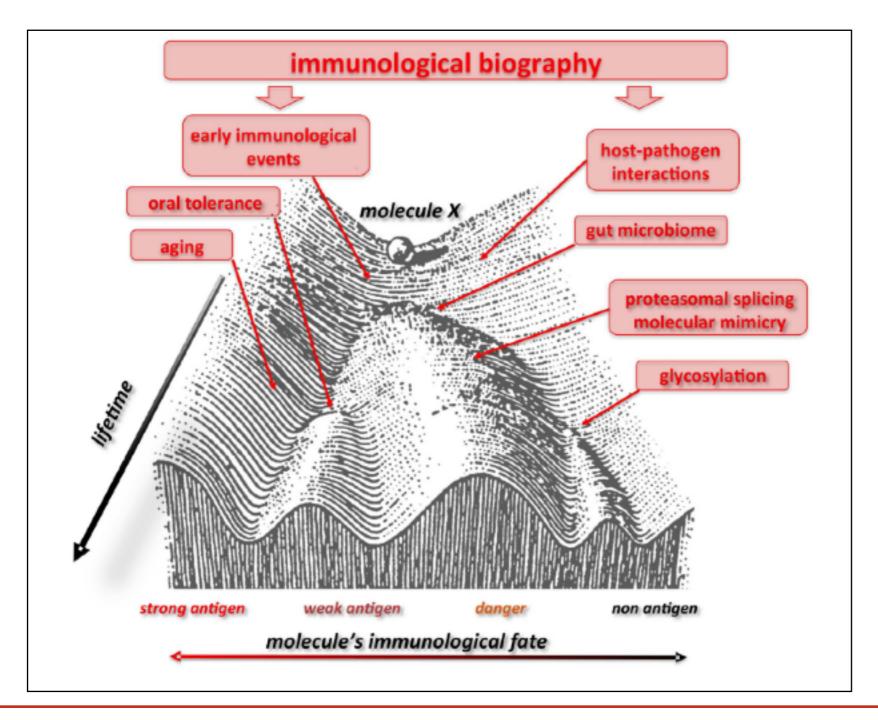
## **Idiographic Science**



interaction biography
=

unique history of interactions

lifeless systems: biography is irrelevant

living systems: biography is crucial



# Three degrees of theory separation

### A. Scientific claim, either by construction, or by raising conjectures to principles:

- I. Type of entity postulated (substance, structure, event, state, disposition, field)
- II. Compositional, developmental, or efficient-causal connections between the entities in I

#### B. Tests of associations between entities

- III. Signs of first derivatives of functional dynamic laws of connections in II
- IV. Signs of second derivatives of functional dynamic laws of connections in II
- V. Signs of mixed second order partial derivatives (Fisher "interactions") of connections in II
- VI. Ordering relationships among the derivatives in III, IV, V

### C. Prediction of functional form and parameter values, tests of universality:

- VII. Function forms (e.g., linear? logarithmic? exponential?) of connections in II
- VIII. Trans-situationality (Context relativity) of parameters in VII
- IX.Quantitative relations among parameters in VII
- X. Numerical values of parameters in VII

