

DIATOME

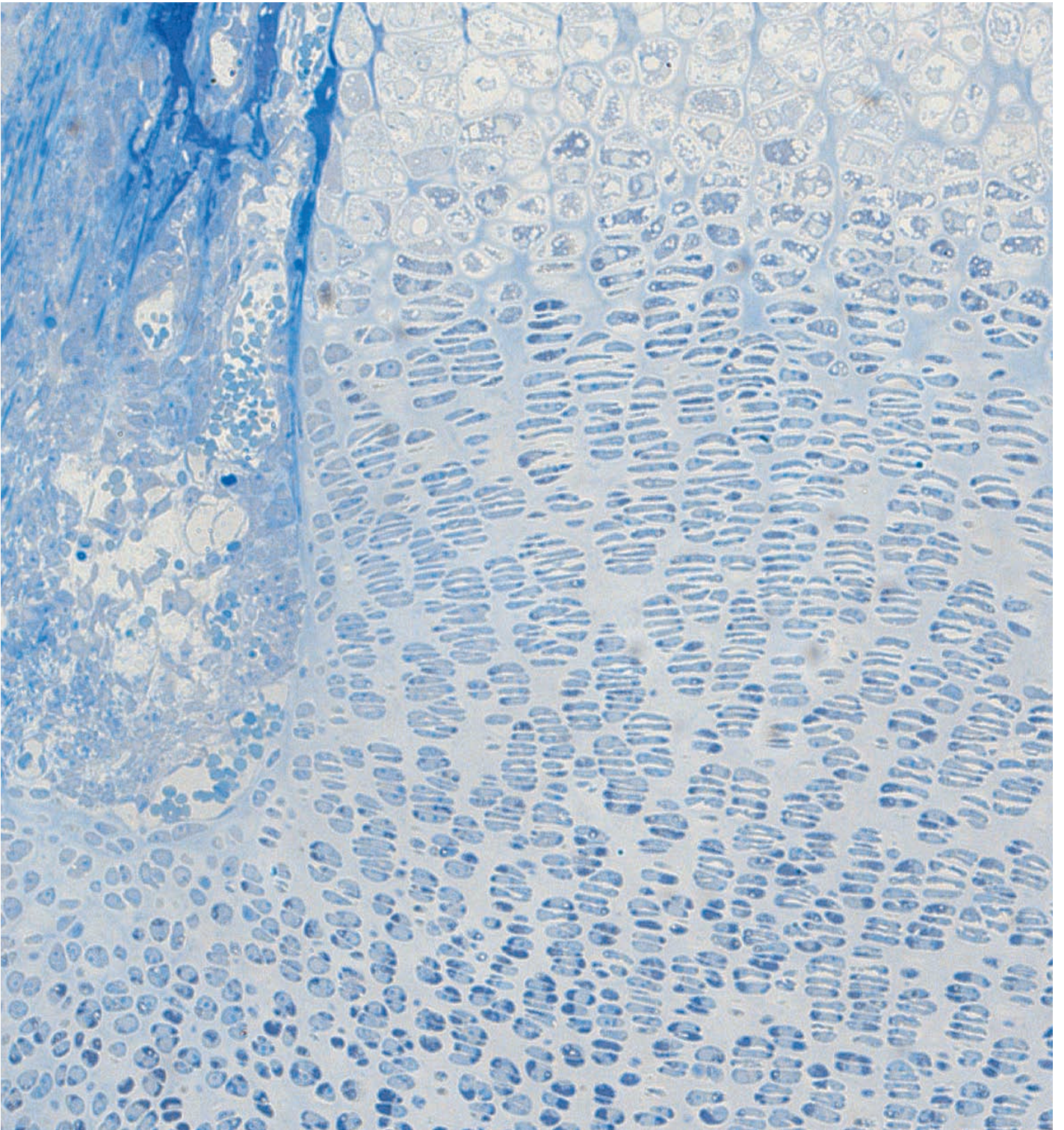
histo

High quality diamonds guarantee perfect sections and a durable edge

Easy wetting cutting edge

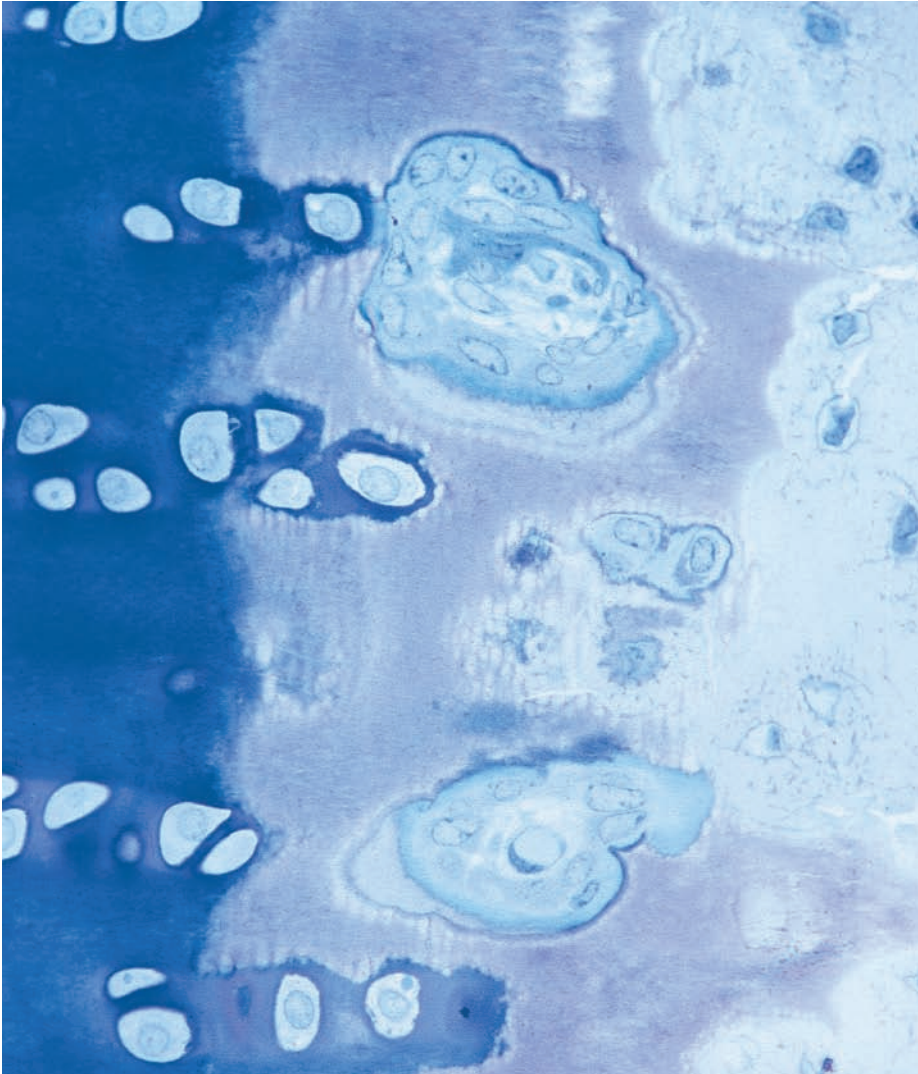
Optimized serial sectioning

Large boat for easy pick-up





The diamond knife for light microscopy



◀◀
Nondecalcified rat bone.
Scale: 35 mm = 100µm.
Daniel Studer, Anatomisches Institut, Bern.

▲
E. B. Hunziker, M. E. Müller Institute for
Biomechanics, University of Bern.
Rabbit joint, calcified cartilage/bone. X760

histo histo cryo

Area of application

The histo knife is designed for the sectioning of hard and soft biological and material research specimens, non embedded or embedded in acrylic or epoxy resins. (Ref. Reymond).

Our histo knives can be used on all ultramicrotomes as well as on microtomes with a retraction of the specimen arm in the return phase.

Resharpener service:

A re-sharpened Diatome diamond knife demonstrates the same high quality as a new knife.

Even knives purchased in previous years can continue to be resharpened.



Our histo cryo knives are delivered with a boat for wet sectioning using a DMSO/water mixture or in triangular holders for dry sectioning. They are made from a special copper-nickel alloy, which guarantees the best possible thermal conduction.

histo Jumbo

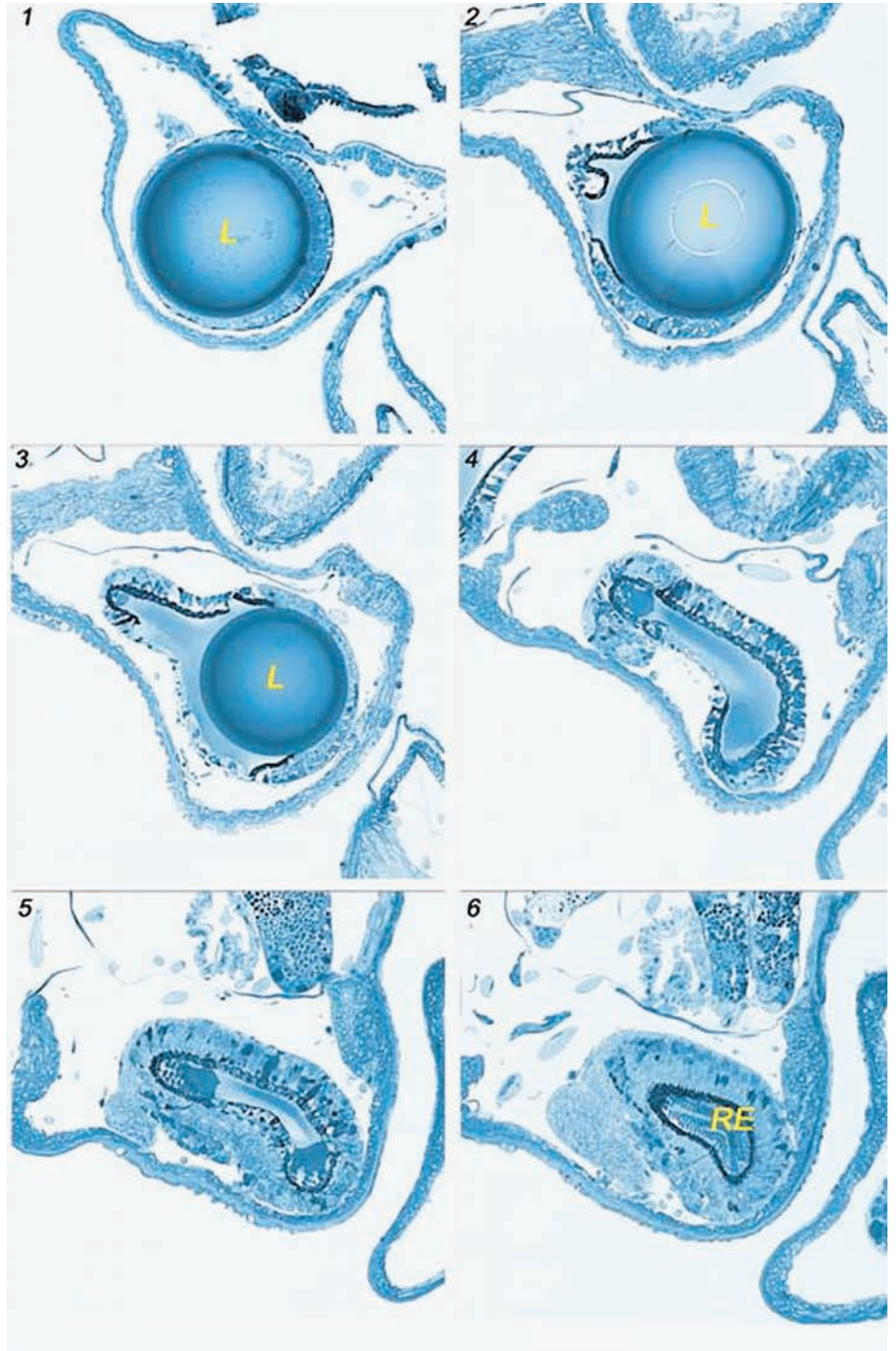


For 3D reconstruction it is imperative not to lose a single section (Ref. Blumer).

The large Jumbo boat as well as the adhesive (Pattex compact by Henkel) applied to the side of the sample block increase the distinct advantages of our histo knives.

They allow:

- Easy production of section ribbons (0.5-2 μ m)
- No section loss
- No folding
- The same orientation of all sections
- Easy collection of section ribbons
- Multiple ribbons on one glass slide
- Perfect for Immuno-histo-chemistry.



▲
Eye of *A. peroni*: photographic sequence of some semithin sections of a complete serie through the eye.

L = lens; RE = retina.

Michael J.F. Blumer, Institut für Zoologie, Universität Wien.

Reprinted from: Ribbons of semithin sections: an advanced method with a new type of diamond knife. *Journal of Neuroscience Methods* 120 (2002 11-16), with permission from Elsevier.

Specifications

histo

Knife angle:	45°
Cutting range:	0.2 - 5µm
Sizes:	4mm, 6mm, 8mm

histo cryo

Knife angle:	45°
Cutting range:	0.2-5µm
Sizes:	4mm, 6mm

histo Jumbo

Knife angle:	45°
Cutting range:	0.5-2µm
Sizes:	6mm, 8mm

References

O.L. Reymond: The «semi» diamond knife: a substitute for glass or conventional diamond knives in the ultramicrotomy of thin and semi-thin sections. Bas. Appl. Histochem. 30, pp. 487-494, 1986.

M.J.F. Blumer, P. Gahleitner, T. Narzt, C. Handl, B. Ruthensteiner: Strips of semi-thin sections: an advanced method with a new type of diamond knife. Journal of Neuroscience Methods 120, pp. 11-16, 2002.

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M.J.F. Blumer: Development of a unique eye: photoreceptors of the pelagic predator *Atlanta peroni* (Gastropoda, Heteropoda). Zoomorphology 119, pp. 81-91, 1996.

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