



Primate Center Discoveries

The following research discoveries from the Primate Center's 50-year history involved Primate Center scientists, staff, resources, and rhesus macaques, cynomolgus macaques, common marmoset monkeys and other nonhuman primates. The Primate Center does not house great apes, but does support conservation biology research on endangered apes and monkeys in the wild. For more information, please contact jlennon@primate.wisc.edu or chan@primate.wisc.edu.

- First successful isolation and culture of embryonic stem cells — rhesus 1995, marmoset 1996, human 1998 — and induced pluripotent stem cells 2007.
- Beneficial effects of controlled caloric restriction on primate health and longevity.
- Discovering how HIV infects the host and escapes the immune system; knowledge used to help develop current HIV therapies and preventive strategies.
- Risk factors and improved diagnoses for endometriosis.
- Causes of and better diagnoses for polycystic ovarian syndrome.
- Improved enrichment and veterinary care for captive primates. (Diseases diagnosed and new treatments found.)
- Neuroendocrine triggers of puberty; knowledge used for better diagnosis and treatment of puberty disorders.
- Improved hormone analysis in wild monkeys; knowledge for improved monitoring and managing of captive and wild endangered primates.
- Understanding primate family dynamics; better understanding of human parenting, child rearing and behavior, through a better understanding of the hormones and processes that regulate primate family interactions successfully or unsuccessfully.
- Understanding emotion; better diagnoses and treatments for psychological disorders.
- Improved fMRI and other imaging techniques for noninvasively studying the brain.
- Understanding the requirements for early pregnancy success, to improve natural fertility and learn causes of miscarriage,
- Improved IVF techniques (World's first IVF monkey born in 1984.)
- Nature of taste in primates. (Development of a new natural sweetener for diabetics.)
- New therapies for glaucoma and presbyopia.

Historically, we also note the discovery of the Rh factor and its link to Rh disease, or hemolytic disease of the newborn. This work was conducted in the 1930s by Karl Landsteiner, Philip Levine and colleagues. Levine conducted his research both in New York and at UW-Madison. "Rh" is named after the rhesus monkey.