

CHEMICAL HERITAGE FOUNDATION

**MICHEL STREULI**

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview  
Conducted by

Helene L. Cohen

at

Dana-Farber Cancer Institute  
Boston, Massachusetts

on

8-9 November 1999

From the Original Collection of the University of California, Los Angeles

## ACKNOWLEDGEMENT

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Interviewee agrees to participate in a series of University-conducted tape-recorded interviews, commencing on or about November 8, 1999, and tentatively entitled "Interview with Michel A. Streuli". This Agreement relates to any and all materials originating from the interviews, namely the tape recordings of the interviews and a written manuscript prepared from the tapes, hereinafter collectively called "the Work."

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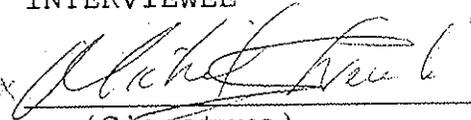
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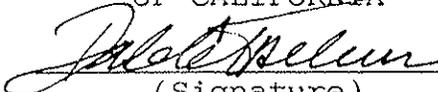
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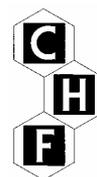
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## MICHEL STREULI

1958 Born in Zurich, Switzerland on 17 April

### Education

1981 B.S., Tufts University  
1983 Diploma, University of Zurich  
1986 Ph.D., University of Zurich

### Professional Experience

Dana-Farber Cancer Institute and Department of Pathology,  
Harvard Medical School

1986-1991 Research Fellow, Division of Tumor Immunology  
1991-1997 Assistant Professor, Division of Tumor Immunology  
1998-present Associate Professor, Department of Cancer Immunology  
and AIDS

### Honors

1981 Prix Jacques de Bedriaga, University of Zurich  
1986 Swiss National Science Foundation Fellowship  
1988 Cancer Research Institute Fellowship  
1993-1997 Pew Scholar in the Biomedical Sciences  
1997 Leukemia Society of America Scholar Award

### Selected Publications

- Streuli, M. et al., 1980. At least three human type  $\alpha$  interferons: structure of  $\alpha$ -2. *Science* 209:1343-1347.
- Streuli M. et al., 1987. Differential usage of the three exons generates at least five different mRNAs encoding human leukocyte common antigens. *J. Exp. Med.* 166:1548-1566.
- Streuli M. et al., 1988. A new member of the immunoglobulin superfamily that has a cytoplasmic region homologous to the leukocyte common antigen. *J. Exp. Med.* 168:1523-1530.
- Streuli, M. and H. Saito, 1989. Regulation of tissue-specific alternative splicing:

- exon-specific cis-elements govern the splicing of leukocyte common antigen pre-mRNA. *EMBO J.* 8:787-796.
- Streuli, M. et al., 1989. A family of receptor-linked protein tyrosine phosphates in humans and *Drosophila*. *Proc. Natl. Acad. Sci., USA* 86:8698-8702.
- Streuli, M. et al., 1992. Expression of the receptor-linked protein tyrosine phosphatase LAR: proteolytic cleavage and shedding of the CAM-like extracellular region. *EMBO J.* 11:897-907.
- Serra-Pagès, C. et al., 1995. The LAR transmembrane protein tyrosine phosphatase and a coiled-coil LAR-interacting protein colocalize at focal adhesions. *EMBO J.* 14:2827-2838.
- Debant, A. et al., 1996. The multidomain protein Trio binds the LAR transmembrane tyrosine phosphatase, contains a protein kinase domain, and has separate rac-specific and rho-specific guanine nucleotide exchange factor domains. *Proc. Natl. Acad. Sci., USA* 93:5466-5471.
- Beck, A.R.P. et al., 1998. RNA-binding protein TIAR is essential for primordial germ cell development. *Proc. Natl. Acad. Sci., USA* 95:2331-2336.
- Serra-Pagès, C. et al., 1998. Liprins, a family of LAR transmembrane protein tyrosine phosphatase-interacting proteins. *J. Biol. Chem.* 273:15611-15620.

## ABSTRACT

**Michel Streuli** was born in Zurich, Switzerland, where his father was a doctor and his mother a law librarian. When he was about three, Michel and his family moved to Bronxville, New York, where his father had taken a postdoc. After a couple of years the family moved back to Switzerland for a couple of years, and then returned to the United States, where Michel began school. In school he liked mathematics and engineering. He built a washing machine and an artificial kidney with his father when he was ten or twelve. In high school he enjoyed mathematics and science classes; he had a very good biology teacher. He tutored math in Harlem and enjoyed sports.

He had always wanted to be a doctor and a scientist, and since Tufts was known to have a good program in child development and pediatrics, Michel began college there, with biology as his major. He also joined the squash team. After his junior year he went to Switzerland for a summer but stayed for a year. He finished his degree in the United States and then went back to Zurich to do research in Charles Weissman's lab, where he worked on cloning interferon.

He returned after 5 years to the Dana-Farber Cancer Center to work in Stuart F. Schlossman's lab. He found a place in Haruo Saito's lab, working on cloning antigens, specifically the antigen CD45, the leukocyte common antigen. It had been cloned for a part of the rat gene but not for the human. During this period, he married Elsa Gontrum, who was studying art history at Yale. They have since had two children.

After finishing his postdoc, he accepted an assistant professorship at the Dana-Farber Cancer Center and at Harvard University, in the department of pathology. He is now an associate professor and continues his research, hoping that eventually scientists will develop cancer therapies. He has patented some of his discoveries; he continues to publish articles and win awards; and he and his wife attempt to balance family life with their two careers.

## UCLA INTERVIEW HISTORY

### INTERVIEWER:

Helene L. Cohen, Interviewer, UCLA Oral History Program. B.S., Nursing, UCLA; P.N.P., University of California, San Diego/UCLA; M.A., Theater, San Diego State University.

### TIME AND SETTING OF INTERVIEW:

**Place:** Streuli's office, Dana-Farber Cancer Institute, Boston, Massachusetts

**Dates, length of sessions:** November 8, 1999 (106 minutes); November 9, 1999 (81)

**Total number of recorded hours:** 3.15

**Persons present during interview:** Streuli and Cohen

### CONDUCT OF INTERVIEW:

This interview is one in a series with Pew Scholars in the Biomedical Sciences conducted by the UCLA Oral History Program in conjunction with the Pew Charitable Trusts's Pew Scholars in the Biomedical Sciences Oral History and Archives Project. The project has been designed to document the backgrounds, education, and research of biomedical scientists awarded four-year Pew scholarships since 1988.

To provide an overall framework for project interviews, the director of the UCLA Oral History Program and three UCLA faculty project consultants developed a topic outline.

In preparing for this interview, Cohen held a telephone preinterview conversation with Streuli to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. She also reviewed prior Pew scholars' interviews and the documentation in Streuli's file at the Pew Scholars Program office in San Francisco, including his proposal application, letters of recommendation, and reviews by Pew Scholars Program national advisory committee members.

For technical background, Cohen consulted J.D. Watson et al., *Molecular Biology of the Gene*. 4th ed. Menlo Park, California: Benjamin/Cummings, 1987; Bruce Alberts et al., *Molecular Biology of the Cell*. 3rd ed. New York: Garland, 1994; Horace F. Judson, *The Eighth Day of Creation*. New York: Simon and Schuster, 1979; and recent issues of *Science* and *Nature*.

The interview is organized chronologically, beginning with Streuli's childhood in Zurich, Switzerland, and Bronxville, New York, and continuing through his undergraduate work at Tufts University, his graduate studies at the University of Zurich, his postdoc at the Dana-Farber Cancer Institute and Harvard Medical School, and the establishment of his own laboratory at the Dana-Farber Cancer Institute. Major topics discussed include his work on interferon, CD45, and tyrosine phosphorylation; differences between the organization of scientific research in Europe and the United States; and competition in science.

## ORIGINAL EDITING:

Ji Young Kwon, editorial assistant, edited the interview. She checked the verbatim transcript of the interview against the original tape recordings, edited for punctuation, paragraphing, and spelling, and verified proper names. Words and phrases inserted by the editor have been bracketed.

Streuli reviewed the transcript. He verified proper names and made minor corrections and additions.

William Van Benschoten, editor, prepared the table of contents. Kwon assembled the biographical summary and interview history. Daniel Ryan, editorial assistant, compiled the index.

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