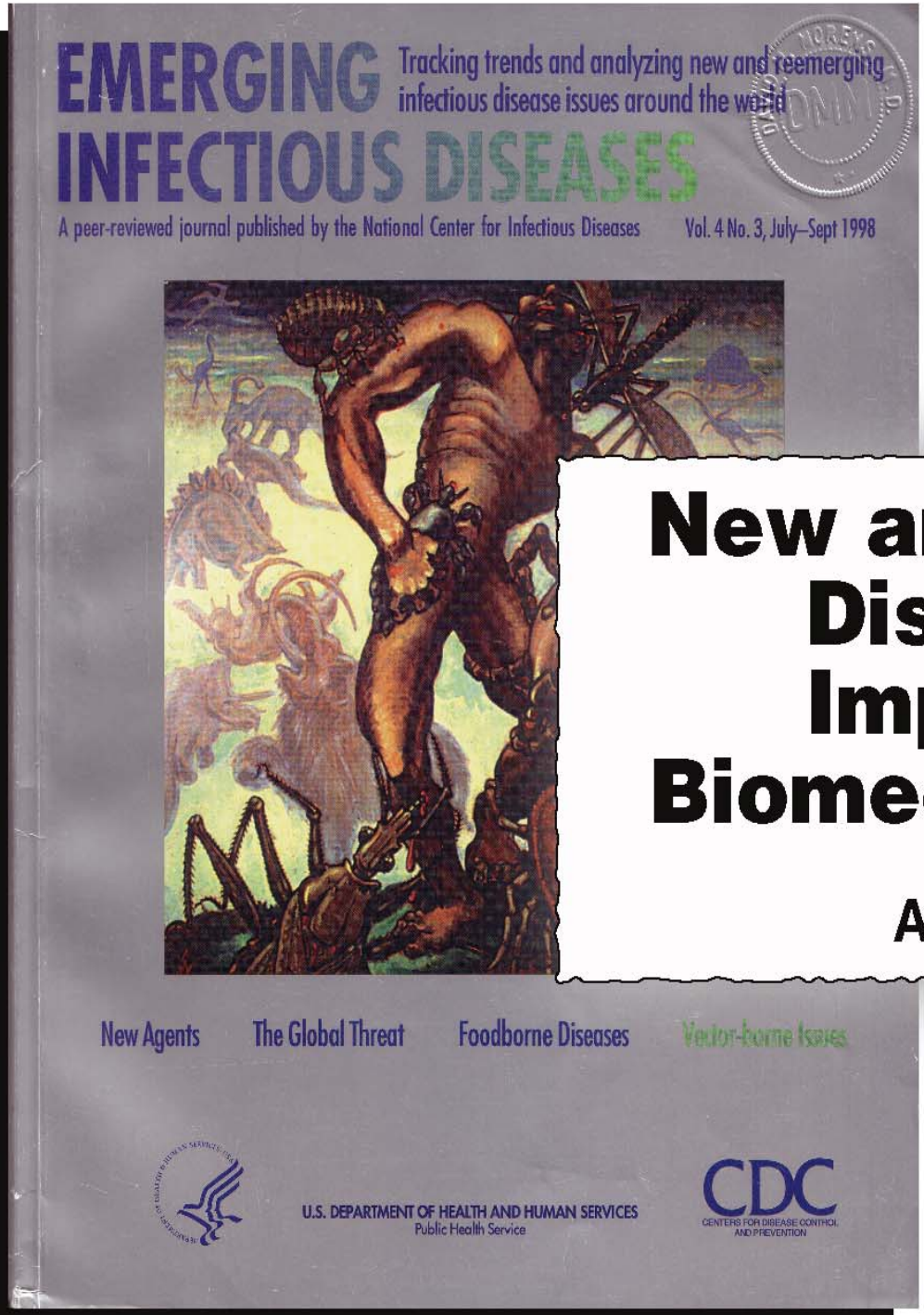
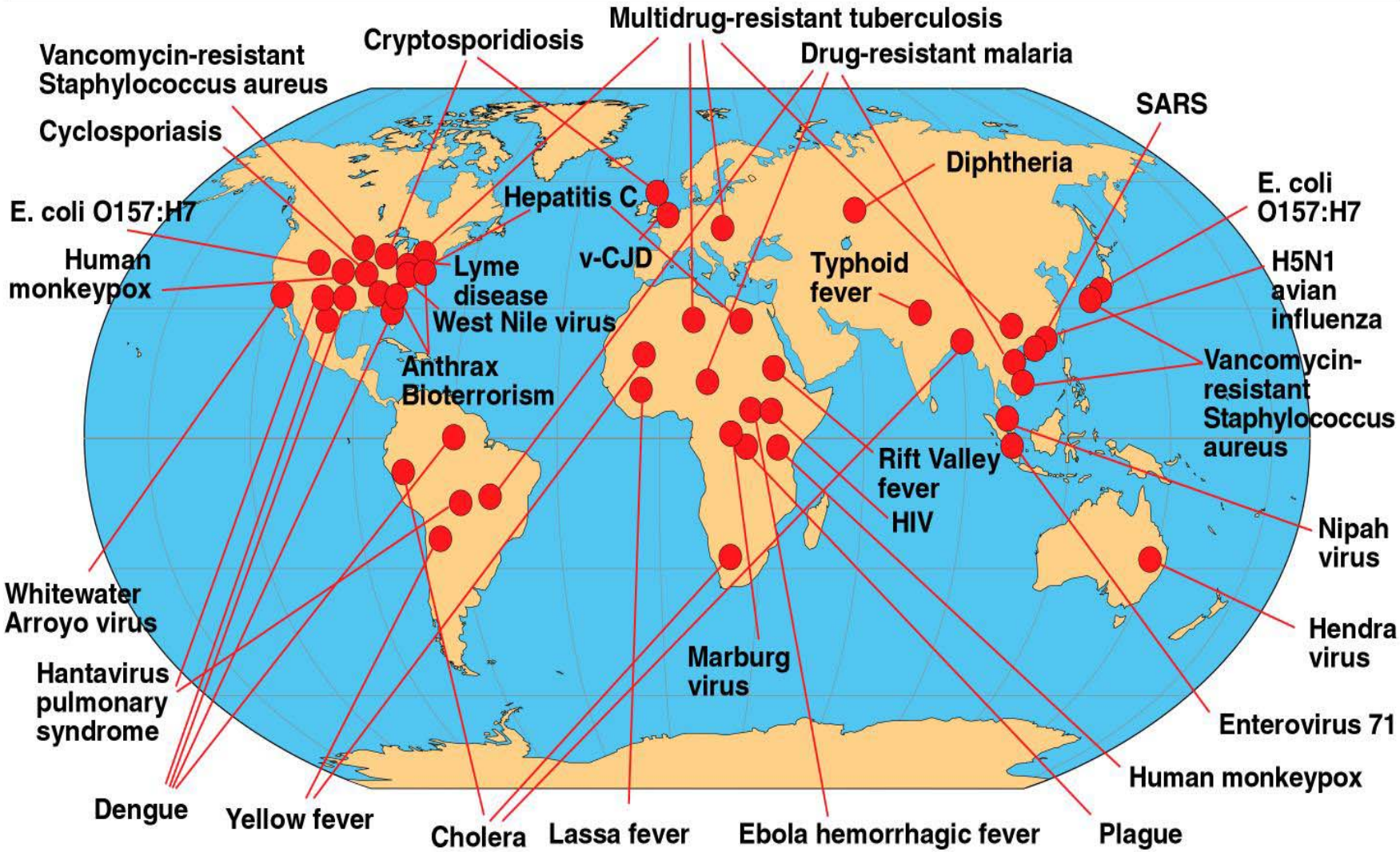
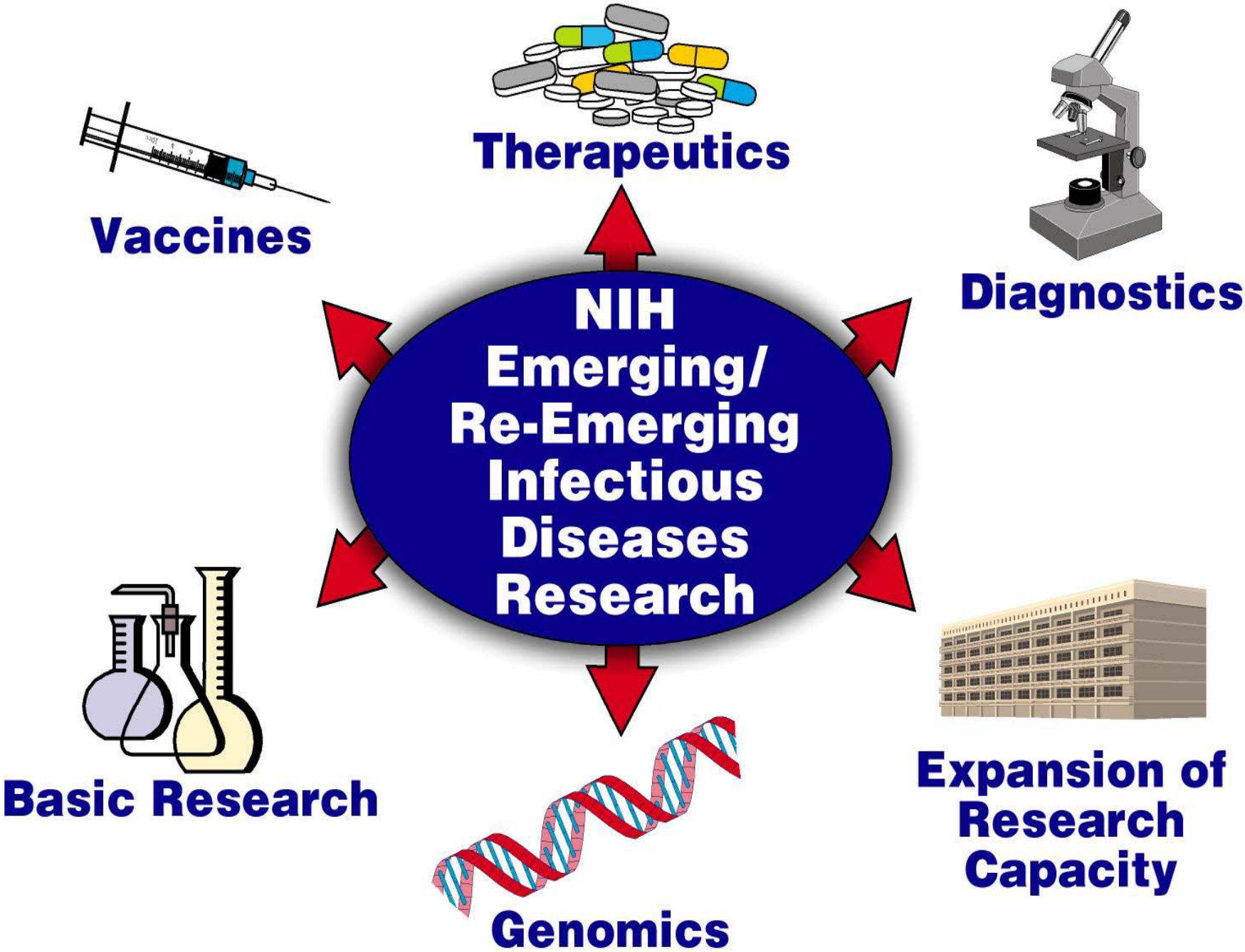


New and Reemerging Diseases: The Importance of Biomedical Research

Anthony S. Fauci

Examples of Emerging and Re-Emerging Diseases




Therapeutics
Vaccines
Diagnostics
NIH Emerging/ Re-Emerging Infectious Diseases Research
Basic Research
Expansion of Research Capacity
Genomics

Emerging/Re-Emerging Diseases: Selected NIH Accomplishments

HIV/AIDS

- 22 approved anti-HIV drugs; multiple vaccine candidates in "pipeline" and clinical trials; worldwide prevention programs

Malaria

- Genomic sequencing of parasite and mosquito vector; molecular mechanisms of drug resistance; vaccine clinical trials

Tuberculosis

- Drug and diagnostics development; 2 clinical trials of new vaccines (first in 60 years)

Emerging/Re-Emerging Diseases: Selected NIH Accomplishments

West Nile Virus

- 2 candidate "chimeric" vaccines; antiviral screening; clinical trial of immunoglobulin

SARS

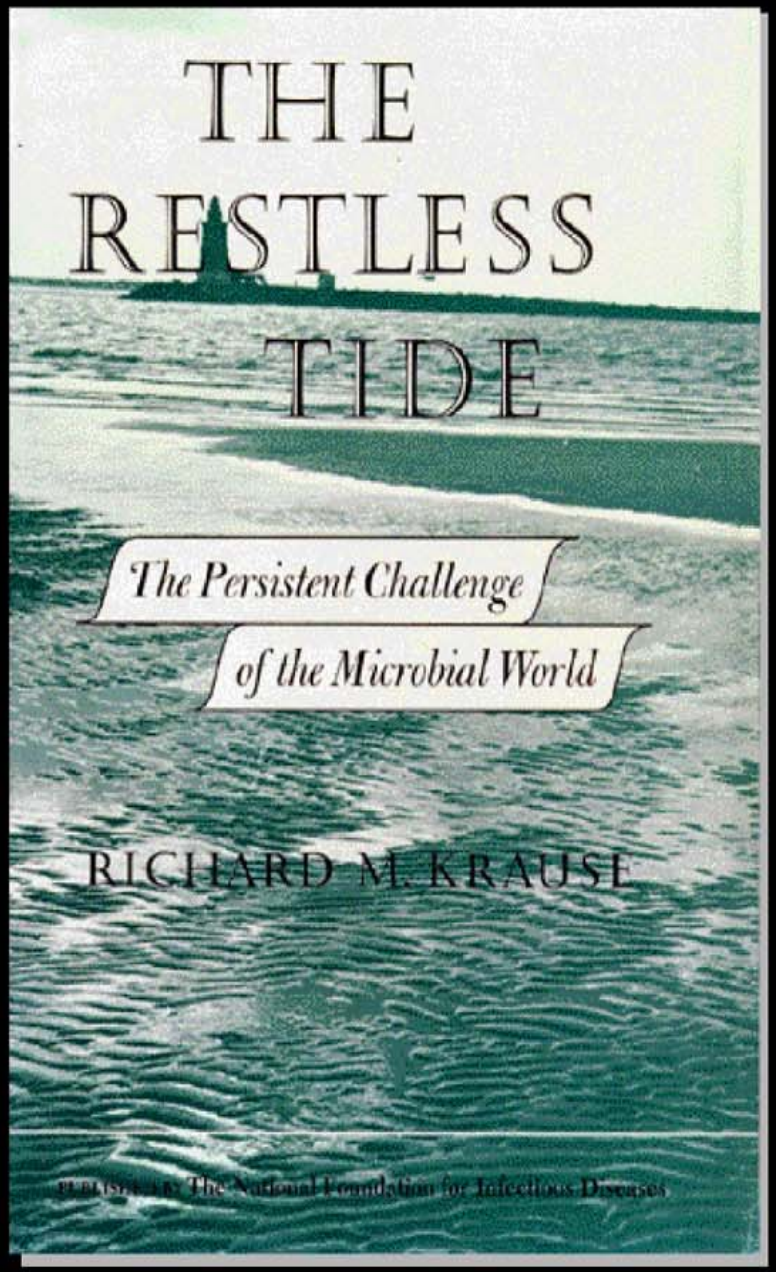
- Several promising vaccine candidates; antiviral screening; monoclonal antibody development

Influenza

- Genomic sequencing; production of seed virus and pilot lots; clinical trials

Potential Bioterror Agents

- Expansion of research capacity; vaccines against smallpox, anthrax, ebola, plague; therapeutics


THE
RESTLESS
TIDE
The Persistent Challenge
of the Microbial World
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