geriatrics8010012.
27. Salis F, Locci G, Mura B, Mandas A. Anemia in Elderly Patients-The Impact of Hemoglobin Cut-Off Levels on Geriatric Domains. *Diagnostics* 2023, 13, 191. doi.org/10.3390/diagnostics13020191.
28. Salis F, Cossu E, Mandas A. The multidimensional prognostic index (MPI) predicts long-term mortality in old type 2 diabetes mellitus patients: a 13-year follow-up study. *J Endoc Investig* 2023. <https://doi.org/10.1007/s40618-023-02135-y>
29. Salis F, Zanda F, Cherchi F, Puxeddu B, Sanna L, Scudu C, Serreli S, Stanisci L, Cossu E, Mandas A. Diabetes mellitus, malnutrition, and sarcopenia: The bond is not explained by bioelectrical impedance analysis in older adults. *Journal of Medicine and Life*. 2023 Vol: 16 Issue: 8. 1170-1177. doi: 10.25122/jml-2023-0173
30. Salis F, Pili P, Collu M, Serchisu L, Laconi R, Mandas A. Six-item cognitive impairment test (6-CIT)'s accuracy as a cognitive screening tool: best cut-off levels in emergency department setting. *Frontiers in medicine*. 2023. doi:10.3389/fmed.2023.1186502

31. Salis F, Puxeddu B, Piras V, Belfiori M, Marongiu G, Capone A, Mandas A. Orthogeriatric Assessment of the Elderly Patient with Fragility Hip Fracture: Preliminary Results of a Prospective Study. *J. Pers. Med.* 2023, 13, 1138. <https://doi.org/10.3390/jpm13071138>
32. Salis A, Mandas A. Physical Performance and Falling Risk Are Associated with Five-Year Mortality in Older Adults: An Observational Cohort Study. *Medicina* 2023, 59, 964. <https://doi.org/10.3390/medicina59050964>
33. Belfiori M, Salis F, Demelas G, Mandas A. Association between Depressive Mood, Antidepressant Therapy and Neuropsychological Performances: Results from a Cross-Sectional Study on Elderly Patients. *Brain Sci.* 2024, 14, 54. <https://doi.org/10.3390/brainsci14010054>
34. Salis F, Belfiori M, Bellisai A, Bernardini E, Murtas M, Piras R, Serreli S, Ortu F, Piano P, Del Giacco S, Mandas A. Cognitive Impairment in People Living with HIV and the Impact of Mood: Results from a Cross-Sectional Study. *J. Clin. Med.* 2024, 13, 1631. <https://doi.org/10.3390/jcm13061631>
35. Belfiori M, Palmas F, Podda C, Tardivo V, Salis F, Presta R, Mandas A, Bo M, Marchionni N. Linee guida, scompenso cardiaco e anziani. *G Ital Cardiol* 2024;25.
36. Salis F, Belfiori M, Figorilli M, Mulas M, Puligheddu M, Mandas A. Sex differences in elderly people's sleep: a cross-sectional study. *Medicina* 2024, 60(10), 1654; <https://doi.org/10.3390/medicina60101654>.
37. Salis F, Lecca R, Belfiori M, Figorilli M, Casaglia E, Congiu P, Mulas M, Mandas A. Sleep quality, daytime sleepiness, and risk of falling: results from an exploratory cross-sectional study. *European Geriatric Medicine* (2025) 16:197–204. <https://doi.org/10.1007/s41999-024-01092-w>.
38. Belfiori M, Salis S, Podda C, Stanisci L, Puxeddu B, Ortu F, Piano P, Del Giacco S, Mandas A. Assessing cognitive impairment in HIV-infected: a comparative study of international HIV Dementia Scale, HIV Dementia Scale Italian version and Montreal cognitive assessment in clinical practice. *Journal of NeuroVirology*. <https://doi.org/10.1007/s13365-025-01248-9>.
39. Salis F, Buffoli I, Belfiori M, Bellisai A, Gianoglio B, Marongiu G, Marzuolo M, Navarra G, Piras V, Puxeddu B, Sanna L, Scudu C, Capone A, Mandas A. Handgrip strength as a predictor of one-year mortality in elderly patients with fragility hip fracture. *Aging Clinical and Experimental Research* (2025) 37:112. <https://doi.org/10.1007/s40520-025-03019-2>.

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