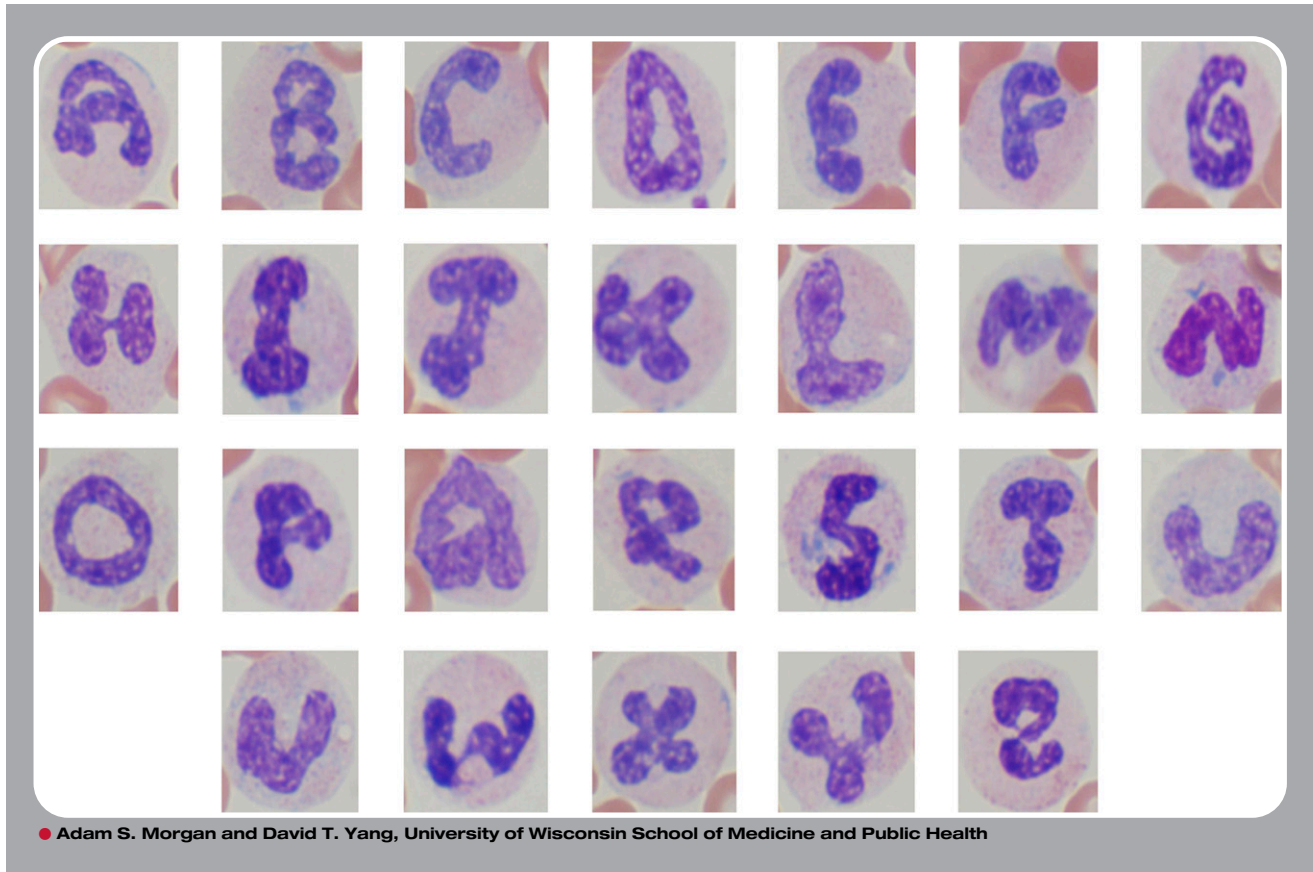


## Neutrophil alphabet



An 80-year-old man was hospitalized with symptoms of progressive cough, fever, and dyspnea over a period of 5 days. Chest x-ray showed bilateral lobar pneumonia. A complete blood count revealed white blood cell count of  $42.3 \times 10^9/L$ , hemoglobin 12.4 g/dL, platelets  $155 \times 10^9/L$ , and mean corpuscular volume 91.2 fL. Morphologic examination of the peripheral blood smear revealed a manual leukocyte differential of 81% segmented neutrophils, 12% bands, 2% monocytes, and 5% lymphocytes. The patient was treated with antibiotics and his leukopenia resolved completely.

Features of prominent Dohle bodies (letters N and S); cytoplasmic vacuolation (letters L, M, and W); and toxic granulation (letters I and S) represent toxic changes consistent with reactive neutrophilia secondary to acute pneumonia. Atypical nuclear segmentation generated a complete modern English alphabet and is a result of accelerated neutrophil maturation.