



5th Annual Symposium Agenda

Thursday, June 1st

11:00PM – 2:30PM **Students check in at South Hall for lodging**
(Purple on map) (check-out time is 11:00AM, Saturday Morning at South Hall)

Jones Annex, Rm 101 (yellow on map)
2:30PM – 4:30PM **Bioinformatics Demonstration – Dr. Rebecca Reiss/NMT and Faye Schilkey/NCGR**
Jones Annex, Rm 101

Macey Center – Auditorium (Orange on map)
3:00PM – 4:45PM **Conference Check-in**
4:45PM – 5:30PM **Welcome/Intro, Dr. Jeff Arterburn, Director**
Dr. Peter Gerity, VP for Academic Affairs, NMT
5:30PM – 6:30PM **Dr. Conly Rieder, Keynote Speaker**
Live Cell Studies on Mitosis in Vertebrates:
The Two Faces of the Kinetochores
6:30PM – 8:30PM **Dinner and Reception – Cash Bar**

Friday, June 2nd

Breakfast on your own

Macey Center – Auditorium
9:00AM – 9:05AM **Good Morning, Dr. Jeff Arterburn**
9:05AM – 12:05PM **Investigator Research Presentations**

Thematic Area: Structure and Function of Biomolecules

- Session Chair: Dr. Snezna Rogelj**
- 9:05AM – 9:35AM **Dr. Larry Sklar, UNM**
NM-MLSC and the Roadmap initiative
- 9:35AM – 10:05AM **Dr. Newton Hilliard, ENMU**
Novel zwitterionic 'Good's' buffers for use at low pH
- 10:05AM – 10:35AM **Dr. Chien-an Andy Hu, UNM**
Apolipoprotein L1, A BH3 Domain-Containing Lipid-Binding Protein, Induces Autophagic Cell Death in Cancer Cells
- 10:35AM – 11:05AM **Break** – Student Poster Set-up Start – Macey Center
- 11:05AM – 11:35AM **Dr. James Huntley, NCGR**
Dynamics of Human CksHs1: Implications for Multiple Roles Involving Multiple Protein Complexes
- 11:35AM – 12:05PM **Dr. David Tierney, UNM**
Structural Studies of Metallo-beta-Lactamases
- 12:05PM – 1:30PM **Lunch** – Copper Patio (right out front)
- 1:30PM – 3:00PM **Investigator Research Presentations**
Session Chair: Dr. Manuel Varela
- 1:30PM – 2:00PM **Dr. Barbara Lyons, NMSU**
Structural and Dynamic Analysis of Proteins in Neuron Cell Motility
- 2:00PM – 2:30PM **Dr. Wim Steelant, NMT**
Effects of extracts from two Native American plants on proliferation of human breast and colon cancer cell lines in vitro
- 2:30PM – 3:00PM **Dr. Peng Zhang, NMT**
Highly sensitive and specific nucleic acid sensor based on photon upconverting particles
- 3:00PM – 3:30PM **Break** – Student Poster Set-up Done
- 3:30PM – 4:00PM **Christiane Herber-Valdez**
Annual Progress Report

4:00PM – 4:45PM Panel Discussion
The New Mexico Genome Sequencing Center

The state legislature is funding the purchase of a 454 massively parallel DNA sequencer, which represents a quantum leap in sequencing technology. The Genome Sequencing Center will be located at the National Center for Genome Resources (NCGR) in Santa Fe and is scheduled to be functioning toward the beginning of 2007. The panel will discuss the revolutionary technology that facilitates the determination of 10 million bases per hour without the need for cloning, the vision for the center, and the potential for INBRE research projects.

Participants:

- ❖ **Rebecca Reiss, NMT Biology: A history of DNA sequencing.**
- ❖ **William Beavis, NCGR: The vision for the Genome Sequencing Center**
- ❖ **Gregory May, NCGR: Research Projects**

4:45PM – 5:30PM Panel Discussion
What constitutes a Minimal Publishable Unit (MPU)?

Publish or Perish is an academic mantra. But when do you have enough data for publication? Is it appropriate to publish a techniques paper separate from a data paper? When can negative results be published? These are questions regarding publication will be answered by a distinguish panel of INBRE mentors.

Participants:

- ❖ **Tom Kieft, NMT**
- ❖ **Don Partridge, UNM**
- ❖ **Brian Wilkinson, ISU**

5:30PM – 7:00PM Dinner on your own

7:00PM – 9:00PM Student Poster Session – Cash Bar
Ballots are the last page in booklet

Saturday, May 21st

Breakfast on your own

Macey Center

Auditorium

9:00AM – 9:05AM

Good Morning, Dr. Arterburn

9:15AM – 12:15PM

Investigator Research Presentations

SIMULTANEOUS SESSIONS

Pathogens to be held at the Macey Center Auditorium

Cell & Organism to be held at Jones Annex, Rm 101

Macey Center Auditorium

Thematic Area: Pathogens

Session Chair: Dr. Newton Hilliard

9:15AM – 9:45AM

Dr. John Gustafson, NMSU

9:45AM – 10:15AM

Dr. Kathryn Hanley, NMSU

Barriers to emergence of sylvatic dengue virus

10:15AM – 10:45AM

Dr. Snezna Rogelj, NMT

Mitigation of Biofouling: Applications of Degradative Enzymes and Antimicrobial Materials

10:45AM – 11:15AM

Break – Macey Center

11:15AM – 11:45AM

Dr. Manuel Varela, ENMU

Pasteurized Whole Milk Confers Multidrug Resistance via the *marCRAB* Locus in *Escherichia coli* and Molecular Cloning Reveals a Novel Antimicrobial Agent Efflux Pump in the Multidrug Resistant Agricultural Bacterial Isolate *Enterobacter cloacae*

11:45AM – 12:15AM

Dr. Scott Shors, NMT

The Rise and Fall of the Interferon-Induced Antiviral State

Jones Annex Room 101 (Yellow on map)

Thematic Area: Cell & Organism

Session Chair Dr. Rebecca Reiss

9:15AM – 9:45AM

Dr. Zhiming Liu, ENMU

Molecular Cloning and Roles of Cyclooxygenase Genes during Ovulation in the Ovarian Follicles of *Xenopus laevis*

9:45AM – 10:15AM

Dr. Brad Shuster, NMSU

Is there a Mitotic Exit Network in higher eukaryotes?

10:15AM – 10:45AM

Dr. Nicholas Wright, ENMU

Investigating Drosophila Mushroom Body Physiology

10:45AM – 11:15AM

Break – Macey Center

11:15AM – 11:45AM

Dr. Carol Linder, NMHU

Characterization and positional cloning of *repro27* mice

11:45AM – 12:15AM

Dr. Marco Bisoffi, UNM

Expression Profiles of Prostate Cancer Cells: Genomic and Proteomic Approaches Towards Biomarker Discovery

Jones Annex - Foyer

12:15PM – 1:30PM

Lunch (Simultaneous Meetings)

- **Steering Committee Meeting**, Rm 108
- **Pathogens**, Rm 102
- **Cell & Organism**, Rm 104
- **Structure & Function**, Rm 106

Macey Center – Auditorium

1:30PM – 2:00PM

UNM Mass Spectrometry Core Facility

Dr. Charlotte Mobarak, UNM

2:00PM – 2:30PM

Cell & Organism Core Facility

Dr. Graciela Unguez, NMSU

2:30PM – 3:00PM

Bioinformatics Core
Dr. Brook Milligan, NMSU

3:00PM – 3:30PM

NCGR
Faye Schilkey, NCGR

3:30PM – 3:45PM

Student Poster Awards & Closing
Dr. Arterburn