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## Top-down and bottom-up research in biodemography

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### Abstract

The most efficient way to make scientific progress in biodemography is to encourage bi-directional exchange between 'top-down' and 'bottom-up' research. This will entail exchange along the continuum of research from microscopic intracellular processes to population-level consequences. In addition, our understanding of the biology of aging and its demographic consequences will be enriched by mutual influence between studies of mechanistic or 'proximate' causal processes and investigations of the evolutionary processes underlying the same phenomena. Researchers working at these different levels of explanation could be more productive if they were informed by research at other levels and interacted with scientists with complementary expertise. Such collaborations could be encouraged both through interdisciplinary workshops, research projects, program projects and training programs.

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