properties of CPS II; specifically, the allosteric activation by PRPP is enhanced and the feedback inhibition by UTP is reduced. These changes would provide a mechanism to accommodate the increased demand for these nucleotides during growth. Therefore, MAP kinase phosphorylation of CPS II may represent yet another example of an important growth response, linking extracellular growth signals to the elementary process of pyrimidine nucleotide synthesis.

L.M. Graves (3)
University of North Carolina at Chapel Hill,
Chapel Hill, NC 27599-7365, USA

(3) Nature 2000; 403: 326-32

Declines in perinatal group B streptococcal disease
Maternal-child spread of group B streptococcal disease, a leading cause of mortality and morbidity among newborns, can be prevented by administration of antibiotics during childbirth to women at risk of transmitting the bacteria to their infants. During the 1990s, efforts to prevent neonatal group B streptococcal disease increased in the United States. Coinciding with these efforts, from 1993–1998, the incidence of group B streptococcal disease during the 1st week of life declined by 65% to an incidence of 0.6 cases/1,000 live births, based on active surveillance conducted by the Centers for Disease Control and Prevention. Additionally, the excess incidence of newborn disease among black infants as compared with white infants decreased by 75%. We estimate that in 1998, 3,900 neonatal group B streptococcal infections and 200 neonatal deaths were prevented in the United States.

S.J. Schrag (5)
Centers for Disease Control and Prevention,
Atlanta, GA 30333, USA


APOE genotype and risk of recurrent hemorrhagic stroke
Apolipoprotein E (APOE) genotype has been established as a genetic risk factor for several common diseases including dyslipidemia and Alzheimer’s disease. Previous work from these authors and others has demonstrated an association between two of the APOE alleles (e2 and e4) and hemorrhagic strokes caused by a process known as cerebral amyloid angiopathy. Based on these observations, the authors prospectively followed 71 patients with hemorrhagic stroke in cortical (or lobar) brain regions for occurrence of recurrent hemorrhages. Recurrent hemorrhagic stroke occurred at a rate of approximately 10% per year. Those patients who carried either APOE e2 or e4 were at a nearly four-fold greater risk for recurrence (risk ratio 3.8, 95% confidence interval 1.2–11.6, \( P = 0.01 \)) than patients with the most common APOE e3/e3 genotype. These data establish APOE genotype as a relatively strong predictor of recurrent hemorrhagic stroke and further support an important biological role for this genotype in the process of cerebral amyloid angiopathy. The data also allow patients at high risk for recurrence to be identified prospectively, an important step towards clinical trials in this field. Together with recent advances in the development of anti-amyloid drug strategies, this work provides a strong foundation for future trials in secondary prevention of this currently untreatable illness.

S.M. Greenberg (4)
Massachusetts General Hospital, Wang ACC 836,
Boston, MA 02114, USA


Influenza vaccination of health-care workers
Vaccination of health-care workers (HCWs) has been claimed to prevent nosocomial influenza infection of elderly patients in long-term care. However, there are only limited data to show whether this strategy is effective. The aim of this study was to determine whether vaccination of HCWs reduces mortality and the incidence of virologically proven influenza in elderly long-term care patients.

We performed a parallel group study 20 long-term elderly care hospital sites in west and central Scotland during the winter of 1996–1997. Sites were randomized for their HCWs to be routinely offered influenza vaccine (SV), or not to be offered vaccine (SO). Influenza vaccine uptake in HCWs was 50.9% in the SV sites compared to 4.9% in the SO sites. The patient mortality rate was 102/749 (13.6%) on the SV sites compared to 154/688 (22.4%) on the SO sites (\( P = 0.014 \)). This effect could not be explained by differences in characteristics between the study groups.

Virologic studies were performed. There were no significant differences between the two study groups in the proportions of patients with culture or polymerase chain reaction (PCR) positive routine nose/throat swabs (SV