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Michael Bennett and **Michael Filaseta*** (filaseta@math.sc.edu), Mathematics Department, University of South Carolina, Columbia, SC 29208, and **Ognian Trifonov**. *Prime divisors of binomial coefficients and the like.*

We begin with classic results associated with prime divisors of a product of consecutive integers. As examples of the kinds of results we will discuss, we recall that J. J. Sylvester showed that the largest prime divisor of a product of k consecutive integers $> k$ has a prime divisor $> k$, and D. H. Lehmer showed that the largest prime divisor of $n(n+1)$ is ≥ 13 for all $n > 9800$. We use these results as a lead into discussions about prime divisors of $\binom{n}{k}$ ending with some recent joint work of the speaker with Mike Bennett and Ognian Trifonov. This work resolves in part an open question posed by E. F. Ecklund, Jr., R. B. Eggleton, P. Erdős and J. L. Selfridge in a 1978 paper on the topic. Our approach applies naturally to results of the type that if n is a positive integer not in the set $\{1, 2, 3, 8\}$ and $n(n+1) = 2^k 3^\ell m$, then $m > n^{0.285}$. (Received February 26, 2007)