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Adventures in Science: Interview with Thomas M. Rivers

Extracted on Mar-29-2023 11:25:24

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<i>Thomas M. Rivers</i>: Well the one that we are most interested in, at the moment, are the diseases of the respiratory tract. Many of which undoubtedly are caused by viruses.

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<i>Thomas M. Rivers</i>: And there's a big group of viruses been discovered recently known as the Adenoviruses, they come from the throat and some of those cause our common respiratory diseases and we've got to match up the virus with the disease.

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<i>Thomas M. Rivers</i>: In addition to that, there's a large group of viruses known as the Echoviruses and the Coxsackieviruses, which inhabit the intestinal tract, in a manner similar to the Polio viruses.

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<i>Thomas M. Rivers</i>: And these viruses may get into the bloodstream and also get into the central nervous system and cause an inflammation of the linings of the brain and cord, leading to what we know as Aseptic Meningitis.

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<i>Thomas M. Rivers</i>: Now, there's a large number of these viruses, and we've had epidemics abroad and we've had epidemics in this country.

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<i>Thomas M. Rivers</i>: Last summer, we had an epidemic of at least 100,000 cases in Milwaukee, 400,000 cases in St. Paul and Minneapolis. And Durham, North Carolina, they had an outbreak of Coxsackievirus B5. In Milwaukee and the Twin Cities, the outbreak was caused by Echo 9.

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<i>Thomas M. Rivers</i>: So, we have in our hands, a group of viruses that will produce infection of the respiratory tract, and produce embalmment in the central nervous system that we should study and see if we can arrive at some solution to how to handle them.

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<i>Watson Davis</i>: Well, this is really, in a sense, just as thrilling as the great attack that's been made on Polio, because it affects as many people, perhaps, and in the long run it'll be very important.

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<i>Watson Davis</i>: Course, this matter of disease seems very simple when you don't know too much about it. The minute you dig into it, Dr. Rivers, you do find it's quite complex and they've got large number of different kinds of viruses that are causing these illnesses.

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<i>Watson Davis</i>: And it seems to me, it must be one of the most exciting things in the world to do as you have -- To dig into and find out which viruses cause what and then look forward to making vaccines against them, just as you have with Polio.

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<i>Thomas M. Rivers</i>: That's correct.

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<i>Watson Davis</i>: Well, now, Dr. Rivers, what are some of the other problems? Do you think you can use the same methods on these diseases that you were mentioning, these virus diseases of the respiratory tract and so forth, that you've used against Polio?

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<i>Thomas M. Rivers</i>: As a matter of fact, the work on Polio led to the discovery of the Echoviruses and the Adenoviruses. Without the tissue culture methods that were developed by John Enders, we would not know that the Echoviruses and Adenoviruses existed.



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