

Minnesota IFT January Meeting

Monday, January 24th, 2011

Metropolitan Club

5418 Wayzata Boulevard Golden Valley, MN 55416



New and Nanotechnologies in Dairy:

Basic Understanding for Direct Applications
Prof. Federico Harte

This presentation will highlight the need to further our basic understanding of milk constituents to improve dairy products and create new food and non-food applications. It will introduce the concept nanotechnology tools (e.g., neutron scattering, cryo electron tomography) for elucidating the structure-function properties of milk components. This presentation will also highlight current and future trends in the use of novel nonthermal technologies for the processing of milk with examples on the use of high hydrostatic pressure and high pressure homogenization for yogurt and cheese manufacturing. New applications for traditional milk components such as the use of milk proteins to transport flavors or even drugs will be discussed. Throughout the presentation, the casein micelle from bovine milk will be used as a constant example of a milk component where basic understanding is needed, new technologies have a direct impact on functionality, and new applications / opportunities are being generated.

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Dr. Federico Harte
Associate Professor
Food Science and Technology Department
The University of Tennessee
fede@utk.edu

Federico earned his B.Sc. in Agricultural Engineering at the University of Uruguay in 1995 and his Ph.D. in Engineering Sciences from the Program in Food Engineering, Department of Biological Systems Engineering at Washington State University in 2002. Following positions as a lecturer and Assistant Professor in Uruguay, Federico was appointed Assistant Professor at The University of Tennessee in 2005, and Associate Professor in July 2010.

During the past five years, Federico has established a highly productive and innovative research program in Dairy Foods Engineering at The University of Tennessee. His research program is funded by USDA-NIFA, DMI, NIH, and private companies and is focused on four major areas: 1) the use of high pressure homogenization in yogurt and cheese manufacture, 2) the use of nonthermal technologies for novel functional applications of milk proteins with emphasis on the casein micelle as a delivery system for hydrophobic nutraceuticals, 3) novel nanostructure-rheology properties of macromolecules derived from milk protein-polysaccharide interactions, and 4) the casein micelle nanostructure and function. Federico has compiled a prolific publication record. He has 32 peer-reviewed journal papers, 6 book chapters, and numerous abstracts and proceedings papers from professional conferences. He has filed six total patent disclosures through The University of Tennessee Research Foundation and has one provisional patent application.

In addition to being a highly prolific researcher, Federico is dedicated to "passing the baton" of knowledge through his teaching. He teaches an intermediate level undergraduate course in Food Engineering and a graduate level course in Advanced Food Polymers. He clearly brings passion to his teaching philosophies and receives excellent feedback from students.

Federico and his research group are frequent contributors to professional conferences. During the past five years, he has been an invited speaker at the Institute of Food Technologists Annual Meeting (multiple times), the Conference of Food Engineering, the National Meeting of the American Chemical Society, the Annual Meeting of the International Association for Food Protection, the International Conference of Engineering and Food, the Minorities in Agriculture, Natural Resources, and Related Sciences - Innovation, Exploration, and Discovery Conference, and other international meetings in Spain, Uruguay, Italy, and Chile. Clearly, these efforts reinforce the highly visible and international presence of his program.

January Meeting Details

Annual Dairy Meeting

Date

Monday, December
24th, 2011

4:00-4:30 PM - Social
& Check in for
Cheese Making 101

4:30-5:30 PM - New
Professionals
Social/Cheese Making

5:00-6:00 PM -Social
& Check in for dinner

6:00-7:00 PM- Dinner
Buffet

7:00-8:00 PM-
Speaker

Menu

BUFFET DINNER

Dinner Stations

- Regional Hard & Soft Cheese w/fresh fruit and berries w/ candied nuts and flatbread
- Garden Salad w/Parmesan Peppercorn dressing
- Grilled Chicken Breast w/Honey Crystallized Ginger Sauce
- Braised Beef Short Ribs w/Balsamic glaze
- Vegetarian Lasagna w/Wild Mushrooms, Artichokes, & Roasted Red Peppers
- Braised Baby "B" Potatoes
- Fire Roasted Vegetable Platter

Dessert Buffet

Assorted Miniature Dessert

Location

[Metropolitan Club](#)
5418 Wayzata
Boulevard
Golden Valley, MN
55416
(612) 375-7553

Cost

Members / Guests -
\$35.00
Retiree's/ Displaced
Members - \$15.00
Students - \$ 5.00

Cheese Making 101-
\$10 (open to anyone)

For More details:

[http://www.mnift.org/
npevent.php](http://www.mnift.org/npevent.php)

Reservations

Register on line at www.mnift.org . On-line credit card payment is preferred or you can pay the night of the event if needed. Reservations are due by Thursday January 20 at 5:00pm. We have to give final meal counts and payment 1 week prior to the event. So please try to register early. For possible late registration/availability or to cancel please call 612-590-8902 or send an email to cher710@gmail.com

Need to get the word out?

Consider signing up for **advertising** for the MN IFT Newsletter this year. The money earned from the ads helps cover some of the newsletter expenses and remaining funds go towards scholarships. Prices vary depending on your ad size (\$25-200 each ad). It's easy and a great way to reach customers! Contact Karen Spartz (usksp@chr-hansen.com) for more info.

The 6th Annual 2011



Items are unique to online and live events.

Keep an eye on www.mnift.org to get what you want and help a great cause.

Part I

Online @ www.MNIFT.org

Preview Week:

February 7 – 13, 2011

Online Bidding Week:

February 13 – 18, 2011

Opens: February 13 at 8:00 am

Closes: February 18 at 8:00 pm

Only one week this year to get what you want, so bid early!

Part II

Live Silent Auction @ Minneapolis Golf Club

In conjunction with the MNIFT/AACC February Meeting

February 22, 2011

Bidding Starts: 4:30 pm

Bidding Ends: 6:00 pm

Because of the HUGE success of the last couple years, the Executive Committee of the MN IFT has decided that half the funds raised from the silent auction will remain local for MN IFT General Scholarship fund.

We will continue to support the National IFT Foundation by donating half the funds to the National Scholarship fund.

There is still time to donate items or skills to the Auction.

Please contact Naomi Sundalius, Naomi.Sundalius@michaelfoods.com or 952-368-6522.



January 2011 Chair's Message

Happy 2011 everyone from Tonya, Kimberly and Dan. The start of a new year is a great time to reflect on the things in our lives that mean the most to us, and the things we would like to focus on changing or improving in the the coming year. Because of events at the end of 2010, we would like to have a special Chair's message from the "Three Chairs".

The most important focus area for our section has always been supporting our students. They are our future professional members and will be responsible for the continued vibrancy and success of our industry.

In October, the IFT Higher Education Review Board did not approve the University of Minnesota Department of Food Science and Nutrition's submission for re-approval of their undergraduate program as an "IFT approved" food science program due to misinterpretation over what information was required, and how it was to be presented in the application.

Since the program is not approved, current undergraduates at the of U of M are ineligible to apply for National IFT scholarships when the applications are due starting in February. Graduate students are eligible for national scholarships.

MN IFT will continue to foster education with all of the section's students (including all other Universities) with our section scholarship opportunities. All students within the MN Section are still eligible for MN IFT scholarships.

The U of M will reapply for approval in February with the opportunity to be re-instated in March of 2011.

Our actions to date:

- ExComm had a conference call on Friday 12/3/10 to discuss next steps
- Email sent by Tonya, Dan, and Kimberly to the Foundation chair and President requesting that the U's undergraduate students be allowed to apply for scholarships this year in anticipation of the department being re-approved in March
- Proposed to divide Silent Auction proceeds 50:50 this year between the IFT Foundation (nationally administered scholarships) and the MN IFT investment fund for generating scholarships in the section

Next Steps:

National IFT and the education committee should recognize that it is not in IFT's, MN IFT's, or the profession's best interest to disenfranchise future professional members in the way the current approval system does. We do not think it was the original intent of the program approval system to financially penalize students once they had enrolled in a program in good-faith. We would like input from all of you about what you think could improve the current system, and would look forward to your involvement on the national level to promote that improvement.

Sincerely,
Tonya Schoenfuss, Chair
Kimberly Mikaliunas, Chair-elect
Dan Kennedy, Past-chair



MINNESOTA SECTION IFT 2010-2011 CALL FOR STUDENT APPLICANTS:

Caldwell Volunteer Service Scholarship Award Graduate, Undergraduate & Travel Scholarships

Each year, the Minnesota Section of IFT awards scholarships to outstanding food science graduate and undergraduate students. These student scholarship awards are given to encourage volunteer service, leadership, academic achievement, professional development and to support research in Food Science. We encourage all students studying food science to apply!

Apply: Download the applications at: <http://www.mnift.org> under the **AWARDS** heading; or contact your Food Science Department representative for more information.

Application Deadline: Completed applications (including letters of recommendation) must be submitted by February 16, 2011.

Student Classification: Applicants must have student status within the 2010-2011 academic year. Award winners must be current student members of MN IFT (<http://www.mnift.org/join.php>).

Eligible University Students:

- North Dakota State University
- South Dakota State University
- University of Minnesota
- University of Wisconsin River Falls
- University of Wisconsin Stout

Award Presentation: April 26th, 2011 - Minnesota Section IFT Student Recognition Night, Como Park Conservatory, St. Paul, MN

Questions? Contact Dana Dronen, MN IFT Scholarship Chair
dana.dronen@genmills.com, tel: 763-293-2441



Penelope's Peach Perfections-

As University of Minnesota's first entry into the Research Chefs Association Culinology competition our team was dedicated to make it to finals. We are tasked with making a peach themed dessert for a southern style family restaurant, quite the task for a group of northerners. After deliberation we decided on a white chocolate covered peach cannoli.

We focused on a healthy single serving dessert that still gave the satisfaction of its calorie heavy competitors with a fraction of the calories. Our team was able to create a 50 g cannoli that has less than 100 calories per serving. A belgian white chocolate whole grain shell has a delicious texture, while the peach flavored creamy yogurt filling rounds the dessert out. This product was quite the challenge and our team is very proud of our accomplishment on making it to finals! Out of a pool of 36 teams Minnesota was one of the 6 finalists, and we all are very excited about the onsite cooking competition in March.

Take a Plate of Penelope's Peach Perfections home with you and support our team!

\$3.50 for 2 Cannoli

\$5.50 for 4 Cannoli

\$12.00 For 10 Cannoli

If you're interested in ordering Penelope's Peach Perfections or have additional questions please email Ian Ronningen at ronni079@umn.edu.

Orders can be placed till February 10th but please email them early so the team can plan ahead. Pick up only as orders will not be shipped. Orders can be picked up at the MN IFT February Meeting on February 22nd, which is preferred, or they can be picked up at the U of MN. If wanting to pick up order at U of MN email Ian to set up specifics.

Food Science Club Updates **University of Minnesota**

What a busy semester! Our International Pot Luck and White Elephant Event was a blast! It was wonderful having food science and nutrition undergraduate students, graduate students, staff and faculty attend. We shared scrumptious multi-cultural dishes and the White Elephant gifts were hilarious. This past semester was filled with worthwhile community service events, fun socials, and interesting company presentations. The officers and I are currently planning many more events for the spring semester including more food industry tours.

Sarah Gutkowski

U of MN Food Science and Nutrition Club's President

Upcoming Dinner Meetings

- Feb 22, 2011:** **AACC Joint meeting/Silent Auction at
Minneapolis Golf Club**
- March 21, 2011:** **Macy Award at Seven in Minneapolis**
- April 26, 2011:** **Student Night at Como Conservatory**
- May 17, 2011:** **Social (For everyone) at Pinstripes**

Do YOU have a submission for the newsletter???

The MN Section IFT Newsletter is distributed to *hundreds* of industry professionals, companies, students, and academia across Minnesota, South Dakota, and Wisconsin, and it's available for YOU to use! We, as editors, welcome articles, news, and announcements for the Newsletter. Simply send your questions and submissions to Jackie Koch (jrkoch2@wisc.edu, 612-423-9280) and Bridget McClatchey (BCMcClatchey@landolakes.com, 219-863-4080).

The Minnesota Section Newsletter is published monthly, September through April, as a service to members of the MN Section, Institute of Food Technologists. The opinions in this newsletter are the opinions of the contributors and do not necessarily represent the official position of IFT, nor the Section, and should not be interpreted as such.