

NIRS Forage and Feed Testing Consortium NEWS

May/June 2004

**Dedicated to Increasing the Accuracy
and Knowledge of NIRS Testing.**



<http://www.uwex.edu/ces/forage/NIRS/home-page.htm>

New NIRSC Instrument Technician



We'd like to introduce you to our new NIRSC Instrument Technician, Kim Darling.

Introducing Kim

Kim was born and raised in Madison. She has been married for 24 years, has two dogs and two cats, and lives in Monona. Kim enjoys biking, hiking and gourmet cooking. Her education includes a B.S. in Food Science as well as one in Landscape Architecture. Kim is also currently working on an MS in Landscape Architecture.

While pursuing her B.S. in Landscape Architecture, she landed a job with Mike Casler while he was with the UW Agronomy Department. Kim thought working in Agronomy would nicely bridge her

education between chemistry and plants. While working for Mike, Kim was exposed to NIR and became familiar with it. She worked with Mike for about 7 years, until his departure from Agronomy. Kim then worked in a temporary position with the USDFRC working for Paul Weimer doing a bioscreening study, which involved some NIR work. While working for Paul, Susan announced her departure and Kim got the job for the NIRSC Instrument Technician position.

Welcome Kim!

Kim's Contact Information is:
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1925 Linden Drive West
Madison, WI 53706

A Transition Process

Over the next few months we will have the need for a transition process for Kim as the new NIRSC Instrument Technician. We have also adjusted the contacts for some of our tasks slightly.

Contact Kim for standardization, diagnostics (reports will automatically go to Kim now), sending in spectra and chemistry, and other technical questions.

Contact Patty for membership information, business questions, and questions on samples for equation updates.

The rest of our operations are the same, so let us know if you have specific questions!

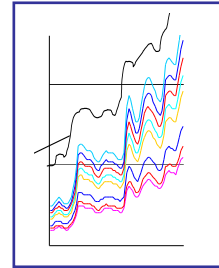
RUP, Coors/Lauer Equations and WARF

The NIRSC Consortium (NIRSC) is having discussions with WARF, the Wisconsin Alumni Research Foundation, regarding RUP and unfermented corn silage equations our members are interested in. WARF is responsible for licensing any intellectual property that comes out of researchers at the University of Wisconsin.

The RUP equation was developed by Pat Hoffman *et. al.* and released for NIRSC members' use in 1999 through a WARF license. The use of this equation by our members, though, seems to be limited (also see Pat Hoffman's discussion of Current Status

of Protein Digestibility in our Jan/Feb 2003 Newsletter, posted on our website). Because of this limited use of the equation, WARF is considering releasing the equation as a paid license to our members having signed the license and paid the fee. Details are still being discussed for this release, however.

The unfermented corn silage equation was developed by Jim Coors, Joe Lauer, and Pat Flannery in 1998 and updated in 2002. This equation currently has a license set-up through WARF. We are discussing drafting a NIRSC



license with WARF, and our members would then license the equation through the NIRSC. The advantage of this process would be that we as a consortium would be able to update the equation with samples from our members, thus expanding it and making samples from across the country represented.

The process for NIRSC members adding samples and license fees are still being discussed with WARF.



No Training Workshop Planned this Summer

Due to our transition in personnel this summer and having had recent training on NIR basics and instrument maintenance last winter, we will not hold a training workshop this summer.

We look forward to any ideas our members might have for training at our next annual conference coming up this winter.

Diagnostics: The Response Test Question

We have had some discussion from our members regarding the method of reporting the Response Test in instrument diagnostics.

Some of our members who now run ISIscan are not able to generate an output for the Response Test. The question is: what to put in that line?

One solution would be to update the diagnostics webpage to include reporting for both WinISI as well as

ISIscan. This would alleviate the question above since ISIscan has slightly different output than WinISI.

Mark Matteson from Foss North America explained that the Response Test in WinISI is equivalent to the Gain Test in ISIscan. Both look at the same thing in a different way. The Response Test and Gain Test each have different units and each has different limits. For example, in ISIscan, a bar graph will display voltage, which should be between 2.3

and 5.8 and the gain on the NIR detector will be between 1 and 8 for autogain instruments. In WinISI the recommended range for output is between 55-58,000 for non-autogain instruments and >36,000 for autogain instruments.

We'd like your input!

Please let us know what you think about this information and how we can improve reporting of diagnostics for you on our website.

NIRSC Annual Conference Committee

Each year we get together a group of knowledgeable and experienced people who volunteer their time to act on a planning committee for our next annual conference. We are pleased to have Don Sapienza, David Johnson, and Dave Sevenich from our membership on the committee as well as three outstanding nutrition professionals serving: Larry Chase from Cornell, Bill Mahanna from Pioneer HiBred, and Bruce Anderson from University of Nebraska, Lincoln.

We would like to thank all of these folks for serving on the committee and look forward to some great ideas for our next conference!

For further information on any of these topics, please contact Patty Laskowski.

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