IUIS

Nomenclature

NOM Goals & Objectives

Nomenclature (NOM)

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)

Complement. Chair: Andrea Tenner (USA)
(**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 2019-2020 Activities

Frontiers Research Topic 2019-2020

Research Topic

Nomenclature: Avoiding Babylonian Speech Confusion in Present Day Immunology

- 12 papers included
- Contributions include those from 7 sub-cies (Allergen, CD, B-cell, complement, cytokine, DC/mono, IG_TR_MH)
- Commentary by editors in prep

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

- >1000 defined allergens
- Extensive website (Allergen.org)
- Updates to nomenclature

Complement Nomenclature

- Update to nomenclature
- Renaming C2 cleavage products C2a and C2b

IG_TR_MH nomenclature

- Standardized Nomenclature of Salmonidae IGH Genes
- Updated V-Quest program for IG/TR alignments

Revival of subcommittees:

- Cytokine/chemokine
- MALT – chair: Ana Caetano

NOM 2019-2020 Activities

Selection of Publications: 2019-2020 Nomenclature and position papers

Frontiers collection

1. Bohlson SS *et al*. 2019. Complement Nomenclature-Deconvoluted. *Front Immunol*. 10:1308.
2. Carlos Del Fresno C *et al.* 2019. A proposal for nomenclature in myeloid C-type lectin receptors. *Front. Immunol.*
3. Ohlin M *et al.* 2019. Inferred allelic variants of immunoglobulin receptor genes: a system for their evaluation, documentation, and naming. *Front Immunol.*
4. Chan S, *et al.* 2019 Keeping allergen names clear and defined. *Front Immunol*.
5. Kalina T *et al.* 2019 CD Maps – dynamic profiling of CD1 to CD100 surface expression on human leukocyte and lymphocyte subsets. *Front Immunol*.
6. Magadan *et al.* 2019 Standardized IMGT® Nomenclature of Salmonidae IGH Genes, the Paradigm of Atlantic Salmon and Rainbow Trout: From Genomics to Repertoires *Front Immunol*.
7. Sanz *et al.* 2019 Challenges and Opportunities for Consistent Classification of Human B Cell and Plasma Cell Populations *Front Immunol*.
8. Günther and Schultze 2019 Mind the Map: Technology Shapes the Myeloid Cell Space
9. Zlotnik 2020 Perspective: Insights on the Nomenclature of Cytokines and Chemokines *Front Immunol*.
10. Heger *et al.* 2020 Subsets of CD1c+ DCs: Dendritic Cell Versus Monocyte Lineage *Front Immunol*.

Allergen

6. Goodman RE and Breiteneder H. 2019. The WHO/IUIS Nomenclature. *Allergy* 74(3):429-435.
7. Goodman RE *et al.* 2020 The Allergen: Sources, Extracts, and Molecules for Diagnosis of Allergic Disease. *JACI IP*

IG_TR_MH

10. Lefranc MP, Lefranc G. 2020 Immunoglobulins or Antibodies: IMGT® Bridging Genes, Structures and Functions. *Biomedicines.*
11. Radtanakatikanon *et al.* 2020 Topology and expressed repertoire of the Felis catus T cell receptor loci. *BMC Genomics*
12. Pégorier P *et al.* 2020 IMGT® Biocuration and Comparative Study of the T Cell Receptor Beta Locus of Veterinary Species Based on Homo sapiens TRB. *Front Immunol*

NOM 2020 & 2021 Budgets

Allocated amount for 2020:
Committee: $11,000
Travel: $6,000

Year 2020 Budget spent: $9,000

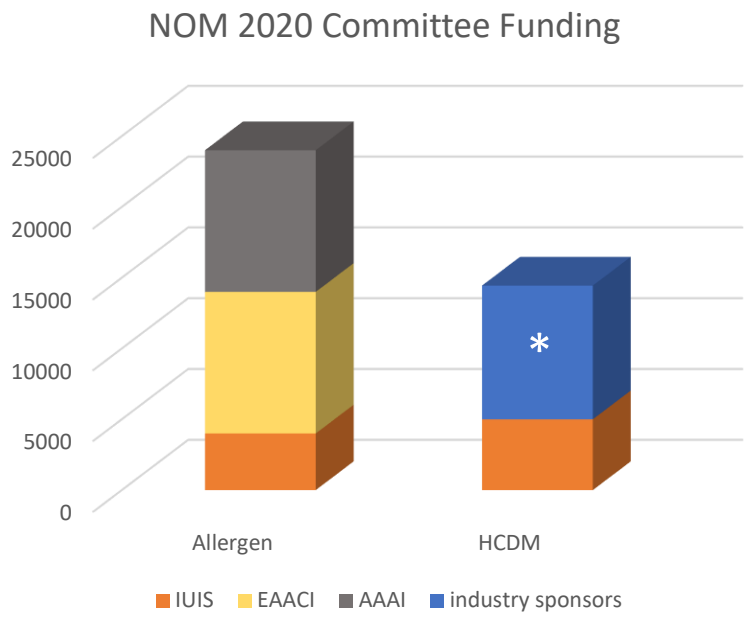
$4,000 for Allergen Nomenclature
$5,000 for CD molecule Nomenclature

Year 2021 committee budget request: $10,000

$4,000 for Allergen Nomenclature Subcie
$5,000 for CD molecule Nomenclature
$1,000 for DC/mono Nomenclature

Year 2021 travel budget request: $10,000

$6,000 for IUIS meeting on Cuba



* 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
- WHO – IUIS linkage

Many NOM subcommittees

- Reinvigorate with new chairs and co-chairs
- Organise annual meetings of NOM chair and subcie chairs
- Link subcommittees with societies (e.g. Cytokine, mucosal immunology, etc.)

Resolve dispute on positional vs non-positional nomenclature of IG and TR variable genes

- virtual meeting / workshop with stakeholders (IMGT, AIRR, IUIS NOM)

Consensus nomenclature for B-cell subsets

- virtual meeting / workshop subcommittee members