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EBMGs advisory group working meeting  
(online) Feb 19, 2024



Calendar. ~1500 (Detail)  
Leuven, M-Museum

## Long Covid seen from family practice and implications for the Evidence Based Medicine Guidelines

<http://tinyurl.com/EBMGS-text-English>

<http://tinyurl.com/EBMGS-texte-francais>

# Bibliography as starter for exploring unknown territories



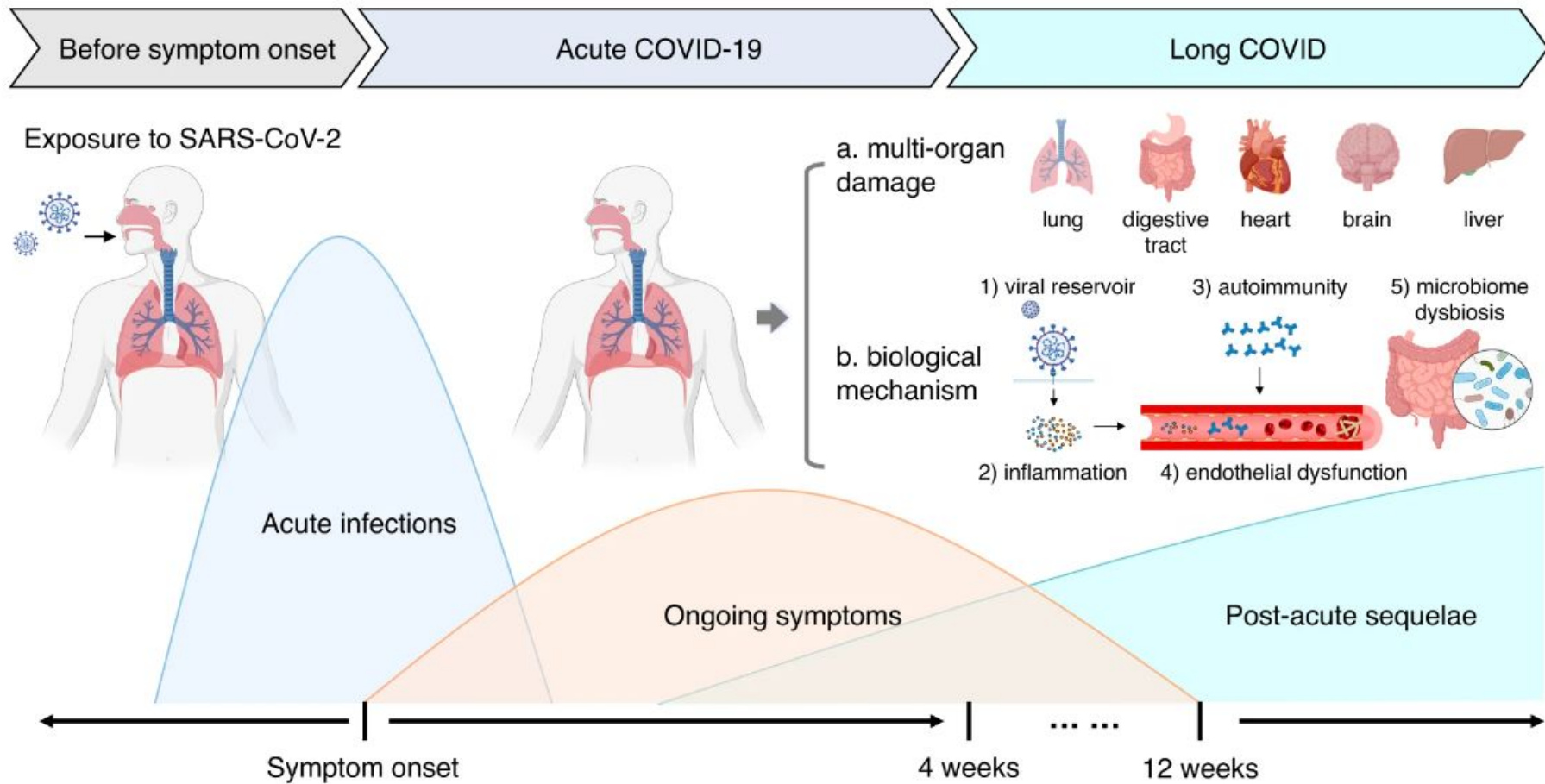
Master of Santa Clara, 15th century  
Death of the Virgin (detail)  
Lyon museum of fine arts

A PBL approach relies to other's knowledge. Almost all ICPC-2 chapters are required to classify Long Covid publications. Q-Codes have been used for non-patient related concepts.

Use of 3CGP classification ; <https://www.hetop.eu/hetop/3CGP/en/>

Access to the open bibliography on Zotero;

[https://www.zotero.org/groups/4929325/long\\_covid\\_open\\_library/library](https://www.zotero.org/groups/4929325/long_covid_open_library/library)



# Cloud based data for clinical care and multidimensional research

An unknown problem needs a adapted research pathway, cloud-based, beginning by the bibliography, needing a research network, leading to care, searching for cure.

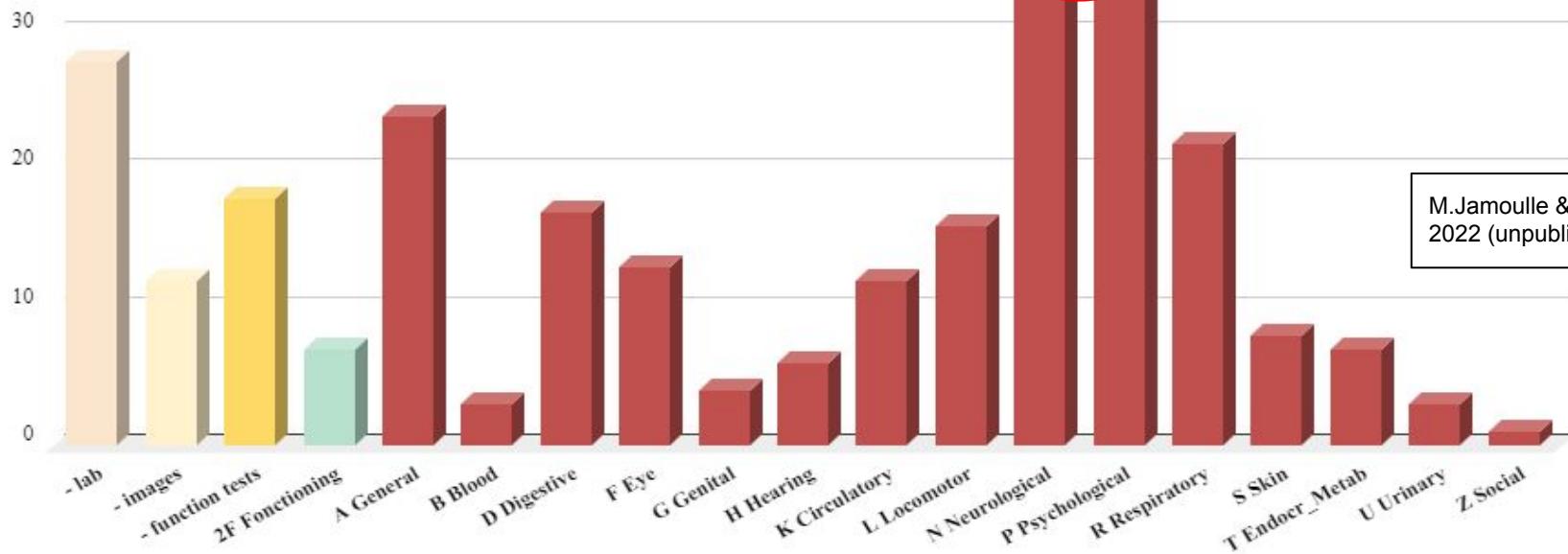
Follow the arrow on this poster;

<https://orbi.uliege.be/bitstream/2268/309310/1/Poster%20Long%20Covid%20Journey%20Madrid%20%281%29.pdf>

# Terminological study; Mapping the Long Covid Phenotype Ontology to ICPC-3

286 Terms chosen from 47 selected publications about LC by Deer & al and mapped manually to ICPC-3 by two authors.

Deer, R. et al. Characterizing long COVID: deep phenotype of a complex condition. *EBioMedicine*, 74, 103722.



neurovascular  
inflammatory viral  
disease

M. Jamouille & Kees van Boven  
2022 (unpublished data)

# A step forward through imaging and molecular biology

Sars-Cov-2; Multiple pathophysiological long term mechanisms

- direct viral toxicity;
- endothelial damage and microvascular injury;
- immune system dysregulation
- hypercoagulability with resultant in situ thrombosis



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Our findings at the end of 2023 displayed in this poster;

[https://orbi.uliege.be/bitstream/2268/309271/1/Poster%20Long%20Covid%20SPECT\\_CT%20%26%20transcriptomic%20Madrid.pdf](https://orbi.uliege.be/bitstream/2268/309271/1/Poster%20Long%20Covid%20SPECT_CT%20%26%20transcriptomic%20Madrid.pdf)

## Some examples of Covid related necessary input in the EBMGs

Long Covid will have a profound impact on the EBMGs as LC concerns all body systems and mental health including social consequences

Jamoulle, M., Vanoverschelde, I., & Vander Stichele, R. (2021). Translation of Finnish Duodecim EBM Guidelines® from English to French and Dutch. Helping evidence to cross borders.

Main : <https://orbi.uliege.be/handle/2268/308567>

Additional file <https://orbi.uliege.be/bitstream/2268/308567/3/EBMGs-LC.pdf>

Jan Rombouts I (1480-1535).  
Fall of the rebel angels.(detail)  
St Peter church, Leuven

In red in the spreadsheet, items about Covid in some EBMGs

# main publications

## published

- Jamouille, M. (2022). Re: Addressing Post-COVID Symptoms: A Guide for Primary Care. *Journal of the American Board of Family Medicine: JABFM*, 35(4), 874–877. <https://doi.org/10.3122/jabfm.2022.04.220006>
- Jamouille, M., Kazeneza-Mugisha, G., & Zayane, A. (2022). Descriptive and Narrative Study of Long Covid Cases in General Practice and Diagnostic Value of Single Photon Emission Computed Tomography. <https://www.mdpi.com/1999-4915/14/9/2000>
- Jamouille, M. (2023). Exploring Long Covid: An Unexpected Research Journey in Family Medicine Leading to Translational Research. *Medical Research Archives*, 11(11). <https://doi.org/10.18103/mra.v11i11.4673>
- Menezes, S. M., Jamouille, M., Carletto, M. P., Van Holm, B., Moens, L., Meyts, I., Maes, P., & Van Weyenbergh, J. (2024). Blood transcriptomics reveal persistent SARS-CoV-2 RNA and candidate biomarkers in Long COVID patients. *COVID-19 SARS-CoV-2 preprints from medRxiv and bioRxiv*. <https://doi.org/10.1101/2024.01.14.24301293>

## submitted

- **Restrained memory CD8+ T cell responses favors viral persistence and elevated IgG responses in patients with severe Long COVID.**  
Petter Brodin; Lucie Rodriguez; Ziyang Tan; Tadeppally Lakshmikanth; Jun Wang; Hugo Barcenilla; Zoe Newell Swank; Fanglei Zuo; Hassan Abolhassani; Ana Jimena Pavlovitch-Bedzyk; Chunlin Wang; Laura Gonzalez; Constantin Habimana Mugabo; Anette Johnsson; Yang Chen; Anna James; Jaromir Mikes; Linn Kleberg; Christopher Sundling; Mikael Björnson; Malin Nygren Bonnier; Marcus Ståhlberg; Michael Runold; Sophia Björkander; Erik Melén; Isabelle Meyts; Johan Van Weyenbergh; Qian-Pan Hammarström; Mark M Davis; David R. Walt; Nils Landegren; COVID Human Genetic Effort ; Alessandro Aiuti; Jean-Laurent Casanova; Marc Jamouille; Judith Bruchfeld <https://www.medrxiv.org/content/10.1101/2024.02.11.24302636v1>
- **Blood transcriptomics reveal persistent SARS-CoV-2 RNA and candidate biomarkers in Long COVID** Menezes, S. M., Jamouille, M., Carletto, M. P., Van Holm, B., Moens, L., Meyts, I., Maes, P., & Van Weyenbergh, J. <https://www.medrxiv.org/content/10.1101/2024.01.14.24301293v1>



Jan Borreman (1479-1520), St Jean in oil, St Peter church. Leuven)