

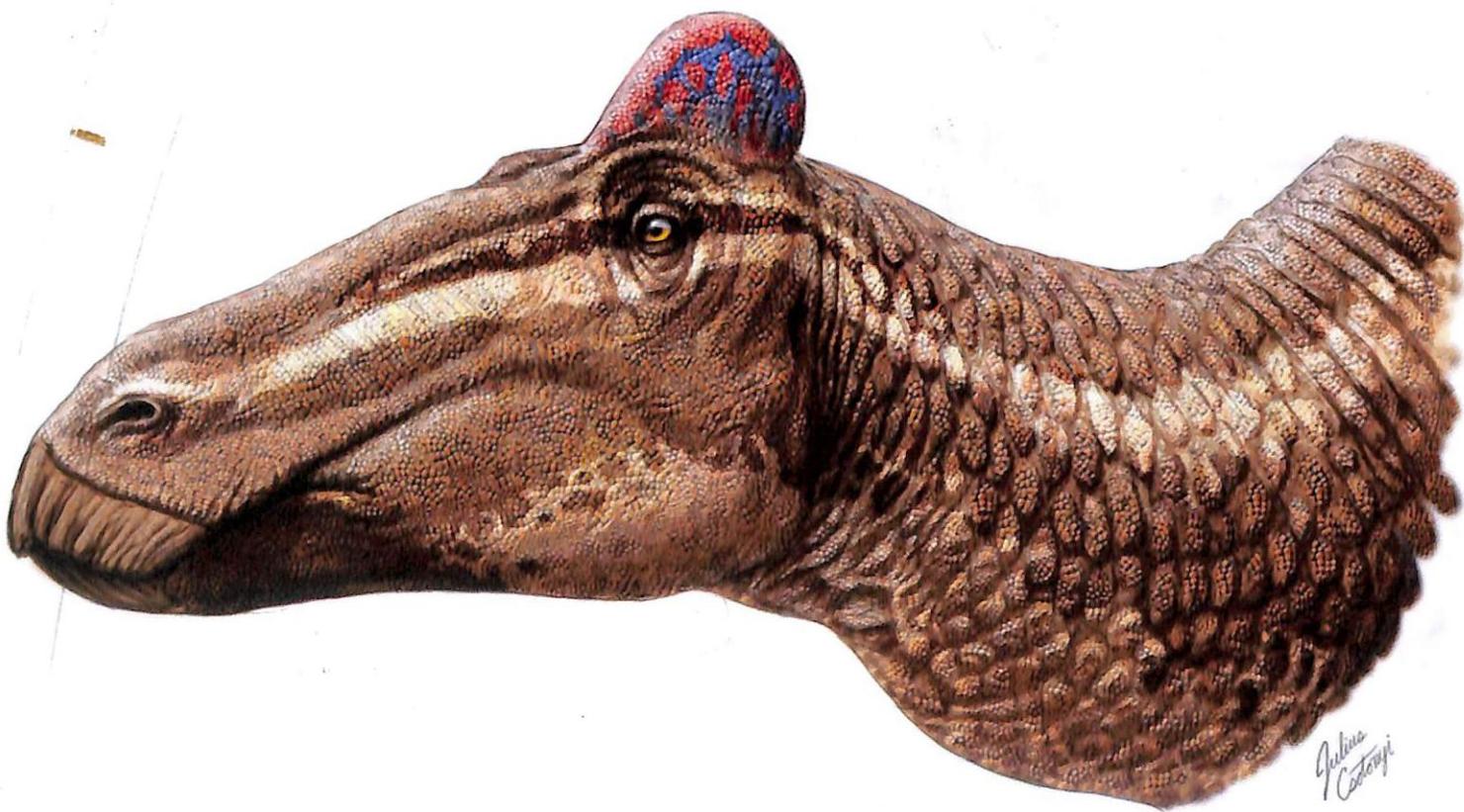
# Current Biology

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A Soft-Tissue Crest in a Dinosaur

# Current Biology

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**On the cover:** The squid *Sepioteuthis lessoniana* uses its large eyes to catch prey with a remarkably accurate tentacular strike. In this issue, Chung and Marshall (pages R64–R65) describe an unexpected defocused region of the eye looking along the strike

direction. Combined with a dynamic head-bobbing behavior, this apparently counteradaptive “retinal bump” creates a unique range-finding mechanism to target prey. Image by Wen-Sung Chung.

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On the cover: In the life cycle of a moon jelly (*Aurelia aurita*), a polyp transforms into a cone-like stack of tiny jellyfishes that later on detach from each other and start an independent planktonic life.

In this issue, Fuchs, Wang, and colleagues (pages 263–273) describe the molecular machinery that controls this seasonal polyp-to-jellyfish transition. Image by Friederike Anton-Erxleben.

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On the cover: A hornless female goat heterozygous for the polled intersex syndrome (PIS) mutation, which also leads to XX sex reversal in homozygous goats. The origin of sex reversal was unclear because of the complexity of the regulatory PIS

mutation involving both *FOXL2* and three lncRNAs. In this issue, Boulanger et al. (pages 404–408) demonstrate that *FOXL2* knockout in the goat is sufficient to cause a female-to-male sex reversal. Image by Eric Pailhoux.

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On the cover: A male Mauritius kestrel (*Falco punctatus*) surveys the Bambous Mountains from a perch near to his cliff-top nesting cavity. Endemic to the island of Mauritius, this threatened species persists in a highly modified forest-agriculture landscape mosaic. Previous work suggests that environmental conditions experienced in early life can have long-lasting effects on wild animals, but the long-term effects of habitat change caused by humans have yet to be explored in this context. In this issue, Cartwright, Nicoll, and colleagues (pages 536–540)

report that adult kestrels born in agricultural territories shift investment in reproduction to earlier in life, at the expense of late-life performance. They also survive less well as young adults. This change in life history enabled the birds to compensate for their poor start in life, representing an example of an adaptive, plastic response to contemporary environmental change. Given the scale of human-induced habitat change, such legacy effects may be widespread in wild populations. Image © Sam Cartwright.

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On the cover: A black-capped chickadee (*Poecile atricapillus*), one of two chickadee species that hybridize in a long, narrow zone extending from New Jersey to Kansas in the United States. The more southern species, the Carolina chickadee (*P. carolinensis*), is morphologically very similar. In this

issue, Taylor et al. (pages 671–676) show, using a novel combination of genomic, climate, and citizen science (eBird) data, that the hybrid zone between these common forest birds has moved 11 km northward over the past decade, likely in response to climate change.

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On the cover: Right lateral view of the fossil skull of the newly described extinct porpoise species *Semirostrum ceruttii*. This computed tomography reconstruction reveals the lower jaw extending significantly beyond the upper jaw. No mammal that we know of has such a prognathous mandible, but its similarity to particular fish and bird species

implies convergence for a skim feeding style, probably near the sea floor. In this issue, Racicot et al. (pages 774–779) demonstrate a potential probing and skimming function for the mandible, further supported by tooth wear, attributes of the skull, and postcrania. Image by Rachel Racicot.

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acidification, vacuolar collapse, and clearance of individual cells are discernible during the cell death process. Time progresses from top to bottom; the image is mirrored. In this issue, Fendrych, Van Hautegem, et al. (pages 931–940) analyze programmed cell death in lateral root cap cells. Image by Matyás Fendrych.

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On the cover: Ogre-faced spiders (*Deinopis* spp., family Deinopidae) make highly modified orb webs, as demonstrated here by this species from Cuba. Deinopoids have long been thought to be the sister group of the classical orb weavers, Araneoidea; however, phylogenomic research published in this issue

by Bond et al. (pages 1765–1771) and Fernández et al. (pages 1772–1777) dramatically alters our understanding of the relationship between these groups, suggesting ancient origin and multiple losses of the orb web. Image used with permission from Dr. Matjaž Kuntner, Ljubljana, Slovenia.

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G.K. Pattanayak, C. Phong, and M.J. Rust

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C. Forzani, E. Aichinger, E. Sornay, V. Willemsen, T. Laux, 1939  
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**Endogenous Species of Mammalian Nonmuscle Myosin IIA and IIB Include Activated Monomers and Heteropolymers**

M.S. Shutova, W.A. Spessott, C.G. Giraudo, and T. Svitkina 1958

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Y. Chen and H. Amrein

1969

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B. Chu, V. Chui, K. Mann, and M.D. Gordon

1978

**Feature-Based Attention Elicits Surround Suppression in Feature Space**

V.S. Störmer and G.A. Alvarez

1985

**Individual Behaviors Dominate the Dynamics of an Urban Mountain Lion Population Isolated by Roads**

S.P.D. Riley, L.E.K. Serieys, J.P. Pollinger, J.A. Sikich, L. Dalbeck, R.K. Wayne, and H.B. Ernest

1989

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R. Hopkins, R.F. Guerrero, M.D. Rausher, and M. Kirkpatrick

1995

**Antibiotic Treatment Selects for Cooperative Virulence of *Salmonella Typhimurium***

M. Diard, M.E. Sellin, T. Dolowschiak, M. Arnoldini, M. Ackermann, and W.-D. Hardt

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C.A. Armstrong, S.R. Pearson, H. Amelina, V. Moiseeva, and K. Tomita

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On the cover: A 2.5 mm-long beetle equivalent of a chemical factory. *Claviger longicornis* is a myrmecophile, specialized for the infiltration of ant societies. Eyeless and flightless, the thick orange brushes of hairs exude compounds to behaviorally manipulate worker ants, which feed *Claviger* mouth-to-mouth and carry it to brood galleries where it targets ant eggs and larvae. In this

issue, Parker and Grimaldi (pages 2428–2434) report *Protoclaviger trichodens*, a 52-million-year-old transitional fossil relative that captures the extreme morphological transformation that adapted these beetles to a life of ant deception—back when ants were just beginning their ascent to ecological dominance. Image created by Nikola Rahme and used with permission.

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M. Gross

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On the cover: A paper in this issue from Basiri et al. (pages 2622–2631) shows that a highly conserved group of proteins mutated in Meckel-Gruber Syndrome comprise a ciliary gate (*Cep290-GFP*, green) that continuously migrates away from the centriole (*Ana-1-tdTomato*, red) to compartmentalize the

site of cilium assembly. Unlike most cilia, the axoneme of *Drosophila* spermatid cilia is not compartmentalized, but is instead exposed to the cytoplasm along most of its length (anti-acetyl-tubulin, cyan). (Image credit: Marcus Basiri.)

If you are preparing a paper that you think might be suitable for *Current Biology*, just send a presubmission enquiry that includes the abstract of the paper, and we shall get back to you very quickly — usually within 24 hours — with our editorial views. The enquiry should ideally be sent by email to the editors at [cbiol@current-biology.com](mailto:cbiol@current-biology.com).

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## Erratum

A Unique Set of Centrosome Proteins Requires Pericentrin for Spindle-Pole Localization and Spindle Orientation	C.-T. Chen, H. Hehnly, Q. Yu, D. Farkas, G. Zheng, S.D. Redick, H.-F. Hung, R. Samtani, A. Jurczyk, S. Akbarian, C. Wise, A. Jackson, M. Bober, Y. Guo, C. Lo, and S. Doxsey	2975
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On the cover: A green woodhoopoe, *Phoeniculus purpureus*, next to a tree cavity. Tree cavities, which are crucial for both survival and reproductive success, represent the limiting resource for groups of these territorial, cooperatively breeding birds. In this issue, Radford and Fawcett (pages 2935–2939) show that conflicts between neighboring groups have a

lasting influence on decisions concerning roost cavities. Their results demonstrate that both the intensity and outcome of intergroup interactions affect resource defence and associated within-group behavior many hours later, making further links between war and peace. Image by Warwick Tarboton (<http://www.warwicktarboton.co.za/>).