



NEWSLETTER APRIL 2017

Welcome to the latest edition of the Frailomic Initiative Newsletter!
In this edition you can enjoy updates on

- Our most recent Frailomic meeting in Mallorca, November 2016
- The database sharing policy
- Publications news
- Partner news

We hope you enjoy learning about the progress made since our last newsletter and don't forget to share any news with us for the next newsletter!

Note: do not share the contents of this newsletter with anyone outside the consortia as it contains confidential information that should only be available to Frailomic partners
(this newsletter will not be published on either of our websites)

Last November, partners of the Frailomic Initiative gathered to discuss progress and share insights into the project so far. The meeting was held at the Barceló Illetas Albatros hotel where the partners were able to enjoy the facilities, some even enjoyed a well deserved swim despite the season! The objectives of the meeting were to update partners on the project, publications and financial reporting.

SERMAS opened the meeting with a warm welcome from Leo and a project update from Frailomic project manager, Dr Betty Davies Urizar. The Exploratory phase results were presented, including the number of participants from which samples had been received in each of the four cohorts: TSHA, AMI, INCHIANTI and 3C.



The Frailomic team, November 2016

Betty updated the consortium on the progress of the Validation phase, in which there are six participating cohorts (TSHA, ENRICA, SardiNIA, MAPT, SAGE and EXERNET). To date, samples from three cohorts (TSHA, ENRICA and SardiNIA) have been shipped and samples from EXERNET, MAPT and SAGE were to follow. A list of biomarkers selected for investigation during the Validation phase was presented and the decision of which particular biomarkers was to be made at the meeting.

David Gomez Cabrero Lopez, from

YouHealth presented information on the datasets and reminded partners of the statistical approach being used to generate the minimal models. Stefan Walter then discussed the concept of Inverse Probability Weighting.



David Gomez Cabrero Lopez

Stefan explained that as the proportion of frail to no-frail cases is different in each cohort, this should be considered when working with multiple populations and in secondary outcome analysis. In an interactive session of 'PubliDating' partners pitched their publication concepts and were matched with fellow partners, with similar interests, to form the beginnings of a fruitful publication for the Validation phase! On this productive note, Day 1 ended and attendants enjoyed dinner and drinks.



Mallorca Meeting

3rd - 4th November 2016

Day 2

Niche Science & Technology (NST) presented the dissemination plan and a refresher to the publications process, including the IPC and publication tracking activities that NST coordinate. Laila presented the six manuscripts that had obtained IPC approval during 2016 and seventh that was undergoing IPC approval. With these manuscripts approved for development we expect to have many publications from the Frailomic consortium over the next 12 months.

- OMIC Risk Factors of Frailty (Phase 1) – Stefan Walter
- Factors involved in the diagnosis of frailty – David Gomez-Cabrero
Towards the generation of the minimal models during Phase 1
- Challenges involved in multi-cohort studies – Imad Abugessaisa
- Cellular response to oxidative stress, inflammation, vascular physiology and hypoxia – Mariam El Assar
- Plasma fat-soluble vitamins and carotenoids – Pilleron / Catherine Feart
- Plasma CCL11 (eotaxin-1) and cognitive status in community-based French older adults: – Lee Butcher/ Jorge Erusalimsky
- Higher plasma CCL11 (eotaxin-1) is associated with a higher incidence of dementia in community-dwelling French older adults – Karine Pérès / Lee Butcher/ Jorge Erusalimsky



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Dissemination Discussion

Share your news with NST so that we can share these updates

The range of dissemination activities coordinated by NST were summarised at the meeting. Partner feedback regarding the future direction of these activities had been invited in an on-line questionnaire, sent out prior to the meeting. From the results of the questionnaire it was clear that some participants had been publishing and attending conferences but had not necessarily shared this news with the consortium. Please keep NST updated with your publications proposals as well as your conference activity for the already large publications tracker!

The survey also highlighted the need for improved partner engagement within the consortium to improve the impact of the dissemination activities. Partners were reminded to share Frailomic news with their peers outside the consortium and to also contribute towards the list of contacts for dissemination of Frailomic-related news through an extended network that Niche was creating.



Dr Tim Hardman presenting the dissemination activities undertaken by Niche Science & Technology for the Frailomic Initiative



Mallorca Meeting

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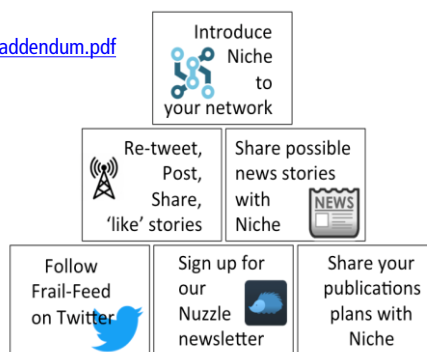
Drawing a Dissemination Plan

A dissemination plan was drawn by Dr Tim Hardman illustrating the vehicles and channels for increasing the FRAILOMIC brand identity. Further details are in the 'Toot your horn' guide*. Most memorable was the demonstration of the impact of being team players and using Share of Voice, exemplified by participants throwing scrunched papers at Tim, which was met with surprising enthusiasm! Needless to say, we all have a role in promoting the FRAILOMIC Initiative so keep sharing your news stories!

Results from the previous days 'Publi-dating' session were then presented by Stefan. Eight proposals were suggested and we look forward to receiving submissions to the IPC from the collaborating authors!

The guidelines on financial reporting were presented by Fran, who reminded us of aspects to consider for the financial report. Fran thanked everyone for submitting their Form C via the participant portal by 15 Jan 2017. The meeting was concluded with a word from Professor Leocadio Rodriguez-Mañas. It was great to meet everyone again and keep the momentum going.

[*www.niche.org.uk/lb3cUletLYfXYuzn3PRAQ15DzV7JEv/Frail-Toot-Final-addendum.pdf](http://www.niche.org.uk/lb3cUletLYfXYuzn3PRAQ15DzV7JEv/Frail-Toot-Final-addendum.pdf)



A call to action for increasing awareness
of the Frailomic consortium

An Update to the Frailomic Data Sharing Policy

In Mallorca, it was agreed that the Frailomic database will be available to all consortium members. Now, just one step is required whereby partners forward their request and institutional IP address to YouHealth. Imad sent a notification, on 22 January 2017, of the release of Version 03 of the Frailomic Exploratory phase database. Updates to the database were made at the request of partners for an integrated dataset that can be used for analysis and clinical data was updated to fix some bugs.

The YouHealth team issued a new dataset in early February 2017. This dataset excludes the Mosaiques and Metabolite data and is smaller in file size to the integrated data. Please continue to feedback to the YouHealth team and direct your feedback/queries to the relevant contacts listed below:

- For database access and data formats contact Imad Abuguessaisa at imad.abugessaisa@ki.se
- For queries related to experimental protocols contact the corresponding laboratory / company
- For queries on the harmonisation process send your response to David Gomez Cabrero at david.gomezcabrero@ki.se and Stefan Walter at stefanfrailomics@gmail.com

Since the end of 2016 there have been many publications from partners of the Frailomic consortium. Pérez-Tasigchana and co-authors have published in Age and Aging. The manuscript is entitled 'Metabolic syndrome and insulin resistance are associated with frailty in older adults: a prospective cohort study' and the authors are: RF Pérez-Tasigchana, LM León-Muñoz, E López-García, JL Gutierrez-Fisac, M Laclaustra, F Rodríguez-Artalejo, P Guallar-Castillón.

Congratulations to the team at Universidad Autónoma de Madrid. Professor Rodríguez Artalejo's group at Universidad Autónoma de Madrid have had several more publications and are listed on the next page.

Dr Lee Butcher submitted an application to the IPC for an abstract submission to IAGG 2017. The IPC unanimously supported this. Good luck to all authors: L Butcher, K Pérès, P André, S Walter, J-F Dartigues, L Rodríguez-Mañas, C Feart, JD Erusalimsky.

Stefania Bandinelli / Elenora Talluri submitted an abstract 'Are some plasma circulating miRNAs a signature for sarcopenia in older adults? – Results from the InCHIANTI cohort' for presentation at the ICFSR 2017.



Professor Fernando
Rodríguez Artalejo at
Universidad Autónoma de
Madrid

Partner Publications

Recent Published Works

- Lana, A., et al. (2016). Leptin concentration and risk of impaired physical function in older adults: the Seniors-ENRICA cohort. *Age and Ageing*, 45(6), 819–826. Martinez-Gomez, D., et al. (2016). Sitting Time and Mortality in Older Adults With Disability: A National Cohort Study. *Journal of the American Medical Directors Association*, 17(10), 960.e15-960.e20.
- Martinez-Gomez, D., et al (2016). Attenuation of the Effect of Multimorbidity on Cardiovascular Mortality by Physical Activity in Older Adults. *Journal of the American Medical Directors Association*, 17(12), 1161–1162. 2016. pii: S1525-8610(16)30422-4.
- Pérez-Hernández B, et al. (2016). Desigualdades sociales en los factores de riesgo cardiovascular de los adultos mayores de España: estudio ENRICA-Seniors- ClinicalKey. *Revista Española de Cardiología*. 2016 pii: S1885-5857(16)30152-9
- Lana, A., et al (2017). Serum Leptin Concentration is Associated with Incident Frailty in Older Adults, 8(2), 1–10
- García-Esquinas, E., & Rodríguez-Artalejo, F. (2017). Association between serum uric acid concentrations and grip strength: Is there effect modification by age? *Clinical Nutrition*, 6–12. García-Esquinas, E. (2016). Serum uric acid concentrations and risk of frailty in older adults. *Experimental Gerontology*, 82, 160–165. Castro-Rodríguez, M., Carnicero, J. A., García-García, F. J., Walter, S., Morley, J. E., Rodríguez-Artalejo, F., Sinclair, A.J., Rodríguez-Mañas L. (2016). Frailty as a Major Factor in the Increased Risk of Death and Disability in Older People With Diabetes. *Journal of the American Medical Directors Association*, 17(10), 949–955. <http://doi.org/10.1016/j.jamda.2016.07.013>
- Angulo J,et al (2016). Frailty and sarcopenia as the basis for the phenotypic manifestation of chronic diseases in older adults. *Mol Aspects Med*;50:1-32.
- Argilés JM, et al (2016) Skeletal Muscle Regulates Metabolism via Interorgan Crosstalk: Roles in Health and Disease. *J Am Med Dir Assoc*.17(9):789-96.
- Alonso Bouzón C, et al (2017). The Standardization of Frailty Phenotype Criteria Improves Its Predictive Ability: The Toledo Study for Healthy Aging. *J Am Med Dir Assoc*. S1525-8610(16)30520-5. [ahead of print] PubMed PMID: 28162927.
- Rodríguez-Mañas L et al (2017). The Third Transition: The Clinical Evolution Oriented to the Contemporary Older Patient. *J Am Med Dir Assoc*.18(1):8-9.
- Izquierdo M, et al (2016). Is It Ethical Not to Prescribe Physical Activity for the Elderly Frail? *J Am Med Dir Assoc*.17(9):779-81.
- Viña J, et al (2016). Exercise: the lifelong supplement for healthy ageing and slowing down the onset of frailty. *J Physiol*.15;594(8):1989-99.
- Tarazona-Santabalbina FJ, et al (2016). Multicomponent Exercise Intervention that Reverses Frailty and Improves Cognition, Emotion, and Social Networking in the Community-Dwelling Frail Elderly: A Randomized Clinical Trial. *J Am Med Dir Assoc*. 1;17(5):426-33.

The suit that ages you 40 years in 5 minutes

Partners at the Getafe hospital are helping volunteers understand the passage of time and experience the physical aspects of ageing with a GERontologic Test (GERT) suit that simulates age-related impairments.



With earmuffs that reduce hearing and a collar and vest weighing 2–4 kgs, the GERT suit restricts movement and puts pressure on the spine affecting gait. As a result, everyday tasks such as walking and climbing a flight of stairs or any movement in general will cause instability and require greater effort. The suits also have gloves that use small electric shocks to replicate hand trembling and difficulty catching and holding objects.

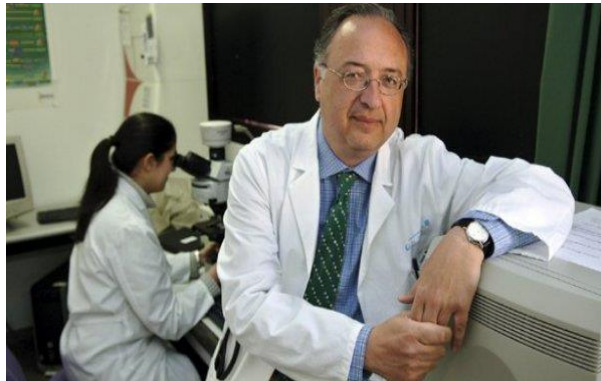
The GERT suit has caught the attention of El País newspaper and has made numerous TV and radio appearances recently, including the national station Cadena de Ondas Populares Españolas ('People's Radiowaves of Spain Network'). To see their appearance and the presenters trying on the suits (!), you can see the suit in action here:

<https://www.facebook.com/cope/videos/10154910352860821/>

http://ccaa.elpais.com/ccaa/2017/02/22/madrid/1487752901_853162.html

By providing a transitory attack on the senses and insight into the restrictions of ageing and age-related illness, the geriatric team at the Getafe hospital are hoping to highlight the importance of healthy ageing as part of the objectives for the Frailomic Initiative. We would like to wish the team at Getafe the very best for a successful road trip!

In other news from Getafe, Madrid, Professor Leocadio Rodriguez Mañas has participated in several conferences Santiago de Chile, Chile June 2016; Lima, Peru October 2016, Mattone, Italy October 2016, Toulouse, France November 2016, Nice, February 2017).



Professor Leocadio Rodriguez Mañas

Professor Mañas is now coordinating the Joint Action on Frailty ADVANTAGE, that started on 1st January 2017 and was launched in the Spanish Ministry of Health last January. He was also appointed recently as the Scientific Director of the Spanish Center of Biomedical Research on Frailty and Healthy Aging (CIBERFES).

Partner News

Giovanni and Mattias from Evercyte have launched the first products from their company TAmiRNA. Their exciting product range includes a research use only kit based on circulating miRNAs to predict the risk of osteoporotic fractures. The products were showcased at the American Society for Bone and Mineral Research (ASBMR) 2016 Annual Meeting and TAmiRNA also led a workshop on circulating miRNAs in Vienna.



TAmiRNA have also released a new microRNA qPCR kit that rapidly measures circulating plasma miRNAs to analyse platelet function from samples as little as 200 µL. This offers a minimally invasive option to those involved in platelet function research, anti-platelet therapy and age-related/cardiovascular diseases. For more information visit the TAmiRNA website.

<http://www.tamirna.com/>

Congratulations to our Frailomic partner, Life Length, who featured in the Expansion newspaper, for their work on telomeres and longevity. Dr Stephen Maitlin was interviewed and indicated the role for a revolutionary test to detect early aging. Life Length were also featured on 'Innovations with Ed Begley Jr', a TV program on FOX Business, which described Telomere Analysis Technology®.



To see the news piece visit:

<http://innovationstelevision.com/videos/>

lifelength.com

Conference List

This list of upcoming conferences may be of interest you. Some deadlines for abstract submission may have passed, however the details are provided should you wish to attend. Please do let us know if you will be attending any conferences, and don't forget to lodge your intentions to submit abstracts to the IPC via Laila at NST (laila.guzadhur@niche.org.uk)

- ICDH 2017: 19th International Conference on Diabetes and Healthcare 28-29 June, 2017. London (UK). <https://www.waset.org/conference/2017/06/london/ICDH/home> Abstract submission closed
- International Association of Gerontology and Geriatrics (IAGG) 23-27 July 2017, San Francisco (USA) Deadline for abstract submission passed
- The Asian Conference on Aging & Gerontology 2017 AGen2017. 8-11 June 2017, Kobe (Japan). <http://iafor.org/conferences/agen2017/>. Abstract submission closed
- 21st International Congress of Nutrition 15–20 Oct 2017, Buenos Aires (Argentina). <http://www.icn2017.com>. Abstract submission deadline: 31 March 2017
- European Union Geriatric Medicine Society (EUGMS) 13th international congress. 20-22 Sept, Nice (France). <http://www.eugms.org/2017.html>. Abstract submission deadline: 15 April 2017
- 2nd International Conference on Aging & Technology 26-28 June 2017, San Diego (USA) <http://aging.conferenceseries.com/abstract-submission.php>
- Alzheimer's Association International Conference 16-20 July 2017. 14-15 July (Preconferences), London (UK) <https://www.alz.org/aaic>. Deadline for abstract submission passed
- IANA (International Academy on Nutrition and Ageing): 23 July 2017 at Moscone Center West in San Francisco, USA. Deadline for abstract submission passed
- The British Society of Gerontology 46th Annual Conference 5–7 July 2017, Swansea (UK). <http://www.britishgerontology.org/events-jobs-news/bsg-events/bsg-2017-conference.html> Deadline for abstract submission passed
- American Geriatrics Society Annual Scientific Meeting 18 - 20 May 2017, San Antonio (USA) http://www.americangeriatrics.org/annual_meeting/2017_annual_meeting. Deadline for abstract submission passed
- World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases-IOF-ESCEO 23-26 March 2017, Florence (Italy). <http://www.wco-iof-esceo.org/>. Deadline for abstract submission passed
- ASBMR 2017 Annual Meeting. Abstract Submission deadline April 12 2017. <http://www.asbmr.org/ASBMR-abstracts>



Next Newsletter...

For those of you wishing to share Frailomic news with individuals outside of the consortium, we have uploaded a public version of our last newsletter on the website: <http://www.frailomic.org/news.html>

Watch out for our next newsletter and please keep NST informed of any news worthy pieces that we can share with our partners and followers.