* QUIZ
* Set up restriction digestion
* Pipetting : discussion
* Plant transformation: background information
(* TAIR-worksheet).

Sample Mean

$$\bar{x} = \frac{\sum_{i=1}^{n} x_i}{n} \qquad \bar{x} = \frac{x_1 + x_2 + x_3 + \ldots x_n}{n}$$

Sample Standard Deviation

$$SD^2 = \frac{1}{n-1} \sum_{i=1}^{n} (x_i - \bar{x})^2$$

Accuracy

100 x [(Mean –Reference value)/ Reference value)]

Precission:

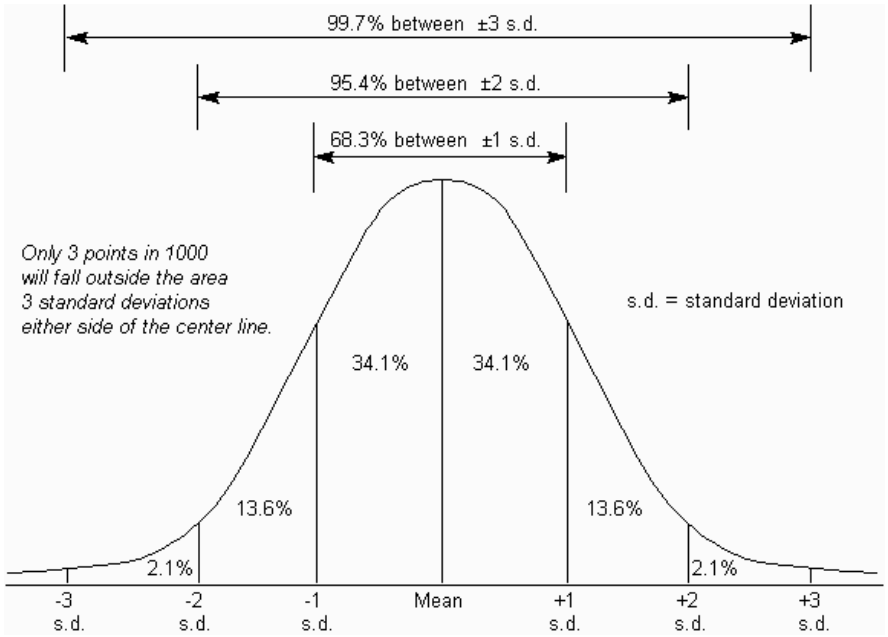
SD/mean x 100

Sample Standard Deviation

$$SD^2 = \frac{1}{n-1}\sum_{i=1}^{n}(x_i - \bar{x})^2$$

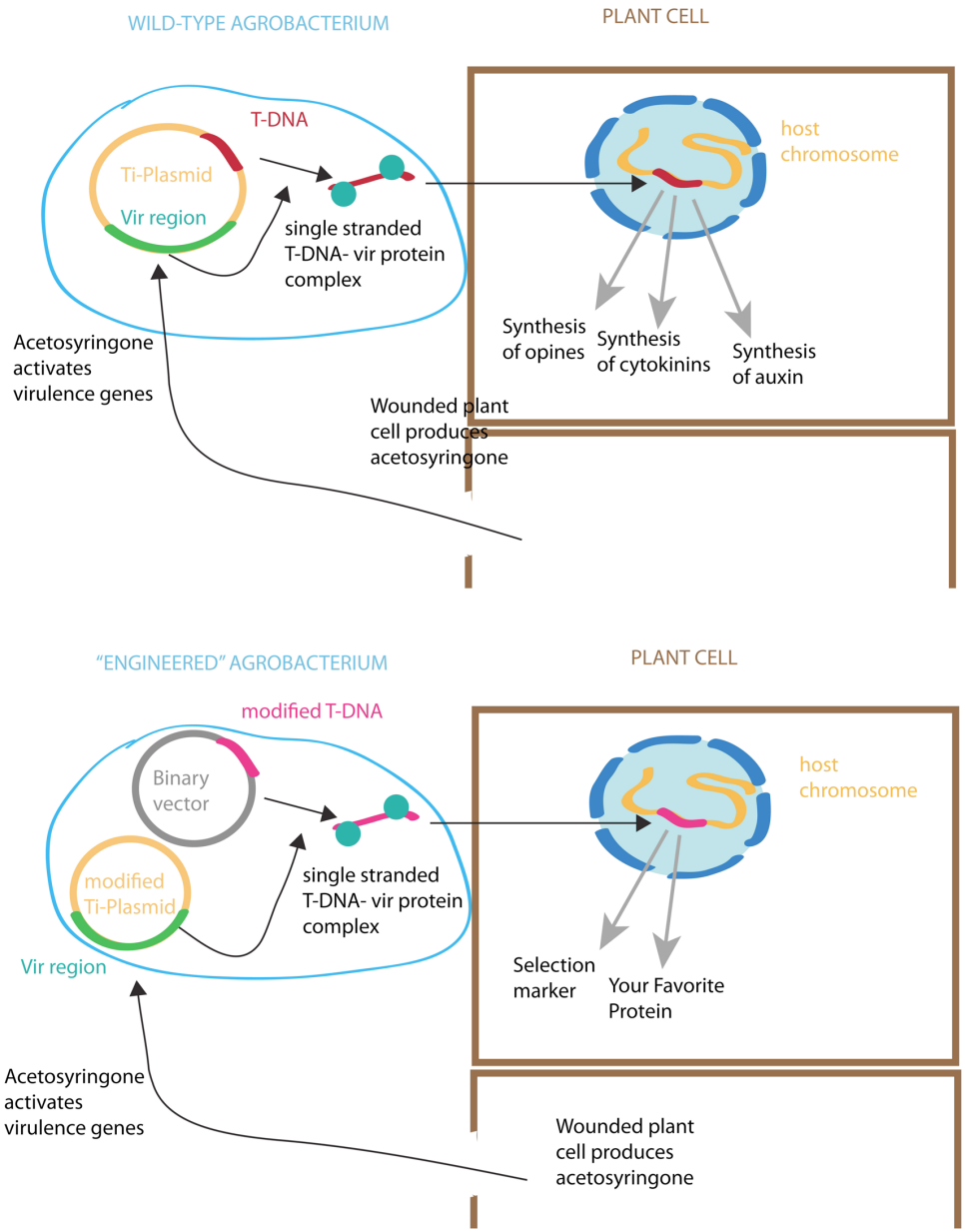
Probability distributions

- Learning to think "statistically" is learning to think in terms of probability.
- A statistic is simply an estimated parameter of a probability distribution.



Modified from, Professor Kurt Paulsen, Temple University
graph from : http://syque.com/quality_tools/toolbook/Variation measuring_spread.htm

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{\frac{-(x-\mu)^2}{2\sigma^2}}$$


WILD-TYPE AGROBACTERIUM
PLANT CELL
T-DNA
Ti-Plasmid
Vir region
single stranded
T-DNA- vir protein
complex
host
chromosome
Synthesis
of opines
Synthesis
of cytokinins
Synthesis
of auxin
Acetosyringone
activates
virulence genes
Wounded plant
cell produces
acetosyringone
"ENGINEERED" AGROBACTERIUM
PLANT CELL
modified T-DNA
Binary
vector
modified
Ti-Plasmid
Vir region
single stranded
T-DNA- vir protein
complex
host
chromosome
Selection
marker
Your Favorite
Protein
Acetosyringone
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