nanoUtah 2015

UTAH'S STATEWIDE NANOTECHNOLOGY GRANT COORDINATION WORKSHOP

TUESDAY, OCTOBER 13, 2015

UNIVERSITY OF UTAH USTAR Atrium & Auditorium Sorenson Molecular Biotechnology Building (SMBB)

7:30 a.m.	Check-in, poster set-up	11:05 a.m.	Steve Blair: Advanced 3D
8:00 a.m.	Welcome: Bruce Gale, Ian Harvey	11.15 a m	Mike Czabai: X-Ray nanoCT (5um
8:15 a.m.	Paul Clayson: Father of Utah Nano Initiative (precursor to USTAR): Where we've come from where we are going		voxel resolution on 3-5" specimens, 500nm resolution on 1mm specimens)
Morning Sessic	on: Large multi-PI proposals	11:25 a.m.	Raheel Samuel: Raman nano spectroscopy for biomed imaging applications
8:30 a.m.	support	11:35 a.m.	Will Rankin: Imaging EELS NSF/MRI
8:45 a.m.	M. Janat-Amsbury and H. Ghandehari: Cancer Nanotechnology and Nanotoxicology: Response to NIH REAs	11:45 a.m.	Ross Walker: Electrical Characterization user lab
9:00 a.m.	Bryony Richards-McClung: EGI/SCII collaboration	11:55 a.m.	Student poster session Working lunch: Topics by table Nanofab tours
9:15 a.m.	Deepankar Pal: The future of 3D metal printing	1:45 p.m.	Debriefing session: Facilitators summarize topics from tables, including action items
9:30 a.m.	Scott L. Anderson: I/UCRC	1.50 n m	Andy Buffmire: Litab Advanced Materials
9:45 a.m.	Will Rankin: EFRC RFP 2D materials	1.00 p	and Manufacturing Initiative. Benefits of
10:00 a.m.	Morning break		by the SBA and how to take advantage of this.
Late morning S Instrumentation	Session: Infrastructure and proposals - Wish lists	Afternoon Session: Smaller multi-PI grants and support resources	
10:20 a.m.	lan Harvey: Nanofab update and designing new device functionality with hard-to-handle materials	2:05 p.m.	Rapid-fire intros for tech push and market pull, see back for details
10:35 a.m.	David Belnap: 300 KeV Cryo TEM	3:22 p.m.	Afternoon break
10:45 a.m.	Scott Anderson: eTEM at the U	3:40 p.m.	Rapid-fire intros for tech push and market pull see back for details
10:55 a.m.	Shad Roundy: Advanced materials MRI: Thick AIN for piezoelectric and thermal conductivity	5:00 p.m.	Conclusion

nanoutory chanter works and the works and the state with the state

UTAH'S STATEWIDE NANOTECHNOLOGY GRANT COORDINATION WORKSHOP

TUESDAY, OCTOBER 13, 2015

UNIVERSITY OF UTAH USTAR Atrium & Auditorium Sorenson Molecular Biotechnology Building (SMBB)

The following are participating	in the rapid-fire intros:
Market Pull = MP	
Tech Push = TP	

- 2:05 p.m. *TP* Mary Cardon Utah's SBIR/STTR Assistance Program: USTAR small business resource center
- 2:12 p.m. *TP* **Amy Arkwright** State Science Olympiad Coordinator: Science Olympiad as a drop-in program for NSF Broader Impact outreach, with self-selection of students with interest in your discipline from all over the state, and self-assembly on our campus
- 2:19 p.m. *MP* **Kirk Schmierer** CEO Total Quality Systems, Inc: SBIR/STTR plans and soliciting participation. Also participating in the lunch discussion on nXCT
- 2:26 p.m. *TP* **Tom Whitworth** Synchronicity Microfluidics: CD style bio-reader test platform
- 2:33 p.m. *TP* **Tom Whitworth** Synchronicity Microfluidics: 250nm full-wafer lithography here in SL Valley
- 2:40 p.m. *TP* **Jim Smith** SLCC, U of U Course Instructor: Course offerings in the Utah Nanofab
- 2:47 p.m. *TP* Brian Baker Utah Nanofab Staff Engineer: Keyence 3D microscopy
- 2:54 p.m. TP Matt Linford BYU: TOF SIMS
- 3:01 p.m. *MP* **Almut Vollmer** USU: Potential use of nXCT in food science
- 3:08 p.m. *TP* **Aaron Smith** SpectraSymbol: Flexible circuits as an alternative to traditional PCB's
- 3:15 p.m. *TP* **Shawn Averett** BYU: NDE using second harmonic generation spectroscopy

	/		
	3:22 p.m.		Afternoon break
:	3:40 p.m.	TP	Brian Van Devener - U of U Surface Analysis Lab: 3D tomographic elemental mapping at the nanometer scale
	3:47 p.m.	TP	Randy Polson - U of U Surface Analysis Lab: Multi-scale correlative microscopy: ways to image and visualize the same sample location from the mm scale to the Å scale
	3:54 p.m.	TP	Loren Rieth - U of U Center for Engineering Innovation: Tools and resources to help engineer at the microscale when you do not understand the thin film tools
	4:01 p.m.	TP	Bruce Gale - Director, Utah Nanofab:
	4:08 p.m.	TP	Michael Granger - U of U: What a Vibrating Sample Magnetometer VSM in the Nanofab can do for you
	4:15 p.m.	TP	Paulo Perez - U of U Surface Analysis Lab: New SEM techniques available
	4:22 p.m.	TP	David Petrucci - Hydrogena: Evolving H ₂ gas from inexpensive renewable sources
	4:29 p.m.	TP	Zhiheng Liu - U of U: Nanoscale characterization available through SEM/CL and nanoRaman
	4:36 p.m.	TP	Taylor Sparks - U of U: Resources at the MSE Materials Characterization Lab
	4:43 p.m.	TP	Steve Pritchett - Utah Nanofab Staff Engineer: Techniques for wafer thinning, controlled reactive thin film sputter

deposition