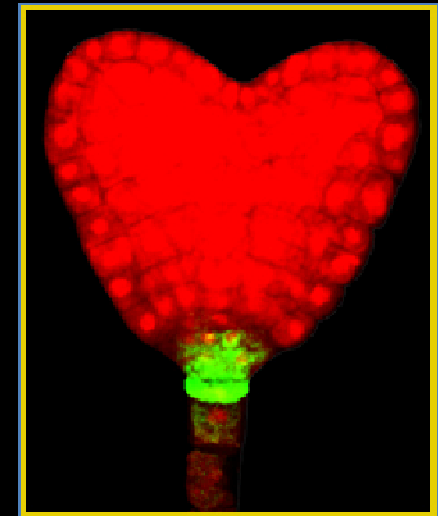
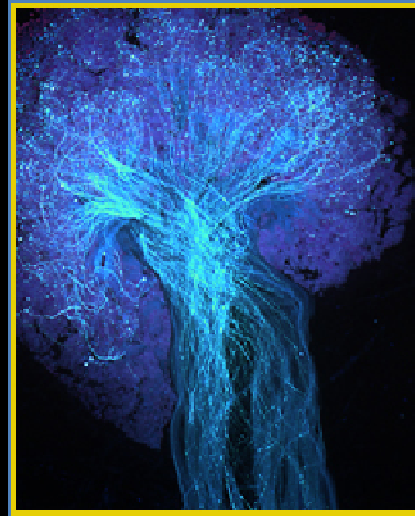
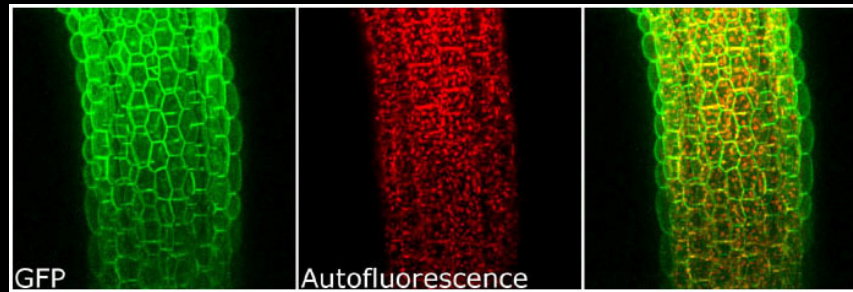




*Enhancing Research in*  
**PLANT BIOLOGY**  
*for the PUBLIC...*







© Pooktree  
Planted 1998

“...the study of disease processes in all animals (and possibly in plants also)...

**Section of Comparative Medicine.**

President—Sir D'ARCY POWER, F.R.C.S.

[October 26, 1927.]

**What is Comparative Medicine?**

By O. CHARNOCK BRADLEY, D.Sc., M.R.C.V.S.

ABSTRACT.—Inasmuch as it includes the study of disease in a considerable number of animals belonging to widely different species, there is some ground for regarding veterinary medicine as being comparative medicine. But this is held to be too narrow an application of the term.

There is a better reason for the contention that human and veterinary medicine together compose comparative medicine. Notwithstanding marked differences between some of the diseases of man and those of the lower animals, the similarities and resemblances are much more numerous. Human and veterinary medicine are confronted with similar problems and employ similar means for their solution; and, taken together, they deal with a large group of animals sufficient to justify the contention that they are two branches of one medicine. But an even wider and more comprehensive conception of comparative medicine is suggested. It is held to embrace the study of disease processes in all animals (and possibly in plants also), in all conditions, and with the help of all available means. Its corpus contains elements that have been contributed, and are being contributed, from widely different sources. The physicist, the chemist, the physiologist, and others make discoveries that are susceptible of incorporation; and thus is accumulated a store of linked facts from which practitioners of human and veterinary medicine take what they need, and taking, give.

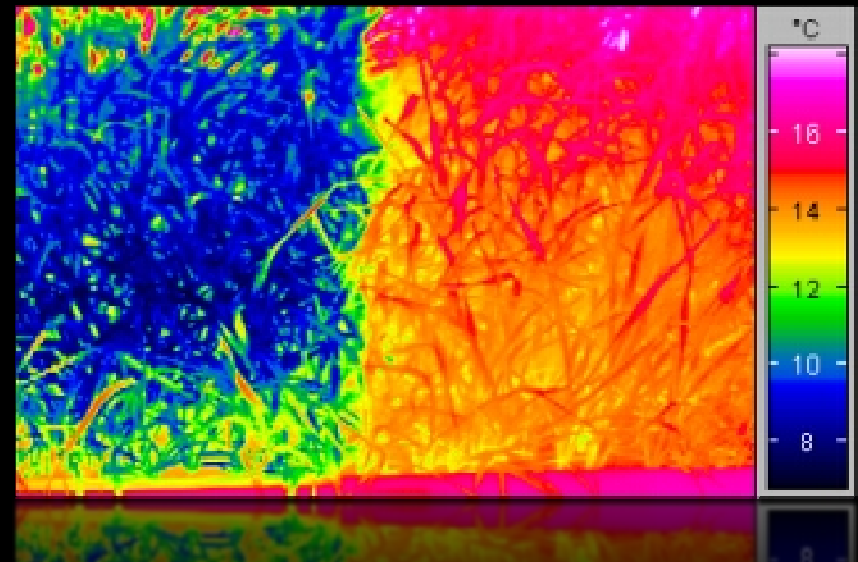
THOUGH it would be difficult, if not impossible, to suggest a better adjective, it is unfortunate that “comparative” when used in conjunction with “medicine” is susceptible of a variety of interpretations, the interpretations depending upon the angle of the interpreter.

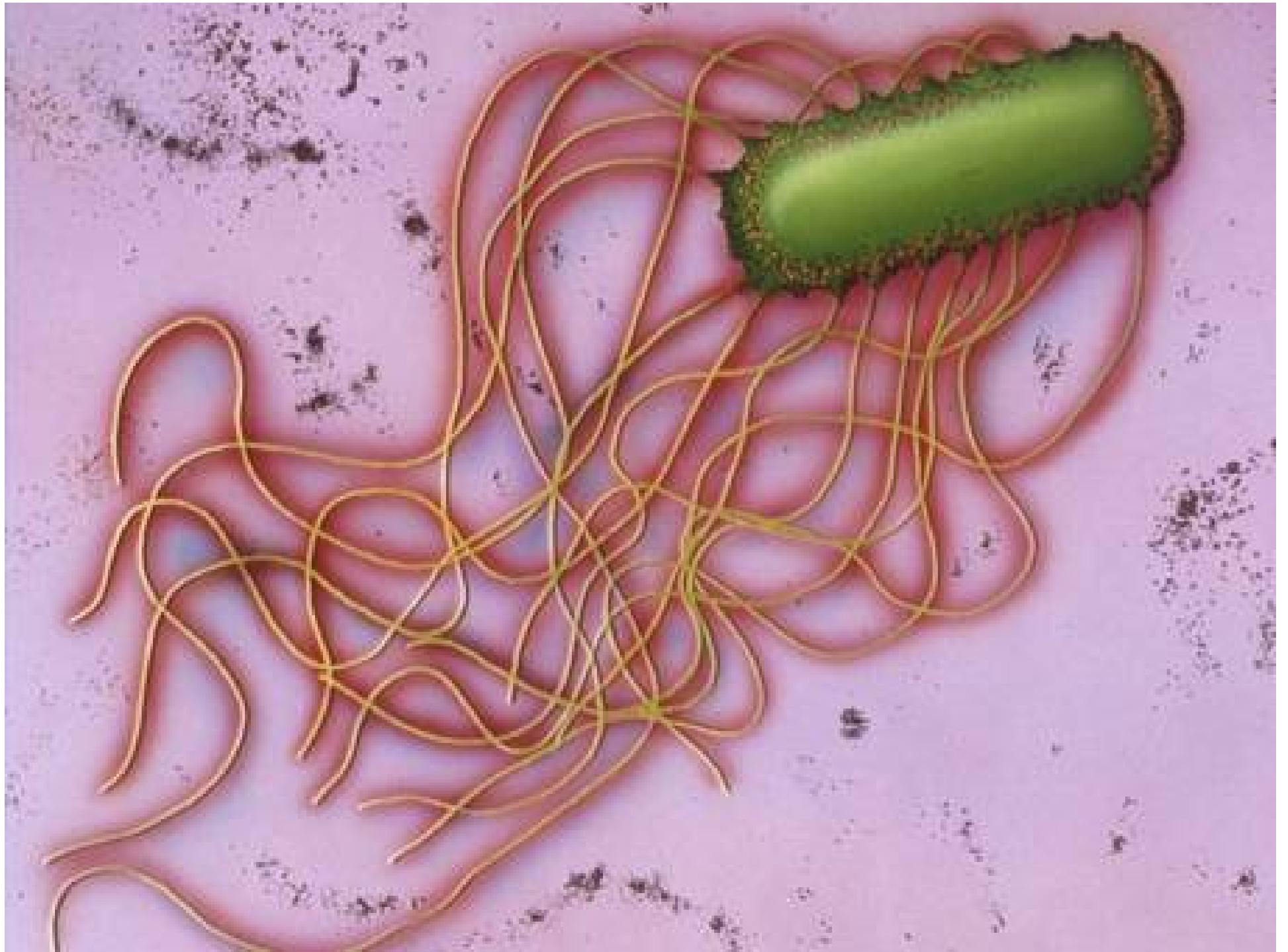
It is very unlikely that anyone will view the term from so narrow an angle, but it is just possible to claim that comparative medicine is that part of human medicine which takes into account individual, racial and other differences. Such an interpretation, however, need not be seriously considered.

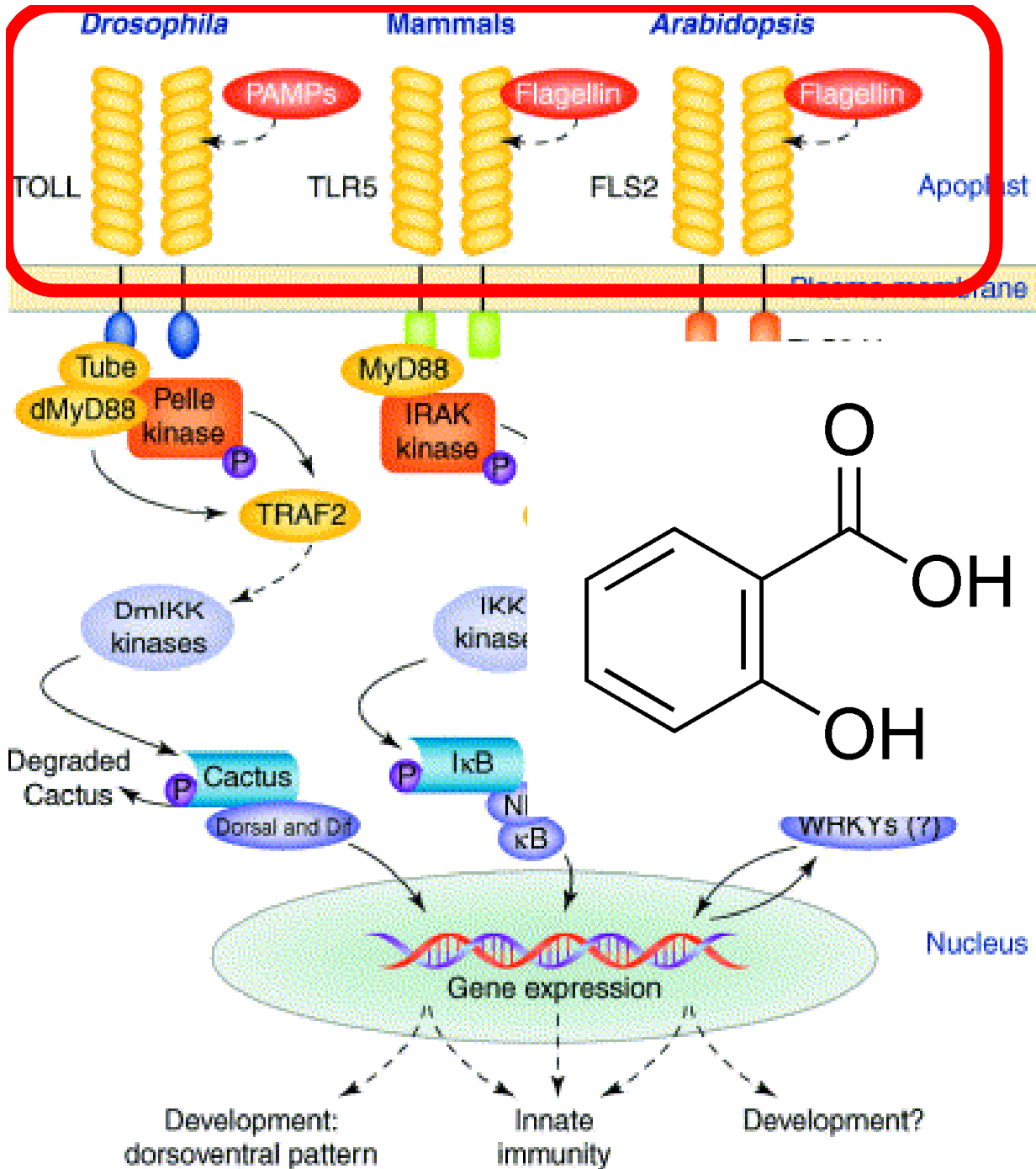
But the supposition that comparative medicine is synonymous with veterinary medicine is worthy of a closer examination.

Veterinary medicine, in its early days, was concerned with only one or two animals. From the laws of Hammurabi we are to conclude that the ox and sheep were the only domestic animals that mattered in the third millennium B.C. This we have no difficulty in believing, for Babylon was a pastoral country. Nor are we surprised that, in a later age, writers in a country that enjoyed military fame (such as Rome) should have confined their attention almost exclusively to diseases of the horse. Veterinary science to-day, on the contrary, concerns itself with many different—and widely different—species. Ranging, as do the patients of the modern

**Feverish,  
infected  
plants**



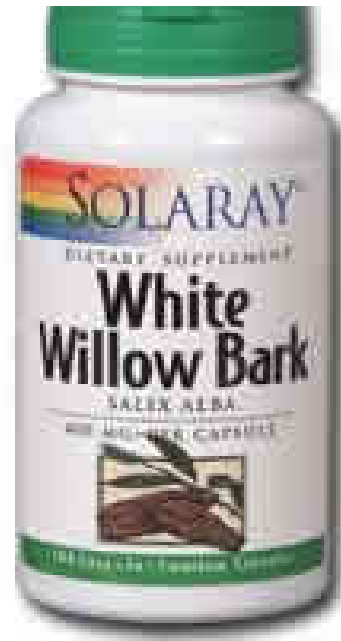


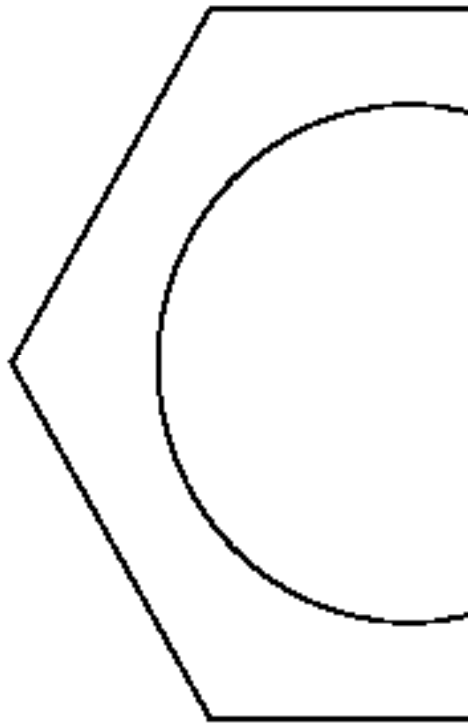


Like animals, plants detect bacterial flagella...

and respond via a highly-conserved signal pathway



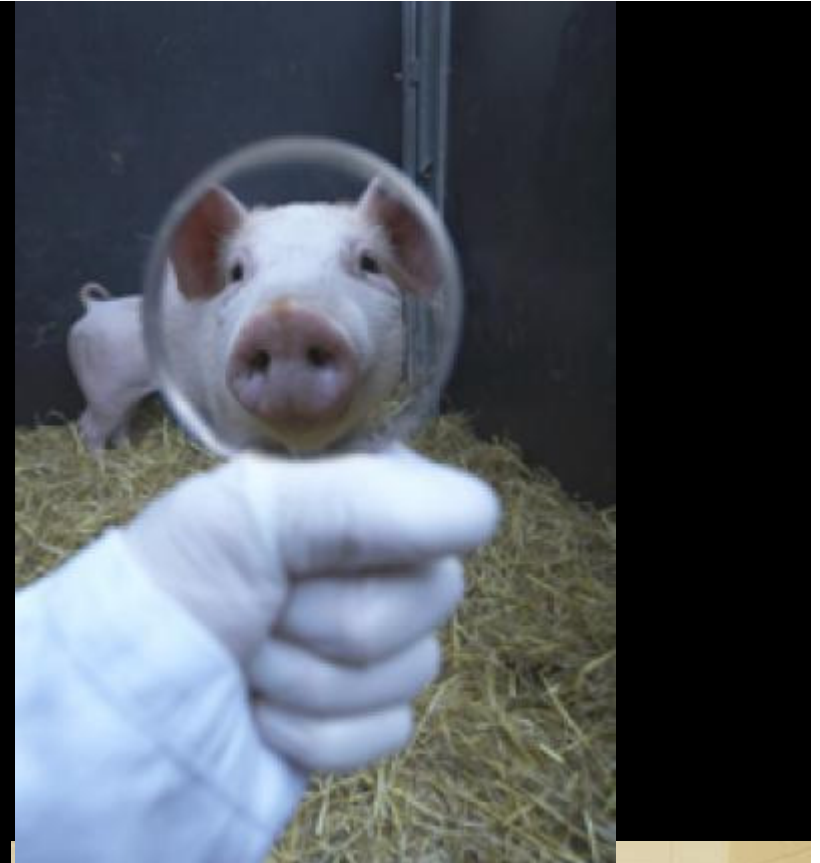


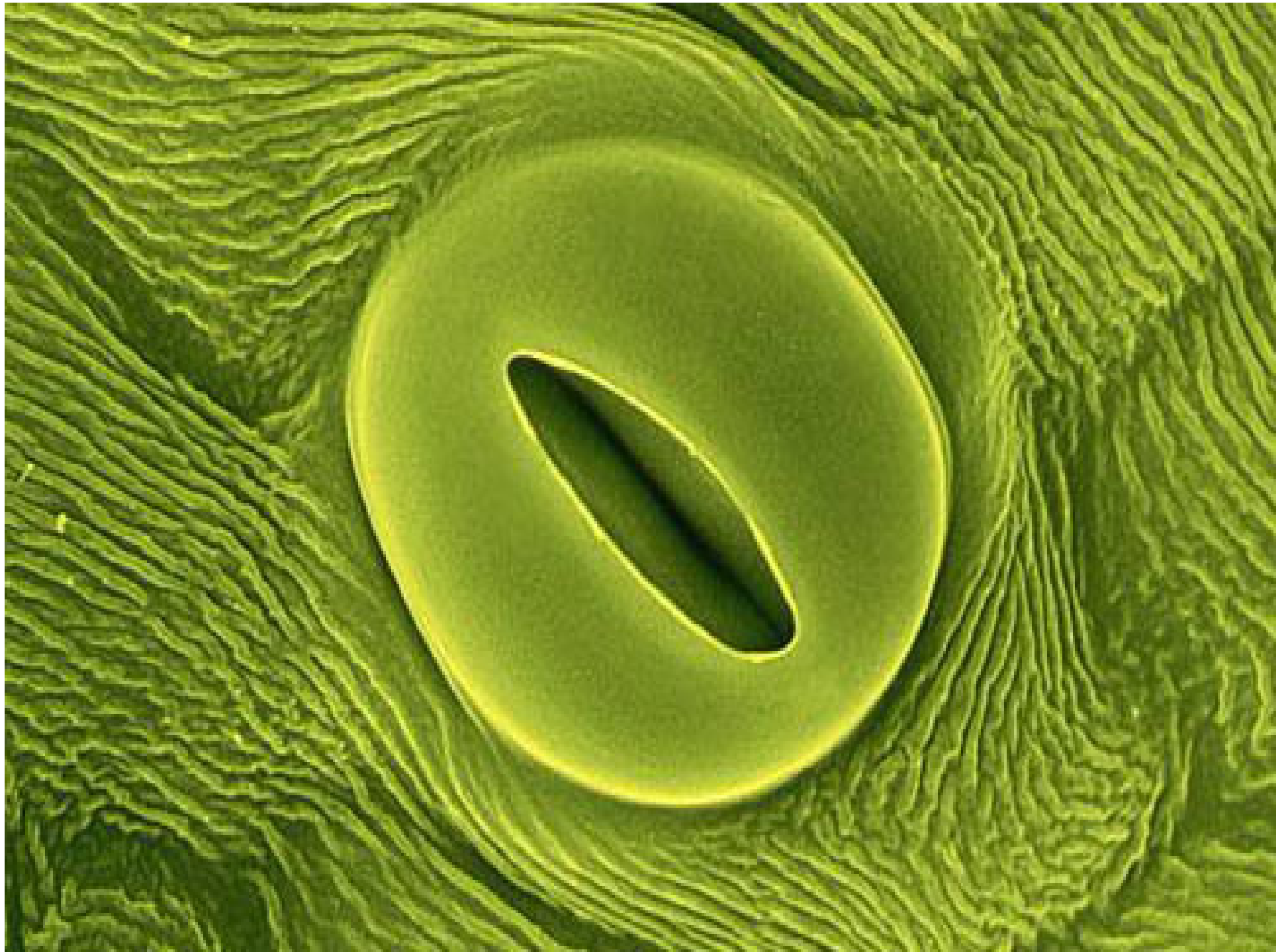




# Pigs Bred With Cystic Fibrosis Provide Model To Mimic Human Disease

ScienceDaily (Sep. 26, 2008) — Cystic Fibrosis (CF) continues to be a lethal disease for humans despite the identification of the problematic gene two decades ago. Many humans born with CF – the most common genetic disease in Caucasians - often die because of a lung disease developed later. Scientists have been unable to develop an animal model that develops the fatal lung disease. Now, a University of Missouri researcher is producing pigs born with cystic fibrosis that mimic the exact symptoms of a newborn with CF.

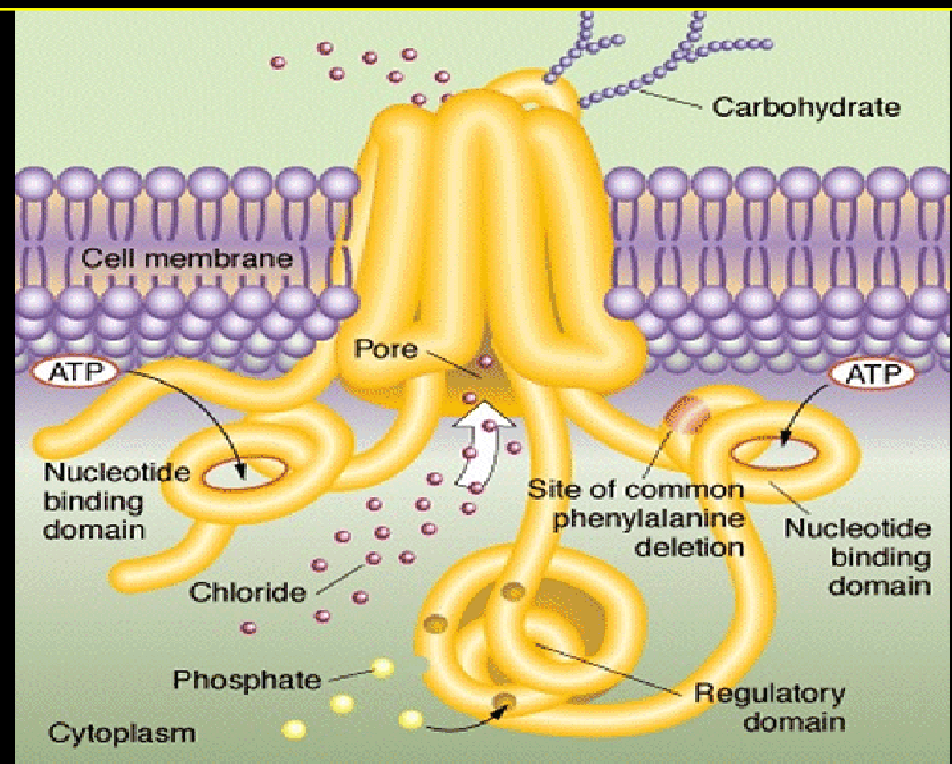
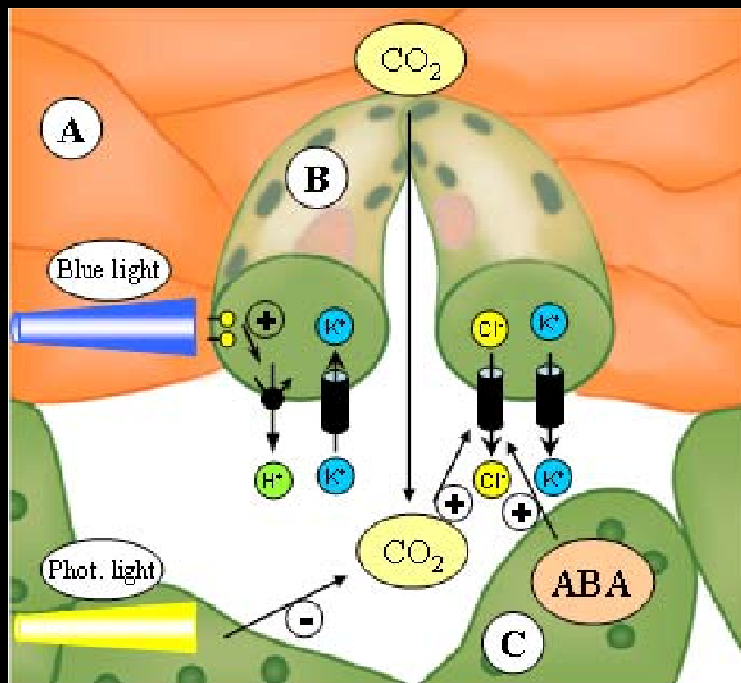




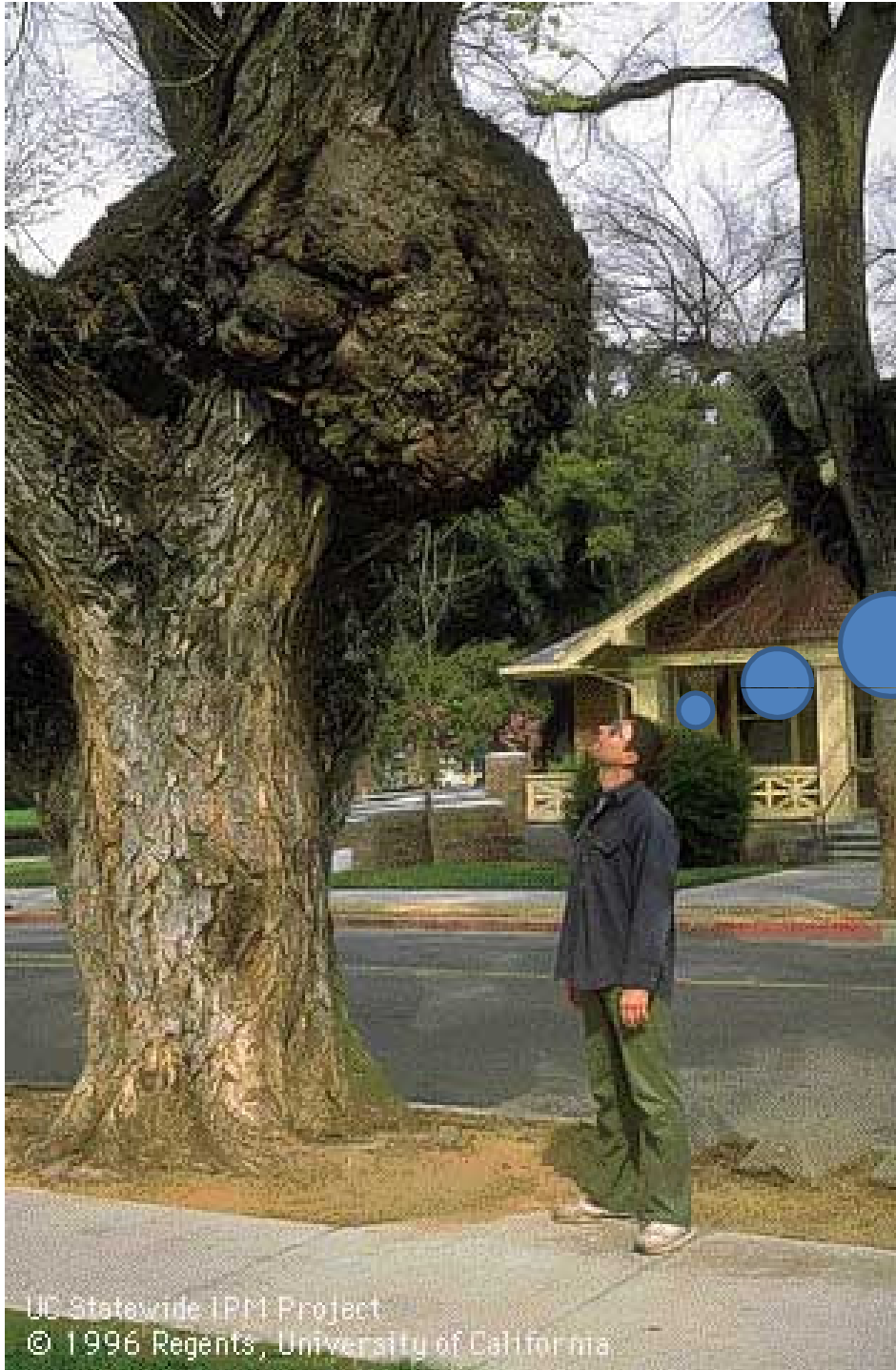


Plant stomata are opened and closed using ion channels that respond to light,  $\text{CO}_2$  and hormones

The same type that is defective in CF







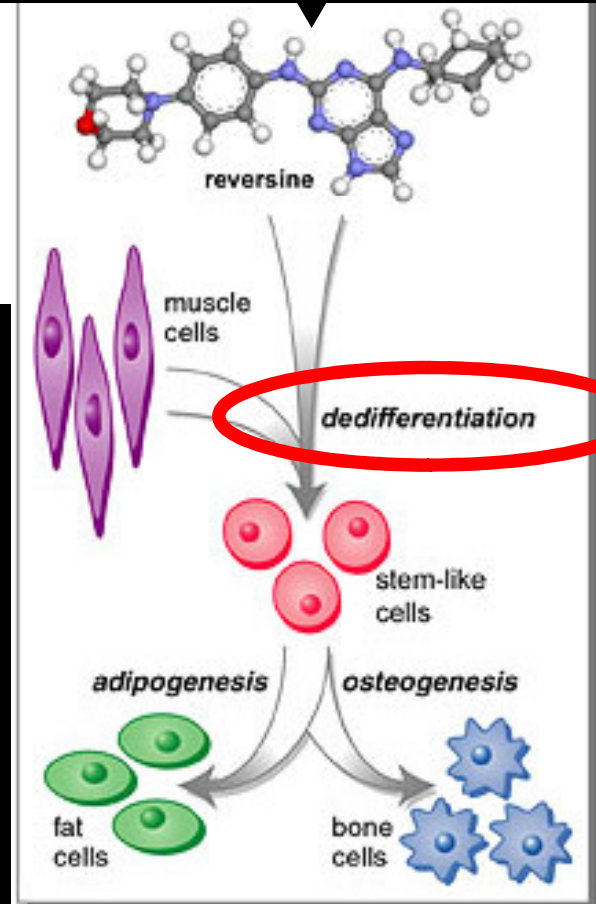
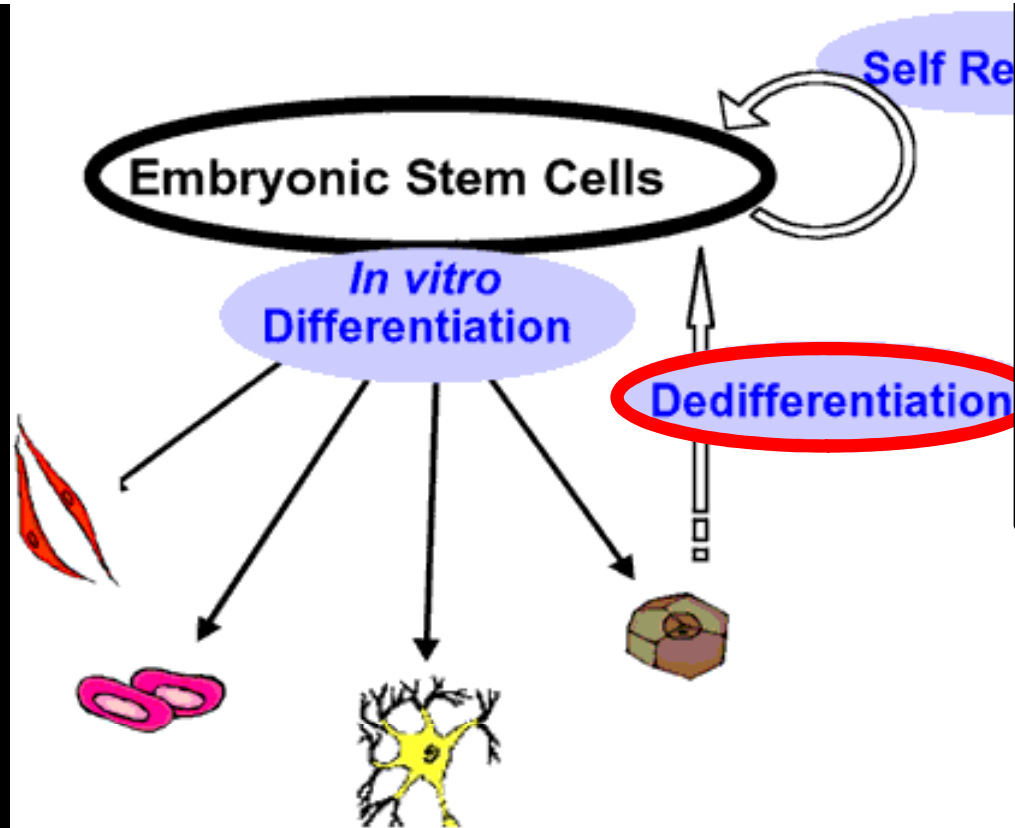
“Hmmm....a  
plant tumor...?”



© 2009 GARY VALLE  
SIERRAPHOTOGRAPHY.COM

A

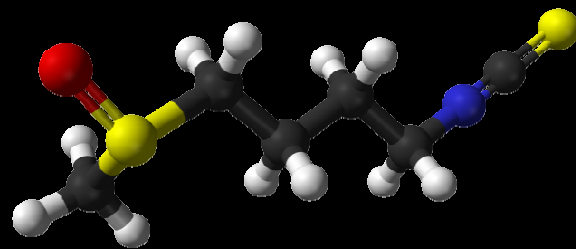
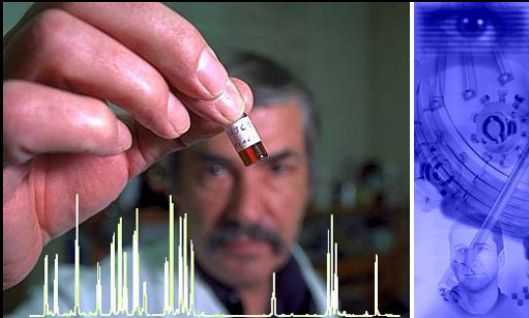




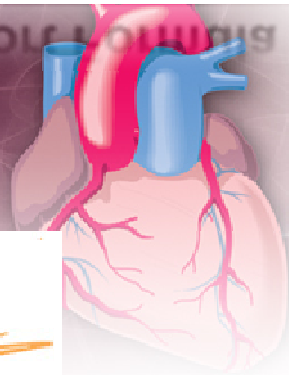
Insects did it first...



# Plants, comparative medicine, & dietary health



**ActivaMune**<sup>®</sup>  
Immune Support Formula



# Heart Disease

DIABETES:  
*Risks & Prevention*



Bladder  
Cancer  
Advocacy  
Network



**BCAN.**

*Leading the way to awareness and a cure*

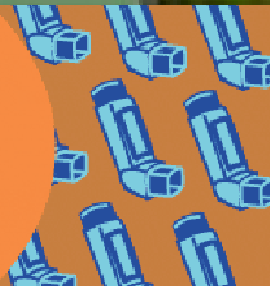


Breast Cancer



Prostate  
Cancer  
Foundation

Asthma



**ARTHRITIS**  
FOUNDATION<sup>®</sup>

**Take Control. We Can Help.**<sup>™</sup>

# Plant Science + Comparative Medicine



A vision...



**MU** Mizzou  
University of Missouri

the Bond LSC



**MU: the diet-animal-human health intersection  
on the “Life Sciences Corridor”**



