**PNAS Template for Main Manuscript**

This PNAS template for the Main Manuscript may be used to organize your main text source file. The template is intended to provide a clearly organized PDF to facilitate the review process. Further information is available in our [Information for Authors](http://www.pnas.org/site/authors/procedures.xhtml#si).

**Using the template**

Paste the appropriate text from your manuscript into the relevant section of the template. You may maintain the template formatting, or reapply styles after pasting your text into the template. On the title page, complete the relevant description of the items in your main text and delete text that does not apply.

Figures should be placed on separate pages with legends set immediately below each figure. Table titles should be set immediately above each table.

References cited in the main text should be included in a separate reference list at the end of this file. Examples of the PNAS citation style are included below.

**Notes about submission**

The following items are required on the title page: **Title, Author Line, Author Affiliations, Corresponding Author information, Classification, Keywords**. Each of these items **must** be provided on the title page for us to proceed with processing your paper.

You are not required to adhere to the section order outlined below. For example, you may combine your Results and Discussion or use alternate section headings. Materials and Methods should be included after the Results and Discussion in most cases. If your paper does not include the standard section headings, please provide a brief explanation in the **Comments to Editorial Staff** field of the submission form.

You may include subheadings within the standard headings listed below. You may also include line numbers.

**Submitting your main manuscript**

Delete this first page, and then save your completed main text file as a PDF for submission, following instructions available [here](http://www.pnas.org/site/authors/procedures.xhtml#preparation).

*Updated January 2020*



**Main Manuscript for**

Paste manuscript title here.

Paste the full author list here. Please note that author names should be listed in first name, last name format, e.g., John A. Smith.

Paste the full affiliation list here.

\* Paste corresponding author name(s) here.

**Email:**  [xxxxx@xxxx.xxx](mailto:xxxxx@xxxx.xxx)

Paste ORCIDs (if any) here. Please note individual authors must also link their ORCID account to their PNAS account at [www.pnascentral.org](http://www.pnascentral.org).

**Classification**

Paste the major and minor classification here. Dual classifications are permitted, but cannot be within the same major classification.

**Keywords**

Paste the keywords here. There should be at least three and no more than five.

**Author Contributions**

Paste the author contributions here.

**This PDF file includes:**

Main Text

Figures 1 to X

Tables 1 to X

**Abstract**

Paste your abstract here. Please note it may not exceed 250 words. It may include up to three cited (non-numerical) references.

**Significance Statement**

Paste your significance statement here. Please note that it should not exceed 120 words, but should be at least 50 words in length. It should not include any references.

**Main Text**

**Introduction**

Paste your introduction here.

**Results**

Paste your results here.

**Discussion**

Paste your discussion here.

**Materials and Methods**

Paste your materials and methods section here.

**Acknowledgments**

Paste your acknowledgments here.

**References**

Paste your main manuscript references here. They should be listed in order of citation.

Example References:

1. J.-M. Neuhaus, L. Sticher, F. Meins, Jr., T. Boller, A short C-terminal sequence is necessary and sufficient for the targeting of chitinases to the plant vacuole. *Proc. Natl. Acad. Sci. U.S.A.* 88, 10362–10366 (1991).
2. E. van Sebille, M. Doblin, Data from “Drift in ocean currents impacts intergenerational microbial exposure to temperature.” Figshare. Available at [https://dx.doi.org/10.6084/m9.figshare.3178534.v2. Deposited 15 April 2016](https://dx.doi.org/10.6084/m9.figshare.3178534.v2.%20Deposited%2015%20April%202016).
3. A. V. S. Hill, “HLA associations with malaria in Africa: Some implications for MHC evolution” in Molecular Evolution of the Major Histocompatibility Complex, J. Klein, D. Klein, Eds. (Springer, 1991), pp. 403–420.

**Figures and Tables**

**Figure 1.** Type or paste legend here. Paste figure above the legend.

<insert page break here>

**Figure 2.** Type or paste legend here. Paste figure above the legend.

<insert page break here>

**Table 1.** Type or paste table title here. Paste table below the title.

<insert page break here>

**Table 2.** Type or paste table title here. Paste table below the title.