

Electromagnetic communication in the Ciliate *Paramecium caudatum*

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Indirect evidence has accumulated over the years that cells can communicate electromagnetically with each other. Experiments with the Ciliate *Paramecium caudatum*, a freshwater unicellular organism of the Eurasian plate, do support these findings as well.

With a derivative of Gurwitsch's early design (1923) for studying non-chemical cell communication, populations of *Paramecia* were chemically separated from each other by placing them into two cuvettes of different sizes, one standing in the other. Such pairs were exposed to each other during 48 hrs while they were in a black box.

The effects of neighbouring populations as compared to their absence regard increased or decreased cell growth, energy uptake, density regulation and altered growth between (other) aquatic species. Evidence for one population compensating mortality in the other was found, too.

Cells apparently use more than chemical signals for communication. They are, sensitive to external em-fields, generate these fields themselves, and inherit them, too. Hence, the results from investigating cellular em-fields are supposed to affect theories of life, diagnosis and therapy, ecology, environmental protection, and presumably evolutionary theory as well.

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