

TEM Artistry 360 Contest 2026

Transforming Electron Micrographs into Scientific Hand-Drawn Art

Part of the 360 Anniversary Celebration 2026

Organised by Oral Pathology 360 / Oromed 360 Academy

Participant Rules and Official Reference Image

This document contains the contest instructions and the official reference image. Please read the rules carefully before preparing your submission.

Quick principle: Use the official reference image provided in this document, create a hand-drawn labelled colour schematic, and submit the schematic with the reference image code.

About the Contest

- TEM Artistry 360 is an educational illustration contest designed to help dental students observe, interpret, and understand ultrastructural details more carefully.
- Participants will be provided with one official electron micrograph reference image. Each participant must study this image and convert it into a clear, labelled, hand-drawn colour schematic illustration.
- The goal is not only to make an attractive image, but to create a scientifically meaningful schematic that helps others understand the structure shown in the original image.

Who Can Participate?

- The contest is open to undergraduate dental students, interns, and postgraduate dental students / residents.
- Participants may be grouped into categories depending on the number and type of entries received.
- This is an individual contest. Team entries are not permitted.

What Participants Have to Do

- Use the official reference image provided in this document.
- Study the image carefully and identify the main visible structures.
- Create a hand-drawn labelled colour schematic based on the reference image.
- Submit the final schematic along with the required details, original source citation, and work-in-progress evidence.
- The schematic should faithfully represent the main visible structures in the original reference image.

Important Image Use Rules

- The reference image provided in this document is shared only for the TEM Artistry 360 educational contest.
- Participants must not download and circulate the original reference image separately.
- Participants must not post the original reference image on social media or use it in presentations, publications, notes, videos, or other online/offline material.
- Participants must not share this contest image document with others.
- Participants must not use the image for any purpose outside this contest.

What the Final Submission Should Include

1. Final labelled colour schematic
2. Reference image number FE-1
3. Brief schematic description, 2-4 lines
4. Participant details
5. Work-in-progress evidence

Important: The original reference image should not be included in the final public artwork. To help OP360 correctly acknowledge the original source later, participants must copy the source citation exactly as given below the reference image they selected.

Labels

- The schematic must be labelled clearly in English.
- Labels should identify the important visible structures in the reference image, such as secretory ameloblasts, Tomes' processes, secretory vesicles, stippled extracellular matrix, developing enamel, dentin, and the enamel–dentin relationship.
- Participants should avoid overcrowding the image with too many labels. Labels should be accurate, readable, and placed neatly.

Drawing Method

- Participants must create a hand-drawn colour schematic based on one of the official reference images.
- The drawing may be created using pencil/pen and colour pencils, sketch pens, markers, ink and colour media, or other paper-based drawing methods.
- The final drawing should then be scanned or photographed clearly and submitted as a digital file.
- Please ensure that the image is clear and well lit, labels are readable, the page is not tilted or shadowed, and the final file is suitable for viewing on screen.
- Digital enhancement, AI-generated artwork, and digitally created illustrations are not permitted for this contest.

AI and Originality Policy

This contest is intended to encourage careful observation, scientific interpretation, and hand-drawn scientific illustration skills.

The schematic must be created by the participant.

AI-generated artwork is not permitted. This includes images created using text-to-image or image-to-image AI tools.

Digitally created artwork is also not permitted for this edition of the contest, so that entries can be judged more fairly and transparently.

Participants must submit 1 work-in-progress images showing the development of the hand-drawn schematic. These may include the initial rough outline, a partially completed drawing, the colouring stage, or the labelling stage.

Shortlisted participants may be asked to provide additional process evidence or the original physical drawing for verification.

Entries may be disqualified if AI-generated artwork, digitally created artwork, copied artwork, or misrepresentation is suspected.

Scientific Accuracy

- The schematic should remain faithful to the original reference image.
- Participants should not add imaginary structures, decorative details, or unrelated elements that are not supported by the reference image.
- Colours may be used creatively, but they should help understanding rather than distract from the scientific content.

Submission Format

- Final schematic: JPG, PNG, or PDF.
- Use a clear, high-resolution scan or photograph; 300 dpi is preferred if scanned.
- Suggested file name: TEM360_[ParticipantName]_[Category]_[FE1].
- Example: TEM360_AshaRao_UG_FE1.

Submission Details to Include

- Full name
- Degree/year
- Institution
- City and country
- Email address
- Category: Undergraduate / Intern / Postgraduate
- Reference image number used
- Original source citation for the reference image used
- Title of schematic
- Brief figure legend
- Drawing materials used
- 1 work-in-progress images
- Final scanned/photographed schematic

For the source citation: Please copy the citation exactly as provided below the selected reference image in this document.

Judging Criteria

Criterion	Marks
Scientific accuracy	40
Clarity and correctness of labelling	25
Faithful representation of the reference image	20
Visual clarity, neatness, and educational value	15
Total	100

The judges' decision will be final.

Certificates and Recognition

- All eligible participants will receive a participation certificate.
- Selected entries may receive achievement certificates, recognition, and/or prizes as announced by Oral Pathology 360.
- Selected schematics may be displayed by Oral Pathology 360 as part of the Anniversary Celebration showcase, with credit to the participant.

Declaration

By submitting an entry, the participant confirms that:

- The submitted schematic is their own original work.
- AI image-generation tools were not used to create the schematic.
- Digitally created artwork was not used for the schematic.
- The reference image was used only for this contest.
- The original reference image has not been posted, circulated, or reused elsewhere.
- Oral Pathology 360 may display the submitted schematic for educational and promotional purposes related to the contest, with participant credit.
- The participant has provided accurate details in the submission.

Source Acknowledgement

The reference image used for this contest is selected from an open-access / appropriately licensed educational source and is provided only for this contest activity.

Participants must confirm that their submission is based on reference image FE-1. OP360 will retain and use the original source citation for acknowledgement where required

Public display of entries will acknowledge the original source appropriately.

Important Links and Dates

Item	Details
Submission deadline	17 August 2026

Submission form	https://forms.gle/f3YbPWb77uu1tBjE9
Result announcement	28 August 2026 - 360 Anniversary Event. The event link will be shared with registered participants by email.
Contact email	info@oromed360academy.com

Image Plate and Scientific Guidance

Education • Awareness • Collaboration

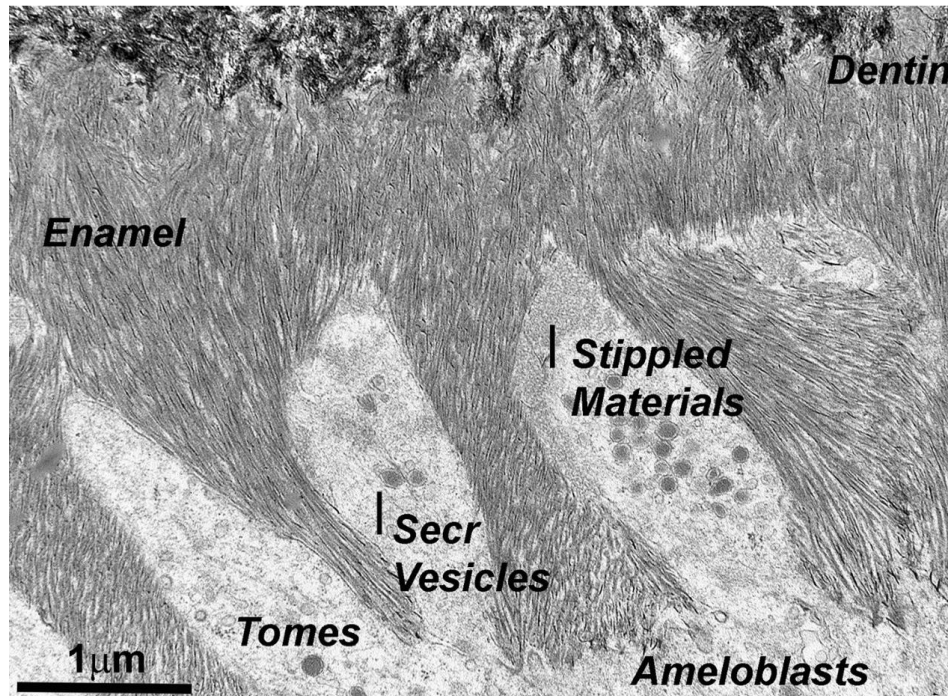
To make judging fair and comparable, all participants will work from the same official reference image.

The following page explains the scientific content of the reference transmission electron micrograph before participants begin their artwork. The contest is not an identification exercise. Participants should use colour, line, texture, emphasis, or other hand-created artistic methods to make the structures and their relationships easier to understand while preserving the original ultrastructure.

For every image:

- Follow the scientific description and structure list supplied.
- Preserve the original scale bar and scientifically relevant details.
- Clarify the micrograph rather than replacing it with an unrelated illustration.
- Keep the supplied citation and attribution with any displayed or published version.

FE-1 | Developing enamel and the secretory ameloblast interface



WHAT THIS IMAGE SHOWS

This micrograph shows the interface between secretory ameloblasts and newly forming enamel. The ameloblasts occupy the lower part of the image and extend Tomes' processes toward the developing enamel. Secretory vesicles are visible near the apical region of the cells. Between the cells and the more organised enamel is extracellular matrix containing stippled material. The image shows how ameloblast shape and secretion contribute to organised enamel formation.

STRUCTURES AND RELATIONSHIPS TO REPRESENT CLEARLY

Secretory ameloblasts

Tomes' processes

Secretory vesicles

Stippled extracellular matrix

Developing enamel

Dentin and the enamel–dentin relationship

The transition from the ameloblast surface to forming enamel

ARTISTIC OBJECTIVE: Distinguish the ameloblasts, Tomes' processes and vesicles from the extracellular matrix, enamel and dentin. Make the direction of enamel formation and the cell–matrix relationship easy to understand.

SOURCE, CITATION AND ATTRIBUTION

Full citation: Pandya M, Lin T, Li L, Allen MJ, Jin T, Luan X, Diekwisch TGH. Posttranslational Amelogenin Processing and Changes in Matrix Assembly During Enamel Development. *Frontiers in Physiology*. 2017;8:790. doi:10.3389/fphys.2017.00790.

Required attribution: Adapted from Figure 1A in Pandya et al. (2017), *Frontiers in Physiology*, 8:790, doi:10.3389/fphys.2017.00790. Licensed under CC BY.

Retain the original scale bar. Do not alter, obscure, or remove scientifically relevant structures.

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