The permanent presence of noninfectious but rescuable Rous sarcoma virus (RSV) genome in all in vivo or in vitro passaged XC cell lines or clones, in the absence of any signs of infectious virus formation, led to the conclusion that XC cells are virogenic and harbor RSV provirus. It was proposed and later proven that the virus rescue from XC cells was based on fusion with these noninfectious virogenic mammalian cells with permissive chicken cells. 

[Hilgert 1968] demonstrated that no infectious virus was detected with the expertise of Ivan Hilgert concluded that the viral genome in XC cells should be responsible for the genetic change that transformed a fibroblast into a tumor cell, and therefore elucidation for the genetic change that transformed a fibroblast into a tumor cell, and therefore elucidation

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Oncogenic Provirosis Integration and Rescue

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September 24, 1990

As a research fellow of the Institute of Experimental Biology and Genetics directed by Milan Hálek I proceeded with my studies of the rat XC tumor, harboring the chicken Rous sarcoma virus (RSV) genome. From the standpoint of outside observers, this model gave an impression of an experimental artifact and, not surprisingly, aroused little interest at the institute. I remember the director’s repeated comments: What else can you do with that and when are you going to stop it?

Arguments worked because of broadmindedness and a sense for new approaches to experimental genetics, characteristic features of Hálek’s creative mind.

At this oncology conference in Bratislava, I attracted the attention of Dušan Simkovick and Viliam Thurzo, director Cancer Research Institute, We set up a real collaboration that included, on my side, overnight trips from Prague to Bratislava and transportation of even a microscope and micropipettes for cloning: The results of previous in vivo experiments were reemployed also in tissue culture, and we demonstrated that monoclonal XC clone retained the viral genome. Ul-entrance of a cell to a tumor, and therefore elucidation of the nature of the viral genome in XC cells might provide information about the mechanism of this change. This argument worked because of broadmindedness and a sense for new approaches to experimental genetics, characteristic features of Hálek’s creative mind.

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