

# MEMO

# BIVI

Value through Innovation

**TO:** John Doe

**FROM:** Jane Doe

**DATE:** July 5, 2007

**SUBJECT:** Enhancing communication in the lab

I am writing to propose a possible solution to the overwhelming need expressed by the scientists for assistance from the lab technicians in the BIVI Research and Development lab. Due to the recent increase of swine vaccine research projects at BI the work load for scientists has rapidly increased, and help from the technicians on these projects is vital. With the licensing of five vaccines in the past 15 years, BIVI has been given the chance to maintain its position as the leader in swine pharmaceuticals, but with the increased amount of research comes the need for increased amounts of help from lab technicians. I am proud to be a part of such an intelligent team of employees, and I know that the success we have had in the past is just the beginning of numerous achievements to come. However, to fully achieve at the highest level, organized communication between the scientists and the lab technicians is essential.

First, I will include a brief history of BI as a whole as well as the history of the Ames site specifically. Throughout the remainder of this memo, I will address the following:

- ◆ the importance of strong communication between the employees here at BIVI
- ◆ a possible solution to increase the amount of communication between scientists and technicians
- ◆ the simple implementation of an all access communication system
- ◆ the benefits of an open communication system

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## THE CURRENT SITUATION

### *Company History*

Founded by Albert Boehringer in Ingelheim, Germany in 1885, Boehringer Ingelheim made dyes produced from a by product of bacteria for use textile and food production. Initially, twenty employees worked at the factory in its first year. Nearly 125 years later, employing 38,400 people world-wide, Boehringer Ingelheim or BI is among the top pharmaceutical companies in the World and is now responsible for developing prescription medicines, consumer health care products, and animal health care treatments and vaccines. In 1955, the animal health sector, Boehringer Ingelheim Vetmedica Incorporated (BIVI) started developing veterinary vaccines for cats, dogs, horses, cows, and pigs. Today, according to the BI Animal Health website, 13% of animal health's net sales are invested in the Research and Development field which has four research sites in the United States. Ames, Iowa is home to one of these sites, and the scientists here focus on the production and improvement of swine vaccines.

In 1991, NOBL labs rented a one room lab at Iowa State and employed one full time scientist to begin what would become extremely successful research on swine vaccines. BIVI bought NOBL labs in 1992, and moved the facility out to the Iowa State Research Park where it remains today. Today, nine full-time scientists and three lab technicians are employed at the Ames BIVI research facility. The scientists at the Ames lab have been accredited with the development and licensing of five major swine vaccines in the last 15 years. These vaccines are distributed local farms here in Iowa as well as farms across the world in places such as Germany, Australia, and China.

### *The Addition of Technicians*

Along with the enormous amounts of success also came an increasing work load and the need for support on projects as well as routine maintenance in the lab. These needs were addressed by hiring lab technicians to take care of the dishes and clean-up the lab. The technicians who were usually ISU students also aided scientists in minor experiments and the processing of specimens. The first priority of the lab technicians was to maintain the lab, but if a scientist needed help with a project, the lab technicians could assist them as needed. However, the scientists began to rely heavily on the lab technician's help in their research, and the technicians began putting aside their regular duties to contribute to the fast paced research projects. Soon, certain scientists began to favor specific technicians, and eventually the technician would abandon his or her lab duties all together in order to assist that scientist.

The inability to finish all of the hourly tasks soon led to a break down within the lab. The dishes were not be cleaned and the trash would be over flowing. The research was picking up with all the contributions from the technicians and the everyday tasks

that were crucial to the upkeep of the lab began being neglected. To resolve this problem, as you recalled during our meeting, a weekly checklist was developed that forced the hourly duties to be done and initialed when finished. The list proved to be effected for ensuring that the basic lab cleaning and maintenance was completed in a timely manner.

### *An Unorganized System*

However, according to Kelly, who was a lab technician at this time, with the increased efficiency of the lab technicians when completing their regular duties, there became an increasing amount of free time for them. There was no system in place for informing the lab technicians which scientist had extra tasks that could be completed if time permitted. Therefore, the lab did not reach its maximum productivity level, and the technicians were becoming bored with a job that should be extremely interesting. Some scientists suggested assigning certain technicians to certain scientists. This practice was suggested to ensure that the technician had enough to do as well as familiarize them with the specific project work so they could effectively add to the on-going research under the supervision of the project leader. Yet, with only a few technicians and nine full time scientists, some scientists were feeling neglected and overwhelmed with the amount of work in front of them. So, the practice of assigning a technician to a scientist dissolved into a system that operated by scientists verbally requesting technicians to assist them at that very moment. This loosely organized system proved to be difficult for announcing project work in advance to technicians, and still left some scientists feeling unheard and frustrated.

### *Today*

Currently we are experiencing a rapid increase in the amount of assistance needed by the scientists, and we lack an organized system to handle this increase. All of the employees are feeling confused and frustrated. If the problem of miscommunication remains unaddressed, declining morale and potential failure to meet deadlines could be imminent. Failure to communicate between technicians and scientists will lead to failure to produce the desired end result of licensing new swine vaccines. The inability to meet deadlines could eventually lead to the loss of jobs for some scientists and lab technicians.

### *An Opportunity to Improve*

The current frustration of scientists and lab technicians and the miscommunication in the lab results from the opportunity for increasingly more research projects on new vaccines. The past success of the Ames BIVI site shows what the scientists are capable of, but the maximum output will not be reached if the miscommunication between technicians and scientists is not resolved. According to Dr. Vaughn, “an open communication system must be set up to ensure that tasks needing to be

completed are effectively communicated to all.” Therefore, in order to achieve the highest level of research capable at the Ames site, communication lines must be opened between everyone who works in the lab and full cooperation must be attained. I firmly believe the solutions I will suggest will help BIVI meet its maximum potential.

“An open communication system must be set up to ensure that tasks needing to be completed are effectively communicated to all.”

-Dr. Eric Vaughn

## THE PLAN: INCREASED PRODUCTIVITY THROUGH AN OPEN COMMUNICATION SYSTEM

Changing the communication style of the lab technicians and the scientists at BIVI requires a plan that will allow communication to be easily conducted to keep the flexibility of the work place intact. Therefore, I believe that my plan of implementing an all access open communication system will drastically increase the productivity level within the research lab with an easy to use format. In order to be successful, the communication system must be:

- ◆ available for use by scientists and lab technicians.
- ◆ easy to view for both scientists and lab technicians.
- ◆ efficient to use to minimize time spent entering tasks.
- ◆ capable of making changes to a task after entered in the case of shifting deadlines.

To meet these criteria, I propose that an all access calendar be developed that would allow scientists to enter tasks that need to be completed and lab technicians to view the calendar whenever necessary. The best option for employees at BIVI would be to set up an open calendar on Microsoft Outlook (see appendix for Figure 1) that would allow anyone to enter an item that needs to be completed, and it would allow everyone to view the calendar by day, week, or month (see appendix for Figure 2). Each employee would have access to the calendar and could enter projects and specify the time of day for completion as well as the amount of time to be devoted to each task (see appendix Figure 3). By allowing everyone to access the calendar, technicians as well as scientists could look ahead to determine how busy the upcoming days are going to be. The ability of being able to look ahead is advantageous for both the lab technicians and the scientists especially when considering new projects that could be started. With this system, scientists can be aware of the status of projects be conducted by other scientists and they will also be able to see which lab technician is helping that scientist.

## *Implementation*

For the implementation of the calendar I propose the following steps:

- ◆ Call a group meeting to discuss the calendar and the benefits it would have on the productivity of the lab.
- ◆ Contact the IT department to get a calendar set up on Outlook that enables each scientist and technician to access it from their own computer at any time.
- ◆ Set up guidelines for using of the calendar to enter tasks and discuss which tasks should be put on the calendar and what items can be left off.
- ◆ Discuss a timeline for determining how early in advance tasks should be entered to ensure they are completed.
- ◆ Check in with each person who uses the calendar at the bi-monthly meetings to see how the calendar system is working for the scientists regarding job completion.
- ◆ Make changes to the guidelines for using the calendar as needed.
- ◆ Print out a copy of the calendar each morning for the current day and post it in the autoclave room for all employees to access freely.

With this plan, I feel that ample time to allow the scientists to prepare to use the calendar is provided. Also, by calling a meeting where everyone is present and aware of what will be discussed, I think it will give people time to gather their thoughts on the current system and think about the aspects that they would want to improve upon. By considering everyone's input the calendar will feel like a group project rather than a change that must be adhered to. So, the calendar can be implemented without any negative morale being created.

## **MY QUALIFICATIONS**

During my employment as a lab technician experience at BIVI over the past year and a half, I have noticed the extreme need for a functional yet versatile communication system. The fast-paced environment of the lab makes working for BIVI a favorable experience, but it can also lead to confusion and frustration with such a high volume of project work to be completed and no set communication system. After working with the scientists and balancing daily cleaning tasks with research projects, I believe my experience allows me to carefully analyze the current situation and give valuable insight into the calendar and its abilities to enhance the environment within the lab.

## **CONCLUSION: THE BENEFITS OF OPEN COMMUNICATION**

I firmly believe that the benefits of an open communication system will be evident in the morale of the employees and the productivity of BIVI. Initially, it might take some time to for each employee to familiarize themselves to calendar. Ultimately,

however, the calendar has the potential drastically improve the communication between scientists and technicians. Some if the benefits include:

- ◆ The ability to communicate a task without the hassle of email or setting up a meeting time.
- ◆ Scientists would be able to add, remove, or update a task at anytime during the project.
- ◆ Tasks can be added one time and scheduled as a recurring task when entered on the specific days without have to be re-entered each week.
- ◆ Priority items can be addressed first and finished on time before moving on to lower ranked items.
- ◆ Schedule availability for technicians can be viewed by any scientists so that the technicians can be fully utilized.

As suggested above, the benefits of such a calendar system are tremendous. If scientists are given the ability to communicate a task to the technician without having to go through a chain of emails or without scheduling a time to meet, it will allow more chances for scientists to work on their research in the lab or reports in their offices. This alone could greatly increase the efficiency of BIVI as a whole. Emails tend to take more time to write than a small discussion about a task would, but neither process is faster than simply typing an item on the calendar for the technician to see. Great project flexibility can also be established by the calendar by allowing scientists to post daily updates and changes to the calendar whenever necessary. Also, the recurring task feature within task entry screen of the calendar (see appendix Figure 3) allows scientists to enter a task once, but it will appear on the same day for the duration of the project. For example, if Kelly has samples coming in every Wednesday that need to be taken care of, she will only have to enter it once and click the recurrence button and the task will be on the calendar each Wednesday for the rest of the study. Another major benefit for the technicians is that we will be able to see all the tasks that are to be completed for one day, and we will be able to identify the highest priority task and complete it first. Then, we can move on to the rest of the items for the day. This feature benefits the scientists as well because they will be able to see how busy the lab technicians are for a given day and either schedule a task or move it to an emptier day. Overall, the proposed calendar will make the lab a more efficient and organized place to work, which will lead to higher employee morale and increased productivity.

### *To Conclude*

Finally, I would like to stress my availability to work with you on this project. I strongly believe that the calendar could do nothing but benefit the lab, and would require no cost to set up. If you have any further questions or would like to discuss anything at all please let me know.

## APPENDIX

The appendix includes the following:

- ◆ Figure 1. A Daily View of the Proposed Calendar
- ◆ References
- ◆ Survey Answers Regarding the Addition of an All Access Calendar

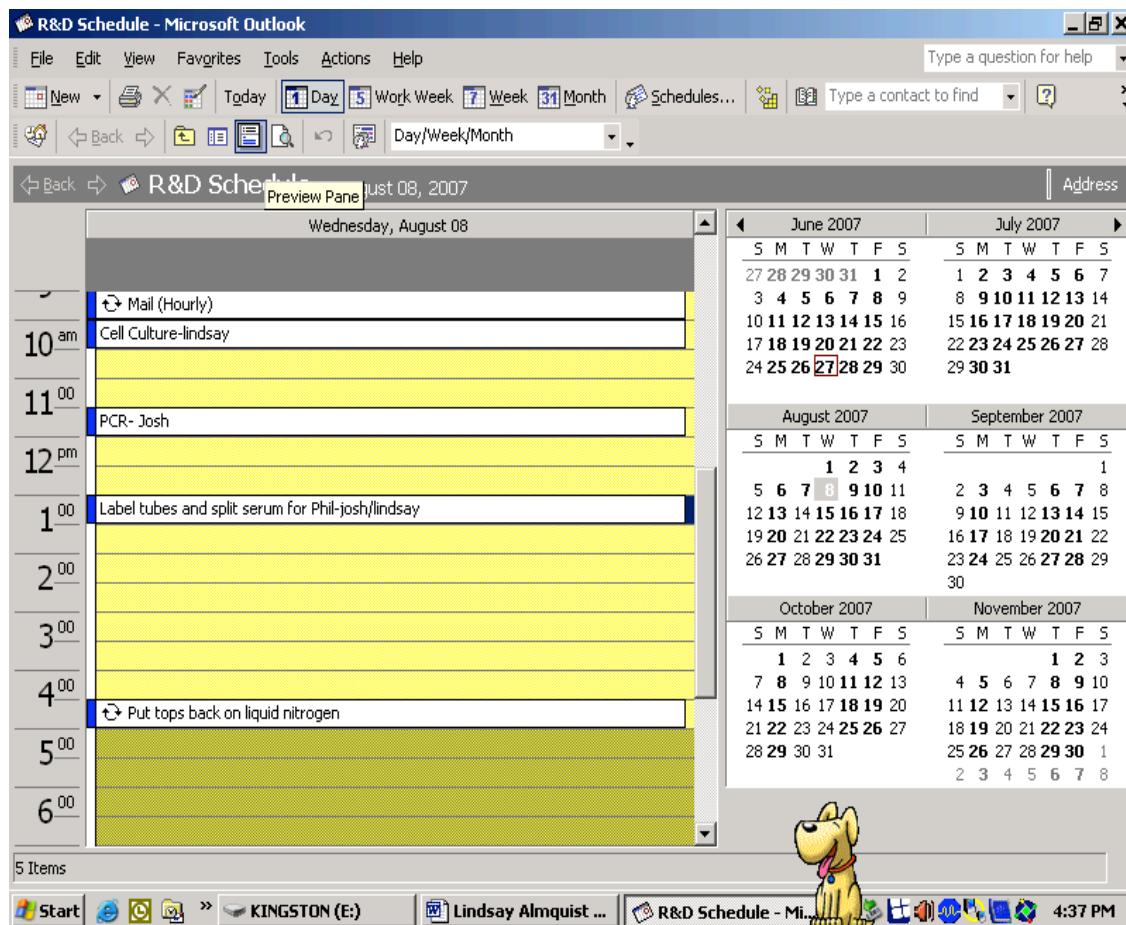


Figure 1. Daily View of Proposed Calendar

## REFERENCES

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