

NASA Ames Instrument Workshop 2010  
Agenda  
Thursday, May 13<sup>th</sup> 2010

7:30 AM	Poster Set-Up (Northwing/Ballroom)	
8:00 AM	Registration/Sign In/Coffee	
8:30 AM	S.P. Worden, Ames Center Director	Welcoming Remarks
8:40 AM	Kimberly Ennico	Goals of Workshop
8:50 AM	Peter Zell	Tour Overview
9:00 AM	Plenary Lecture (Ballroom) Harry Partridge, NASA Ames, detail to NASA HQ      Early Stage Innovation Team Lead for NASA's Chief Technologist Office (CTO) July 2010      Chief Technology Office (CTO)	
	Three minute Oral Presentations (Ballroom)	
9:30 AM	Alan Cassell	TPS Embedded Sensors Payload MISSE-7
9:33 AM	Gregory Swanson	Damage Recording System (DRS)
9:36 AM	Diana Ly	Biocompatibility Considerations for Biology Payload Instruments
9:39 AM	Jessica Koehne	Carbon Nanofiber Based Biosensor
9:42 AM	Jose Santos	MEDLI Instrumented Sensor Plug
9:45 AM	Jing Li	Nano Chemsensors for Space and Terrestrial Applications
9:48 AM	Michael Flynn	Rotating Disk Analytical System Photonic Crystal Fiber-Based High Sensitivity Sensor
9:51 AM	Jason Lohn	Evolved Antenna Technology: Low Cost, High-Performance, Rapid Design
9:54 AM	Richard Alena	Wireless Sensor Networks
9:57 AM	Friedemann Freund	Hyperspectral Testbed and Operational Platform (HyTOP)
10:00 AM	Michael Winter	Airborne Re-entry Observation with a Fiber Optics Coupled Spectrometer
10:03 AM	Michael Flynn	In-Situ Extreme Environment Isotope Ratiometer MALDI-TOF Mass Spectrometer for Space and Extraterrestrial Applications Extended Depth of Field Imaging for High Speed Cell Analysis
10:07 AM	David Bubenheim	Controlled Ecology Research Facility
10:10 AM	Edward Balaban	Flyable Electro-mechanical Actuator (FLEA) Testbed for Prognostics
10:13 AM	<b>POSTER SUMMARIES</b>	
10:15 AM	Morning Poster Session (Ballroom) and Coffee Break	
10:45 AM	Plenary Lecture (Ballroom) Dan Rasky, Director, Space Portal, NASA Ames      Instrument Needs for Commercial Space	
	Three minute Oral Presentations (Ballroom)	
11:00 AM	Tony Ricco	GeneSat/PharmaSat/O-OREOS/MISST Overview
11:03 AM	Matthew Sorgenfrei	Active Attitude Control for Nanosatellites
11:06 AM	Millan Diaz-Aguado	NanoSatellite Thermal Design, Analysis and Testing
11:09 AM	Bruce White	Quick, Cheap & Small Sensors for Suborbital Flight
11:12 AM	Giovanni Minelli	SEVO Nanosatellite Payload
11:15 AM	Linda Timucin	Fluorescence Microscope for NanoSat Platform
11:18 AM	Evan Jackson	NanoSat Launch Adapter System (NLAS)
11:21 AM	Charlie Friedericks	Nanosatellite BUS Capabilities
11:24 AM	Christopher Beasley	Hermetically Sealed Free Flyer 6 Cube Spacecraft [6U]
11:27 AM	Matthew Piccini	Microfluidic Bioreactor for Space Based Experimentation Fluid Delivery System for In-situ Experimentation Integrated Microfluidic System
11:30 AM	Plenary Lecture (Ballroom) Michael Freilich, Director, Earth Science Division,      Instrument Needs for Earth Science NASA HQ	
	Three minute Oral Presentations (Ballroom)	
12:00 AM	Matthew Fladeland	SIERRA UAV airborne platform
12:03 AM	Jeffrey Myers	Instrument Development at the ARC Airborne Sensor Facility
12:06 AM	Joshua Forgione	Custom Electronics for High-Altitude, Airborne Earth Science
12:09 AM	Patrick Hillyard	Ames Aerosol Instrument (AAI): Measuring Aerosol Optical Properties Apparatus to Adsorb and Analyze Particulate Matter

12:12 AM	Roy Johnson	Spectrometer for Sky-Scanning, Sun-Tracking Atmospheric Research (4STAR)
12:15 PM	<b>NETWORKING LUNCH (Showroom) and Poster Viewing (Ballroom)</b>	
1:15 PM	Plenary Lecture (Ballroom) Doug Hudgins, Discipline Scientist, Astrophysics Instrument Needs for Astrophysics R&A Programs, Program Scientist for Spitzer and Herschel Space Telescopes, NASA HQ	
	Three minute Oral Presentations (Ballroom)	
1:30 PM	Mark McKelvey	The Echelon-Cross-Echelle Spectrograph for SOFIA (EXES)
1:33 PM	Scott Horner	NIRCam for JWST
1:36 PM	Robert McMurray	Infrared Detectors for Space-based Astronomy
1:39 PM	Ruslan Belikov	Development of the PIAA Coronagraph for exoplanet imaging
1:42 PM	Doug Caldwell	<i>Kepler</i> Photometer Performance
1:45 PM	Kimberly Ennico	LCROSS (Lunar CRater Observation & Sensing Satellite) Payload Suite
1:48 PM	Terry Fong	K10 Planetary Rovers
1:51 PM	Anthony Colaprete	The LADEE Ultraviolet-Visible Spectrometer
1:54 PM	Carol Stoker	Tethered Ice Drill for Moon and Mars
1:57 PM	David Blake	Development of the CheMin Mineralogical Instrument on Mars Science Lab '11
2:00 PM	Nathan Bramall	Fluorescence Spectroscopy in Boreholes to Detect Subsurface Organics
2:03 PM	Rick Elphic	Neutron Spectrometer for Planetary Water Prospecting
2:06 PM	Bin Chen	Raman Spectroscopy and Imaging Systems
2:09 PM	Ronald Reisman	Augmented Reality Tower Technology (ARTT) First Light Instrumentation
2:15 PM	<b><u>NASA Headquarters Future Directions Panel (Ballroom)</u></b> <i>"Emerging opportunities at NASA"</i> – New directions and opportunities for instrument development. A.J. Brown (Chair) Participants: H. Partridge, M. Freilich and D. Hudgins	
3:15 PM	<b>Afternoon Poster Session (Ballroom)</b>	
3:45 PM	Sharepoint and the Ames Instrument Community	Creon Levitt
3:50 PM	SBIR/STTR Opportunities for Instrument Development	Kimberly Hines
3:55 PM	NASA Research Park Overview	Geoff Lee
4:00 PM	<b><u>Ames Response to New NASA Vision Panel (Ballroom)</u></b> <i>"From Breadboard to Flight"</i> – Funding Low TRL Projects at NASA Ames. K. Ennico(Chair) Participants: H. Tran (Code A) P. Klupar (Code R) M. Bicay (Code S) E. Tu (Code T)	
5:00 PM	Kimberly Ennico	Closing Remarks
5:05 PM	Adjourn to Golf Course for Happy Hour	

POSTERS		
#1	Steve Dunagan	Spectrometer for Sky-Scanning, Sun-Tracking Atmospheric Research (4STAR)
#2	Damon Flansburg	Metrology & Calibration - Ames Program & Project Funding
#3	Kamalika Das	Virtual Sensors for Earth Science Data
#4	Kara Vargo	Life Cycle of a Flight Instrument At Ames Research Center
#5	Diana Gentry	High-Altitude Bioaerosol Capture
#6	Anthony Intravaia	6 DOF/Visual Imaging for Navigation and Stability in Small Robots
#7	Joseph Mach	SMART Temperature Sensor Probe
#8	Clara McCrossin	LunaChem
#9	Darrell Nieman	Micro-Column Scanning Electron Microscope and X-ray Spectrometer (MSEMS) for Planetary Exploration
#10	Tomo Oishi	Sensors at SDL (TSF Sensors Development Lab)
#11	Anuscheh Nawaz	TSF Sensors Group Capabilities
#12	Dawn McIntosh	Machine Learning and Controls Lab
#13	Todd Klaus	Kepler Science Operations Center
#14	Michael Winter	Emission Spectroscopy in Plenum and Free Stream of the IHF Arc Jet
#15	Friedemann Freund	Hyperspectral Testbed and Operational Platform (HyTOP)
#16	Ronald Reisman	Augmented Reality Tower Technology (ARTT) First Light Instrumentation