



ENQUIRE Cluster 13

Immunology and Respiratory Systems

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CSRAC Presentation – 18 September 2023

Ten study sections evaluated in Cluster 13

Basic Immunology Group

- | | Avg. # | Area |
|---|--------|---|
| • CMIA – Cellular and Molecular Immunology A | (78) | - molecular and structural immunology |
| • CMIB – Cellular and Molecular Immunology B | (90) | - adaptive/innate immune response |
| • III – Innate Immunity and Inflammation | (110) | - innate immune system/signaling/inflammation |

Applied Group

- | | | |
|---|------|---|
| • HAI – Hypersensitivity, Autoimmune, and Immune-Mediated Diseases | (65) | - immune-mediated diseases |
| • HAMI (IIDB-57) – Hypersensitivity, Allergies, and Mucosal Immunology | (53) | - hypersensitivity/mucosal surfaces |
| • ACTS – Arthritis, Connective Tissue, and Skin | (85) | - skin, joint, connective tissue diseases |
| • TTT – Transplantation, Tolerance, and Tumor Immunity | (66) | - making/breaking of immune tolerance |

Respiratory Systems Group

- | | | |
|--|-------|--|
| • LCMI – Lung, Cellular, Molecular, and Immunobiology | (100) | - respiratory biology/immunobiology |
| • LIRR – Lung Injury, Repair, and Remodeling | (90) | - lung development/lung injury |
| • RIBT – Respiratory Integrative Biology and Translational Research | (100) | - integrative/translational/vascular biology |

External Workgroup Members



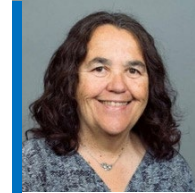
Leslie Berg
Chairperson

Lymphocyte Immunology
University of Colorado



Wonder Drake

Interstitial Lung Disease/Sarcoidosis
Vanderbilt University



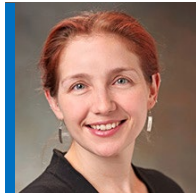
Olivia Martinez

Transplant Immunology
Stanford University



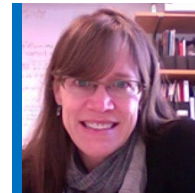
Soman Abraham

Mast Cell Immunology/Skin
Duke University



Stephanie Eisenbarth

Adaptive Immune Response
Northwestern University



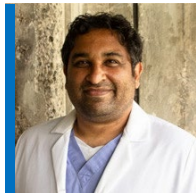
Paula Oliver

Autoimmunity and Allergic Diseases
University of Pennsylvania



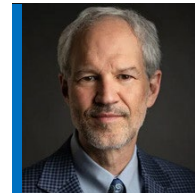
Allan Brasier

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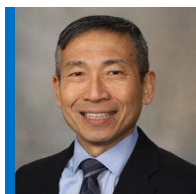
Mark Shlomchik

Autoimmunity/Immunotherapy
University of Pittsburgh



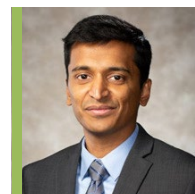
Jane Buckner

Adaptive Immunity/Autoimmunity
Benaroya Research Institute



Hirohito Kita

Allergic Diseases/Asthma/Dermatitis
Mayo Clinic Arizona



Narasimhan Rajaram
CSRAC Observer

University of Arkansas

External Workgroup Meeting (January 2023)

Current Study Sections (10)

Basic Immunology Group

CMIA – Cellular and Molecular Immunology A (78)

CMIB – Cellular and Molecular Immunology B (90)

III – Innate Immunity and Inflammation (110)

Applied Group

HAI – Hypersensitivity, Autoimmune, and Immune-Mediated Diseases (65)

HAMI – Hypersensitivities, Allergies, and Mucosal Immunology (53)

ACTS – Arthritis, Connective Tissue, and Skin (85)

TTT – Transplantation, Tolerance, and Tumor Immunology (66)

Respiratory Systems Group

LCMI – Lung Cellular, Molecular, and Immunobiology (100)

LIRR – Lung Injury, Repair, and Remodeling (90)

RIBT – Respiratory Integrative Biology and Translational Research (100)

Overarching considerations:

- The study sections addressing basic immunology and lung have high application numbers and need to be addressed.
- A better separation between autoimmunity, alloimmunity, and hypersensitivity/allergic diseases is needed.
- Reviewing transplantation immunology and tumor immunology together is problematic.
- Reviewing skin/joint biology and rheumatic diseases together is problematic.
- Allergy and asthma topics are too scattered.
- A more translational and clinically-focused study section is needed to better appreciate the human component of immunology and respiratory diseases.

External Workgroup Recommendations

Basic Immunology Group:

MSI – Molecular and Structural Immunology*

MCI – Myeloid Cell Immunobiology*

IIIR – Innate Immunity and Inflammatory Response to Infection or Injury*

AIS – Adaptive Immune System*

IRT – Immunoregulation and Tolerance*

Notes:

- MSI focuses on fundamental molecular and structural immunology, both the innate and adaptive arms
- MCI focuses on the immunobiology of myeloid cell subsets
- IIIR focuses on innate immune responses and inflammation
- AIS focuses on adaptive immunity and its interplay with the innate immune system
- IRT focuses on the mechanisms of self/non-self discrimination

External Workgroup Recommendations

Applied Group:

MAI – Mechanisms of Autoimmunity*

IMHA – Immune Mechanisms of Hypersensitivity and Allergy*

SCTS – Skin and Connective Tissue Sciences*

ITAP – Immunobiology of Transplantation, Alloimmunity, and Pregnancy*

Notes:

- MAI focuses on autoimmunity across different organ systems and tissues. Arthritic and rheumatic diseases, formerly in ACTS, are added.
- IMHA formalizes a long-standing SEP (HAMI) and focuses on hypersensitivity and allergy across different organ systems and tissues. Asthma and allergy in the lung, formerly in LCMI, are added.
- SCTS focuses on skin and connective tissue topics.
- ITAP focuses on transplantation and alloimmunity. Tumor immunology is removed, with transfusion medicine and maternal/fetal immune-tolerance added.

External Workgroup Recommendations

Respiratory Systems Group:

LII – Lung Immunology and Infection*

PIRR – Pulmonary Injury Remodeling and Repair*

PVP – Pulmonary Vascular Disease and Physiology*

TIPI – Translational Investigations of Pulmonary and Immunological Diseases*

Notes:

- LII focuses exclusively on the immunological host response to pathogens in the lung. Immunological responses to non-pathogens (asthma/allergy), formerly in LCMI, moved to IMHA
- PIRR focuses on the more structural aspects of lung diseases. Absorbs pulmonary biology from LCMI
- PVP focuses on physiological and integrative research in the lung, most notably vascular
- TIPI focuses on immune-mediated diseases and pulmonary diseases in humans. It will have a more translational/clinical focus.

External Workgroup Recommendations (Final)

Current Study Sections (10)

Basic Immunology Group

CMIA – Cellular and Molecular Immunology A (78)

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III – Innate Immunity and Inflammation (110)

Applied Group

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Respiratory Systems Group

LCMI – Lung Cellular, Molecular, and Immunobiology (100)

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Proposed Study Sections (13)

Basic Immunology Group

MSI – Molecular and Structural Immunology*

AIS – Adaptive Immune System*

IIR – Innate Immunity and Inflammatory Responses to Infection or Injury*

MCI – Myeloid Cell Immunobiology*

IRT – Immunoregulation and Tolerance*

Applied Group

MAI – Mechanisms of Autoimmunity*

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Respiratory Systems Group

LII – Lung Immunology and Infection*

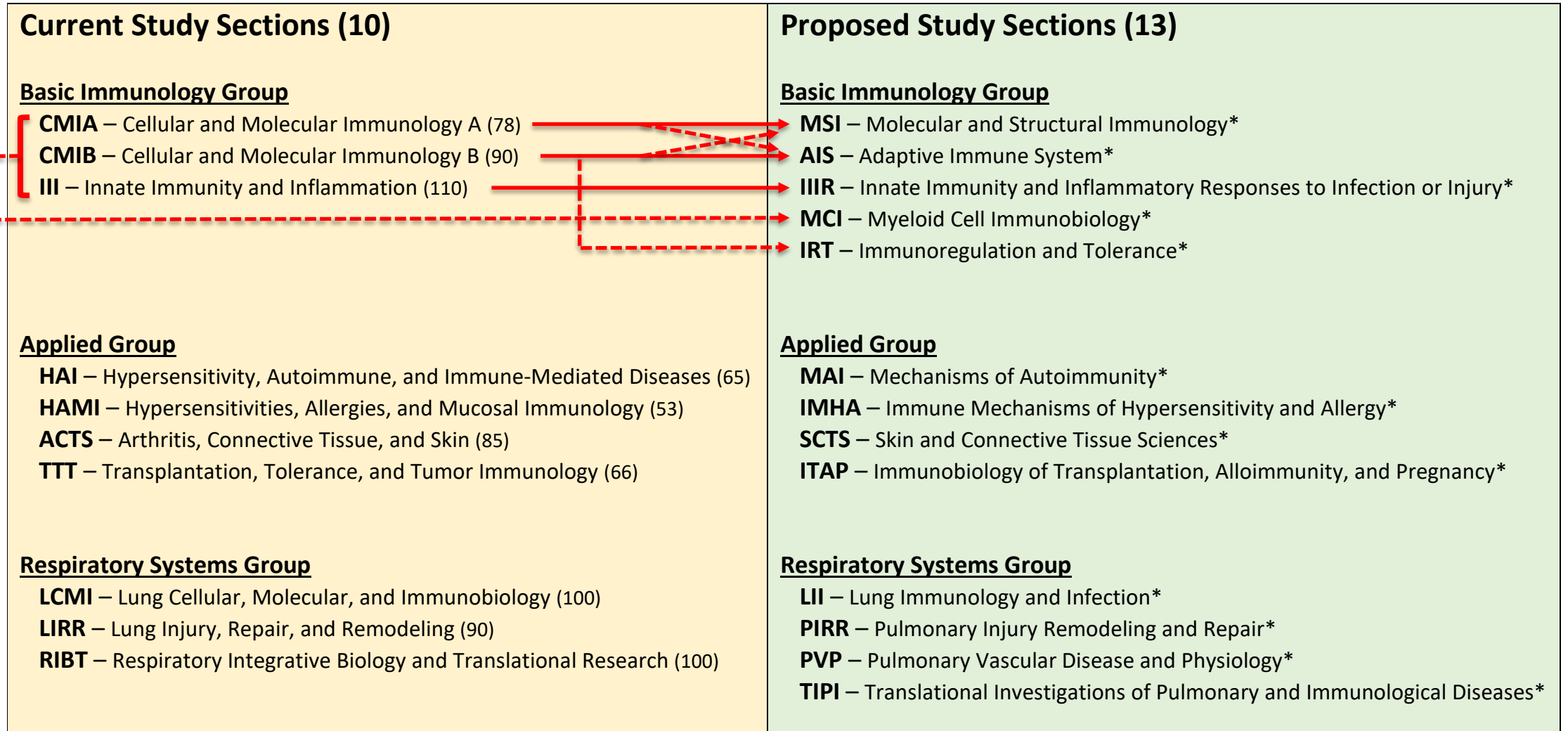
PIRR – Pulmonary Injury Remodeling and Repair*

PVP – Pulmonary Vascular Disease and Physiology*

TIPI – Translational Investigations of Pulmonary and Immunological Diseases*

External Workgroup Recommendations (Final)

Basic



* - Study section names are tentative

External Workgroup Recommendations (Final)

Applied

Current Study Sections (10)	Proposed Study Sections (13)
<p>Basic Immunology Group</p> <p>CMIA – Cellular and Molecular Immunology A (78) CMIB – Cellular and Molecular Immunology B (90) III – Innate Immunity and Inflammation (110)</p>	<p>Basic Immunology Group</p> <p>MSI – Molecular and Structural Immunology* AIS – Adaptive Immune System* IIR – Innate Immunity and Inflammatory Responses to Infection or Injury* MCI – Myeloid Cell Immunobiology* IRT – Immunoregulation and Tolerance*</p> <p style="text-align: right;">Arthritic/Rheumatic Diseases</p>
<p>Applied Group</p> <p>HAI – Hypersensitivity, Autoimmune, and Immune-Mediated Diseases (65) HAMI – Hypersensitivities, Allergies, and Mucosal Immunology (53) ACTS – Arthritis, Connective Tissue, and Skin (85) TTT – Transplantation, Tolerance, and Tumor Immunology (66)</p> <p style="text-align: center;"> → Cancer → Transfusion/Maternal/Fetal </p>	<p>Applied Group</p> <p>MAI – Mechanisms of Autoimmunity* IMHA – Immune Mechanisms of Hypersensitivity and Allergy* SCTS – Skin and Connective Tissue Sciences* ITAP – Immunobiology of Transplantation, Alloimmunity, and Pregnancy*</p> <p style="text-align: right;">Asthma/Allergy</p>
<p>Respiratory Systems Group</p> <p>LCMI – Lung Cellular, Molecular, and Immunobiology (100) LIRR – Lung Injury, Repair, and Remodeling (90) RIBT – Respiratory Integrative Biology and Translational Research (100)</p>	<p>Respiratory Systems Group</p> <p>LII – Lung Immunology and Infection* PIRR – Pulmonary Injury Remodeling and Repair* PVP – Pulmonary Vascular Disease and Physiology* TIPI – Translational Investigations of Pulmonary and Immunological Diseases*</p>

* - Study section names are tentative

External Workgroup Recommendations (Final)

Respiratory

Current Study Sections (10)	Proposed Study Sections (13)
<p>Basic Immunology Group</p> <p>CMIA – Cellular and Molecular Immunology A (78) CMIB – Cellular and Molecular Immunology B (90) III – Innate Immunity and Inflammation (110)</p>	<p>Basic Immunology Group</p> <p>MSI – Molecular and Structural Immunology* AIS – Adaptive Immune System* IIR – Innate Immunity and Inflammatory Responses to Infection or Injury* MCI – Myeloid Cell Immunobiology* IRT – Immunoregulation and Tolerance*</p>
<p>Applied Group</p> <p>HAI – Hypersensitivity, Autoimmune, and Immune-Mediated Diseases (65) HAMI – Hypersensitivities, Allergies, and Mucosal Immunology (53) ACTS – Arthritis, Connective Tissue, and Skin (85) TTT – Transplantation, Tolerance, and Tumor Immunology (66)</p>	<p>Applied Group</p> <p>MAI – Mechanisms of Autoimmunity* IMHA – Immune Mechanisms of Hypersensitivity and Allergy* ← SCTS – Skin and Connective Tissue Sciences* ITAP – Immunobiology of Transplantation, Alloimmunity, and Pregnancy*</p>
<p>Respiratory Systems Group</p> <p>LCMI – Lung Cellular, Molecular, and Immunobiology (100) → LIRR – Lung Injury, Repair, and Remodeling (90) → RIBT – Respiratory Integrative Biology and Translational Research (100) →</p> <p style="text-align: right;">Translational/Clinical</p>	<p style="text-align: center;">Asthma/Allergy</p> <p>Respiratory Systems Group</p> <p>LII – Lung Immunology and Infection* PIRR – Pulmonary Injury Remodeling and Repair* PVP – Pulmonary Vascular Disease and Physiology* TIPI – Translational Investigations of Pulmonary and Immunological Diseases*</p>

Internal Panel (June 2023)

Overall Comments:

- The overall restructuring proposed by the external panel was viewed favorably.
- Creating distinct study sections dedicated to autoimmunity (MAI) and hypersensitivity/asthma (IMHA), and thereby eliminating a long-standing recurring SEP (HAMI) was welcomed.
- Including pregnancy and transfusion medicine in ITAP was viewed as problematic and better reviewed elsewhere.
- The removal of rheumatology from ACTS was welcomed.
- Given that NIAID, NHLBI, and NIAMS all do in-house review of clinical trials, there were questions about the viability of TIPI. However, they were supportive of a more translational/clinically-focused study section.

Final CSR Recommendations

Proposed Study Sections ~~(13)~~ 12

Basic Immunology Group

MSI – Molecular and Structural Immunology*

AIS – Adaptive Immune System* ←

IIIR – Innate Immunity and Inflammatory Responses to Infection or Injury*

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Applied Group

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~~**ITAP** – Immunobiology of Transplantation, Alloimmunity, and Pregnancy*~~

Respiratory Systems Group

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PIRR – Pulmonary Injury Remodeling and Repair*

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TIPI – Translational Investigations of Pulmonary and Immunological Diseases*

With Proposed Modifications:

- Current application numbers do not support the creation of 5 basic immunology panels, so absorbing IRT back into AIS.
- Agree with the internal panel that transfusion medicine and maternal/fetal immunology are not a good fit for ITAP.
- Removing the “P” in ITAP to keep the focus on transplantation and alloimmunity. Pregnancy is better addressed with an overlap statement. Transfusion medicine already reviewed elsewhere.

Next Steps (with CSRAC approval):

- Mock sort of applications using new guidelines to assess viability. ITA and TIPI may need to run initially as standing SEPs.
- Guideline modifications and publication for a 2024 application receipt date.



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Discussion