# Proposal Form

In order to submit a Research Topic proposal, you simply need to form a group of co-Editors, define the scope of your Research Topic, and identify potential authors. We have included more information on each of these parts below.

## Team of Guest Editors

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Full name and title**  *Ex.: Prof. Jane B. Brown* | **Affiliation**  *Ex.: Univ. of Texas, USA* | **Email address** | **CV sent**  *Yes/No* | [Loop](https://www.frontiersin.org/Registration/Register.aspx) **profile created with this email address** |
| Dr. Shicheng Guo | Marshfield Clinic Research Instititute, USA | [Guo.Shicheng@marshfieldresearch.org](mailto:Guo.Shicheng@marshfieldresearch.org) |  |  |
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| Prof. Dongyi He | Guanghua Hospital, China | Dongyihe@medmail.com.cn |  |  |
| Prof. Li Jin | Fudan University | lijin@fudan.edu.cn |  |  |
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| Prof. Nan Shen | Shanghai Institute of Rheumatology, China | nanshensibs@gmail.com |  |  |
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| Prof. Xiaodong Zhou | [University of Texas Health Science Center at Houston, USA](https://uthealth.influuent.utsystem.edu/en/persons/john-d-reveille) | [Xiaodong.zhou@uth.tmc.edu](mailto:Xiaodong.zhou@uth.tmc.edu) |  |  |
| Prof. Minghua Wang | Soochow University, China | wangmh75@yeah.net |  |  |
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| Jörg Tost | Centre National de Recherche en Génomique Humaine, France | [tost@cng.fr](mailto:tost@cng.fr) |  |  |
|  |  |  |  |  |

Do you or any of your co-Editors have any **competing interests** to declare (financial interests, business, professional partnerships or relations with commercial company involved in the topic)?

**Yes  No**

*If yes, please specify:*

|  |
| --- |
|  |

#### Other elements to include:

**Please send us a CV in English for each Guest Editor** (including education, work history, and a list of publications). These will be shared with the Chief Editors for evaluation.

**All Guest Editors will also need to register on** [**Loop**](https://www.frontiersin.org/Registration/Register.aspx) **in order to have access to our platform. This must be done before the proposal can be sent to the Chief Editor.**

#### Additional information:

### *Who should my co-editors be?*

Research Topics are edited by a team of two or more Guest Editors (Topic Editors).

When forming your team of editors, bear in mind that your team will be acting as handling editors for the manuscripts submitted to this collection (perform a preliminary evaluation, assign reviewers, oversee the review process, accept manuscripts or recommend rejection to the Chief Editor). This means that the expertise of the team of Guest Editors must closely match the scope of your proposed Research Topic.

Guest Editors **must** be geographically diverse, coming from different institutions and countries in order to expand your network and help prevent conflicts of interest. The team should include researchers who are well established in the field, but can also include early career researchers with relevant expertise (minimum requirement of a PhD degree and three years of relevant experience).

Please insert the information for your group of Guest Editors above, and add lines to the table if needed.

## Journal and Section

JOURNAL:Choose the [journal](http://home.frontiersin.org/about/journals-a-z) that best matches the scope of your Research Topic.

Frontier in immunology and Frontier in Genetics

SECTION:All of our journals are broken into sections, which reflect the sub-disciplines in the field. Please select [the section](http://home.frontiersin.org/about/journals-a-z) that best matches the scope of your Research Topic. For a complete list of sections in each journal visit the [journal](http://home.frontiersin.org/about/journals-a-z) homepage and click on the ‘sections’ menu at the top of the page.

Autoimmune and Autoinflammatory Disorders

**Note:** All manuscripts submitted to your article collection will need to fall within the scope of the journal and section which you select. If you feel that multiple sections are necessary to encompass the scope of your expected manuscripts ([cross-listing](http://www.frontiersin.org/files/pdf/Frontiers_what_is_crosslisting.pdf)), please let us know, we are happy to discuss the possibility of listing your Research Topic in more than one specialty section.

## Title and Description of the Research Topic

TITLE: max. 150 characters

Genetic, Epigenetic and Precision Medicine of Human Autoimmune Disease

KEYWORDS: 5 keywords

Genetic, Epigenetic, Precision Medicine, Autoimmune Disease, Interaction

DESCRIPTION: Your description will serve as your call for participation and will appear online. It should be written like an abstract - do not include references. Maximum 500 words.

In the past decades, etiology, susceptibility and pathology of autoimmune diseases have been significantly enhanced by molecular epidemiological and GWAS research. Take rheumatoid arthritis as an example, genetic susceptibility of HLA-DRB1 interacted with citrullination-modified calreticulin or vimentin, mediated by PTPN22 and PADI4, caused by environment triggers such as smoking and/or infections initialized the activation of immune system and further inflammatory reactions. On the other side, epigenetic changes were also observed in immune cell (CD4+ and CD8+ T-cells) and synovial cells, especially DNA methylation in HLA and immune-related gene regions, such as interferon-related genes regions. Recently multi-omics research and single-cell based research (single-cell RNA-seq etc) provide more details to autoimmune diseases, such as novel T-cell, B-cell and fibroblast subtypes were involved in the pathogenesis of autoimmune disease. Although we still do not have drugs to completely cure autoimmune disease, immunotherapy have provided promising solution to control the progress of autoimmune disease, such as TNF-α inhibitors and  interleukin-6 receptor (IL-6R) blocker to rheumatoid arthritis. What’s more, Pharmacogenomics have successfully identified serials of genetic markers to predict the drug response, toxicity and adverse events, which provided excellent model for personalized and precision medicine. However, we do require more understandings to subtypes of autoimmune disease, to identify novel susceptibility and pathology related variants for better precision medicine for autoimmune diseases.

With this Research Topic, investigators can contribute with Original Research articles, Review articles, as well as clinical studies that will stimulate the continuing efforts to the understanding of personalized and precision medicine to autoimmune diseases. The following topics, but not limited to them are welcomed in the present topic research section:

1. Identification and evaluation to Novel genetic and epigenetic biomarker for autoimmune diseases
2. Reviews on latest findings with multi-omics molecular analysis to inflammatory and autoimmune diseases
3. Understanding GWAS identified significant SNPs with Epigenetic modifications regulation mechanism.
4. Genetic and epigenetic interaction in the pathology of autoimmune diseases.
5. Review how to understand epigenetics in precision medicine to autoimmune diseases
6. Genetic and Epigenetic difference between different autoimmune diseases, such as SLE, RA, AS
7. Genetic or Epigenetic biomarker or prediction models for drug therapy response or outcomes.
8. Bioinformatics studies to integrate recent GWAS, EWAS, eQTL and molecular pathway works to illustrate susceptibility, etiology and pathology of autoimmune disease.
9. Novel subtype identification to autoimmune diseases based on genetic, epigenetic, cellular features.
10. Cell-free circulating DNA research on autoimmune diseases
11. Pharmacogenomics research for precision medicine to autoimmune diseases in toxicity, adverse events and drug response.

Please include a separate Word-compatible document with this information.

#### Additional information:

#### How do I choose a title?

A good title should condense the Research Topic’s scope in a few words and capture the reader’s attention. In order to be attractive, you may want to keep in mind these three tricks: keep it **simple and brief**, use **appropriate descriptive words,** and **avoid abbreviations and jargon**.

#### What should I include in my description?

It should include background information as well as details for potential authors:

**Background**: Give the background information needed to understand your Research Topic (e.g., explain your subject, why it is important, what is already known, where the research is heading)

**Goal**: Present the underlying problem which you want to tackle in your Research Topic

**Scope**: Define the scope of your proposed article collection.

**Details for Authors:** Provide authors with specific guidelines (e.g., indicate the types of manuscripts you are interested in, list specific themes you would like potential contributors to address)

**SUBMISSION DEADLINES:**

Please enter your preferred submission deadlines below.

We suggest about 2 months from the acceptance of your proposal to the abstract submission deadline, and 4-6 months after that for the manuscript submission deadline, but you are free to decide on the time frame that works best for your team. If you would like to use the default deadlines described above, you are welcome to leave the boxes below blank.

|  |  |
| --- | --- |
| Abstract Submission | *+ 6 Months after acceptance* |
| Manuscript Submission | *+ 12 Months after acceptance* |

## List of Potential Authors

Use this[*Excel template*](http://fron.tiers.in/download/ExcelTemplate.xlsx) to list the name and email address (other fields are optional) of researchers who you think may be interested in submitting a manuscript to your Research Topic. We suggest making this list varied in terms of affiliation and geographic distribution, as this helps make sure the reach of your Topic will be as broad as possible.

You do not need to contact potential authors at this stage. After your Research Topic is approved by our Chief Editors, you will use this list to send a call for participation via our platform.

## Image (Optional)

An image helps improve the visibility of your Topic on our website. If you would like to include an image on your Research Topic homepage, please send a JPEG image. The image must be at least 400 pixels x 400 pixels. We suggest that you use a square image; if you use an image that is not square, it will be cropped.

Please be sure you have copyright permission to use the image (e.g., your own image, a stock/free use image such as from [Pixabay](https://pixabay.com/" \t "_blank), [The Metropolitan Museum of Art](http://mymodernmet.com/metropolitan-museum-of-art-open-access/), or [Shutterstock](https://www.shutterstock.com/" \t "_blank)), and provide details of the source or who should be acknowledged for photo credit.

**To submit your proposal, email me the following:**

* This form and a Word document containing your description
* Your list of potential contributors
* CVs for you and each of your co-Guest Editors

I will then perform a final check and send it to the Chief Editor for evaluation.