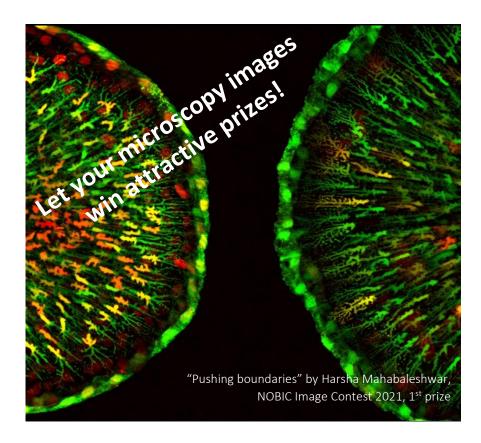
NOBIC Image Contest

2023

Scan to learn more:





NOBIC (<u>www.nobic.sg</u>), a joint LKCMedicine and SCELSE initiative established to support and advance optical bio-imaging, would like to invite all users of NOBIC imaging facilities (AOBIP at LKCMedicine and ABIF at SCELSE) to participate at NOBIC Image Contest 2023. The contest is open for image submission until **August 1st**, 2023. An international panel of judges comprising representatives from academia and industry will select three winners who will receive prizes contributed by the sponsor of the contest:



Carl Zeiss Pte Ltd

What can I win?

- Apple iPad 9th generation (64 GB)
- Apple HomePod
- Apple AirPods (3rd generation)

What images can I submit?

Any images acquired using the equipment at NOBIC imaging facilities. For more information refer to the contest website.

Who can participate?

Any user of NOBIC imaging facilities (AOBIP at LKCMedicine and ABIF at SCELSE).

How can I participate?

Visit the <u>contest website</u> to learn more, register and submit your images.

When can I submit my images?

Between 15/06/2023 and 01/08/2023.

If you have any further questions, contact the organisers at nobic.facilities@e.ntu.edu.sg.

NOBIC Image Contest 2023 – Terms and Conditions and a detailed guide for participants

A guide to participant registration and image submission:

- If you have an NTU account or an NTU associate account, fill in the integrated <u>Participant Registration and Image Submission Form</u>. Read what applies to **Case 1** below:
- If you have neither an NTU nor NTU associate account, fill in the <u>Participant Registration Form</u> and follow what applies to **Case 2** below:

Case 1 and Case 2:

- 1. Form Questions 1-4: Provide your name, email address and affiliation.
- 2. Form Questions 5 11: If others have contributed to the submitted image, you can list them as coauthors here (maximum 3 co-authors besides the submitting author). See **section B** for more details.
- 3. Form Questions 12 14: Provide a title of the image (as catchy or as descriptive as you choose) and a concise description of your image. The description is divided into a public part, which can be published together with your image (e.g. in the online gallery of finalists or elsewhere; refer to section E), and a private part accessible only for the panel of judges (who are bound by confidentiality agreement, see section D), which may contain information you do not wish to make public for the time being. The description should contain all essential information about the image, especially: the microscope and objective lens used, imaging modality, imaged area dimensions (unless indicated by a scalebar in the image), type of sample and main image processing steps leading to the submitted image.

Case 1:

- 4. Form Questions 15 17: Upload the image file and indicate your acceptance of the terms and conditions of the contest (see sections A F). Make sure that:
 - a. The submitted image follows the guidelines of **section C**.
 - b. The file name is identical to the image title (*Question 12*). Files with names not matching the corresponding image title may be excluded from the contest.
 - c. The submitted image is in a ready-to-view form (e.g. RGB image with the correct lookup tables applied), same as an image you would attach to a journal manuscript.

Case 2:

- 5. Send your image file to <u>nobic.facilities@e.ntu.edu.sg</u>. Use a file transfer service of your choice for files larger than accepted email attachment (e.g. FileSender).
- 6. Make sure that:
 - a. The submitted image follows the guidelines of **section C**.
 - b. The file name is identical to the image title (*Question 12*). Files with names not matching the corresponding image title may be excluded from the contest.
 - c. The submitted image is in a ready-to-view form (e.g. RGB image with the correct lookup tables applied), same as an image you would attach to a journal manuscript.
- 7. Form Questions 15 17: Confirm you have submitted the image file with the correct file name (same as the image title) and your acceptance of the terms and conditions of the contest (see sections A F).

A. General terms and conditions:

- 1. By submitting an image to NOBIC Image Contest 2023 (referred to as "contest" henceforward) the participant accepts these terms and conditions.
- 2. Only one image can be submitted at a time.
- 3. Each participant can submit up to 3 images, each image as a separate submission. Submissions exceeding the maximum number of 3 from the same participant will be excluded from the contest.
- 4. An image can be submitted only once. If multiple participants submit an identical image or images obviously derived from the identical raw image data, all such submissions will be disqualified from the contest.

B. Image authorship:

- 1. A participant can submit an image to the contest only if the participant is an author of the submitted image.
- 2. If multiple authors have contributed to an image submitted to the contest, it is the sole responsibility of the submitting author to ensure that:
 - a. Due credit is given to all contributing authors (see instructions on filling in the registration form).
 - b. All authors have given a permission to the submitting author to submit the image to the contest.
- 3. Only the submitting author or a co-author delegated by the submitting author are eligible to receive a prize in the case the respective image is selected by the panel of judges.

C. Image format and acceptable image processing:

- 1. Each submitted image file can contain only a single static colour (RGB) image. Videos, multi-page image files, image stacks or similar are not acceptable. However, the submitted image can be derived from multiple images by projections, stitching or any other acceptable processing (see **point 4** of this section for more details).
- 2. Any dimension of a submitted image should not exceed 4096 pixels and the file size should not exceed 100 MB.
- 3. Images should be submitted in standard image formats (preferably TIF/TIFF). Image files that cannot be opened by the panel of judges will be excluded from the evaluation. Loss of image quality caused by lossy image compression (e.g. in formats such as JPG/JPEG) may affect the ranking by the panel of judges.
- 4. Submitted images may be obtained from raw image data (the direct outputs of an imaging instrument) by standard and/or well documented image processing. Applying lookup tables, overlaying multiple channels, image cropping, rescaling image dimensions or adding scale bars are considered standard processing and do not need to be explicitly mentioned in the image description. Other acceptable image processing, such as but not limited to, image stitching, volume or surface rendering, maximum intensity projections, background subtraction, denoising, image deconvolution, spectral unmixing, image segmentation or super-resolution image rendering need to follow a well-documented processing pipeline (for example using a published algorithm or a standard tool in commercial software) and be mentioned in the description of the submitted image.

D. Image evaluation and awarding of prizes:

- 1. Images submitted to the contest will be evaluated by an independent panel of judges, whose identities will be announced together with the results of the contest.
- 2. The evaluation is anonymous; the panel of judges will not know the identities nor affiliations of the authors of the images. The only information about an image accessible to the panel of judges will be the image title and public and private descriptions (see instructions on filling in the registration form).
- 3. The members of the panel of judges are bound by a confidentiality agreement (similarly to reviewers in peer reviewed journals) which prohibits them from disclosing to third parties any of the information contained in the private image descriptions (see **instructions on filling in the registration form**) or from using the said information to advance their own interests.
- 4. The evaluation by the panel of judges will proceed in 2 rounds. In the first round, 10 finalists will be selected. In the second round, 3 winners (1st place, 2nd place and 3rd place) will be selected from among the 10 finalists selected in the first round. The winners will receive prizes contributed by the sponsor of the contest.

- 5. The evaluation and the choice of the finalists and the winners is fully within the discretion of the panel of judges. The judges are advised by the organisers to take the following aspects of the images into consideration:
 - a. Overall visual appeal of the image (How well would it do at the cover of a scientific journal or in a microscopy themed calendar?).
 - b. Technical quality of the image (sharpness, contrast, signal-to-noise ratio, absence of obvious artefacts, ...).
 - c. Information content of the image (Does the image appear to provide a lot of insight?).
 - d. Complexity and ingenuity of the experiment (How complex, advanced and novel does the whole imaging experiment, including the sample preparation and image processing, appear? How close does it seem to be to the limits of what is technically possible?).

E. Rights to use of the images submitted to the contest:

- 1. By submitting images to the contest, the participants give the organisers (NOBIC, LKCMedicine and SCELSE) and the sponsor of the contest the right to use the images at their respective websites and in other forms of electronic and/or printed presentations and promotional materials. Due credit to the author(s) of the images must be given in each case.
- 2. Images may be used only in such ways and in such contexts which cannot be deemed defamatory and which do not intent to harm the reputation or the interests of the authors of the images or the organisers or the sponsor of the contest.

F. Withdrawal from the contest:

1. Participants who want to withdraw from the contest may do so by writing to the organisers at nobic.facilities@e.ntu.edu.sg.