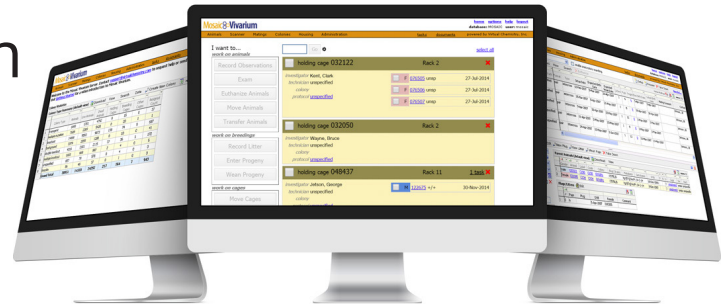# Mosaic⬡⬡Vivarium

Using Real-Time Vivarium Information To Make Cost-Saving Decisions

Facility managers and researchers alike have developed best practices in the use of laboratory animal resources. Some of those practices are aimed at minimizing the use of animals while others are aimed at minimizing the use of research funds. In this Technical Brief, we examine how real-time information can further improve time-tested cost-saving practices. **Schedule a demo** today to see how Mosaic Vivarium can improve your laboratory animal research efficiency.

Three Time-Tested Practices

Generating transgenic mouse lines, their care, and subsequent study can cost many thousands of dollars. Cage maintenance alone ranges from $1.00 to $2.00 per day ($365 to $730 USD per cage-year). When cages can be reduced, research funds go further.

Taking Action
Cost-conscious researchers take several obvious steps to reduce cage costs. For example, experiments that depend on animals in a specific age range do not benefit from excess population beyond that range. These cages may be **eliminated**.

Breedings which are not producing the expected results can also be **terminated** and their cage space costs eliminated.

When cage mates are compatible, under-occupied cages are an obvious target for **consolidation** and further reduction in housing requirements.

Taking Action More Promptly
If we already understand these practices, how can "real-time vivarium information" help? The answer is surprisingly simple: using a database to monitor the state of animals and cages allows investigators and staff to initiate these time-tested steps *more promptly*.

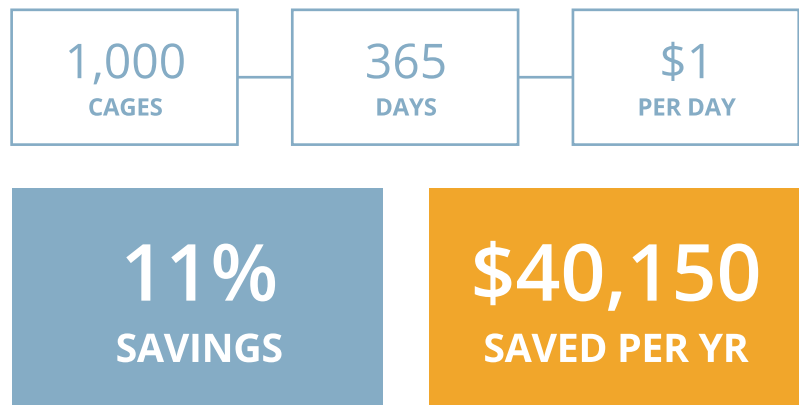| 1 |
| Eliminate |
| AGED-OUT ANIMALS |

| 2 |
| Terminate |
| UNDER-PRODUCING BREEDINGS |

| 3 |
| Consolidate |
| UNDER-OCCUPIED CAGES |

How Much Can A Database Really Help - Compared To Good Old Paper And Pencil, Or Excel Worksheets?
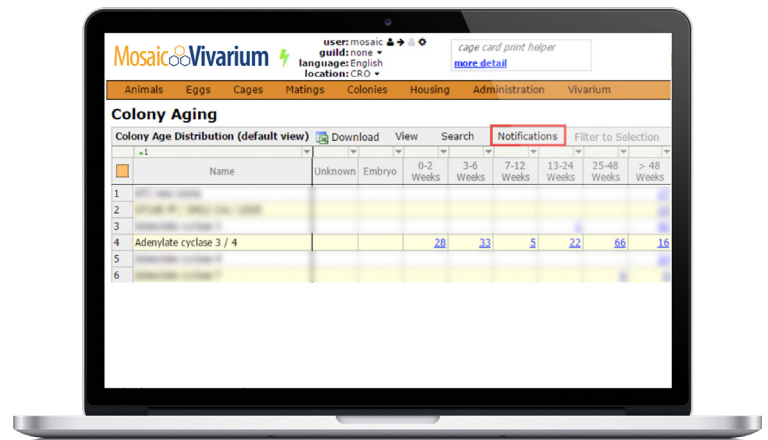
One study presented at the 2008 AALAS conference by a team of veterinarians and programmers at Genentech[1] answered this question by measuring research cage loads before and after the transition from Excel spreadsheets to a web-based vivarium database. They found a reduction in cage load of 11%.

1,000	365	$1
CAGES	DAYS	PER DAY

11%	$40,150
SAVINGS	SAVED PER YR

How Does Mosaic Vivarium Facilitate Best-Practices?

Mosaic Vivarium provides researchers and facility staff with convenient web-based access to the information that drives best practices. For example, age distribution is available from a simple report:

ARMED WITH THIS INFORMATION, RESEARCHERS CAN PROMPTLY PERFORM OR REQUEST TASKS RESULTING IN CAGE REDUCTION.

Active Notifications For Even Faster Response
Mosaic Vivarium provides a Notification mechanism in most areas of the database. This feature allows users to schedule emails when data meet specified requirements. By reducing the need to actively monitor the database, Mosaic Vivarium greatly increases your ability to promptly execute the practices that will save research funds.

Mosaic❀❀Vivarium

MOSAICVIVARIUM.NET

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[1] Presentation at 2008 AALAS National Meeting of work by Erik Bierwagen, Ph.D., Dr. Rhonda Wiler, DVM, et. al., Genentech, South San Francisco, CA, USA