



BARSHOP INSTITUTE FOR LONGEVITY AND AGING STUDIES



COMPARATIVE BIOLOGY OF AGING

The comparative biology of aging uses natural variation in aging rate among different animal species to investigate mechanisms that modulate the aging process itself. Species most commonly used in laboratory research are distinguished by their lack of success at combating the ravages of aging. They grow old in a hurry and are exceptionally short-lived. However, it is possible that cellular and molecular mechanisms that make very short-lived animals age more slowly will not do so in long-lived species like humans. For this reason, comparative biology of aging focuses on animals that are exceptionally long-lived, such as naked mole-rats and many bats and birds as well as on traditional short-lived species such as flies and mice.