



UNIVERSITÀ DI PARMA

Antibiotico-resistenza: una sfida per il modello One-Health

Prof. Gabriele Costantino

Department of Food and Drugs

gabriele.costantino@unipr.it

Resistenza Batterica: Una Sfida Globale

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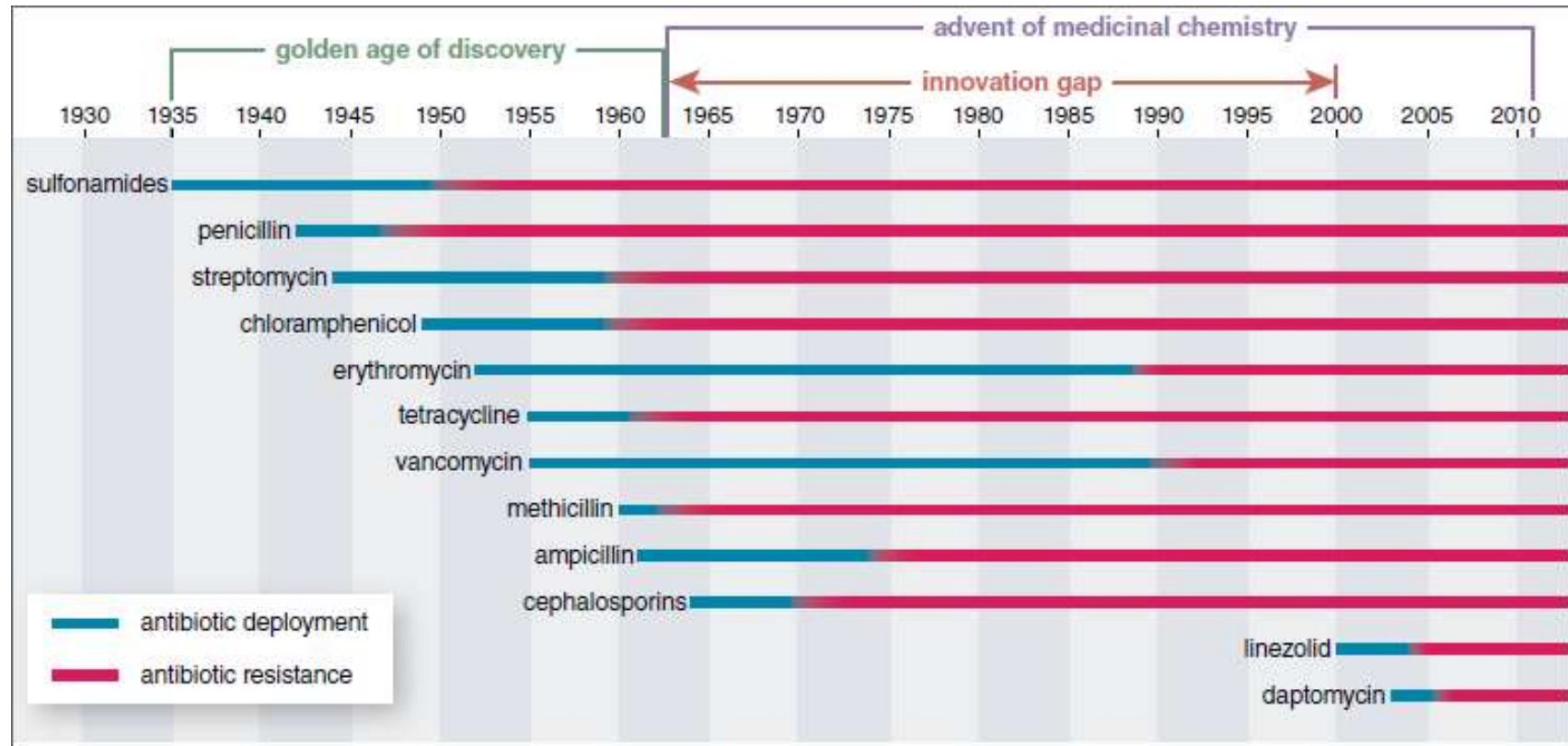
Bacteria resistant to last-resort antibiotic appears in U.S.

Gene from *E. coli* strain could spread to other bacteria
BY MEGHAN ROSEN 6:03PM, MAY 27, 2016



SUPERBUG A strain of *E. coli* resistant to the antibiotic colistin has infected a woman in Pennsylvania (3-D rendering of an *E. coli* bacteria shown).

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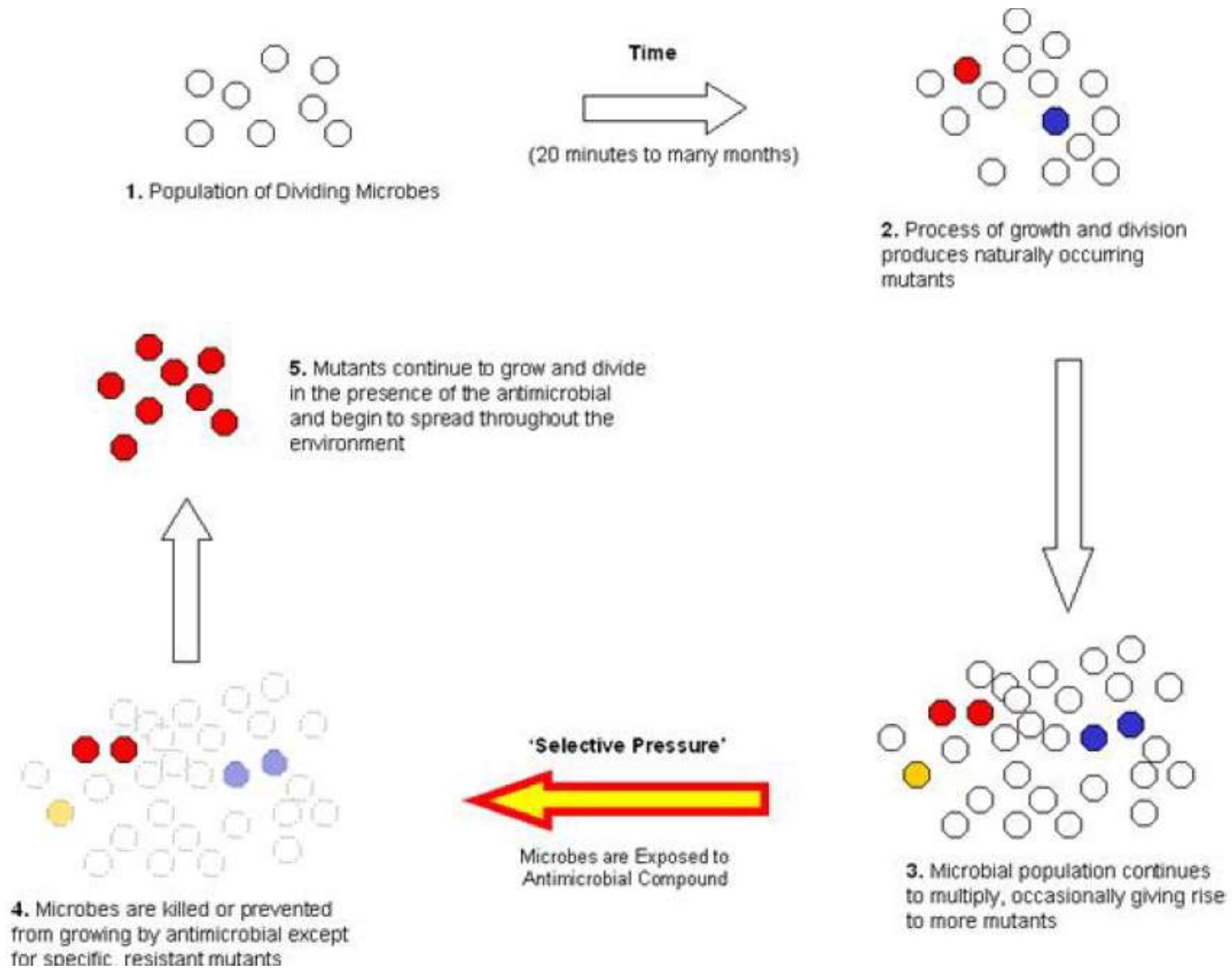
Resistenza Batterica: Una battaglia persa in partenza?

La strategia basata sulla continua ricerca di nuovi antibiotici in attesa che la resistenza verso il nuovo antibiotico emerge, è insostenibile nel medio-lungo termine: la velocità dei batteri di adattarsi ai nuovi antibiotici è incredibilmente più alta della nostra capacità di scoprirne di nuovi

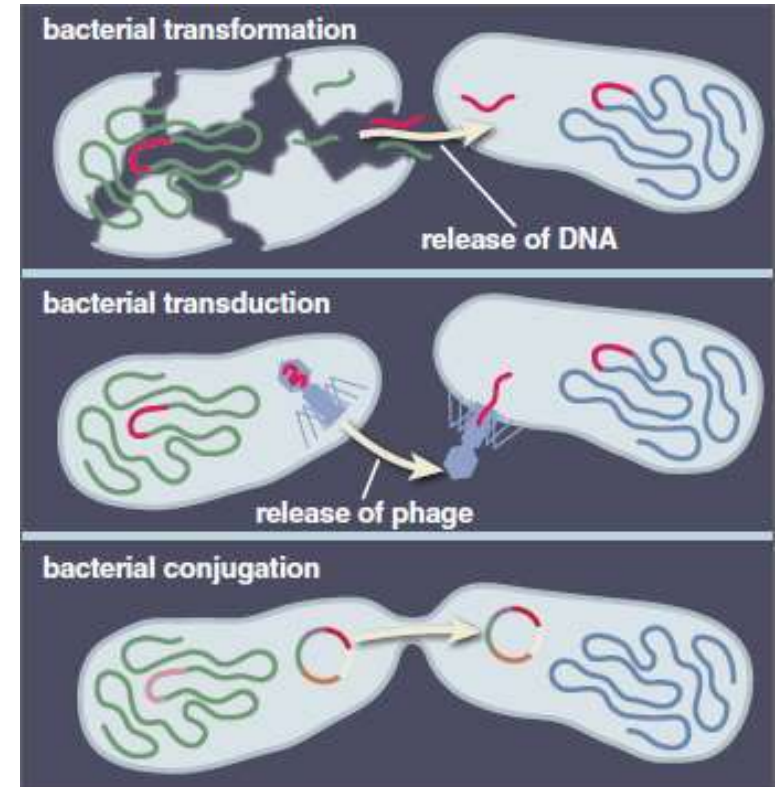
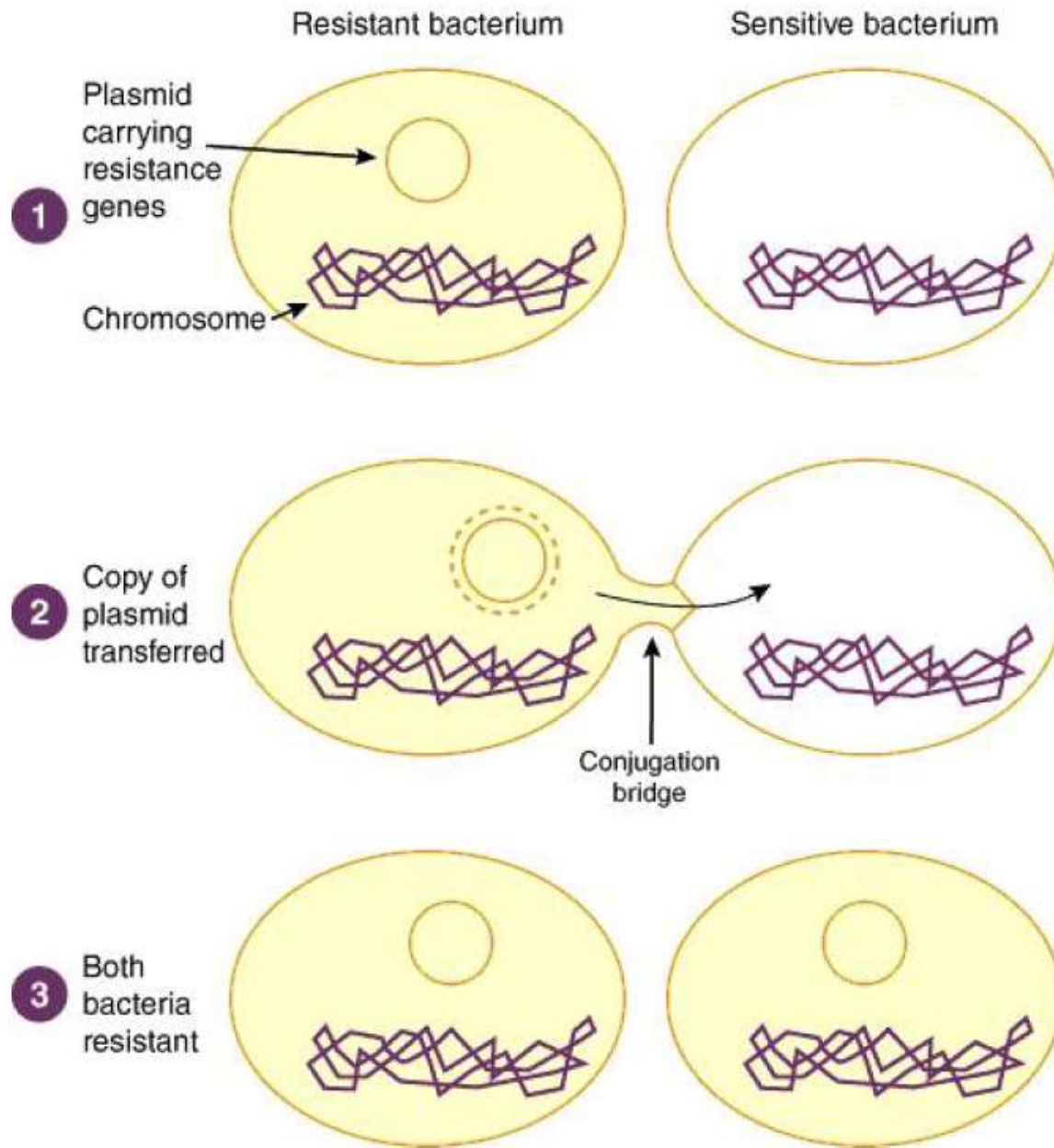
Vertical Transmission

Horizontal Transmission

Vertical Transmission



Horizontal Transmission



Il caso della Colistina: Dell'uomo, e altri animali

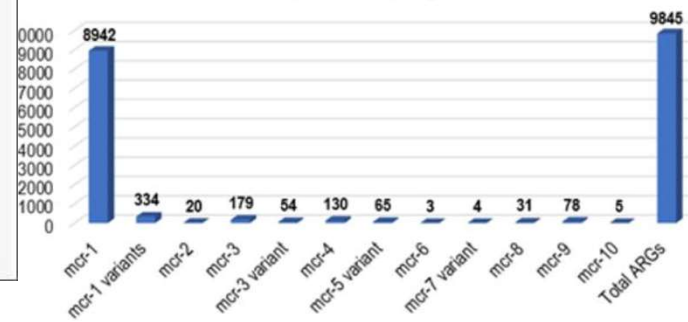
Countries with antibiotic-resistant *mcr-1* gene in humans as of March 1, 2016



GOING GLOBAL An antibiotic-resistant gene, *mcr-1*, had cropped up in a number of countries across the globe by March 1, 2016. Now, scientists have found *E. coli* bacteria carrying the gene in the United States, too.

R.L. SKOV AND D.L. MONNET/EUROSURVEILLANCE 2016

Global Count of MCR genes



Total MCR genes per country



MCR variants distribution per country

