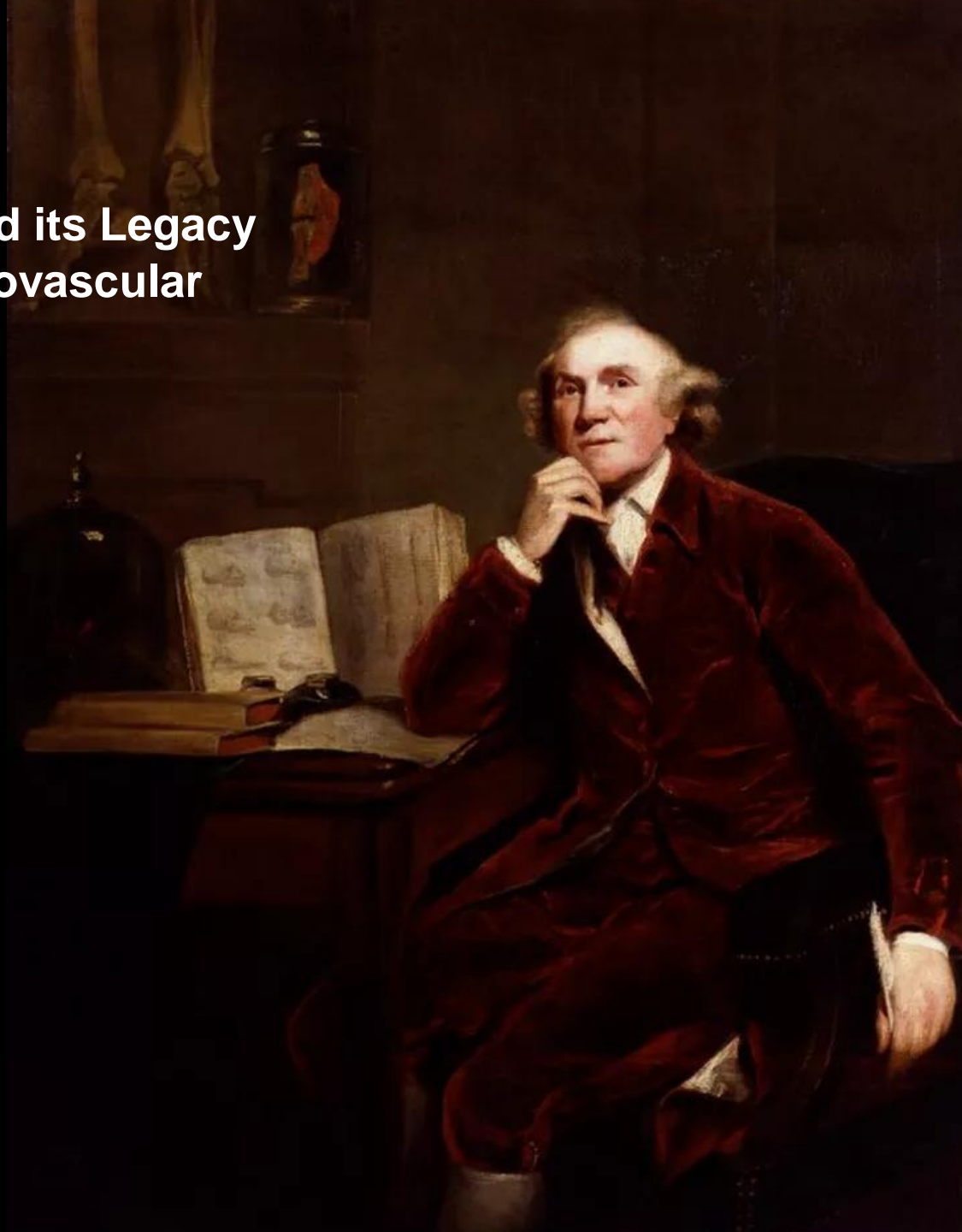




The Hunterian Method and its Legacy to Contemporary Cardiovascular Research

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The Hunterian Method

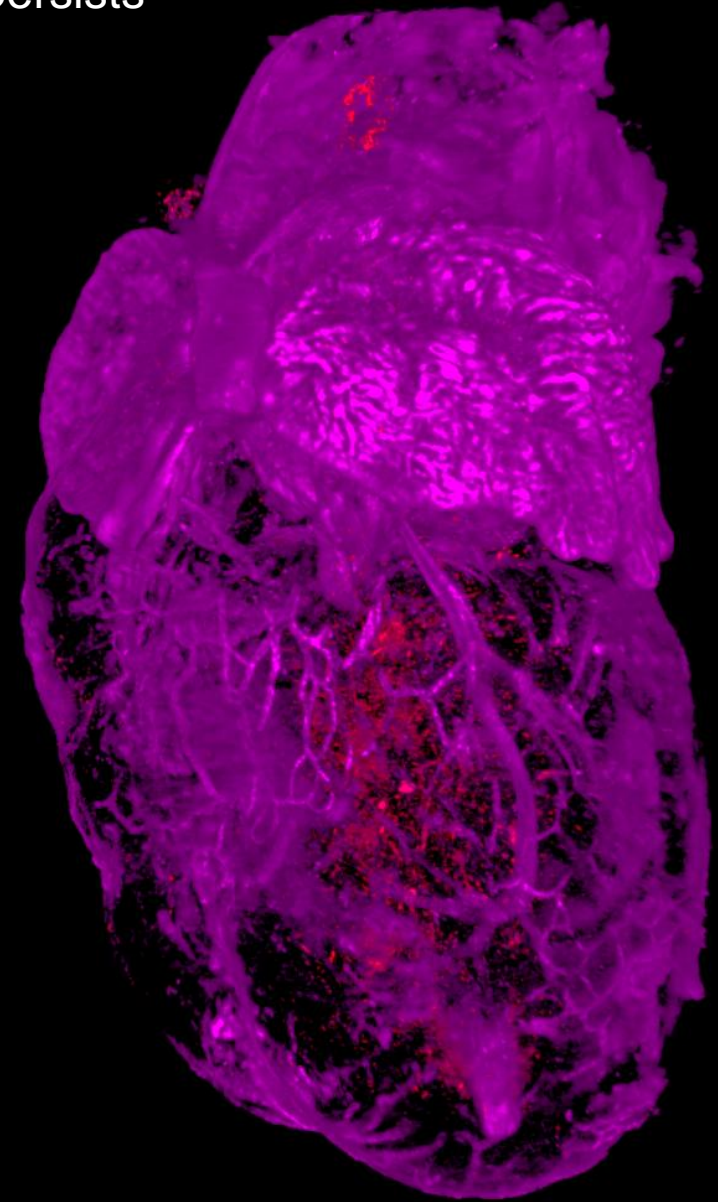
“Something new – consisting of surgical, physiological, and comparative anatomy branches, and so mixing them together, as to confound or illustrate each other.”

Jessé Foote

In the face of improving tools and resolution, the Hunterian Method persists



[Hunterian Museum, Royal College of Surgeons of England]

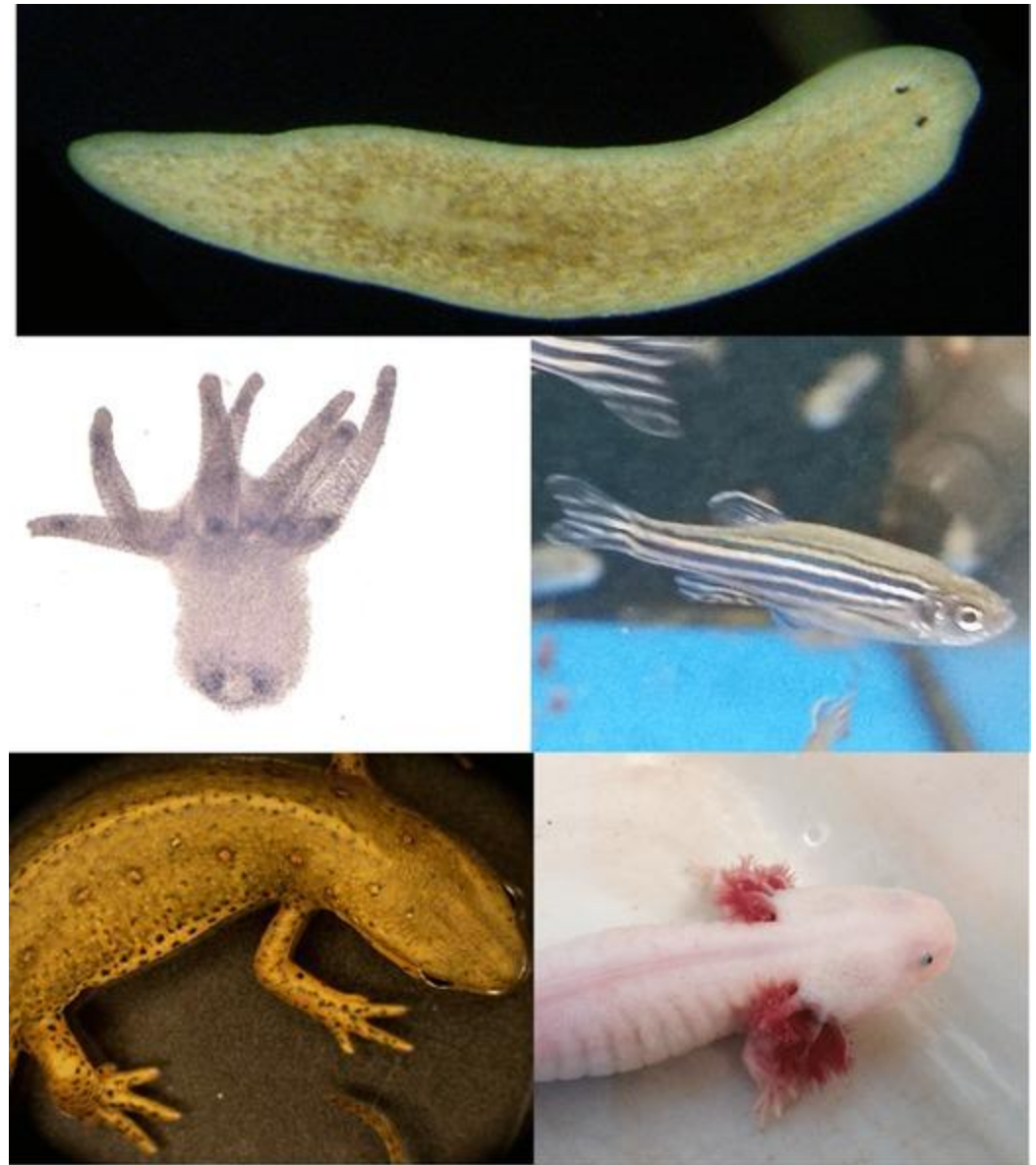


LYVE1 (Lymphatics)
CD68 (Macrophages)



**Lizard tail detachment and regrowth.
Specimens collected by Hunter in Portugal**

*[Hunterian Museum, Royal College of Surgeons of England,
Author's own photograph]*



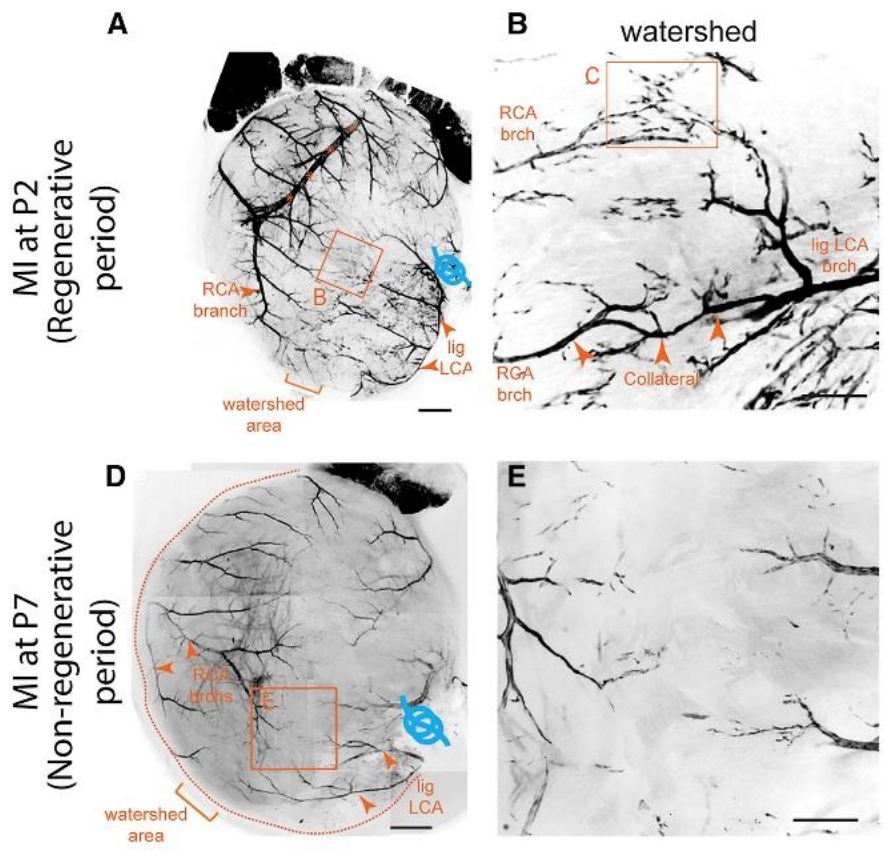
Examples of animal models used in contemporary regenerative research

*[Ninov et al. Current advances in tissue repair and regeneration: the future is bright.
Regeneration. 2015.]*

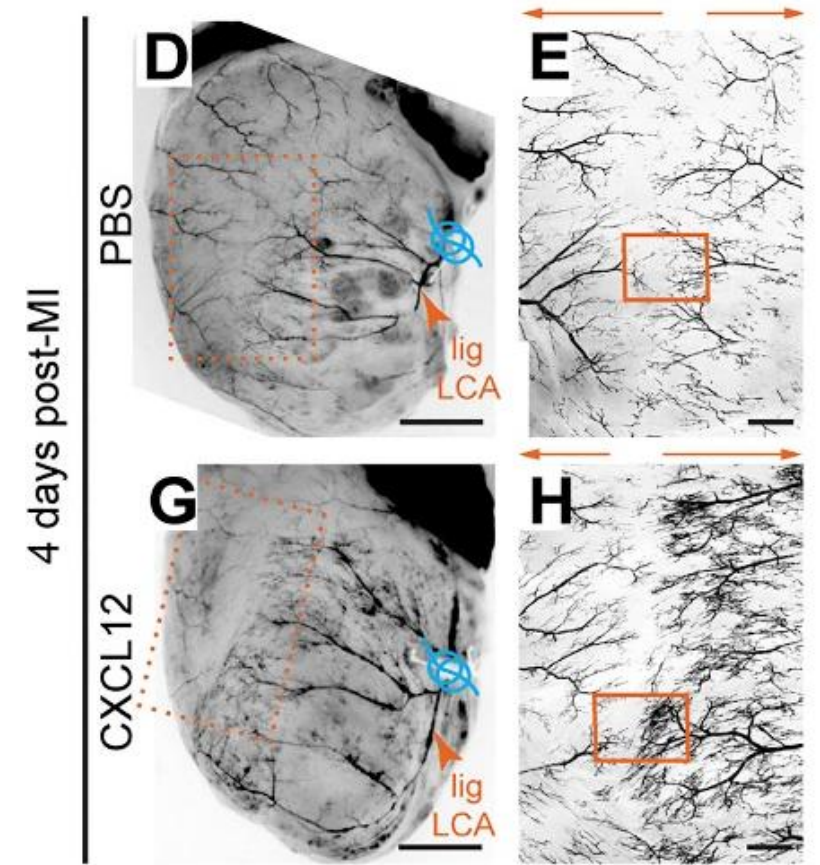


Popliteal aneurysm dissected years following the famous 1785 surgery

[Hunterian Museum, Royal College of Surgeons of England]



Collateral formation in mouse heart following MI at postnatal day 2 (P2) and postnatal day 7 (P7)



Exogenous CXCL12 enhances collateral artery formation following MI.

[Das et al. A Unique Collateral Artery Development Program Promotes Neonatal Heart Regeneration. Cell. 2019]

TABLE I.—*Spayed Sow*

Farrows	Number of Young	Time
1	6	December, 1779
2	8	July, 1780
3	6	January, 1781
4	10	August, 1781
5	10	March, 1782
6	9	September, 1782
7	14	May, 1783
8	13	September, 1783
	76	

TABLE II.—*Perfect Sow*

Farrows	Number of Young	Time
1	9	
2	6	
3	8	
4	13	December, 1781
5	10	June, 1782
6	16	December, 1782
7	13	June, 1783
8	12	October, 1783
9	12	February, 1784
10	16	June, 1784
11	12	December, 1784
12	16	May, 1785
13	19	December, 1785
	162	

Hunter's record of single spayed vs intact offspring numbers

[Cohen, H. *Reflections On The Hunterian Method. The British Medical Journal.* 1956]

“ The difference in the number [of piglets] produced by each was greater than can be justly imputed to accident”

John Hunter

Other notable similarities...

“ It may be thought by some, that I should have repeated this experiment ; but an annual expense of twenty pounds for ten years, and the necessary attention to make the experiment complete, will be sufficient reason for my not having done it.”

John Hunter