

BIOTECHNOLOGIES TO 2025?

- KEY**
- Technical Bottlenecks** Technical areas which require solutions and if a breakthrough occurs could result in a flood of new developments.
 - Legislative Readiness?** Future technological areas that our legislative system may not yet be equipped to handle.
 - Possibility Space?** The convergence of technology forecasts, or the dual use of technologies which could result in completely novel outcomes.
 - Decision Point?** A fork in the road: if two technologies converge to produce the same result, which one will be taken up by different markets?
 - Interdependencies** Technology forecasts which are dependent on other technological areas or other systems or infrastructures to eventuate.
 - Convergence** The merging or coming together of different technologies or market sectors.
 - Trend Drivers** Trends occurring in other realms which are emerging as a result of, or drive or limit the advance of, biotechnologies.

2005 | 2010 | 2015 | 2025

REGENERATIVE MEDICINE

ENHANCEMENT

"Better than well"

REPRODUCTIVE TECHNOLOGIES

GENOMIC MEDICINE

1997 - First gene-based targeted therapeutic Herceptin® for breast cancer enters the marketplace
 1997 - 16% of new drugs based on biotechnology
 2003 - Map of the human genome completed

NUTRITION

AG-BIO

1996 - First commercial planting of GM Crops. First generation of GM Crops exhibits production, or "input", traits, like insect and herbicide resistance
 2002 - First livestock cloned for commercial purposes

INDUSTRIAL BIOTECHNOLOGY

ENVIRONMENTAL BIOTECHNOLOGY

SECURITY AND DEFENCE

