

SARS. Further studies will be needed to demonstrate conclusively that SARS-CoV is indeed causative of neurologic manifestations such as those described here and to address the potential neuropathologic sequelae of SARS-CoV infection of the central nervous system.

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Protein Microarrays: A Literature Survey

To the Editor:

We have previously published literature surveys on microchips, mi-

croarrays, and nanotechnology that were compiled by the IFCC Working Group on Nanotechnology (1–3). The Working Group has now completed a survey on the protein microarray literature. The current survey covers the protein, peptide, and antibody microarray literature up to the middle of 2003.

A protein microarray is a collection of proteins arranged on a planar solid surface (membrane, glass slide, or silicon chip) or immobilized on individual microbeads trapped in the ends of the fibers in a fiber optic bundle, or a collection of coded microbeads in solution (known as a liquid or 3D array). The scope of arrayed protein includes peptides, antigens, antibodies, and allergens. In common with the cDNA and oligonucleotide microarrays, a protein microarray facilitates simultaneous multianalyte assays. These analytical devices are now an important tool in studies to characterize the human and other proteomes and for characterizing protein interactions (e.g., protein–protein and protein–DNA). The literature survey has been divided into four sections: (1) General (books, reviews, editorials); (2) Fabrication (array construction and detection methodologies); (3) Applications (protein identification and quantification, array-based proteomics, protein interactions); and (4) Patents (only US patents listed currently). The database can be accessed at *Clinical Chemistry Online* at <http://www.clinchem.org/content/vol49/issue12/>. Other useful resources for general information on protein microarrays and chips are the DNA Microarray (Genome Chip; at www.gene-chips.com) and BioChipNet (www.biochipnet.de) web sites.

This compilation is based in part on a survey undertaken by the IFCC Working Group on Nanotechnology, chaired by Dr. Larry J. Kricka. Members of the Working Group are listed in the data supplement that accompanies this letter at *Clinical Chemistry Online* (<http://www.clinchem.org/content/vol49/issue12/>).

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Improved Real-Time PCR Assay for Homogeneous Multiplex Genotyping of Four CYP2C9 Alleles with Hybridization Probes

To the Editor:

The human cytochrome P450 2C (CYP2C) subfamily consists of four members (CYP2C8, -9, -18, and -19), which share >82% amino acid identity (1). The enzyme CYP2C9 metabolizes ~10% of therapeutically important drugs (e.g., phenytoin and warfarin). The gene CYP2C9 is very polymorphic, with >10 alleles result-