**TennaGen**

Assay for Tennessee Antigen

A SIGNIFICANT RESEARCH TOOL FOR DETECTION AND MANAGEMENT OF GASTROINTESTINAL AND LUNG CANCER

AFTER TEN YEARS OF BASIC RESEARCH AND SUBSEQUENT CLINICAL STUDIES, THE ASSAY HAS DEMONSTRATED:

<table>
<thead>
<tr>
<th>TennaGen Assay vs. CEA Assay</th>
<th>Sensitivity</th>
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<tr>
<td>Early detection of colorectal carcinoma</td>
<td>94.5% of Colorectal Carcinoma (Dukes' A)</td>
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<td>86.4% of Colorectal Carcinoma (All Stages)</td>
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<td>79.1% of Carcinoma of the Stomach</td>
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<td>84.2% of Carcinoma of the Pancreas</td>
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<td>93.2% of Carcinoma of the Liver</td>
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<td>76.7% of Carcinoma of the Lungs (All cancers were histologically confirmed)</td>
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Results not affected by smoking

In a study of over 1,200 normal individuals, no significant difference in JCL TennaGen Assay levels was observed between smokers and nonsmokers.

92.4% displayed normal assay levels.

**TennaGen is available for research use only.**

**Ordering Information**

Orders may be directed by mail, telex or telephone to:

JCL Clinical Research Corporation

PO BOX 6275

Knoxville, Tennessee 37914, U.S.A.

Telephone (615) 546-0654

TELEX: In care of 55-7404 TENHDBAGS DDRE

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**WILMOT CANCER RESEARCH FELLOWSHIPS**

The University of Rochester School of Medicine offers research training to individuals with the M.D. degree and at least one year of postdoctoral experience. Research fellows can train for up to three years in any discipline relevant to the cause, diagnosis, treatment or prevention of cancer. Training is available in fields such as: endocrinology, experimental therapeutics, genetics, hematology, immunology, microbiology, molecular and cellular biology, pathology, and radiation oncology.

Stipends range from $27,000 to $30,000, depending on the number of years since the M.D. degree was achieved. There is also an annual allowance of $6,000 for other research costs.

For further information, contact:

Wilmot Cancer Research Fellowship Program

Box 706

University of Rochester School of Medicine & Dentistry

601 Elmwood Avenue

Rochester, NY USA 14642
The Nobel Prize in Physiology of Medicine for 1978 was awarded to Werner Arber, 49, of the University of Basel, Switzerland, and to Hamilton O. Smith, 47, and Daniel Nathans, 50, of Johns Hopkins University. The awards recognized the development of restriction endonucleases, enzymes that are used to study DNA structure and thus to manipulate DNA. The events are described by Stuart Linn (Science 202: 1069–1071, 1978).

The contributions of Arber and his coworkers included the isolation of DNA restriction endonucleases that recognize and cleave specific nucleotide sequences. The work of Smith and his associates led to the purification and characterization of the first of the specific restriction endonucleases, which now number over 80. The first applications of restriction endonucleases to DNA characterization were reported in 1971 by Nathans and his graduate student, Kathleen Danna. They used the oncogenic simian virus SV40 in their research.

The genome of SV40 is a covalently closed, circular DNA duplex consisting of about 5000 nucleotide pairs. The orientation of the DNA strands was determined by means of endonucleases by Nathans and his group. They used a scheme pictured here in their report in Fed. Proc. 33: 1035–1038, 1974, and in Nathans’ Nobel lecture in Science (Wash. D. C.), 206: 903–909, 1979.

We are indebted to Dr. Arber for his portrait (right) and to Jan Emrick of the Johns Hopkins Office of Public Affairs for the photographs of Drs. Nathans (left) and Smith (center).

M. B. S.