

NOM Goals & Objectives





Chair: Menno C. van Zelm

Vice-chair: Cathrine Scheepers

The mission of the different IUIS Nomenclature subcommittees is to establish a universal and consistent nomenclature for both molecules and cells of the immune system.

The IUIS subcommittees have continued to establish the nomenclature of different molecules of the immune system and updating their databases and webpages.

Especially useful in driving these activities has been the Frontiers research topic:

Nomenclature: Avoiding Babylonian Speech Confusion in Present Day Immunology

With contributions from 7/10 subcommittees:

Allergen, B-cell, CD Molecule, Complement, Cytokine, IG TR and MH, Monocytes and Dendritic Cells in Blood

Current IUIS Nomenclature Subcommittees and chairs

Allergen Nomenclature. Chair: Rick Goodman (USA)

(web page: www.allergen.org)

CD Nomenclature. Chair: Pablo Engel (Spain)

(web page: www.hcdm.org)





IG, TR and MH Nomenclature. Chair: Marie-Paule Lefranc (France)

(web page: www.imgt.org)



Monocytes and Dendritic Cells in Blood. Chair: Loems Ziegler-Heitbrock (Germany)

KIR Nomenclature. Chair: Steven Marsh (UK)

(web page: www.ebi.ac.uk/ipd/kir)



(web page: www.complement.org)

B cells and plasma cells. Chair: Ignacio Sanz (USA)

Cytokines, chemokines and their receptors Chair: tbd

Innate lymphocytes Chair: Marco Colonna (USA)

MALT Nomenclature. Chair: Ana Caetano (Brazil)









NOM 2021 Activities



Nomenclature: Avoiding Babylonian Speech

Frontiers Research Topic 2019-2020

- 12 papers + commentary
- Contributions include those from 7 sub-cies

 (Allergen, CD, B-cell, complement, cytokine, DC/mono, IG_TR_MH)
- 83,523 views

CD nomenclature:

- 11th HLDA workshop experiments ongoing 112 mAbs, potentially 22 new CD markers
- CD Maps 2 studies ongoing revisiting expression of CD1-CD372



Allergen nomenclature

- >1048 defined allergens
- Extensive website (Allergen.org)
- Updates to nomenclature



IG_TR_MH nomenclature

- Updated guidelines new genes/alleles
- Reports and NOM updates placed on new IUIS website

Complement Nomenclature

Research Topic

- Nomenclature update approved



Monocyte/DC Nomenclature

- Advances through single-cell RNAseq
- Need to define subsets vs cell states, and monocyte vs DC subsets

Revival of subcommittees:

- Cytokine/chemokine
- MALT chair: Ana Caetano



NOM 2019-2020 Activities



Selection of Publications: 2020-2021 Nomenclature and position papers

Frontiers collection - editorial

1. van Zelm MC, Ziegler-Heitbrock L, Collins AM, Chan SK, Engel P. Editorial: Nomenclature - Avoiding Babylonian Speech Confusion in Present Day Immunology. *Front Immunol.* 2020 Dec 14;11:621100.

Allergen

- 2. Sudharson S, Kalic T, Hafner C, Breiteneder H. 2021. Newly defined allergens in the WHO/IUIS Allergen Nomenclature Database during 01/2019-03/2021. *Allergy*. [Epub].
- 3. Platts-Mills TA *et al.* 2021. Carbohydrate epitopes currently recognized as targets for IgE antibodies. *Allergy*. 76(8):2383-2394.
- 4. Goodman RE et al. 2020. The Allergen: Sources, Extracts, and Molecules for Diagnosis of Allergic Disease. JACI IP

CD

5. Kalina T, Lundsten K, Engel P. 2020. Relevance of Antibody Validation for Flow Cytometry. Cytometry A. 97(2):126.

IG_TR_MH

- 6. Trück J et al. AIRR Community 2021. Biological controls for standardization and interpretation of adaptive immune receptor repertoire profiling. *Elife*. e66274.
- 7. Magadan S *et al.* 2021 Genomic analysis of a second rainbow trout line (Arlee) leads to an extended description of the IGH VDJ gene repertoire. *Dev Comp Immunol.* 118:103998

Monocytes/DC

8. Heger et al. 2020 Subsets of CD1c+ DCs: Dendritic Cell Versus Monocyte Lineage Front Immunol.

NOM 2021 & 2022 Budgets



Allocated amount for 2021:

Committee: \$10,000

Travel: \$6,000

Year 2021 Budget spent: \$9,000

\$4,000 for Allergen Nomenclature \$5,000 for CD molecule Nomenclature

Year 2022 committee budget request:

Carry forward from 2021: \$7,000

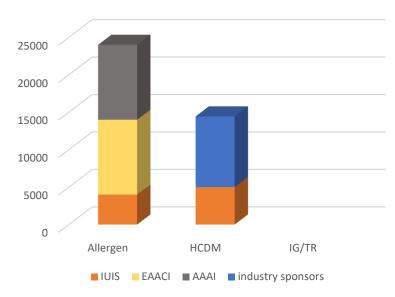
- New for 2022 \$10,000

Year 2022 committee budget items:

\$4,000 for Allergen Nomenclature Subcie \$5,000 for CD molecule Nomenclature \$2,000 for DC/mono Nomenclature – \$1000 carried forward from 2021

\$6,000 for NOM cie meeting at IUIS meeting – carried forward from 2021

NOM 2021 Committee Funding



* Excluding in kind reagents provided by multiple companies for HLDA11/CD Maps 2

NOM Opportunities and Challenges



Support and boost the work and visibility of the existing IUIS NOM subcommittees

- Frontiers Research topic → engagement and exposure
- IUIS website

Change in complement Nomenclature

- closer collaboration Int'l Complement Society (ICS) and IUIS NOM

Lack of in-real life meetings in 2020-2021

- Momentum in many subcommittees has slowed down
- Need for face-to-face meeting of NOM chair and subcie chairs in 2022

Change of NOM leadership in 2022

- Dr Scheepers stepped down as vice-chair Sept 2021
- A/Prof van Zelm will step down in 2022 after 2 full terms

Progress made in IG/TR/MH nomenclature of new genes/alleles

- drive towards terms-of-reference and fixed term leadership positions.