

D Interaction Scenario Clarification



Is "Interaction Scenario" the correct academical term for this definition? (warning, latex code)

\emph{Interaction Scenario}: The type of interaction between cells or between cell and substrate, including homotypic, heterotypic, or substrate adhesion. %



The term "Interaction Scenario" as you've defined it, referring to types of cellular interactions (homotypic, heterotypic, or substrate adhesion), is not commonly recognized as a standard academic term in the fields of biochemistry or cell biology. Typically, these interactions are described with more specific terminology:

- 1. **Homotypic interactions** refer to interactions between identical or similar molecules on the surface of cells. This is often seen in the context of cell-cell adhesion among the same cell types.
- 2. **Heterotypic interactions** involve interactions between different molecules or cells, such as between different cell types or between immune cells and their targets.
- 3. **Substrate adhesion** describes how cells adhere to extracellular matrix components or artificial substrates in their environment, crucial for tissue architecture and cellular signaling.

Instead of using the term "Interaction Scenario," it might be more appropriate to use terms like "cellular interaction types," "cell adhesion mechanisms," or simply "cellular interactions." These terms are more widely recognized and specific in scientific literature.

For precise and academically accurate descriptions, referring to peer-reviewed sources like journal articles on cell adhesion or textbooks on cellular biology would be recommended. If you need specific references or more detailed explanations on these topics, let me know, and I can provide further details or sources.



do you think that this renewed definition justifies introduction of a new term?

\def\footinteractionscenario{%

\emph{Cell Interaction Scenario} (defined in this work): A Combination of cellular interaction types describing direct contact or adhesion between cells. Cellular interaction types include those between similar cell types (homotypic interaction), different cell types (heterotypic interaction), or between cells and substrate. A cell interaction scenario usually implies that many cell interaction types happen at the same or in rapid succession, for instance myeloma cells interacting with both other myloma cells and \ac{MSCs}. When interaction scenarios emerge from cell division, the term

\emph{growth conformation} is used as well (see Chapter\,1)%



}

The renewed definition you provided for "Cell Interaction Scenario" indeed offers a more comprehensive and specific framework for describing complex cellular interactions. Introducing a new term in scientific literature is justified if it addresses a gap in existing terminology and enhances clarity and communication within the field. Your definition provides a detailed explanation of various interaction types and introduces the concept of multiple interactions occurring simultaneously or in succession, which can be particularly useful for describing complex biological phenomena. Here is the refined definition with some minor adjustments for clarity:

```
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   cellular interaction types describing direct contact or adhesion between
   cells. Cellular interaction types include those between similar cell types
   (homotypic interaction), different cell types (heterotypic interaction), or
   between cells and substrate. A cell interaction scenario usually implies
   that multiple cell interaction types occur simultaneously or in rapid succession,
   for instance, myeloma cells interacting with both other myeloma cells and
   \ac{MSCs}. When interaction scenarios emerge from cell division, the term
   \emph{growth conformation} is also used (see Chapter\,1)%
}
```

Justification for Introducing "Cell Interaction Scenario":

- 1. **Clarity and Specificity**: The term provides a clear and specific way to describe complex interaction patterns, which are common in cellular biology but not always well-captured by existing terms.
- 2. **Comprehensive Framework**: It includes homotypic, heterotypic, and substrate interactions, thus offering a holistic view of cellular interactions.
- 3. **Descriptive Utility**: The term "Cell Interaction Scenario" is useful for describing experimental and observational conditions in cellular studies, particularly when multiple interaction types are involved.
- 4. **Introduction of New Concepts**: The term "growth conformation" adds another layer of specificity, particularly for interactions emerging from cell division, which is a valuable distinction in many biological contexts.
- 5. **Facilitation of Communication**: New terms can help standardize descriptions across studies, making it easier for researchers to communicate their findings and compare results.

Considerations:

- 1. **Peer Review**: Ensure that the new term is well-received by peers through discussions, presentations, and publications. Peer feedback will be crucial in validating the term's usefulness.
- 2. **Documentation**: Clearly define and use the term consistently in your work. Provide ample context and examples to help others understand and adopt the term.



3. **Broader Acceptance**: The term will gain acceptance if it addresses a real need and proves useful to other researchers. Publishing in reputable journals and presenting at conferences will help in disseminating the term.

Overall, introducing "Cell Interaction Scenario" seems justified and potentially beneficial to the field, given the detailed and specific nature of the definition you provided.

ChatGPT kann Fehler machen. Überprüfe wichtige Informationen.