

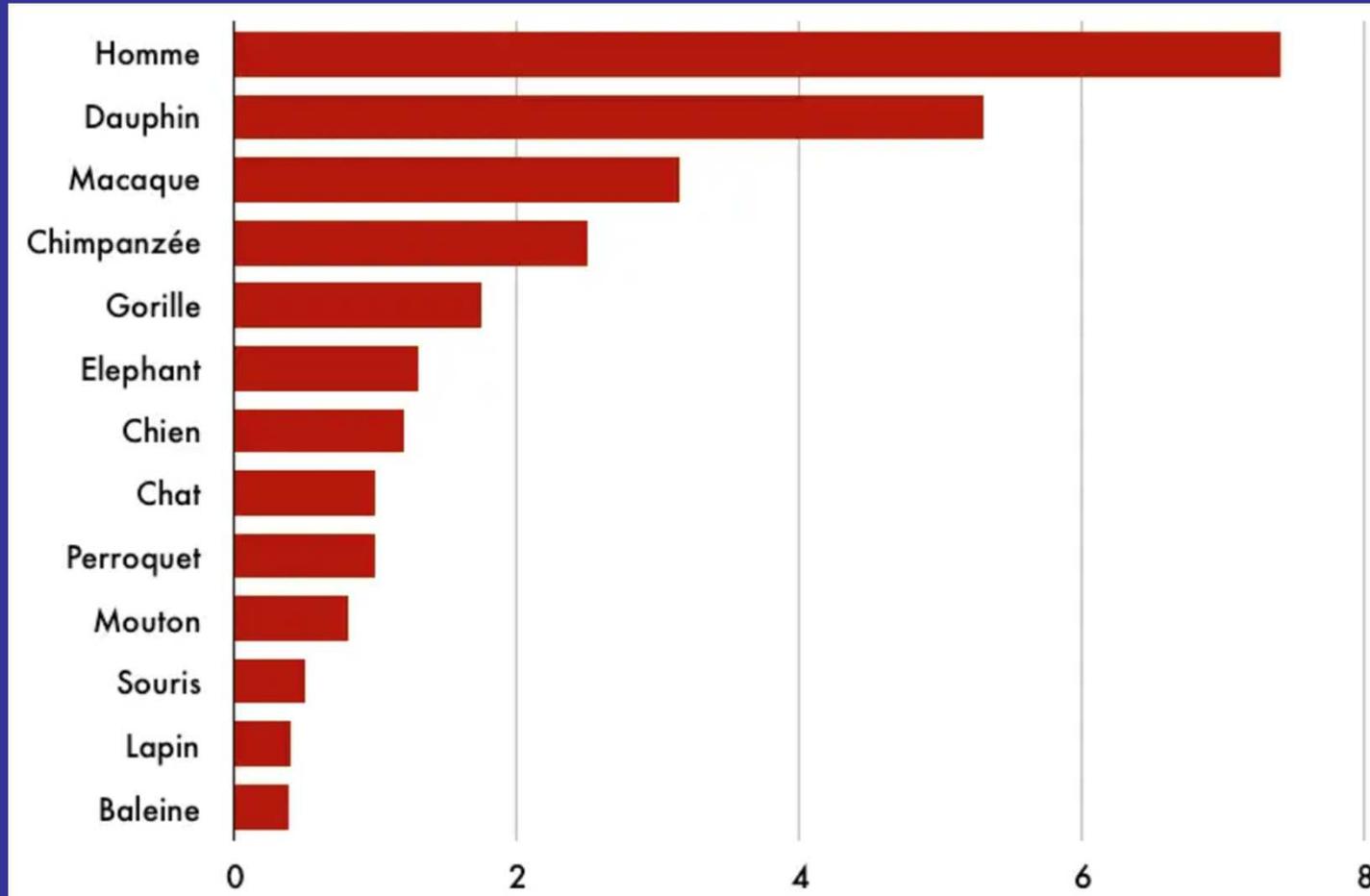
**BIPÉDIE, ENCÉPHALISATION ET
REPRODUCTION**



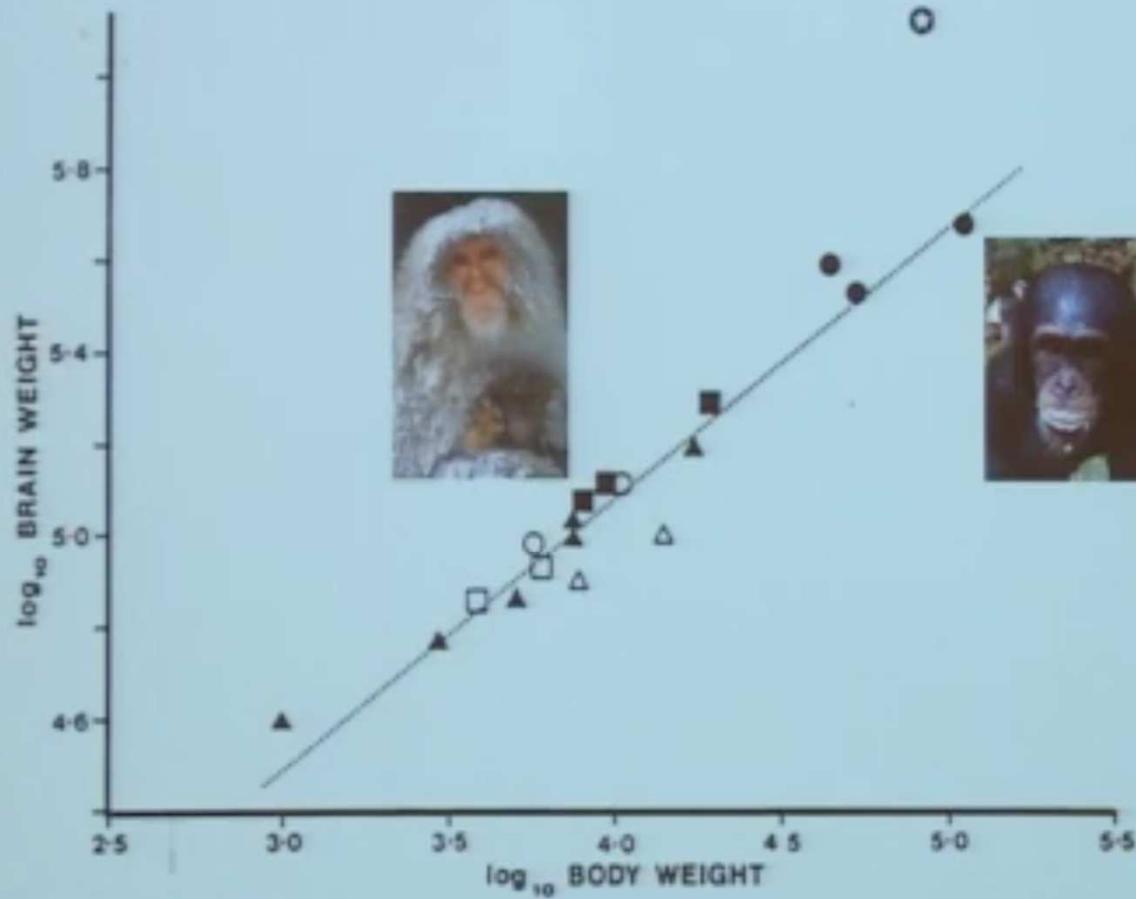
Xavier Capelle

Coefficient d'encéphalisation

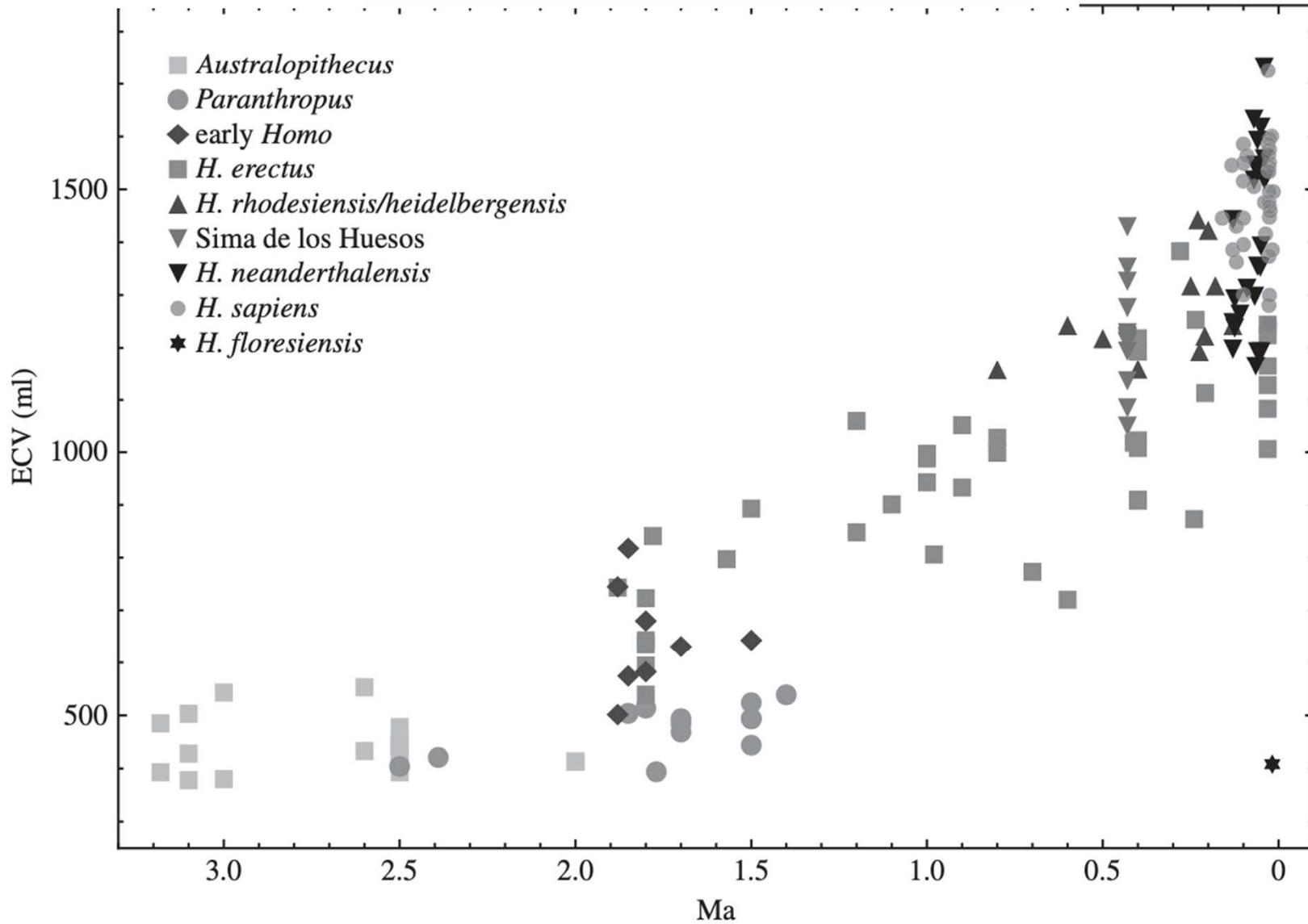
JLGO 2023

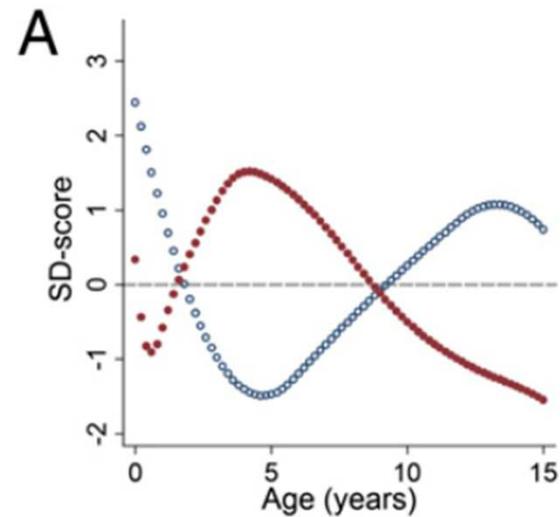
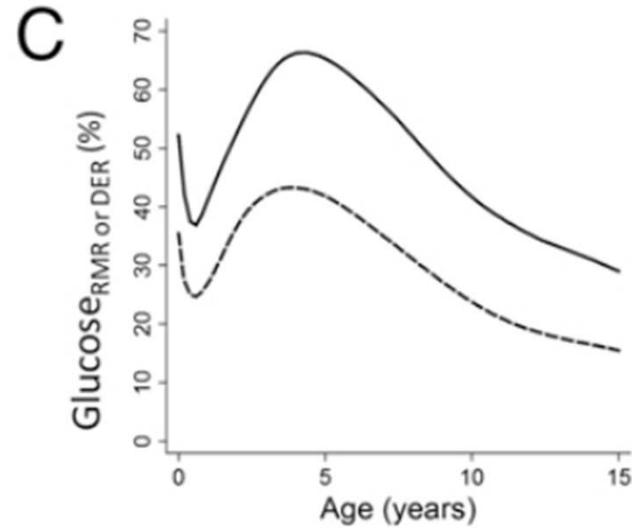
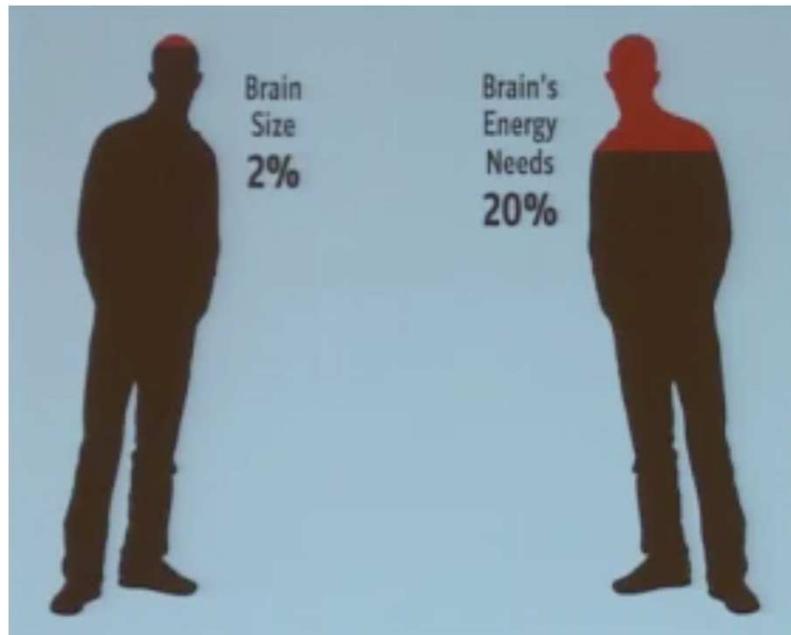


Taille du cerveau et masse corporelle chez les Catarrhini



(Martin 1983)





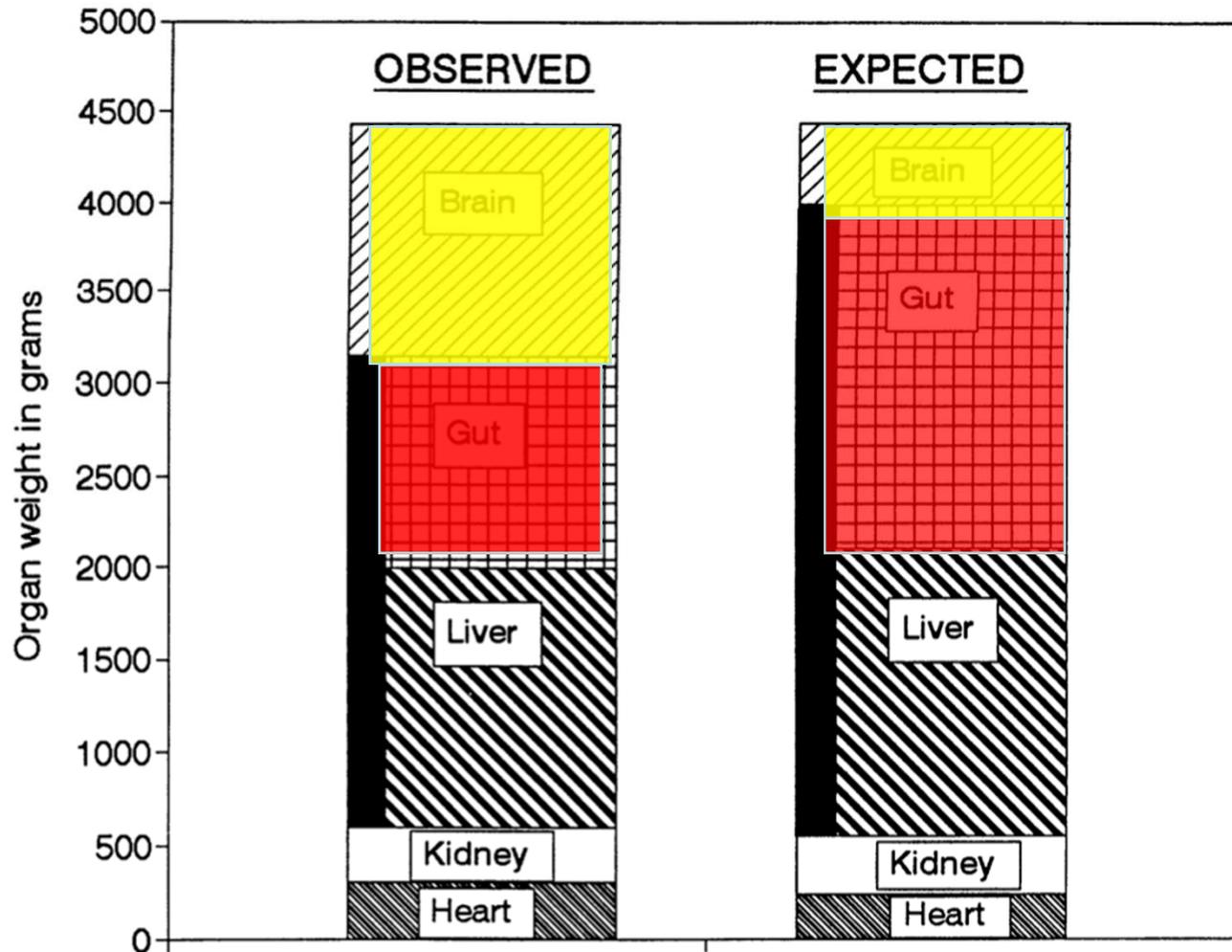
Metabolic costs and evolutionary implications of human brain development

Christopher W. Kuzawa^{a,b,1}, Harry T. Chugani^{c,d,e}, Lawrence I. Grossman^f, Leonard Lipovich^{e,f}, Otto Muzik^d, Patrick R. Hof^g, Derek E. Wildman^{f,h,i}, Chet C. Sherwood^j, William R. Leonard^a, and Nicholas Lange^{k,l}

The Expensive-Tissue Hypothesis

The Brain and the Digestive System in Human and Primate Evolution¹

by Leslie C. Aiello and Peter Wheeler



Metabolic acceleration and the evolution of human brain size and life history

Herman Pontzer^{1,2}, Mary H. Brown³, David A. Raichlen⁴, Holly Dunsworth⁵, Brian Hare⁶, Kara Walker⁶, Amy Luke⁷, Lara R. Dugas⁷, Ramon Durazo-Arvizu⁷, Dale Schoeller⁸, Jacob Plange-Rhule⁹, Pascal Bovet^{10,11}, Terrence E. Forrester¹², Estelle V. Lambert¹³, Melissa Emery Thompson¹⁴, Robert W. Shumaker^{15,16,17} & Stephen R. Ross³

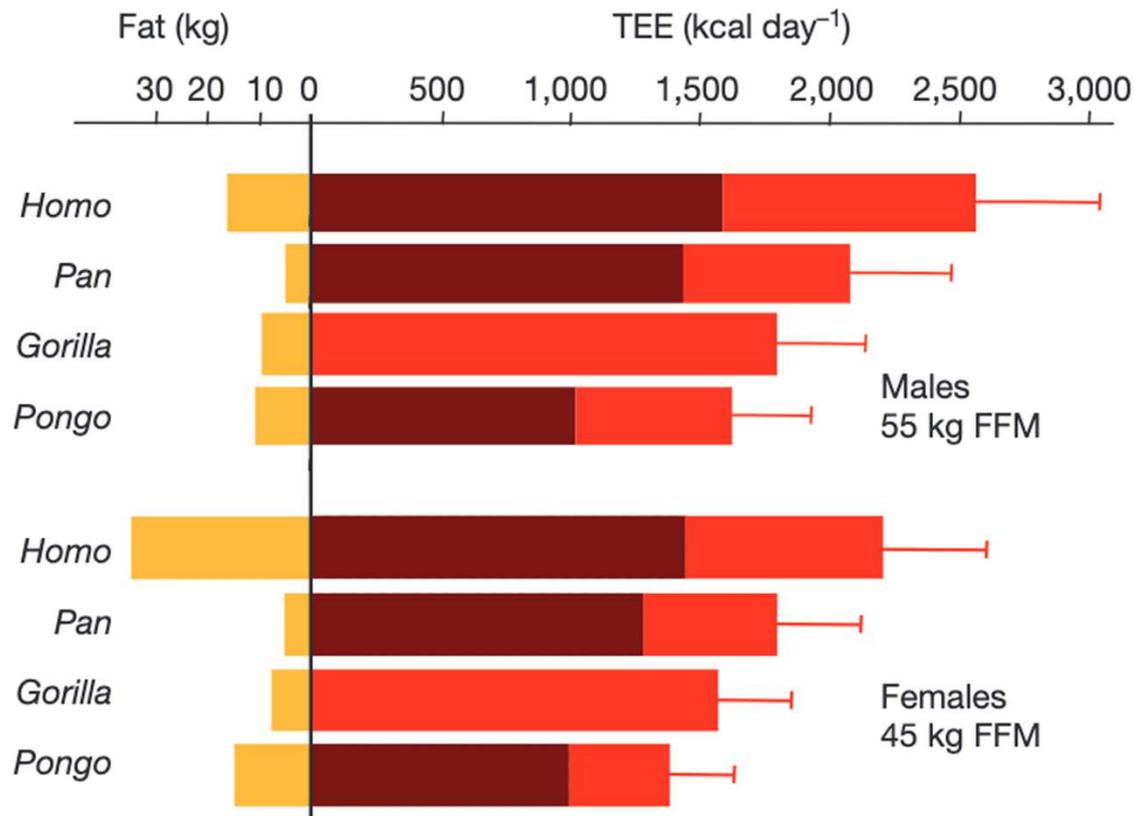
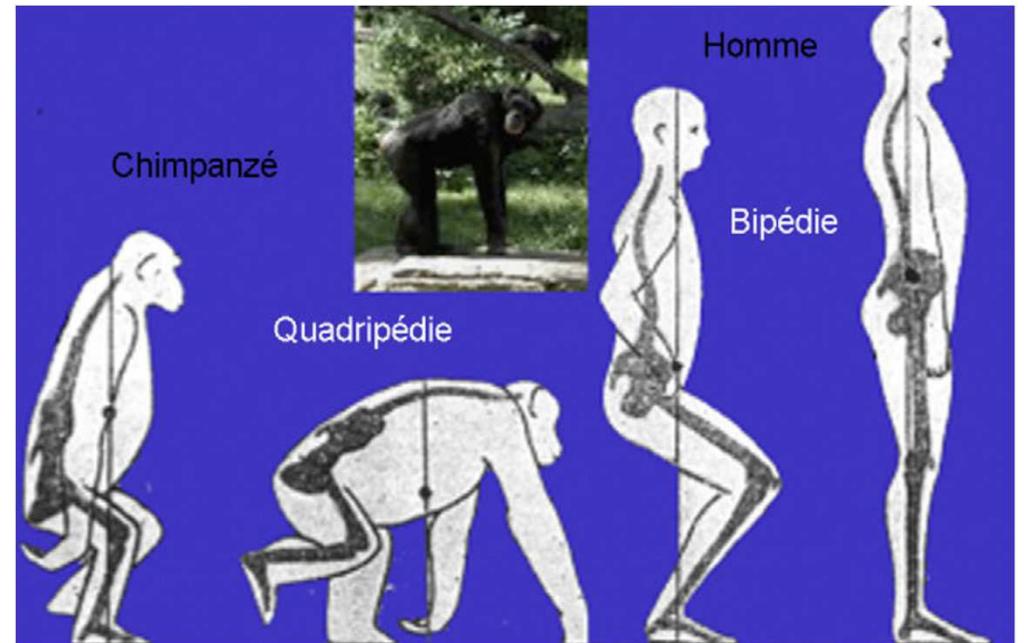
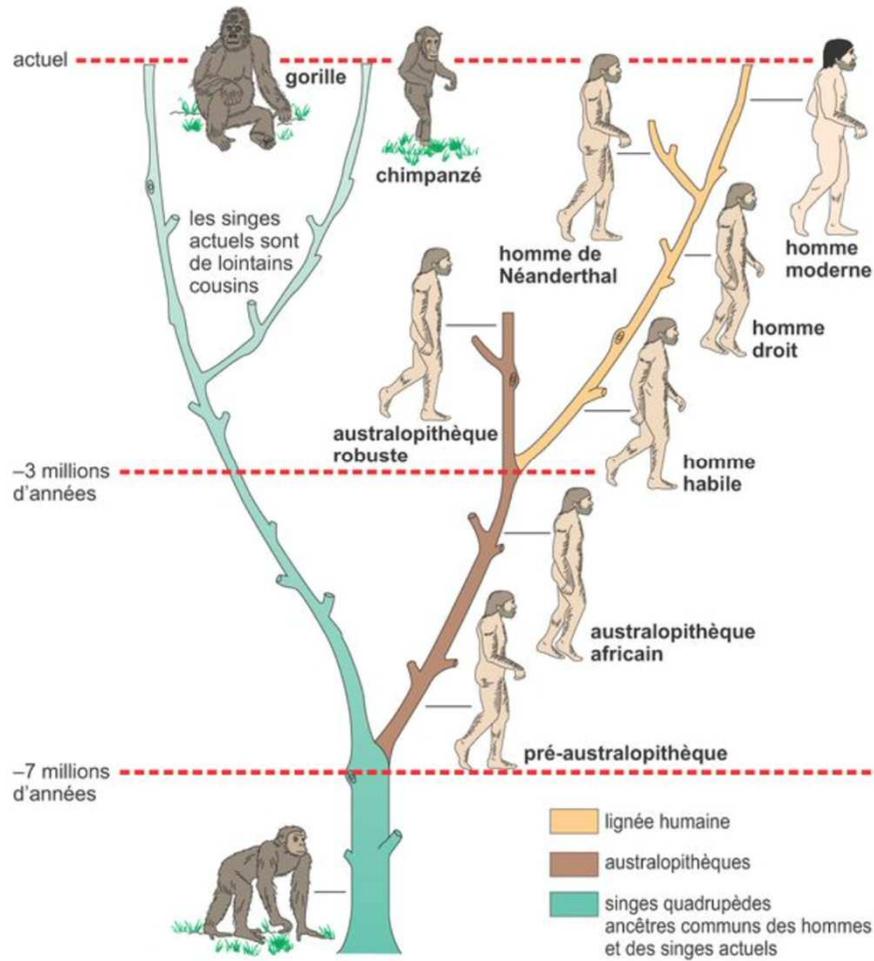


Figure 2 | Predicted TEE, BMR and fat mass for adult hominoids. Values are estimated for males (55 kg FFM) and females (45 kg FFM), using the same FFM across genera. TEE (red bars) is estimated from FFM, fat mass and genus using model C in Supplementary Table 3; error bars represent model standard error. BMR (darker red regions) is estimated from body mass (Methods and Extended Data Fig. 2); no BMR data are available for *Gorilla*. Fat mass (yellow bars) is calculated from FFM using body fat percentages in Table 1.



Arbre d'évolution de la lignée humaine

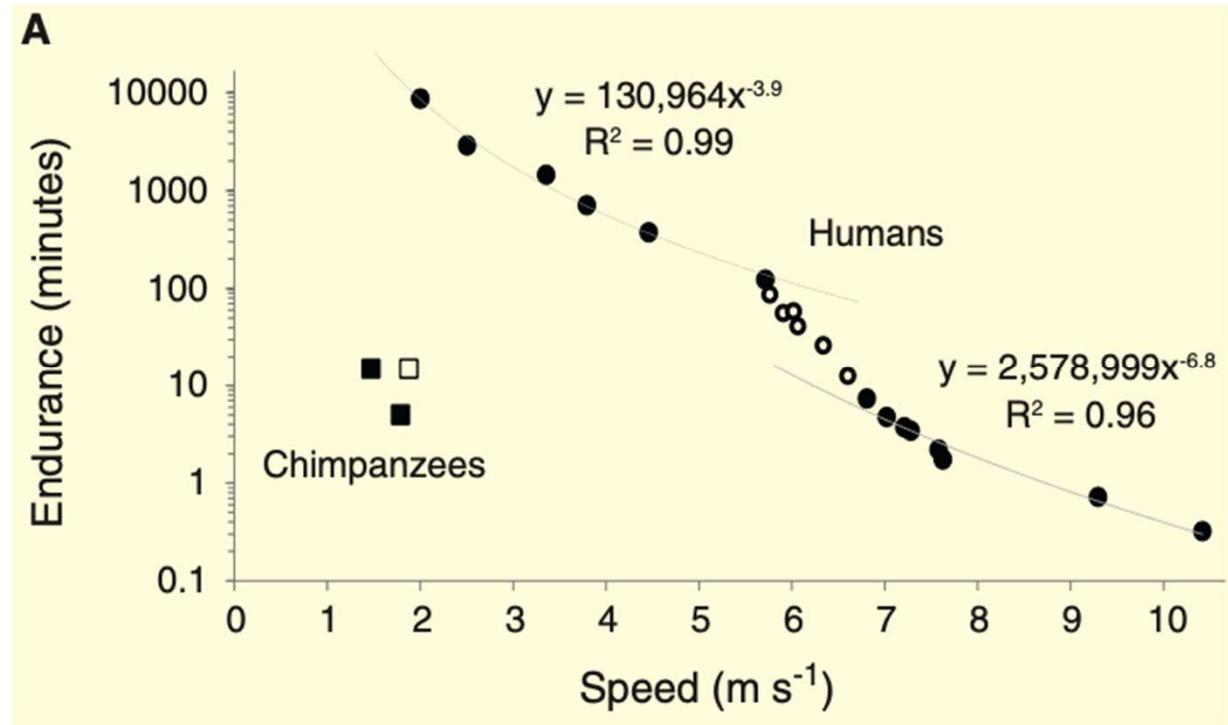
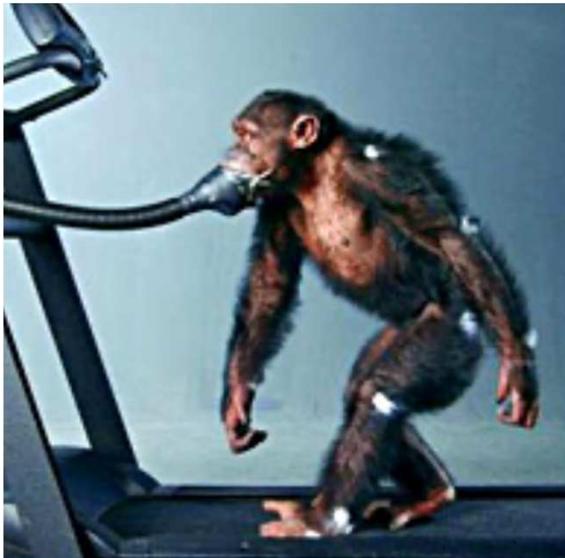


Efficiency de la Bipédie et de la thermorégulation



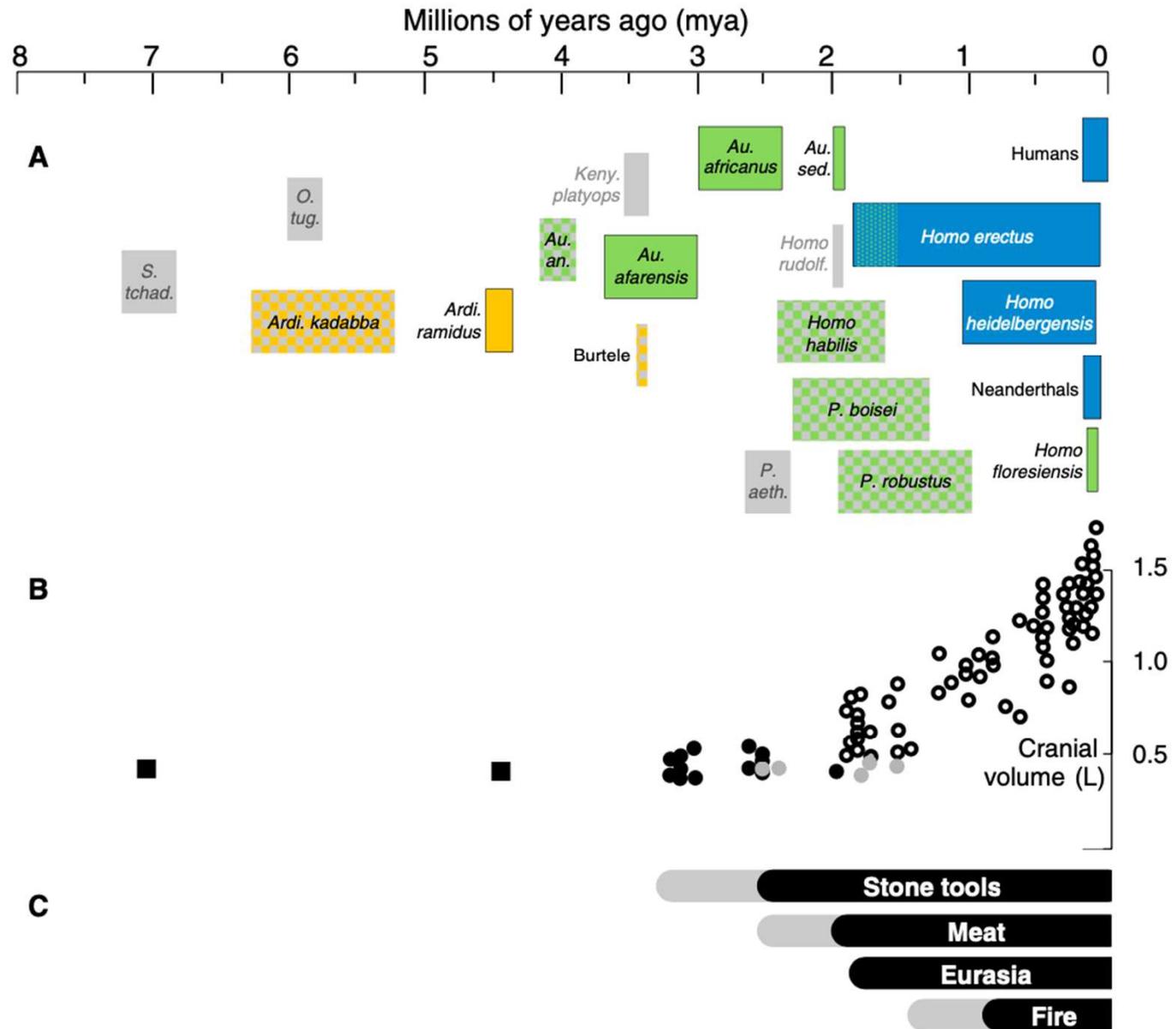
Economy and Endurance in Human Evolution

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Hunter College, City University of New York, New York Consortium for Evolutionary Primatology, New York, NY 10065, USA
Correspondence: hpontzer@hunter.cuny.edu
<http://dx.doi.org/10.1016/j.cub.2017.05.031>



Economy and Endurance in Human Evolution

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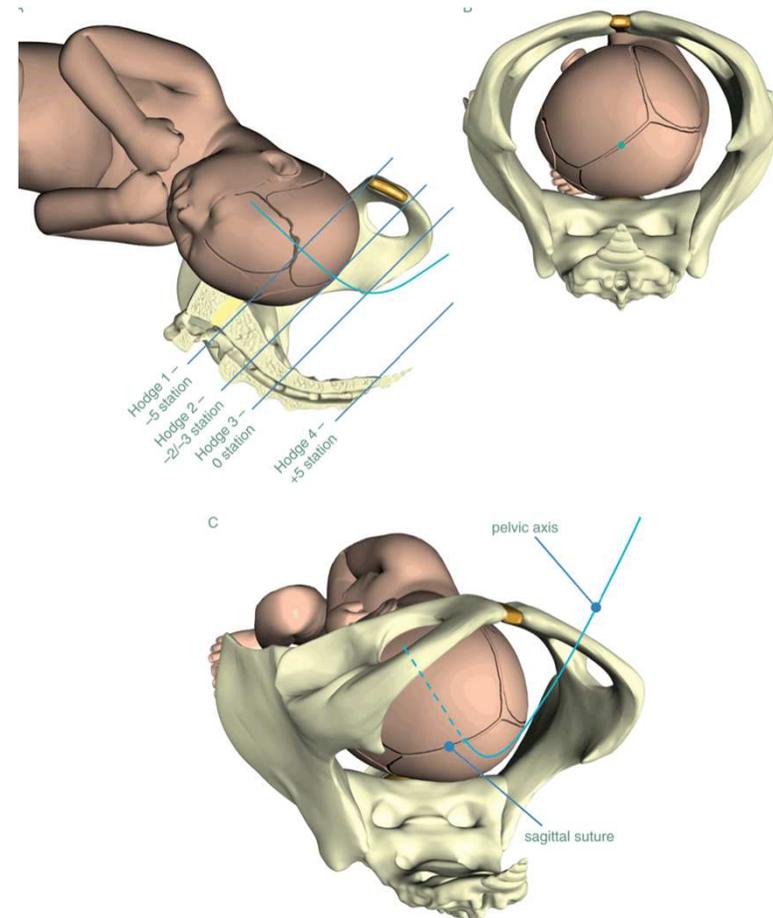


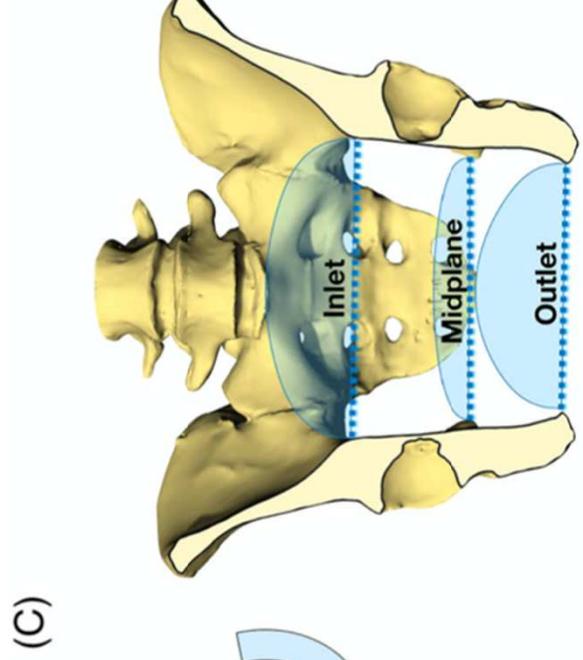
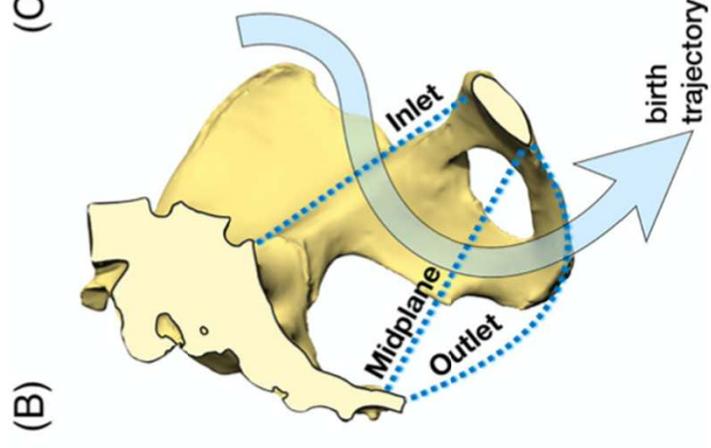
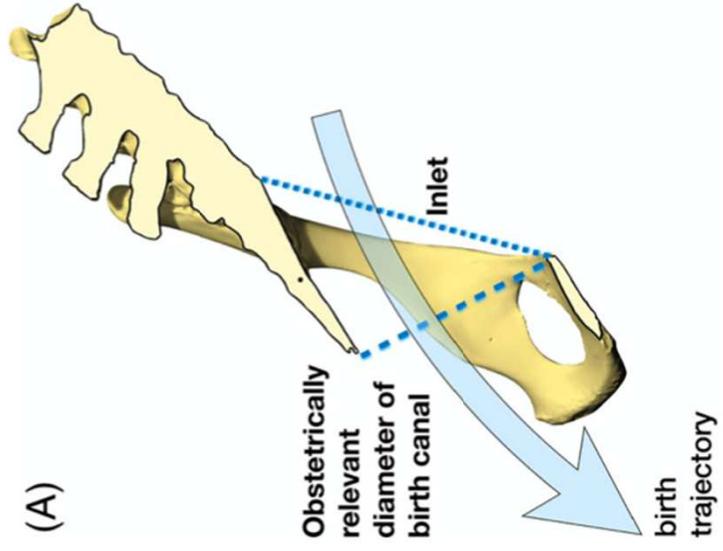
UN DILEMME OBSTETRICAL

> Sci Am. 1960 Sep;203:63-75.

Tools and human evolution

S L WASHBURN



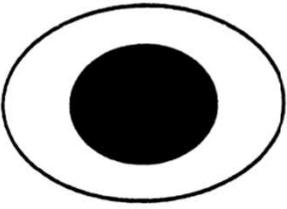




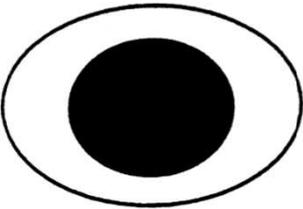
Homo



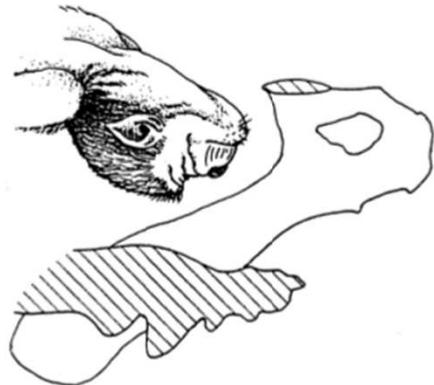
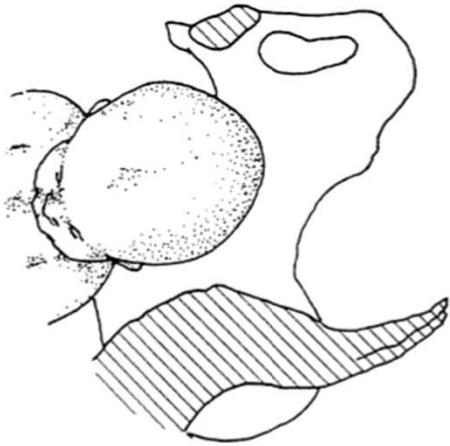
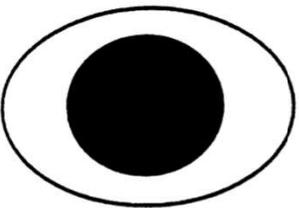
Gorilla



Pan



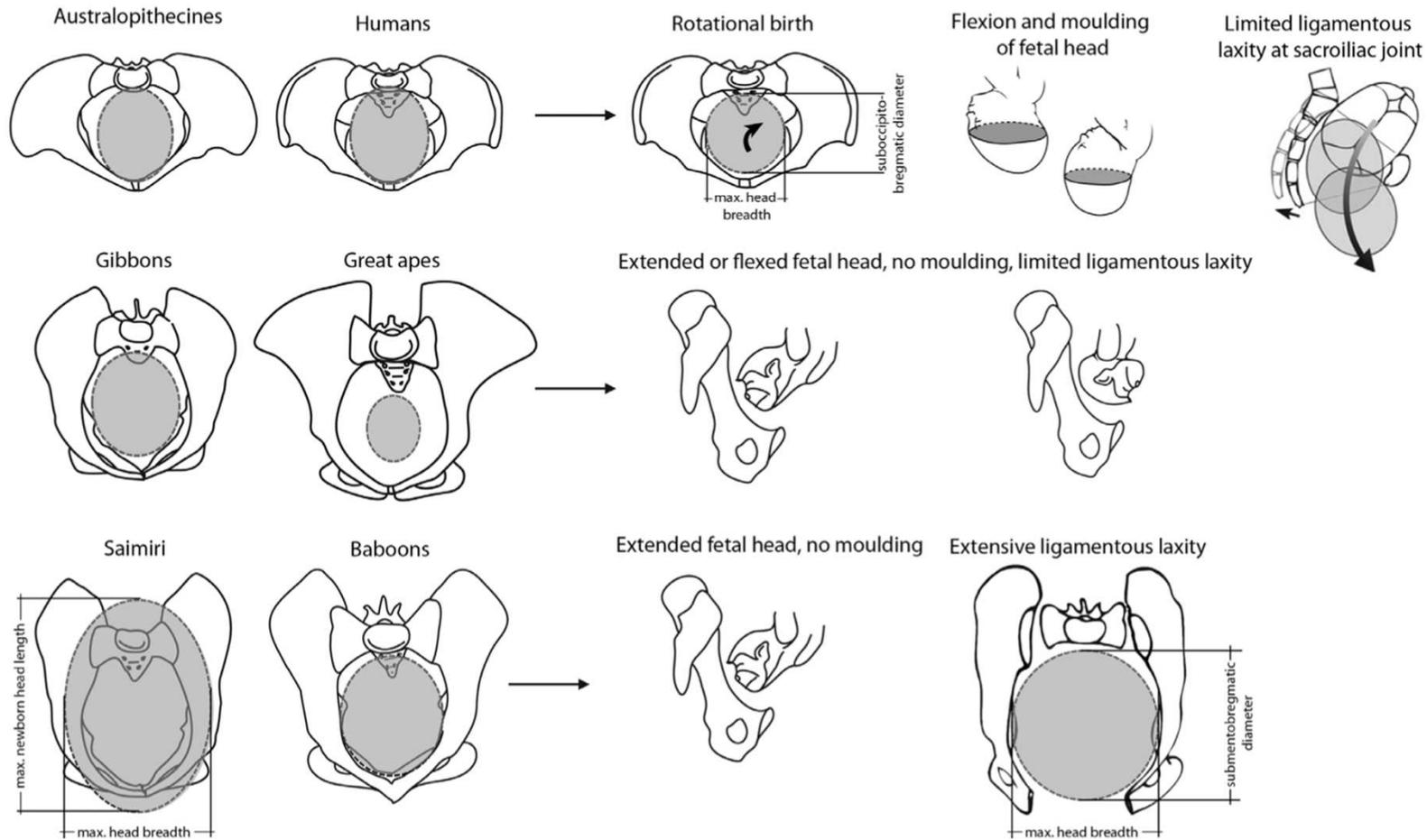
Pongo



Un accouchement en rotation

Cephalopelvic proportions:

Different adaptations hominins and monkeys:

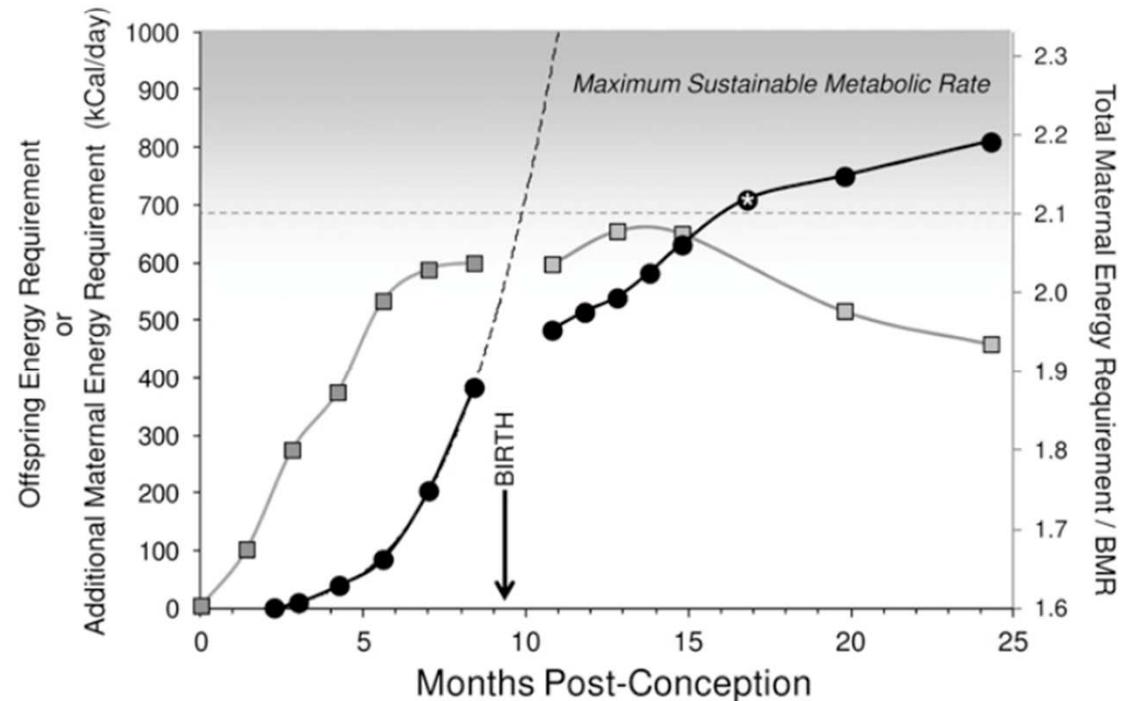
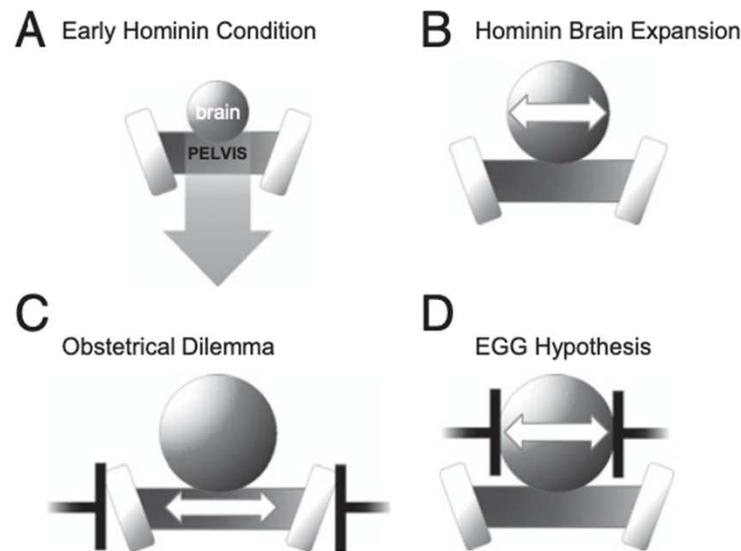


Un problème énergétique plutôt que mécanique ?

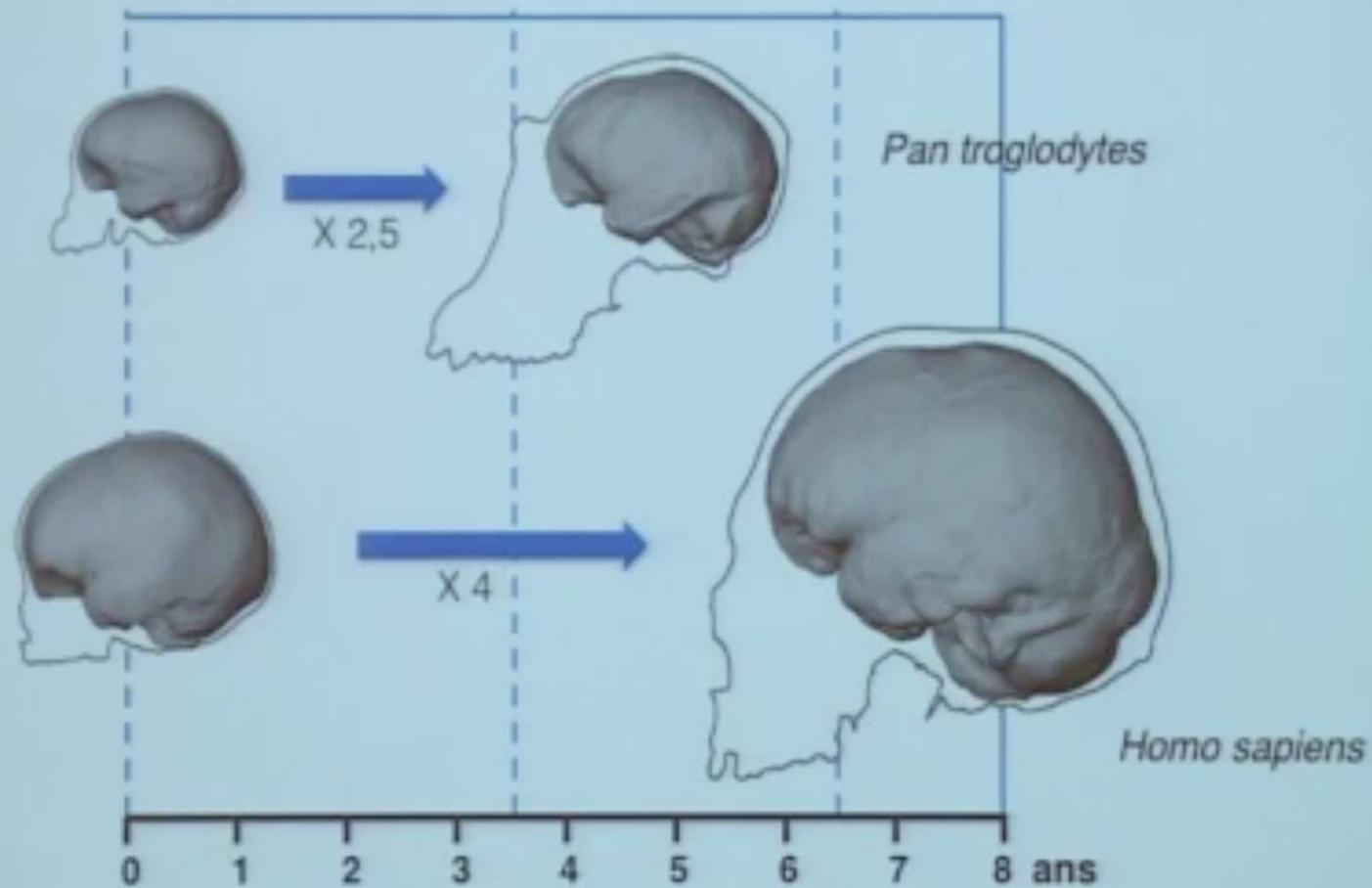
Metabolic hypothesis for human altriciality

Holly M. Dunsworth^a, Anna G. Warrener^b, Terrence Deacon^c, Peter T. Ellison^{b,1}, and Herman Pontzer^d

^aDepartment of Sociology and Anthropology, University of Rhode Island, Kingston, RI 02881; ^bDepartment of Human Evolutionary Biology, Peabody Museum, Harvard University, Cambridge, MA 02138; ^cAnthropology Department, University of California, Berkeley, CA 94720; and ^dDepartment of Anthropology, Hunter College, New York, NY 10065



Résoudre le dilemme obstétrical et énergétique



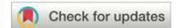
The obstetrical dilemma hypothesis: there's life in the old dog yet

Martin Haeusler^{1†}, Nicole D.S. Grunstra^{2,3,4†}, Robert D. Martin^{1,5}, Viktoria A. Krenn^{1,6}, Cinzia Fornai^{1,6} and Nicole M. Webb^{1,7†*}

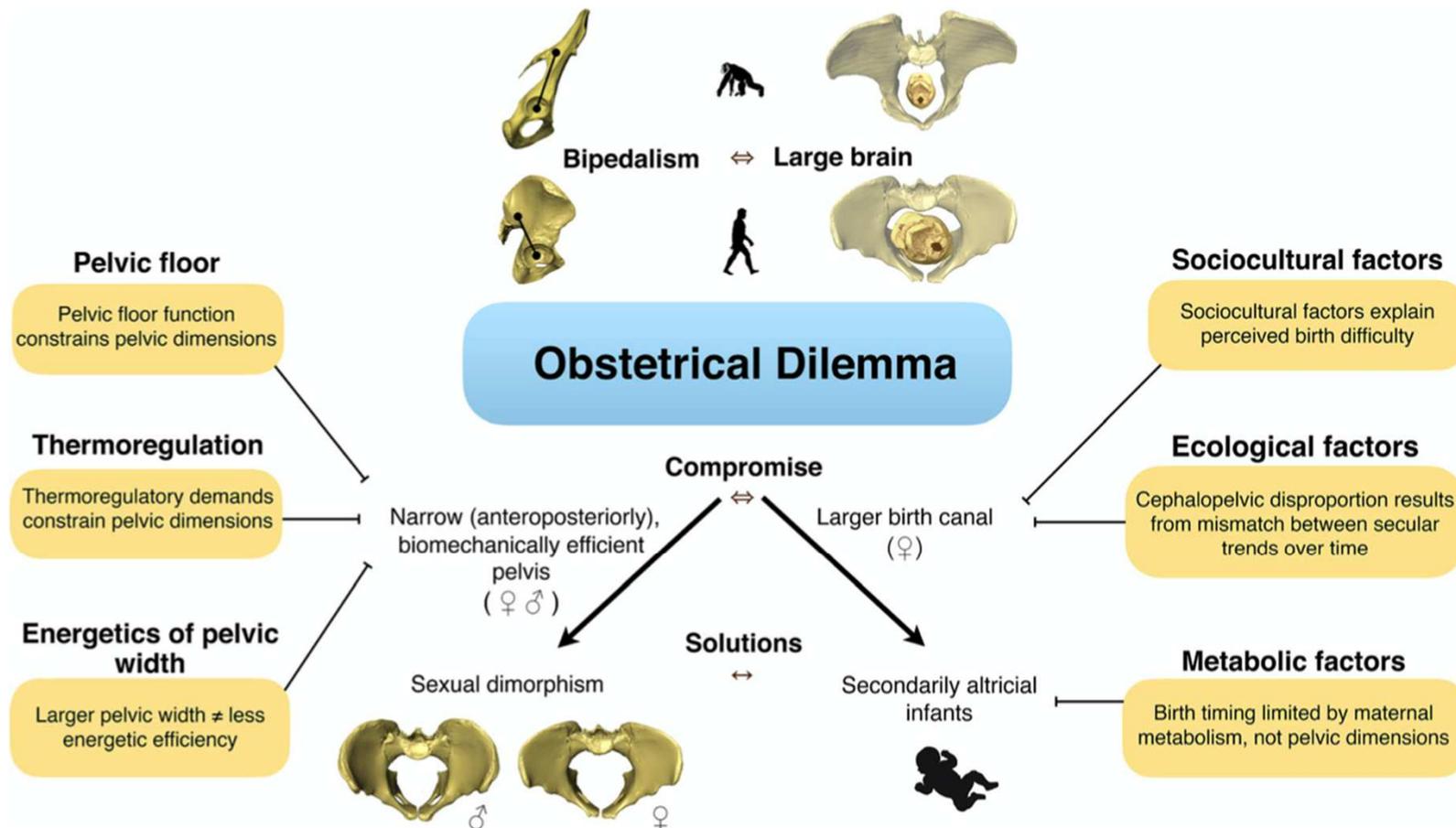
Expert Reviews

ajog.org

Evolution of the human pelvis and obstructed labor: new explanations of an old obstetrical dilemma



Mihaela Pavličev, PhD; Roberto Romero, MD, DMedSci; Philipp Mitteroecker, PhD



ENCEPHALISATION

BIPEDIE

CONTRAINTES
Mécaniques

CONTRAINTES
Métaboliques

Bassin
étroit

ACCOUCHEMENT

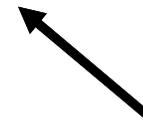
BMR maternel
Thermorégulation

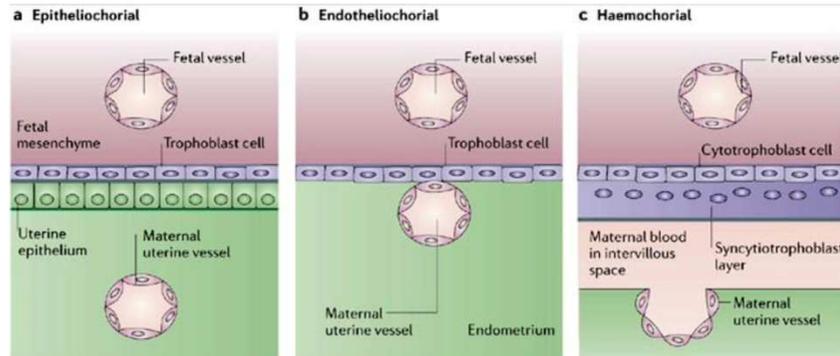
Périnée/Contention
org. et grossesse

Prématurité
Croissance céréb
PN
Dimorphisme sexuel
Accouchement rot.

Travail obstructif

Croissance
céréb.PN





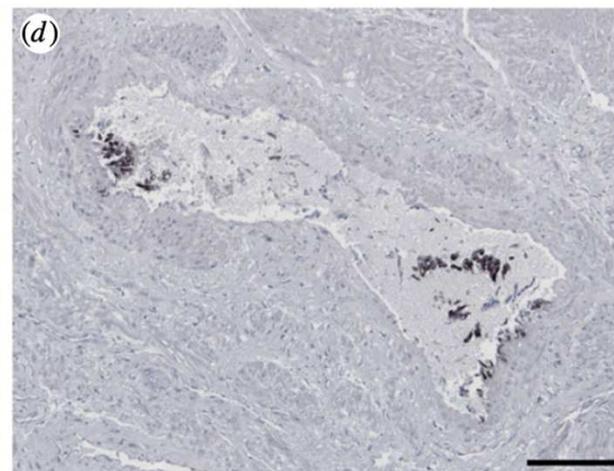
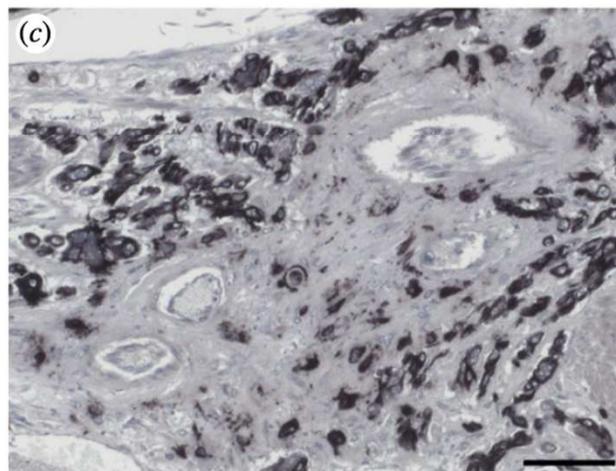
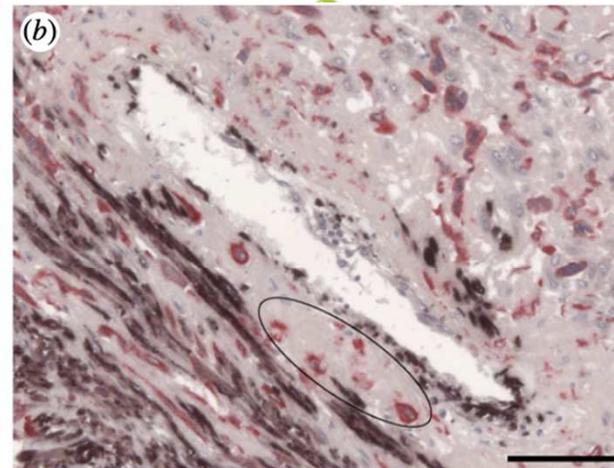
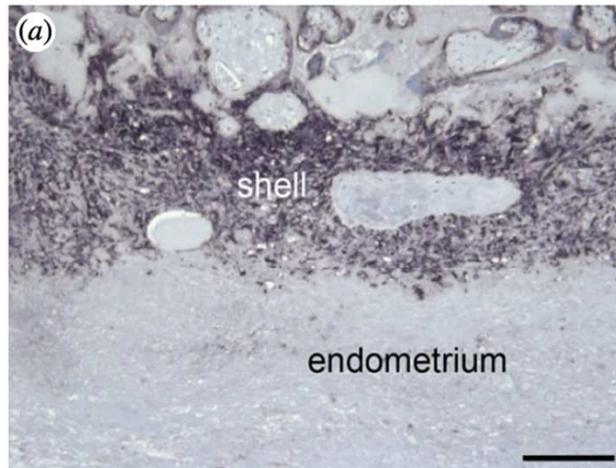
The role of invasive trophoblast in implantation and placentation of primates

Anthony M. Carter¹, Allen C. Enders² and Robert Pijnenborg³

¹Department of Cardiovascular and Renal Research, University of Southern Denmark, 5000 Odense, Denmark

²Department of Cell Biology and Human Anatomy, School of Medicine, University of California Davis, Davis, CA 95616, USA

³Department of Development and Regeneration, Katholieke Universiteit Leuven, 3000 Leuven, Belgium

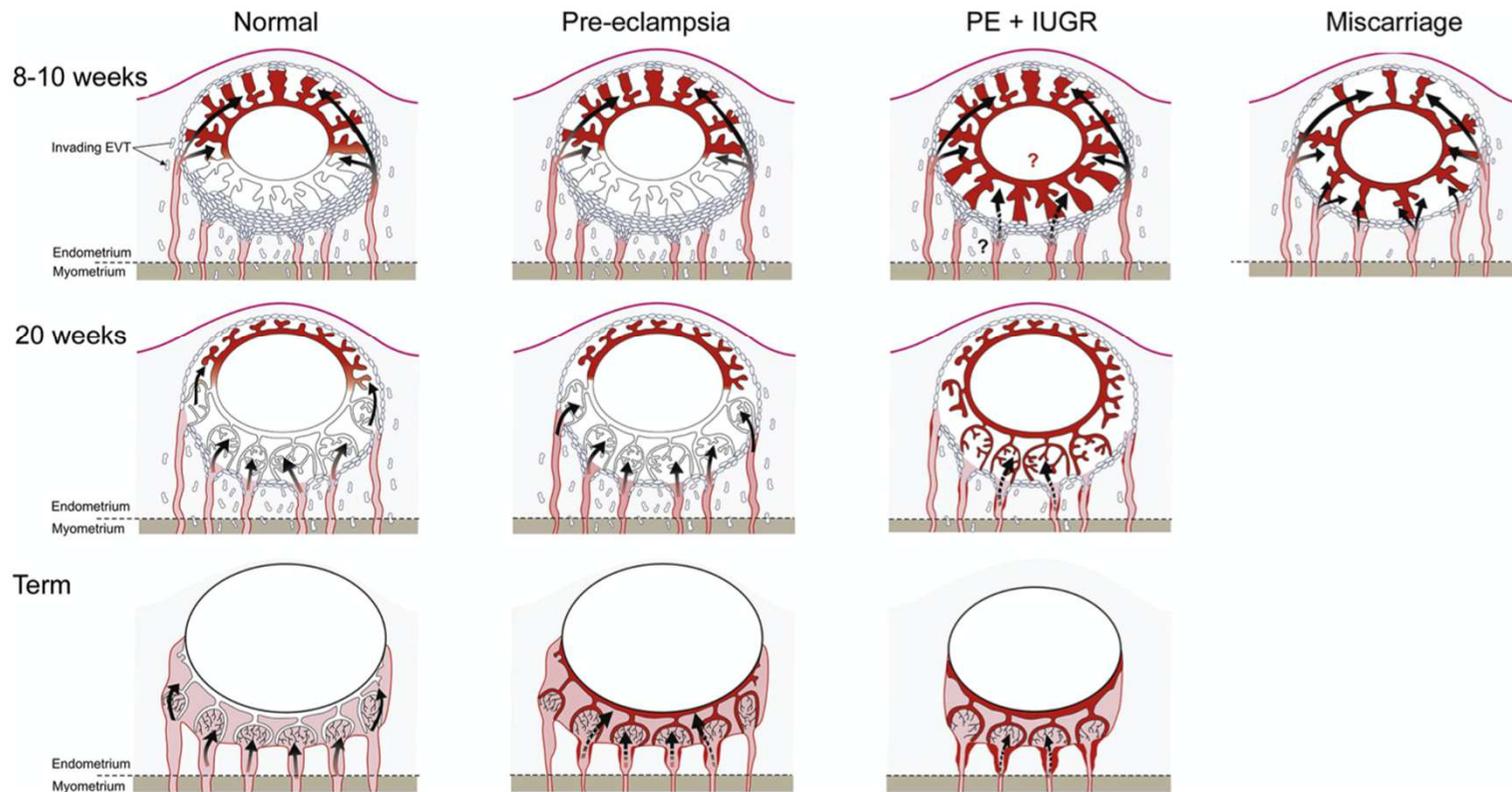


Pathophysiology of placental-derived fetal growth restriction

Graham J. Burton, MD, DSc; Eric Jauniaux, MD, PhD, FRCOG

FEBRUARY 2018 *American Journal of Obstetrics & Gynecology*

FIGURE 11
Schematic of spectrum of pregnancy complications arising from deficient trophoblast invasion



RESEARCH ARTICLES

Framing Postpartum Hemorrhage as a Consequence of Human Placental Biology: An Evolutionary and Comparative Perspective

Elizabeth T. Abrams and Julienne N. Rutherford

Am J Obstet Gynecol. 2011 March ; 204(3): 193–201. doi:10.1016/j.ajog.2010.08.009.

THE “GREAT OBSTETRICAL SYNDROMES” ARE ASSOCIATED WITH DISORDERS OF DEEP PLACENTATION

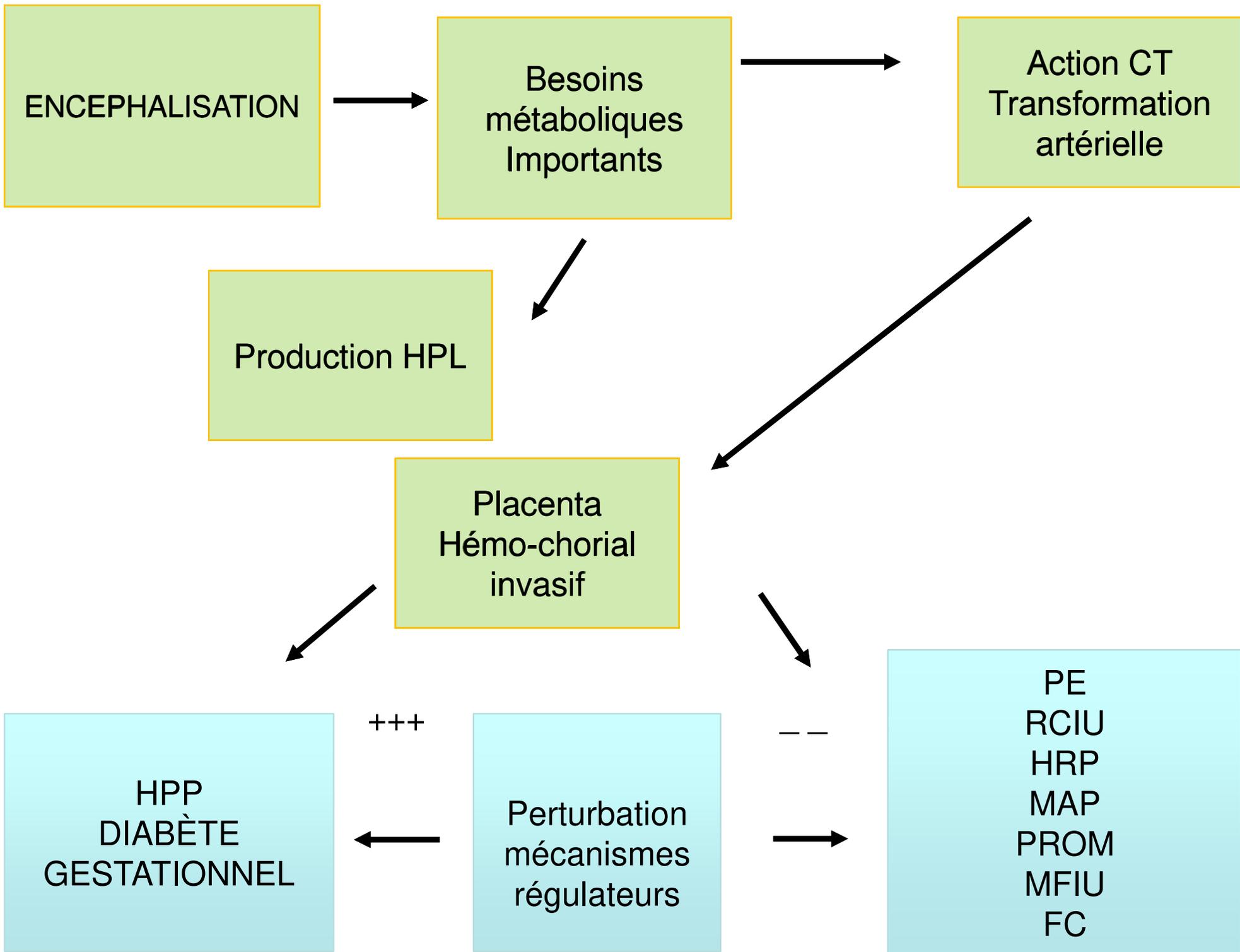
Ivo Brosens, MD¹, Robert Pijnenborg, PhD², Lisbeth Vercruysse, MSc², and Roberto
Romero, MD^{3,4}

Placental bed research: I. The placental bed: from spiral arteries remodeling to the great obstetrical syndromes

Ivo Brosens, MD, PhD; Patrick Puttemans, MD; Giuseppe Benagiano, MD, PhD

Pathophysiology of placental-derived fetal growth restriction

Graham J. Burton, MD, DSc; Eric Jauniaux, MD, PhD. FRCOG



CONCLUSION

