# 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 | [Shihcheng.Guo@gmail.com](mailto:Shihcheng.Guo@gmail.com)  [Guo.Shicheng@marshfieldresearch.org](mailto:Guo.Shicheng@marshfieldresearch.org) | Yes | Yes |
| Prof. Li Jin | Fudan University |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

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 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.

[Epigenomics and Epigenetics](https://loop.frontiersin.org/journal/all/section/455)

**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

Non-Invasive Cell-free DNA Biomarkers for Human Complex Diseases

KEYWORDS: 5 keywords

Cell-free, Non-invasive, Biomarker, Diagnosis, Prognosis

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.

Epigenetic modifications and regulators have been demonstrated to be significant changed in almost all the human complex disease including human cancers, autoimmune diseases, and psychological disorders. Since epigenetic elements abnormal frequently occurred in the early stage of the diseases, they are becoming the most promising biomarkers for diagnosis and prognosis. Meanwhile, epigenetic changes are inheritable and reversible; therefore, it shows great potential to be pharmacotherapy targets as well as real-time surveillance of disease progress. Recently, different epigenetic sequencing and detection techniques have been developed to analyze DNA and RNA methylation (m5C, 5hmC, m6A), histone modification (H4K16ac,H3K9me3, H3K27me3 etc.), ncRNA (miRNA, circRNA, lncRNA, ceRNA etc.) which provided a great opportunity for biomarker identification.

These scientific and technical progress has been provided the probability of the achievement for serials of latest clinical application, such as non-invasive cell-free DNA methylation biomarker, SHOX2, SPET9 methylation biomarker for high-risk individual screening. Meanwhile, histone deacetylase inhibitors (HDAC inhibitors) have been widely used in serials of disease, such as cancers, parasitic and inflammatory diseases, suggesting the promising potential of epigenetic modification in disease treatment.

Recently, epigenetic profiles have been applied to identify disease subtype for a better understanding of the disease pathology; therefore, these biomarkers would play more roles in personalized and precision medicine.

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 use epigenetic biomarker in the personalized and precision medicine, including:

1. Epigenetic biomarker identification and evaluation,
2. Novel detection and sequencing techniques on epigenetic assay,
3. Novel statistic approach and tools on epigenetic and genetic analysis.
4. Interaction identification between genetics and epigenetics in precision medicine.
5. Approach and strategy of personalized precision medicine based on integration of genetic and epigenetics.

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 | *+ 2 Months after acceptance* |
| Manuscript Submission | *+ 6 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.