

Sender:
To: "Elmo R. Zumwalt"
Subject: FW: Computer viruses - defensive, offensive and commercial applications
Date: Wed, 1 Sep 1999 13:39:29 -0400
Sensitivity: Company-Confidential

We discussed meeting with them... Would ask them to coordinate a schedule to meet with you..
Thanks again for all the help with grand schemes and delusions.....
Will look forward to seeing you more as the avalanche builds...
Best/S

-----Original Message-----

From:
Sent: Monday, August 30, 1999 9:53 PM
To: 'Saydjari, Sami'; 'Hui, Bert'
Cc: 'Jones, Shaun'; 'Cohen, Fred'; Stemmer, Pim
Subject: Computer viruses - defensive, offensive and commercial applications

Dear Drs. Hui and Saydjari,

I was referred to you by Shaun Jones. From Shaun and Xan Alexander I understand that Darpa has a strong interest in the combination of computing/informatics/electronics with biological organization principles.

Fred Cohen and I are pursuing a new venture (called Geneticom) aimed at the defensive, offensive and commercial applications of computer viruses.

Fred, as you may know, discovered computer viruses in 1983 and has written several books on computer viruses and how they can be evolved like biological organisms. Fred is widely considered the leading researcher in the virus field as well as a world leader in distributed processing.

My own background is in breeding a broad variety of biological sequences (called 'molecular breeding'), including viruses like HIV, MLV, HPV and parts of about 10 other viruses, and understanding the rules for evolution of biological sequences and organisms. The simplicity, reliability and breadth of the breeding approach compared to rational design has resulted in strong commercial interest and rapid success for Maxygen, which is now about 110 people and ready to go public soon. Many of the evolution and breeding principles we have established can easily be transferred to digital sequences and used for evolving computer viruses, related autonomous digital

For to Shaun
Fred set it up


Cohen
9/2/99

Tickie
9/14/99

agents as well as text, music or art files.

Fred and I have prepared a detailed presentation on the diverse applications of computer virus breeding, which includes the defense/offense applications which we see as an early focus area, as well as a broad range of highly commercial applications, some of which are short or medium term. The long term potential is to fundamentally impact communication ('distributed communication') and to evolve evolutionary computer language which may .

If you are interested, Fred and I would like to meet with you at Darpa to discuss these ideas and obtain your feedback.

Some dates that are convenient for us are Sept 27,28,29,30, Oct 6,7, 8, Oct 13,14,15, and Oct 18,19,20 (a few of these I have not yet checked with Fred).

If you have suggestions for contacts at other government agencies which are likely to be interested in this area, please pass those on to me so that we can arrange to see those people on the same trip.

Sincerely -

Willem 'Pim' Stemmer, PhD
Vice-President R&D
Maxygen, Inc.

Redwood City, CA

ph:
email:

fax:

Was set for
14 Oct., had to
cancel on
4 Oct. Need to
reschedule