



*World Class. Face to Face.*



## *Academic Showcase*

**March 27, 2009  
Bohler Gymnasium**

WORLD CLASS. FACE TO FACE.  
**SHOWCASE**



## KEY

CAHNRS .....	College of Agricultural, Human, and Natural Resource Sciences
BUS .....	College of Business
CEA .....	College of Engineering and Architecture
CEd .....	College of Education
CLA .....	College of Liberal Arts
CNR .....	College of Nursing
SCI .....	College of Sciences
CVM.....	College of Veterinary Medicine
DSAED.....	Division of Student Affairs, Equity and Diversity
EXT.....	WSU Extension Service
HON.....	Honors College
INTD .....	Interdisciplinary
LIB .....	Libraries
PHARM.....	College of Pharmacy

Authors are listed below the abstract title. The primary author is listed first; secondary author(s) follow. The number listed to the left of the abstract title indicates the location of the poster or display. For an alphabetical listing of authors, please see the index in back. For a copy of the abstract(s), go to [showcase.wsu.edu](http://showcase.wsu.edu).

### 1 **Academic Advising at Washington State University**

Christine Oakley  
John McNamara  
Thomas Whitacre  
Sandra Brabb  
Justine Rupp  
Lisa Laughter  
INTD

### 2 **Exploring a Different White Box**

Heather McGeachy  
CLA

### 3 **Visualizing Large CATIA Models Interactively Over the Internet**

Sankar Jayaram  
Uma Jayaram  
Lijuan Zhu  
Vinay Mishra  
Arun Natarajan  
James Fernandes  
CEA

### 4 **SimRisk: An Agent-Based Modeling and Simulation Tool for Risk Analysis of Supply Chains**

Benjamin Meyer  
Li Tan  
Brock Erwin  
Shenghan Xu  
CEA

### 5 **Optimizing Performance on High-end Supercomputers Using Advanced Parallel Programming Models**

Manojkumar Krishnan  
CEA

### 6 **npf – a Fast Intrusion Detection System to Combat Malicious Activity in High Speed Network**

Shariful Shaikot  
Min Sik Kim  
CEA

### 7 **Static Cyclic Response of Concrete Filled FRP Tubes**

Mohamed ElGawady  
CEA

### 8 **Superfast Amphibious Transport for Arctic Regions**

Konstantin Matveev  
CEA

### 9 **Supported Cobalt Catalysts for Ethanol Steam Reforming by Impregnation and Coprecipitation Methods**

Sean Shih-Yi Lin  
Su Ha  
CEA

### 10 **Advancement of Small-Scale Thermoacoustic Systems**

Sungmin Jung  
CEA

### 11 **Tiny OS-based Quality of Service Management in Wireless Sensor Networks**

Nina Peterson  
Lohith Anusuya-Rangappa  
Behrooz Shirazi  
CEA

### 12 **A Low Noise, Low Power Sensor Amplifier for Neural Study**

Hari Krishnamurthy  
CEA

### 13 **Low Power Analog to Digital Converter**

Kun Yang  
CEA

### 14 **Water Sorption and Glass Transition Studies in Raspberries**

Roopesh Mohandas Syamaladevi  
Shyam Sablani  
Juming Tang  
Barry Swanson  
CEA

### 15 **Thermohydrogen Processed Friction Stir Welding**

Yuri Hovanski  
CEA

- 16 Over – The – Air Programming of Wireless Sensor Networks**  
Rashmi Parthasarathy  
CEA
- 17 Reinterpreting Reality: Balancing Function and Aesthetics**  
Erika Iiams  
CAHNRS
- 18 Castor PDAT1A: A Novel Player in The Biosynthesis of Hydroxy Fatty Acids**  
Harrie Van Erp  
Julie Bungal  
Jay Shockey  
John Browse  
CAHNRS
- 19 Comparison of Booms and Big-Gun Irrigation Systems in Northwestern Washington**  
Troy Peters  
Don McMoran  
CAHNRS
- 20 Effects of Compost Tea on Pheromone Production in *Xanthomonas campestris* pv. *campestris***  
Catherine Crosby  
Lynne Carpenter-Boggs  
CAHNRS
- 21 The Rhizobial Nitrogen Stress Response and Effective Nitrogen Fixation**  
Michael Kahn  
Svetlana Yurgel  
CAHNRS
- 22 How Large are Learning Externalities?: Measurement by Calibration**  
Seung Mo Choi  
CAHNRS
- 23 Japanese and U.S. Mothers' Concerns: Content Analyses of Mothers' Questions on Online Message Boards**  
Noriko Porter  
CAHNRS
- 24 The Marker-Assisted Breeding Pipeline for Efficient Tree Fruit Genetic Improvement**  
James Olmstead  
CAHNRS
- 25 A Study of China's Comparative Advantages in Textile Complex**  
Ting Chi  
CAHNRS
- 26 Significant Associations of Stearoyl-CoA Desaturase (SCD1) Gene with Muscle Fat Deposition and Composition in Beef Cattle**  
Zhihua Jiang  
Jennifer Michal  
David Tobey  
Tyler Daniels  
Daniel Rule  
Michael MacNeil  
CAHNRS
- 27 Characterization of Cassava Root PPD**  
Suresh Iyer  
CAHNRS
- 28 Plants Do Not Produce Antibodies, How Do They Resist Disease?**  
Lee Hadwiger  
CAHNRS
- 29 Identification of Chromosomal Regions Associated with Tissue Infection and Fecal Shedding of *Mycobacterium avium* subspecies *paratuberculosis***  
Ricardo Zanella  
Matthew Settles  
Stephanie D. McKay  
Robert D. Schnabel  
Jerry F. Taylor  
Terry Fyock  
Robert H. Whitlock  
Holly L. Neibergs  
CAHNRS
- 30 Sub-lethal Effects of Pesticide Residues in Honey Bee Comb as a Potential Factor in Colony Collapse Disorder (CCD)**  
Judy Wu  
CAHNRS
- 31 *Brassica juncea* Seed Meal as a Fumigant in Organic Greenhouse Production**  
Stewart Higgins  
Lynne Carpenter-Boggs  
Mark Mazzola  
Timothy Paulitz  
Jeffery Smith  
Catherine Crosby  
CAHNRS
- 32 Parental Investment and Other Factors in Sibling Rivalry in a Rural Dominican Village**  
Michelle Dillon  
CAHNRS
- 33 Influence of Tannin Concentration, Storage Temperature and Time on Polymeric Pigment and Astringency of Cabernet Sauvignon Wines**  
Remedios Villamor  
Carolyn Ross  
James Harbertson  
CAHNRS

- 34 Will Washington State Grow Its Own Biofuel Feedstocks?**  
Suzette Galinato  
Douglas Young  
Craig Frear  
Jonathan Yoder  
CAHNRS
- 35 Para-Retroviral Sequences in Centers of Plant Diversity**  
Sahar Eid  
Hanu Pappu  
Keri Druffel  
Dayle Saar  
CAHNRS
- 36 The WSU Apple Breeding Project: An Integrated Approach to the Development of New Varieties**  
Kate Evans  
Cameron Peace  
Yanmin Zhu  
Amit Dhingra  
David Rudell  
Dorrie Main  
James Olmstead  
Carolyn Ross  
Bruce Barritt  
CAHNRS
- 37 Allylic Double Bond Reductases in *Arabidopsis* and *Pinus* Species**  
Sung-Jin Kim  
Choonseok Lee  
Ann Patten  
Diana Bedgar  
Syed Moinuddin  
ChulHee Kang  
Laurence Davin  
Norman Lewis  
Buhyun Youn  
CAHNRS
- 38 A High Performance No-Chamber Fuel Cell Using Ethanol as Fuels**  
Kang Wang  
CEA
- 39 Learning Patterns in the Dynamics of Biological Networks**  
Chang hun You  
Lawrence Holder  
Diane Cook  
CEA
- 40 Ultrasonic Detection of Simulated Corrosion in Tieback Rods**  
Karl Olsen  
CEA
- 41 Physical Analyses of Inhomogeneous Deformation in Aluminum Using a Finite Element Crystal Plasticity Model and Discrete Dislocation Dynamics**  
Alankar Alankar  
David Fields  
CEA
- 42 Miniature Data Acquisition System for Multi-Channel Sensor Arrays**  
Ding Ma  
CEA
- 43 Single Ended 16x10Gbps Data Bus**  
Saurabh Mandhanya  
CEA
- 44 Isolation and Characterization of Algae Strains from the Northwest: With an Emphasis on Biomass Production**  
Ben Lucker  
CEA
- 45 Hydroxyapatite Coating on Load Bearing Ti Implants**  
Mangal Roy  
Amit Bandyopadhyay  
Susmita Bose  
CEA
- 46 East Central Neighborhood Working Family Housing Prototypes Design Research and Development Case Study (ESN dR+D)**  
John Abell  
CEA
- 47 Fruit Cell Wall Analogue**  
Pallavi Moehekar  
Marvin Pitts  
CEA
- 48 Study of the Activity of Mo-Oxide Catalysts for the Reforming of Hydrocarbons**  
Oscar Marin-Flores  
CEA
- 49 Analysis of Heterogeneous Deformation and Dislocation Dynamics in Single Crystal Micropillars Under Compression**  
Sreekanth Akarapu  
Hussein Zbib  
David Bahr  
CEA
- 50 A Lookup-Table-Based Algorithm for Pipelined CRC Calculation**  
Yan Sun  
CEA
- 51 Analysis of Amplitude Quantization in Acelp Excitation Coding**  
Wisarn Patchoo  
Thomas Fischer  
Changho Ahn  
Sangwon Kang  
CEA
- 52 Effects of Head Position and Impact Direction on Neck Muscle Reflex Responses**  
Darrin Trask  
Anita Vasavada  
David Lin  
Anne Knottnerus  
CEA

- 53 Laser Processing of Alloys and Metal Matrix Composites for Enhanced Thermal Conductivity**  
Felix Espana  
Amit Bandyopadhyay  
Susmita Bose  
CEA
- 54 Extrudable Melamine Resins for Wood Plastic Composites**  
Lee-Wen Chen  
Karl Englund  
Michael Wolcott  
CEA
- 55 Effectiveness of Surface Flow Constructed Wetlands Receiving Agricultural Runoff in Mitigating Pathogens and Turbidity, Lower Yakima Basin, WA**  
Victoria Whritenour  
Marc Beutel  
John Foltz  
CEA
- 56 Renewable Microbial Polyester for Wood Plastic Composites**  
Meng-Hsin Tsai  
Long Jiang  
Michael Wolcott  
CEA
- 57 A New Approach Based On FFT For Congestion Monitoring in Networks**  
Haiqin Liu  
CEA
- 58 A Petrologic Overview of the Boring Volcanic Field, Cascade Range, USA**  
Richard Conrey  
CSI
- 59 Comparison of Trace-Element Concentrations in Rhyolitic Glass From Laser Ablation and Solution Data: Effects of Microlites and Trace Phases**  
Scott Boroughs  
Charles Knaack  
Paul Olin  
John Wolff  
CSI
- 60 Geochemistry of Age Equivalent John Day Ignimbrites Near Prineville, OR**  
Karyn Patridge  
CSI
- 61 Towards Determining the Individual Roles of Arogenate Dehydratase Isoforms in Phenylalanine Biosynthesis**  
Oliver Corea  
Hong Yang  
Man-Ho Cho  
Rebecca Hood  
Mark Bernards  
Susanne Kohalmi  
Laurence Davin  
Norman Lewis  
CSI
- 62 Pavilion Lake Freshwater Calcite Microbialites and their Associated Microbial Communities: Possible Extant Analogs for Proto-Macroorganisms**  
Carol Turse  
Dirk Schulze-Makuch  
CSI
- 63 Characterizing Novel Regulators Affecting the Telomere Position Effect**  
Alexander Price  
Julie Stanton  
John Wyrick  
CSI
- 64 Y-chromosome Polymorphisms Differentiate Rainbow Trout Subspecies**  
Joseph Brunelli  
Craig Steele  
Gary Thorgaard  
CSI
- 65 Bimodal Magmatism During the Diego Hernández Formation, Tenerife, Canary Islands: Genesis and Eruption-Triggering of Phonolitic Magmas During Ongoing Mafic Volcanism**  
Paul Olin  
John Wolff  
Campbell Edgar  
Ray Cas  
Joan Marti  
CSI
- 66 Analysis of the Structure and Stability of the H2A-H2B Dimeric Folding Intermediate**  
Paul Guyett  
Lisa Gloss  
CSI
- 67 The Effect of Methamphetamine Exposure on Learning and Memory in the Pond Snail, *Lymnaea stagnalis*: Does Methamphetamine Produce 'Super-Learning?'**  
Stephen Houmes  
Leslie Green  
Katie Wyrick  
CSI
- 68 Hsp27 is Mechanically Linked to Titin in Heat-Stressed Zebrafish Cardiomyocytes**  
Nathan Tucker  
Eric Sheldon  
CSI
- 69 Independent Dimensions of Trait Individual Differences in the Structure of Sleep**  
Lindsey Tompkins  
Hans Van Dongen  
David Dinges  
CSI
- 70 Photoinduced Coloration of Single Crystal Zinc Oxide**  
Enamul Khan  
Steven Langford  
Tom Dickinson  
CSI

- 71 Optimized Scoring Function for Solubility Mutagenesis**  
Ye Tian  
Bala Krishnamoorthy  
CSI
- 72 Lattice-based Algorithms for Number Partitioning**  
Bala Krishnamoorthy  
William Webb  
Nathan Moyer  
CSI
- 73 Common Reading Impact on First Semester Student Experience**  
Leslie Jo Sena  
DSAED
- 74 Characteristics of Cell Phone Only, Listed, and Unlisted Telephone Households**  
John Tarnai  
Danna Moore  
Marion Schultz  
Social & Economic Sciences Research Center
- 75 Confronting HIV and Stigma: Identity Negotiation Among People Living with HIV/AIDS in China**  
Chunbo Ren  
CLA
- 76 Listening to Public Radio Listeners: An Audience-Defined Audience Analysis**  
Douglas Hindman  
COM
- 77 Media Use and Individual-Level Indicators of Social Capital in Japan**  
Masahiro Yamamoto  
COM
- 78 A Pilot Test of *Take it Seriously: Sex and Media* - A Final Report Submitted to the Washington State Department of Health**  
Bruce Pinkleton  
Erica Austin  
Marilyn Cohen  
Yvonne Chen  
Ming Lei  
Masahiro Yamamoto  
COM
- 79 Connection, Restructuring, and Buffering: How Groups Link Individuals and Organizations**  
Patty Sias  
Deborah Silva  
COM
- 80 Fictionality and Perceived Realism in Experiencing Stories: A Model of Narrative Comprehension and Engagement**  
Rick Busselle  
COM
- 81 The Discourse of Welfare Reform in UK Labour Party Election Manifestos, 1945-2005**  
Ryan Thomas  
COM
- 82 Does Violent Video Game Play Influence Players' Aggressive Thoughts and Feelings Based on Individuals' Sensation Seeking Tendencies?**  
Steven Bisch  
COM
- 83 Rednecks for Obama: Paving the Intersection between Intercultural and Political Communication**  
Erin Gallagher  
COM
- 84 Possible Isolation in Tick Cell Culture of a Rickettsia-Like Organism Associated with Strawberry Disease Lesions in Rainbow Trout**  
Sonja Lloyd  
Scott LaPatra  
Kevin Snekvik  
Nicole Lindstrom  
Kenneth Cain  
Douglas Call  
CVM
- 85 Expression of Transient Receptor Potential Channels and Two-pore Potassium Channels in Rat Vagal Afferents Revealed by Single-Cell RT-PCR Analyses**  
Huan Zhao  
Steve Simasko  
Leslie Sprunger  
CVM
- 86 Persistence of Attachment Bonding of Piglets to their Mother as Revealed by the "Maternal Potentiation" Paradigm.**  
Valentina Colonnello  
Paolo Iacobucci  
Ruth C. Newberry  
CVM
- 87 Neuroanatomical Plasticity in the GnRH System of the Sheep: Seasonal Variation in Glutamatergic and GABAergic Afferents**  
Anna Sergeeva  
CVM
- 88 Localization and Expression of the Insulin Receptor Substrate-2 in the Rat Brain**  
Emiko Namatame  
Sue Ritter  
CVM
- 89 Simultaneous Silencing of Npy and Dbh Genes in Catecholamine Cell Groups A1 and C1 Suppresses Glucoprivic Feeding**  
Ai-Jun Li  
Qing Wang  
Thu Dinh  
Sue Ritter  
CVM

- 90 Setting the Clock: Physiological Integration of Seasonal Cues by the Grizzly Bear**  
Jasmine Ware  
Lynne Nelson  
Charlie Robbins  
Gemaine Stark  
Heiko Jansen  
CVM
- 91 Neuroplasticity Upon Active Reward Seeking**  
Brian Lee  
Travis Brown  
Yanhua Huang  
Barbara Sorg  
Yan Dong  
CVM
- 92 Changes in Skeletal Muscle of Brown Bears Between Summer and Winter**  
John Hershey  
David Lin  
Charles Robbins  
O. Lynne Nelson  
CVM
- 93 Time of Day Changes in Interleukin- $\beta$  and Nerve Growth Factor Immunoreactivity in the Rate Somatosensory Cortex**  
Heather Hallett  
Lynn Churchill  
Krista Ingalsbe  
James M. Krueger  
CVM
- 94 Heterogeneous Expression of Voltage-Gated Sodium Channel Subtypes by Subpopulations of Vagal Afferent Neurons Before and After Systemic Capsaicin Treatment**  
Rose Marie Larios  
CVM
- 95 Consequences of University Knowledge Spillover**  
Kun Liu  
BUS
- 96 The Effect of Popular TV Dramas on Tourism Demand**  
Hyun Jeong Kim  
BUS
- 97 Video or Chat? The Effects of Extroversion and Computer Self-Efficacy on Media Adoption**  
Fengchun Tang  
BUS
- 98 Evaluating Website Quality: Using Cue Utilization Theory and WebQual**  
Phil Longstreet  
John Wells  
BUS
- 99 When the True Color Shines: Conditions Under Which Creative Self-efficacy Leads to Employee Creativity in China**  
Shung Shin  
BUS
- 100 Selecting the Appropriate Quantity Discount for the Right Reason**  
Charles Munson  
Susan He  
BUS
- 101 Validating a DEA-based Menu Analysis Model Using Structural Equation Modeling**  
Dennis Reynolds  
Jim Taylor  
BUS
- 102 Information Technology and Firm Performance: Explicating the Mediating Role of Knowledge Networks, Knowledge Capabilities, and Commercialization of Innovation**  
Avimanyu Datta  
K.D. Joshi  
BUS
- 103 Caring, Beliefs, and Discourse in Mathematics Education: How Teachers "Protect" Students from Perseverance and Self-Reliance**  
Janet Frost  
CEd
- 104 Volleyball Team Cohesion**  
Kelsey Clevenger  
CEd
- 105 Three Dimensions of Teachers' Collaborative Inquiry: Using Data to Improve Science Teaching & Learning**  
Tamara Nelson  
David Slavitt  
CEd
- 106 Culture, Cross-Role Consistency, and Adjustment: Testing Trait and Cultural Psychology Perspectives**  
A. Timothy Church  
Cheryl Anderson-Harumi  
Alicia Del Prado  
Guy Curtis  
Junko Tanaka-Matsumi  
Jose Valdez-Medina  
Khairul Mastor  
Lilia Miramontes  
Marcia Katigbak  
CEd
- 107 Prediction and Cross-Situational Consistency of Daily Behavior Across Cultures: Testing Trait and Cultural Psychology Perspectives**  
Marcia Katigbak  
A. Timothy Church  
Jose Reyes  
Maria Guadalupe Salanga  
Lilia Miramontes  
Nerissa Adams  
CEd

- 108 An Investigation of the Adoption of a Suite of Assessment Instruments for Capstone Design Courses**  
Devlin Montfort  
Shane Brown  
CEd
- 109 Engaging Readers: Reading Attitudes and Read Aloud Skills of Pre-service Teachers**  
Jane Kelley  
Sarah French  
Jane Ellen Brady  
CEd
- 110 Academic Achievement among Native Americans: Performance or Data Gap?**  
Adisa Anderson  
Jason Sievers  
Laurie McCubbin  
Lisa Bruna  
CEd
- 111 Improving the Health and Well Being of Native American Students in the State of Washington**  
Laurie McCubbin  
Gary Grogan  
Jason Sievers  
CEd
- 112 Independent Associations of Physical Activity and Screen Time with Youth Health Markers**  
Sarah Ullrich-French  
Tom Power  
Michael Steele  
Kenn Daratha  
Ruth Bindler  
CEd
- 113 Improving Science Achievement and Retention Through Instruction: Leveraging Faculty Expertise**  
David Feldon  
CEd
- 114 Assessment of Information Literacy and Critical Thinking Skills in UH 290, "Science as a Way of Knowing"**  
Betty Galbraith  
Kimberly Green  
Corey Johnson  
Carol Anelli  
CEd
- 115 Efficacy of Psychological Hypnosis for Vaginal Warts (HPV)**  
Arreed Barabasz  
Marianne Barabasz  
Ciara Christensen  
Linda Higley  
CEd
- 116 Age-Related Changes in Warm Water Immersion**  
Kasee Hildenbrand  
Bruce Becker  
Rebekah Whitcomb  
CEd
- 117 Genetic Analysis of Archaeological Fish Remains to Reconstruct Ancient Fisheries**  
Susan Lukowski  
CSI
- 118 Photorespiration and Plant Carbon Use: More of the Story to Tell**  
Berkley Walker  
Asaph Cousins  
CSI
- 119 2008 Methyl Isothiocyanate Residential Air Assessment; Franklin County, Washington**  
Andrew Gross  
Jane LePage  
Vincent Hebert  
CSI
- 120 Coupled Hf-O Isotopic Perspective On 50 Million Years of Magmatism in the Idaho Batholith**  
Richard Gaschnig  
CSI
- 121 New Constraints on the Extent of Paleoproterozoic and Archean Basement in the Northwest U.S. Cordillera**  
Rachel Brewer  
Jeff Vervoort  
Reed Lewis  
Richard Gaschnig  
Garret Hart  
CSI
- 122 Mapping the Effects of Histone Deacetylase Inhibitors on Histone Acetylation in Breast Cancer Cells**  
Julie Stanton  
Robert Morris  
Li Mao  
Brett Johnson  
Raymond Reeves  
John Wyrick  
CSI
- 123 Biopolymer Films with Cellulose Nanowhiskers**  
Elena Ten  
Mike Wolcott  
Edward Long  
CSI
- 124 Understanding the Effects of Impulsivity, Sensation Seeking, and Consideration of Future Consequences on Risky and Aggressive Driving Behaviors Within the Context of the General Aggression Model**  
Yusheng Lin  
Jeffrey Joireman  
Mark Mulder  
CLA
- 125 Characterization of Partially Consolidated Wood Strand Mats with Hybrid Adhesives**  
Yi Wang  
Vikram Yadama  
CEA

- 126 Automated Classification of Scanning Electron Microscope Particle Images Using Morphological Analysis**  
Brian LaMarche  
Robert Lewis  
Donald Girvin  
James McKinley  
CEA
- 127 GAIN: Large Array Computation with Python**  
Jeff Daily  
CEA
- 128 Group Learning Pedagogy and Group Selection**  
David Gunderson  
CEA
- 129 EXCELinSE (Excellence in Science and Engineering) at WSU**  
KD Joshi  
Gretal Leibnitz  
CEA
- 130 Viscoelastic Property of Hotpressed Hybrid Poplar**  
Isabela Reiniati  
CEA
- 131 Lightweight Sandwich Panels Using Recycled Newspaper Core**  
Christopher Voth  
Vikram Yadama  
CEA
- 132 Interfacial Dislocation Distributions and Plasticity in Nanoscale Multilayered Metallic (NMM) Composites**  
Cory Overman  
Nicole Overman  
Hussein Zbib  
Firas Akasheh  
David Bahr  
CEA
- 133 Plastic Deformation of Trimetallic Nanocomposites**  
Ioannis Mastorakos  
Hussein Zbib  
David Bahr  
CEA
- 134 Development of Desktop Learning Modules and Their Application in Pedagogical Assessments in Engineering Education**  
Baba Abdul  
Bernard Van Wie  
David Thiessen  
Paul Golter  
Nurdan Beyenal  
CEA
- 135 The Sex Effect of Skeletal Geometry on Human Neck Strength**  
Liyang Zheng  
Anita Vasavada  
CEA
- 136 Experimental Determination of Sarcomere Force-Length Relationship in Type-I Human Skeletal Muscle Fibers**  
Sampath Gollapudi  
CEA
- 137 Performance Enhancement of Poly(lactic acid) and Sugar Beet Pulp Composites by Improving Interfacial Adhesion and Penetration**  
Feng Chen  
CEA
- 138 Integrating Humans, Daylight, and Technology in High Performance Schools**  
Judy Theodorson  
Libby Blossom  
Becky Bunker-Hermance  
INTD
- 139 Print Coverage of Male and Female Political Candidates: A Comparative Analysis of Statewide Races**  
Lynsi Burton  
HON
- 140 Temperament and School Readiness: Do Infant Temperament Characteristics Predict Core Academic Abilities in Preschool-Aged Children?**  
Rachel Kliewer  
HON
- 141 Educational Process and Politics: Implementing HB 1495 (2005)**  
Renée Walker  
HON
- 142 Adolescent Sexual Identity Formation and Reasons to Have Sex: Links To Sexual Risk Taking**  
Cheri Boyer  
Danielle Broberg  
Jenifer McGuire  
CAHNRS
- 143 The Vanishing Pope**  
Merik Metos  
HON
- 144 Boyhood, Manhood and the Boy Scouts of America**  
Linda Heidenreich  
Jackson Hogan  
CLA
- 145 Cyber-Affordances: The Look of Things in the Age of "E"**  
Maryam Afshar  
David Wang  
INTD
- 146 The Structure of Collaborative Design**  
Isil Oygur  
David Wang  
INTD

- 147 Holding Creativity Together: Asociological Rather than an Epistemological Theory of the Design Professions**  
Ali Ogulcan Ilhan  
David Wang  
INTD
- 148 Innate Perception and Measurement of Anxiety Levels in Mice Using an Elevated Plus-Maze: A Response to Plants**  
Sujeet Verma  
Virginia I. Lohr  
Raymond M. Quock  
INTD
- 149 Palynological Analysis of Ancient Domestic Turkey Droppings from the American Southwest**  
BreAnne Nott  
Brian Kemp  
William Lipe  
John Jones  
INTD
- 150 The Design Substrate: The Phenomenological Unity Enabling Howard Gardner's Theory of Multiple Intelligences**  
Amber Joplin  
INTD
- 151 Jump Frequencies of Cd Probe Atoms in  $\text{In}_3(\text{La}_x\text{Pr}_x)$  Pseudo-Binary Compounds**  
Randal Newhouse  
Gary S. Collins  
CSI
- 152 High Mobility Group Protein HMGA1 is a Prognostic Factor in Human Metastatic Colon Adenocarcinoma**  
Li Mao  
Zeping Wang  
Raymond Reeves  
CSI
- 153 Late Oligocene OIB-like Lavas in Northern Idaho**  
Svetlana Stadnik  
John Wolff  
Garret Hart  
CSI
- 154 Mindfulness, Communication Apprehension, and Negative Affect**  
Timothy Lyons  
Michiyo Hirai  
Jaak Panksepp  
CLA
- 155 Elements of Effective Government-to-Government Relationships Between School Districts and Indian Tribes**  
Ella Inglebret  
Selena Galaviz  
CLA
- 156 Cocaine-Induced Behavior Arising from Mesolimbic Neurogenesis**  
Thiebaut Herzog  
CSI
- 157 Modeling Immune Dynamics of Equine Infectious Anemia Virus**  
Sergey Lapin  
Marca Huffaker  
Brian Stock  
Kelli Wuerth  
Peter Klosterman  
Elissa Schwartz  
CSI
- 158 Analysis of Thymidylate Synthase and Fluoro- $\beta$ -alanine in 5-Fluorouracil Metabolism**  
Jennifer Darnell  
Kinta Serve  
Margaret Black  
CSI
- 159 Ion and Molecule Based Quantum Computing Architectures: Structural Properties**  
Kristofor Nyquist  
Doerte Blume  
CSI
- 160 Mutation of Histone H2B Core Residues Effects Protein Binding and Gene Silencing in *Saccharomyces cerevisiae* Telomeric Regions**  
McKenna Kyriss  
Yi Jin  
Jim Sanford  
John Wyrick  
CSI
- 161 Posture and Trumpet Playing: How Body Alignment Affects Musicians**  
Leah Jordan  
David Turnbull  
INTD
- 162 Mapping Regions of Env Important in Neutralization of Equine Infectious Anemia Virus**  
Gianne Souza  
Susan Carpenter  
Rebecca Tallmadge  
CVM
- 163 Signals Derived from Adipose Stores and from Deficits in Fat Oxidation Control Feeding by Independent Mechanisms**  
Michael Wiater  
Sue Ritter  
Alan Emanuel  
CVM

- 164 Dynamic Expression of Purine Type II Receptors (P2y1 R and P2x7) and Colocalization with Interleukin-1beta and Tumor Necrosis Factor Alpha In Rat Somatosensory Cortex**  
Lynn Churchill  
Heather Hallett  
Andrea Bouchet  
James M. Krueger  
CVM
- 165 Saturation Thresholds of Neurovascular Coupling Under High Intensity Auditory Stimulation**  
Amy Van Nortwick  
Jennifer Schei  
Derrick Phillips  
Mark McNabb  
David Rector  
CVM
- 166 Arousal Threshold to Auditory Stimuli in Rats**  
Derrick Phillips  
Jennifer Schei  
Christi Pedrow  
Manuel Rojas  
David Rector  
CVM
- 167 Evoked Hemodynamic Responses Decrease Following Sleep Deprivation**  
Jennifer Schei  
Derrick Phillips  
Manuel Rojas  
David Rector  
INTD
- 168 Improved Rat Psychomotor Vigilance Test with Fast Response Times**  
Jennifer Walker  
Fernanda Monjaraz  
David Rector  
CVM
- 169 Evolution of Annealing Twins in Thin Films Microstructures**  
Chang Kyu Yoon  
CEA
- 170 Water Infiltration through Frozen Soils: Experimental Investigation and Mathematical Modeling**  
Shuhui Dun  
Joan Wu  
Sergey Lapin  
Kunio Watanabe  
Markus Flury  
Mitchell Plummer  
Cory Greer  
Donald McCool  
CEA
- 171 Swiss-Roll Type Heat-Recirculating Reactors and Applications to Power Generation**  
Chienshung Lin  
CEA
- 172 Game-Based Simulation for the Evaluation of Threat Detection in a Seaport Environment**  
Allen Christiansen  
Damian Johnson  
Lawrence Holder  
CEA
- 173 Processing of Soft Hispanic Style Cheese ("Queso Fresco") Using Thermo-Sonicated Milk**  
Daniela Bermudez-Aguirre  
Gustavo V. Barbosa-Canovas  
CEA
- 174 Algorithm for Determining Genetic Relationships Between Salmonella Isolates**  
Da Meng  
Shira Brochat  
Douglas Call  
CEA
- 175 Space-Efficient Parallelization of Peptide Identification for Large-scale Mass Spectrometry Data**  
Gaurav Kulkarni  
Ananth Kalyanaraman  
William Cannon  
Douglas Baxter  
CEA
- 176 Bounded Model Checking Based Test Generation for Embedded System Designs**  
Archana Raju  
CEA
- 177 Long-Lived Authentication Protocols for Critical Infrastructure Process Control Systems**  
Rasika Mudumbai Chakravarthy  
CEA
- 178 7 1/2 Degrees a Three-Dimensional Spatial Investigation**  
Stanford Wyatt  
CEA
- 179 Preservation Laboratory: Mining for Interpretation in Virginia City, Montana**  
Phil Gruen  
CEA
- 180 Decoding and Performance Analysis of Serially Concatenated IRA Codes**  
Qingwei Ge  
Benjamin Belzer  
Krishnamoorthy Sivakumar  
CEA
- 181 Modeling and Control of a Liquid Fuel – Based 5 kW Fuel Cell/Battery Hybrid Power Supply for Off Grid Applications**  
Zhi Yang  
CEA
- 182 Performance of Hollow Core Piles Under Lateral Loading**  
Steven Greenwood  
Mohamed ElGawady  
CEA

- 183** **“TEAMS” Study: How do the Diets of Middle School Students Measure Up?**  
Ruth Bindler  
Kenneth Daratha  
CNR
- 184** **Readiness to Change and Pre-Adolescent Obesity: Examining the Relationship Between Self Efficacy and Weight Status**  
Michael Steele  
Thomas Power  
Kenneth Daratha  
Ruth Bindler  
CNR
- 185** **Ethnic Diversity and Translation Time in a Children’s Orthopaedic Clinic**  
Mary Sobralske  
CNR
- 186** **Integrating Human Patient Simulation into Nursing Curriculum**  
Katie Adamson  
CNR
- 187** **CPR Simulations: Results From a Pilot Study**  
Suzan Kardong-Edgren  
Katie Adamson  
CNR
- 188** **The Value of Community-Focused Care in Peru: Influence on Cultural Competency in Health Professions Students**  
Carol Allen  
Denise Smart  
Deborah Swain  
CNR
- 189** **Recruiting Native American Students Into Nursing: Summer Nursing Institute Outcomes**  
Janet Katz  
Denise Smart  
Robbie Paul  
Gail O’Neal  
CNR
- 190** **Rootstock/scion Interactions Involved in Sweet Cherry Flowering**  
Tyson Koepke  
Matthew Whiting  
Christina Duncan  
Vandhana Krishnan  
Amit Dhingra  
CAHNRS
- 191** **Agronomic Potential of Perennial Wheat as an Emerging Specialty Crop for Ecologically Sensitive Landscapes**  
Kevin Murphy  
Lori Hoagland  
Stephen Jones  
CAHNRS
- 192** **Multisequence Locus Analysis of *Enterobacter cloacae***  
Juan Pena  
Brenda Schroeder  
CAHNRS
- 193** **Organic Fertility Management Alters Development and Phytonutrients of Tomatoes**  
Preston Andrews  
Neal Davies  
Margaret Colliers  
Karina Vega-Villa  
Xiaoxing Feng  
CAHNRS
- 194** **Science-Based Solutions for a Nagging Problem of Wine Grapes**  
Naidu Rayapati  
Tefera Mekuria  
Gandhi Karthikeyan  
Olufemi Alabi  
Sridhar Jarugula  
Linga Gutha  
CAHNRS
- 195** **Robust Sampling Strategies for the Diagnosis of Grapevine Viruses**  
Olufemi Alabi  
Ghandi Karthikeyan  
Balakrishnan Natarajan  
Naidu Rayapati  
CAHNRS
- 196** **Grapevine Fanleaf Disease in Washington State Vineyards**  
Tefera Mekuria  
Linga Gutha  
Robert Martin  
CAHNRS
- 197** **An IPM Approach for the Management of Thrips-Transmitted Tospoviruses in Vegetable Cropping Systems in South and Southeast Asia**  
Natarajan Balakrishnan  
Gandhi Karthikeyan  
Tri Damayanti  
Gopinath Koditham  
David Riley  
Scott Adkins  
Naidu Rayapati  
CAHNRS
- 198** **Chilling with Pyrus - Resolving the Pear Ripening Paradigm**  
Christopher Hendrickson  
Laura Burke  
Amit Dhingra  
Scott Schaeffer  
Vandhana Krishnan  
CAHNRS
- 199** **Empirical Results from a Price Discriminating Ski Resort**  
Mark Holmgren  
Vicki McCracken  
CAHNRS

- 200 Identifying Resistance Genes for Eyespot of Wheat in *Aegilops Longissima***  
Hongyan Sheng  
Timothy Murray  
CAHNRS
- 201 Rapid And Targeted Introgression Of Genes Into Popular Cultivars Using Marker-Assisted Background Selection**  
Jasdeep Mutti  
Harpinder Randhawa  
Neeraj Kumar  
Kulvinder Gill  
CAHNRS
- 202 Managed Intensive Grazing (MIG) a Key to Carbon Sequestering**  
W. Frank Hendrix  
EXT
- 203 No-Till and Conventional Tillage Fallow Winter Wheat Production Comparison in the Dryland Cropping Region of Eastern Washington**  
Aaron Esser  
Rick Jones  
EXT
- 204 4-H Summer Adventure Day Camp: Science, Technology and Exploration**  
Janet Schmidt  
Sheri Widmer  
Steve Van Vleet  
Janet Edwards  
EXT
- 205 First Day of School at Age 40: Literacy Opportunities for Latino Child Care Providers**  
Lauri Sherfey  
Alissa Schneider  
Danielle Clark  
EXT
- 206 Mobilizing Extension as a Partner in Translational Research on Substance Abuse Prevention in Washington State**  
Laura Hill  
Drew Betz  
Diana Castro  
Jennifer Crawford  
Marcelo Diversi  
Chris Koehler  
Sue Lerner  
Renee Overath  
Louise Parker  
EXT
- 207 A Thousand Points of Flies: Digital Photo Survey of Cattle Pest Fly Abundance in Washington State**  
Holly Ferguson  
Douglas Walsh  
Sally O'Neal  
EXT
- 208 Navigating Difference: Documenting Outcomes of a Cultural Competency Training Program**  
Mary Katherine Deen  
Louise Parker  
Laura Hill  
Anna Whitehall  
Melynda Huskey  
EXT
- 209 OLA: An Inquiry-Based 4-H Summer Science Camp**  
Gary Varrella  
EXT
- 210 Laying the Foundation for a Better Apple**  
Scott Schaeffer  
Vandhana Krishnan  
Salma Tariq  
Tammy Magrath  
Chenjun Wu  
Nathan Tarlyn  
Roger Bumgarner  
Anantharaman Kalyanaraman  
Amit Dhingra  
CAHNRS
- 211 4-H Teen Leadership Program Increases Participation and Leadership Skills**  
Debbie Moberg-Williams  
EXT
- 212 Kinetics Evidence Suggesting that Transporter Handles Xylose Influx and Efflux of *S. cerevisiae***  
Nan Liu  
Zhimin Li  
Jie Chen  
Mythreyi Chandoor  
Shulin Chen  
CAHNRS
- 213 Does Entering a Global Airline Alliance Improve Domestic Passenger and Freight Volume? A Case Study of American, Delta and United Airlines**  
Jamie Everett  
Eric Jessup  
Ken Casavant  
CAHNRS
- 214 Evaluation of Fuel Usage Factors in Highway Construction in Oregon**  
Ken Casavant  
Eric Jessup  
Mark Holmgren  
CAHNRS
- 215 An Optimal Location Choice Model: Estimating Regional Biomass Supply and Transportation Costs for Biofuel Plants in the State of Washington**  
Hayk Khachatryan  
Kenneth Casavant  
Eric Jessup  
CAHNRS

- 216 Exploring the Genetic Linkage Between Virus Susceptibility and Late Blight Resistance in Potato**  
Yu-Hsuan Lin  
Hanu Pappu  
Jonathan Whitworth  
CAHNRS
- 217 My Gas Problem...**  
Simon Smith  
CAHNRS
- 218 Biodiesel Fuel Application in Marine Environment**  
Tianxi Zhang  
CAHNRS
- 219 Development of a Genetically Engineered Viral-Mimetic Vector for Targeted Cancer Gene Therapy**  
Brenda Canine  
Arash Hatefi  
PHARM
- 220 Empirical Evidence on Racial Disparities in Access to Diagnosis and Treatment for Autism Spectrum Disorder: An Information Synthesis**  
Timothy Schut  
PHARM
- 221 Feline Odor-Induced Anxiety in Post-Partum Female Rats**  
Karen Gerde  
PHARM
- 222 Pharmacy Driven "Vanilla" Starter Solution Program to Decrease Time to Initiation of Parenteral Nutrition in Very Low Birth Weight Infants**  
Brenda Kelly  
PHARM
- 223 Discrepancies in Total and Out-of-Pocket Prescription Costs between Disabled and Elderly Medicare Beneficiaries**  
Joshua Engle  
Jae Kennedy  
PHARM
- 224 Patient Perceptions on Sliding Scale Insulin Use at Home**  
Brian Gates  
PHARM
- 225 Evaluation of Mutant Human Thymidine Kinases for Suicide Gene Therapy**  
Brina Lewis  
Michael Parra  
Margaret Black  
PHARM
- 226 Trend in Anxiety Disorders in the United States 1990 to 2003**  
Tracy Skaer  
PHARM
- 227 Organ Specific Effects of Chronic Alcohol Consumption on NK Cells**  
Hui Zhang  
Gary Meadows  
PHARM
- 228 Specific Amino Acid Dependency-Induced Apoptosis of Prostate Cancer Cell Depends on Glucose Metabolism**  
Ya-Min Fu  
Humin Lin  
Xiaoyi Liu  
Gary Meadows  
PHARM
- 229 Exposure to Nitrous Oxide (N<sub>2</sub>O) Increases Levels of Nitric Oxide (NO) Metabolites and b-Endorphin (b-EP) in Ventricular-Cisternally Perfused Rats**  
Lisa Zelinski  
Yusuke Ohgami  
Raymond Quock  
PHARM
- 230 Hyperbaric Oxygen (HBO<sub>2</sub>) Induces a Two-Phase Antinociceptive Response of Unusually Long Response in Mice**  
Eunhee Chung  
Lisa Zelinski  
Yusuke Ohgami  
Lindsay Quock  
Donald Shirachi  
Raymond Quock  
PHARM
- 231 Nitric Oxide (NO)-Dependency of the Antinociceptive Response of Mice to the Pharmacological Gases Nitrous Oxide (N<sub>2</sub>O) and Hyperbaric Oxygen (HBO<sub>2</sub>)**  
Jessica Lack  
Eunhee Chung  
Yusuke Ohgami  
Donald Shirachi  
Sandra Brabb  
Raymond Quock  
PHARM
- 232 Nitrous Oxide (N<sub>2</sub>O)-Induced Nitric Oxide (NO)-Dependent Release of b-Endorphin (b-EP) from the Arcuate Nucleus to Stimulate Opioid Receptors in the Periaqueductal Gray (PAG) to Cause Antinociception in the Rat**  
Yusuke Ohgami  
Eunhee Chung  
Raymond Quock  
PHARM
- 233 Tumor Necrosis Factor- Production by Peripheral Blood Dendritic Cells in Post Menopausal Type 2 Diabetic Women**  
Sally Blank  
E. Carolyn Johnson  
Debbie Weeks  
Carol Wysham  
PHARM

- 234 The Impact of Rural Community-Based Diabetes Screenings on Changes in Health Behavior**  
Jennifer Polello  
Lisa Woodard  
Douglas Weeks  
PHARM
- 235 Proteomic Analysis of p21 Signaling in Colon Cancer Cells**  
Sayed Daoud  
PHARM
- 236 Investigations into the Mechanism by which AhR Activation Delays the Formation of Mammary Tumors in Mice**  
Tao Wang  
Heather Gavin  
Beth Vorderstrasse  
PHARM
- 237 Pulmonary Infection with *Streptococcus pneumoniae* is Reduced by Pre-treatment with an AhR Agonist: Do Alterations in Lung Epithelial Cells Explain the Host Protection?**  
Beth Vorderstrasse  
Christine Akerlund  
Tao Wang  
PHARM
- 238 Investigation into the Chemotherapeutic Potential of Targeting Poly(ADP-ribose) Glycohydrolase for Cancer Therapy**  
Yiran Zhou  
Katie Eby  
David Koh  
PHARM
- 239 Effects of Ethanol on Proliferation of Human Breast Cancer Cells**  
Zhihong Zhang  
PHARM
- 240 Cyanide Toxicity Human Patient Simulation Case for Teaching Emergency Preparedness and Public Health Response**  
Brenda Bray  
Colleen Terriff  
PHARM
- 241 Constitutive Expression of Heat Shock Protein 27 in Muscle Tissue is Independent of Muscle Fiber Lineage**  
Ryan Middleton  
Eric Shelden  
CSI
- 242 Imaging of Plant Anatomical Features**  
Daniel Mullendore  
CSI
- 243 Hydrogen-Related Defects in Zinc Oxide**  
Marianne Tarun  
Matthew McCluskey  
CSI
- 244 Ultracold Fermi Gas at WSU**  
Jiajia Chang  
Peter Engels  
CSI
- 245 A Genomic Approach to Unraveling Mammalian Genomic Evolution of Meiotic Cohesion Binding Sites Reveals a Dual Functional Role for SYCP3**  
Matthew Johnson  
Sofia Shirley  
Terry Hassold  
CSI
- 246 Structure Determination and Verification by Nuclear Magnetic Resonance Spectroscopy (NMR) of Potent Microtubule Stabilizing Compounds Isolated from the Medicinal Plant *Tacca chantrieri*: Possible Use in Tumors Resistant to Paclitaxel and Doxorubicin**  
William Hiscox  
CSI
- 247 A Stochastic Model of Cytotoxic T Lymphocyte (CTL) Responses in HIV-1 Infection**  
Elissa Schwartz  
Lois J. Kwon  
Lisette De Pillis  
Sergey Lapin  
CSI
- 248 Overexpression of Constitutively Inactive Cofilin Reduces Progesterone Production and StAR Expression in Preovulatory Granulosa Cells**  
Amelia Karlsson  
Evelyn Maizels  
Mary Hunzicker-Dunn  
CSI
- 249 There's No Place Like Home: Using Historic Documents and Fur Trade Artifacts to Identify and Date Village Sites in Eastern Wisconsin**  
Erin McIlraith  
CSI
- 250 Diffusion of Tracer Atoms on Al-sites in Tetragonal Al4Ba phases**  
Gary S. Collins  
Randal Newhouse  
Matthew O. Zacate  
CSI
- 251 Titanium Dioxide Thin Films for Pollution Gas Sensor**  
Zachary Seeley  
Amit Bandyopadhyay  
Susmita Bose  
CSI
- 252 GWVis: Ground-Water Visualization Building an Engaging Bridge Between Complexity and Simplicity**  
Daniel Best  
Robert Lewis  
Akram Hossain  
CSI

- 253 Role of DsrC Protein in Microbial Sulfur Metabolism**  
John Cort  
CSI
- 254 The Nonnegative Inverse Eigenvalue Problem for Normal Matrices**  
Sherod Eubanks  
Judith McDonald  
CSI
- 255 Calculation of Formation Energies of Intrinsic Point Defects in  $\text{In}_3\text{La}$**   
John Bevington  
Gary Collins  
CSI
- 256 Spectral Properties of Nonnegative and Eventually Nonnegative Matrices**  
Judi McDonald  
CSI
- 257 Influence of Application Practices for Reducing Near-Field Agricultural Fumigant Emissions**  
Matt Littke  
Jane LePage  
Vincent Hebert  
CSI
- 258 Geoarchaeological Assessment of Floor Variability in a Formative Sunken Court Complex, Taraco Peninsula, Bolivia**  
Melissa Goodman-Elgar  
Louis Fortin  
CLA
- 259 Reconstructing the Economics of Complexity in the Coast Salish Region of Southwestern British Columbia**  
Colin Grier  
Brian Kemp  
Kelly Derr  
Patrick Dolan  
Susan Lukowski  
Erin McIlraith  
Karrah Sugai  
Corrie Ahrens  
CLA
- 260 Patterns**  
Scott Phillips  
CLA
- 261 Until Death Do Us Part: The Tombs of Married Couples in Renaissance Italy**  
Maria DePrano  
CLA
- 262 Clock Drawing in Healthy Aging and Mild Cognitive Impairment**  
Carolyn Parsey  
Alicia Rueda  
Maureen Schmitter-Edgecombe  
CLA
- 263 Shaping the Past: Interpreting Prehistoric Landscape Management in the Gulf Islands of British Columbia, Canada**  
Kelly Derr  
Colin Grier  
Patrick Dolan  
CLA
- 264 Examining the Relationship between Pet Ownership and Human Health**  
Misty Green  
CLA
- 265 Violence Trends of Women and Men in Rural and Urban Areas**  
Jennifer Schwartz  
Arina Gertseva  
CLA
- 266 No Significant Effect of Sleep Deprivation on Impulsivity in a Delay Discounting Task**  
Lora Wu  
John Hinson  
Adrienne Tucker  
Gregory Belenky  
Paul Whitney  
Hans Van Dongen  
CLA
- 267 A Comparison of Contracted and Ideal Music Education Faculty Workload**  
Kyle Chandler  
CLA
- 268 Evaluation of the Treatment Mall at Eastern State Hospital**  
Aja Matthews  
Robert Short  
CLA
- 269 Images of the Nez Perce War: Digitizing the McWhorter Photograph Collection**  
Nathan Roberts  
Lorelei Sterling  
Laura Arata  
CLA
- 270 Tracking Dirt: Bringing Geoarchaeology into the House**  
Patrick Dolan  
Melissa Goodman-Elgar  
Colin Grier  
Kelly Derr  
CLA
- 271 Raw Material Type, Tool Style, and Tool Function in Projectile Points from the Birch Creek Archaeological Site**  
Malinda Lattin  
William Andrefsky  
CLA

- 272 Information Sharing Among Cops: Progress and Barriers Witnessed in a Case Study of the Homicide Investigation Tracking System Program in Washington State**  
Charles Johnson  
CLA
- 273 What is Free Will?**  
Joseph Keim Campbell  
CLA
- 274 Work Value Development from Adolescence to Young Adulthood**  
Monica Johnson  
CLA
- 275 Episodic Memory Predictions in Persons with Amnesic and Non-Amnesic Mild Cognitive Impairment**  
Adriana Seelye  
Jeah Flores  
CLA
- 276 Antinociceptive and Motoric Effects of i.c.v. THC in Male vs. Female Rats**  
Alexa Wakley  
Rebecca Craft  
CLA
- 277 Assessing the Factors Influencing Noxious Cyanobacteria Blooms in Vancouver Lake, WA: Seasonal Patterns of Plankton Distribution and Nutrient Availability**  
Stephen Bollens  
CSI
- 278 The Effects of Photoperiod on the Reinstatement of Cocaine Self-Administration: Impact of Season on Relapse**  
Jenny Browning  
Heiko Jansen  
Barbara Sorg  
CSI
- 279 The Single-Stranded DNA Binding Protein of *Sulfolobus Sulfataricus* Acts in the Pre-Synaptic Step of Homologous Recombination**  
Mike Rolfmeier  
Cynthia Haseltine  
CSI
- 280 Domestic Turkeys in the American Southwest: Imported Birds or an Independent Domestication Event?**  
Scott Wyatt  
Brian Kemp  
Cara Monroe  
William Lipe  
CSI
- 281 The Food-Borne Pathogen *Campylobacter jejuni* synthesizes a Novel Fibronectin-Binding Protein Termed FlpA that Facilitates Adherence To Human Epithelial Cells**  
Michael Konkel  
Charles Larson  
Rebecca Flanagan  
CSI
- 282 The Effect of Estimated In-Flight Sleep on Predicted Effectiveness in Ultra-Long-Range (ULR) Flight – Comparison of 4-Pilot ULR with 2 to 3 Pilot Non-ULR Flights**  
Dipali Patel  
Angela Bowen  
Lora Wu  
Gregory Belenky  
CSI
- 283 The Effect of Estimated In-flight Sleep on Predicted Effectiveness in Ultra-Long-Range (ULR) Flight – Comparison of 4-Pilot ULR to 4-Pilot Non-ULR Flights**  
Angela Bowen  
Dipali Patel  
Lora Wu  
Gregory Belenky  
CSI
- 284 Analysis of the Interaction of the Nucleotide Base with the Myosin Catalytic Pocket and the Effect On Substrate Efficacy**  
David Hyatt  
Roger Cooke  
Edward Pate  
CSI
- 285 Identification and Characterization of Potential Downstream Signaling Components underlying the *Rpg1*-mediated Stem Rust Resistance Pathway in Barley**  
Jayaveeramuthu Nirmala  
Ling Zhang  
Robert Brueggeman  
Tom Drader  
Kara Johnson  
Brian Steffenson  
Andris Kleinhofs  
CSI
- 286 Simulating a Thermal Water Quality Trading Market for Classroom Education**  
Asmeret Bier  
CSI
- 287 Predicting Cognitive Performance with a New Biomathematical Model of Sleep/Wake Homeostasis**  
Peter McCauley  
Leonid V. Kalachev  
Gregory Belenky  
David F. Dinges  
Hans P.A. Van Dongen  
CSI

- 288 Crystal Structure of Chlorophenol 4-monooxygenase (TftD) from *Burkholderia cepacia* AC1100**  
Jordan Ballinger  
Eunjung Kim  
Ka-Sum Lam  
BuHyun Youn  
Mark Nissen  
Luying Xun  
ChulHee Kang  
CSI
- 289 Nonlinear Stability Analyses of Vegetative Pattern Formation in an Arid Environment**  
David Wollkind  
CSI
- 290 Characterization of Potato Multicystatin and its Structural Comparison with Other Cystatins**  
G. N. Mohan Kumar  
Mark Nissen  
BuhYun Youn  
Benjamin Knowles  
Jordan Ballinger  
Norman Knowles  
ChulHee Kang  
CSI
- 291 Tail Dependence of Multivariate Distributions**  
Yannan Sun  
Haijun Li  
CSI
- 292 Identification and Characterization of Novel Genes Related to the Initiation of Meiosis in the Embryonic and Postnatal Murine Gonad**  
Cathryn Hogarth  
CSI
- 293 Effects of Poast Herbicide on Fecundity of Native Northwest Butterflies**  
Scott Breslin  
CSI
- 294 Crystal Structures of NADH:FMN oxidoreductase (EmoB) at Different Stages of Catalysis**  
Mark Nissen  
BuhYun Youn  
Benjamin Knowles  
Jordan Ballinger  
Se-Young Jun  
Luying Xun  
ChulHee Kang  
CSI
- 295 Significance of Molecular Crowding in Photosynthetic Membranes of Higher Plants**  
Silvia Haferkamp  
Conrad W. Mullineaux  
Herbert Van Amerongen  
Winfried Haase  
Helmut Kirchhoff  
CSI
- 296 Retinoic acid responsive lacZ expression and STRA8 localization in the murine testis implies asynchrony in the first wave of spermatogenesis**  
Elizabeth Snyder  
Debra Mitchell  
Michael Griswold  
CSI
- 297 Interplay of Retinoic Acid and Follicle Stimulating Hormone Signaling in Sertoli Cells**  
Nadine Santos  
Timothy J. Doyle  
Kwan Hee Kim  
CSI
- 298 Observation of Unintentionally Incorporated Nitrogen-Related Complexes in Zinc Oxide and Gallium Nitride Nanowires**  
Afsoon Soudi  
Enamul Khan  
J. Thomas Dickinson  
Yi Gu  
CSI
- 299 Semiclassical Theory of Non-Local Statistical Measures: Residual Coulomb Interactions**  
Steven Tomsovic  
Denis Ullmo  
Arnd Baecker  
CSI
- 300 Engineering Cytosine Deaminase/Uracil Phosphoribosyltransferase for Improved Cancer Gene Therapy**  
Andressa Ardiani  
CSI
- 301 Human Flap Endonuclease I is in Complex with Telomerase and is Required for Telomerase-Mediated Telomere Maintenance**  
Shilpa Sampathi  
CSI
- 302 Evaluating Morphological Defects and Oxidative Stress in an Experimental Model of Fetal Alcohol Syndrome**  
Citadel Cabasag  
CSI
- 303 Analysis of Timing and Loci Associated with Murine Recombination Control**  
Brian Baier  
Brenda Murdoch  
Karl Broman  
Patricia Hunt  
Terry Hassold  
CSI
- 304 Metabolic Engineering of Taxus Cells for Increased Taxol (Paclitaxel) and Taxoid Production**  
Raymond Ketchum  
CAHNRS

- 305 Reduced-Risk and Organically Acceptable Seedcorn Maggot Control on Inland Pacific Northwest Vegetable Crops**  
Timothy Waters  
Sally O'Neal  
Douglas Walsh  
CAHNRS
- 306 Regulation of Sterol Biosynthesis In Arabidopsis Thaliana - Experimental Testing of a First Generation Kinetic Mathematical Model**  
Max Feldman  
CAHNRS
- 307 High Throughput Profiling of Fruit for Phytochemicals Related to Human Health**  
Dan Cuthbertson  
CAHNRS
- 308 Academic Performance and Persistence of Washington State University Students**  
Vicki McCracken  
Fran Hermanson  
CAHNRS
- 309 Pacific Northwest Poplars: A Resilient Arthropod Community and the Distribution of Insect-Caused Mortality in Cuttings**  
R. Andrew Rodstrom  
CAHNRS
- 310 Domestic Piglet Responses to Playbacks of Alarm Calls**  
Winnie Chan  
Ruth Newberry  
CAHNRS
- 311 Localization of Cytoskeleton-Associated RNA Binding Proteins in Rice Seed**  
Florence T. Lau  
Andy Crofts  
Thomas Okita  
CAHNRS
- 312 Digital Landform Mapping of the North Cascades National Park, Washington**  
Phil Roberts  
Bruce Frazier  
Phil Roberts  
CAHNRS
- 313 Determining the Location of Genes Contributing to Supersoft**  
Shantel Martinez  
Lesley Murphy  
Kim Campbell  
Bob Allen  
Craig Morris  
Camille Steber  
CAHNRS
- 314 Biosynthesis of Bioactive 9,9'-Deoxygenated Lignans, Nordihydroguaiaretic Acid and Conocarpan**  
Daniel Vassao  
Sung-Jin Kim  
Joaquim Marques  
Jessica Milhollan  
Dietmar Eichinger  
Massuo Kato  
Laurence Davin  
Norman Lewis  
CAHNRS
- 315 Waiting for the Invisible Hand: Brand Names, Habit Formation and Asymmetric Information in the Modern Market for Food**  
Trent Smith  
Hayley Chouinard  
Philip Wandschneider  
CAHNRS
- 316 Children with Cochlear Implants and Electrophysiological Responses to Semantic Incongruity**  
Jeanne Johnson  
CLA
- 317 The Role of Executive Functioning in Verbal Memory and Patients with Multiple Sclerosis**  
Carolyn Anderson  
Jennifer Clark  
Brett Parmenter  
CLA
- 318 ASPM and the Evolution of Neocortex Size and Intelligence in New World Monkeys**  
Fernando Villanea  
Brian Kemp  
CLA
- 319 Human and Environmental Interaction Derived from a Palynological Investigation on Marie-Galante, French West Indies.**  
Claudette Casile  
John Jones  
Nicholas Dunning  
CLA
- 320 The Role of Affective Instability and UPPS Impulsivity in Borderline Personality Disorder Features**  
Sarah Tragesser  
Joe Robinson  
CLA
- 321 Upward Biological Pump, Nutrient Dynamics, and Trophic Interactions Mediated by the Vertically Migrating, Thin-Layer Forming Dinoflagellate *Akashiwo sanguinea***  
Joel Quenette  
Stephen Bollens  
Alexander Bochdansky  
Gretchen Rollwagen-Bollens  
CSI

- 322 Extreme Differences in the Early Steps of Base Excision Repair of Uracil in DNA at Different Orientations on the Nucleosome Surface**  
John Hinz  
Michael Smerdon  
CSI
- 323 Increased Dynamics in UV-Damaged Nucleosomes Revealed by FRET**  
Ming-rui Duan  
CSI
- 324 Interaction of a 157-nm Laser with Fused Silica**  
Sharon George  
Steve Langford  
J.Thomas Dickinson  
CSI
- 325 Intracellular Calcium Signaling is Required for GnRH Mediated Regulation of TCF Dependent Transcription in Gonadotropes**  
April Binder  
John Nilson  
CSI
- 326 CRISP1 Protein and Modulation of Sperm Function**  
Ken Roberts  
Brooke Reed  
Sarah Studeman  
Jessica Wampole  
CSI
- 327 Mathematical Model of Strain Competition in Retroviruses**  
Gregory Vogel  
Elissa Schwartz  
Sergey Lapin  
Susan Carpenter  
CSI
- 328 Identification and Characterization of NHR-64, a Regulator of Fat Storage and Metabolism in *Caenorhabditis elegans***  
Bin Liang  
Monika Tzoneva  
Jennifer Watts  
CSI
- 329 GnRH Regulation of TCF-dependent Gene Expression Requires a Functional Interaction between TCF/LEF Family Members and Beta Catenin**  
Travis Salisbury  
April K. Binder  
Jean C. Grammer  
John H. Nilson  
CSI
- 330 Heterologous Expression of the Castor Bean Fatty Acid Hydroxylase (RcFAH12) and Electron Transfer Proteins in *Arabidopsis thaliana***  
Laura Wayne  
John Browse  
CSI
- 331 Feeding Preference of Larval Pacific herring (*Clupea pallasii*) on Natural Assemblages of Microplankton**  
Laura Friedenber  
CSI
- 332 Achiasmata Chromosomes Escape Cell-Cycle Arrest by Forming Bipolar Attachments in Murine Oocytes**  
So Nagaoka  
Pat Hunt  
CSI
- 333 Grasshoppers and Mormon Crickets on Mount St. Helens: Nutrients and Fitness**  
Louise Wynn  
Sean Hawes  
Andrea Lang  
CSI
- 334 Preserving PeEll: Making of a Cultural Beacon**  
Janetta McCoy  
Elizabeth Blossom  
Junghwa Sun  
Amanda Simons  
Timothy Dickerson  
INTD
- 335 Interactivity Sensory Based Art: VJ Fleet**  
Zachery Jepsen  
CLA
- 336 Screw-Like Behavior of Double-Wall Carbon Nanotubes**  
Iman Salehinia  
Sergey Medyanik  
CEA
- 337 Data Influencing Decisions: A User-Centered Redesign of The Libraries Website**  
Steve Borrelli  
Alex Merrill  
Erica Nicol  
Mark O'English  
LIB
- 338 Genesis of a Concertino**  
Ann Marie Yasinitsky  
Gregory Yasinitsky  
CLA
- 339 Shadow Play and Romance: The Oboe in Southeast Asia**  
Keri McCarthy  
CLA
- 340 "Everyone Likes Likert": Using a Variable-Interval Slider to Collect Interval-Level Individual Opinions**  
Darin Ladd  
BUS

- 341 Resistance Risk Assessment for Novel Reduced-Risk Insecticides in Oblique Banded Leafroller, *Choristoneura rosaceana* (Lepidoptera: Tortricidae)**  
Ashfaq Sial  
Jay Brunner  
John Dunley  
Michael Doerr  
CAHNRS
- 342 “Serving Orphans around the World”: The Discursive Commodification of Children On Intercountry Adoption Websites**  
Diane Carter  
COM
- 343 The Blame Game: Media Rituals and Blame in Recurring Technological Disasters**  
Mary Grace Antony  
COM
- 344 The Design of an Asynchronous Web-Based Project Review System to Support Studio-Based Learning in Computing Education**  
Anukrati Agrawal  
CEd
- 345 Improving Middle School Teachers’ Mathematics Content Knowledge and Content Knowledge for Teaching for Algebraic Thinking**  
Kimberly Vincent  
CEd
- 346 The Day After Tomorrow: The Flood Myth as Archetype in the Age of Global Climate Change**  
Michael Salvador  
COM
- 347 Inter-Agency Management of Roadless Policy: Shifting Political Alliances in a Multi-Stakeholder Conflict**  
Todd Norton  
Hollie Smith  
COM
- 348 Marker-assisted Seedling Selection in the Washington Apple Breeding Program**  
Daniel Edge-Garza  
Yanmin Zhu  
Cameron Peace  
CAHNRS
- 349 Real-Time Measurement of Soil CO<sub>2</sub> in Biofuel Crops**  
Steve Young  
CAHNRS
- 350 Improving the Identification of Osteopenia: The Relationship between Muscle Power, Body Mass Index and Bone Mass Density**  
Shayne Blevins  
CNR
- 351 Songs of Russia and Ukraine**  
Julie Wieck  
Gerald Berthiaume  
CLA
- 352 Reflections of Summers Past**  
Linda Nelson-Johnson  
CAHNRS

## AUTHOR INDEX

Abdul, Baba	134	Boyer, Cheri	142	Cousins, Asaph	118
Abell, John	46	Brabb, Sandra	1, 231	Craft, Rebecca	276
Adams, Nerissa	107	Brady, Jane Ellen	109	Crawford, Jennifer	206
Adamson, Katie	186, 187	Bray, Brenda	240	Crofts, Andy	311
Adkins, Scott	197	Breslin, Scott	293	Crosby, Catherine	20, 31
Afshar, Maryam	145	Brewer, Rachel	121	Curtis, Guy	106
Agrawal, Anukrati	344	Broberg, Danielle	142	Cuthbertson, Dan	307
Ahn, Changho	51	Brochat, Shira	174	Daily, Jeff	127
Ahrens, Corrie	259	Broman, Karl	303	Damayanti, Tri	197
Akarapu, Sreekanth	49	Brown, Shane	108	Daniels, Tyler	26
Akashah, Firas	132	Brown, Travis	91	Daoud, Sayed	235
Akerlund, Christine	237	Browning, Jenny	278	Daratha, Kenneth	112, 183, 184
Alabi, Olufemi	194, 195	Browse, John	18, 330	Darnell, Jennifer	158
Alankar, Alankar	41	Brueggeman, Robert	285	Datta, Avimanyu	102
Allen, Bob	313	Bruna, Lisa	110	Davies, Neal	193
Allen, Carol	188	Brunelli, Joseph	64	Davin, Laurence	37, 61, 314
Anderson, Adisa	110	Brunner, Jay	341	De Pillis, Lisette	247
Anderson, Carolyn	317	Bumgarner, Roger	210	Deen, Mary Katherine	208
Anderson-Harumi, Cheryl	106	Bunker-Hernance, Becky	138	Del Prado, Alicia	106
Andrefsky, William	271	Burgal, Julie	18	DePrano, Maria	261
Andrews, Preston	193	Burke, Laura	198	Derr, Kelly	259, 263, 270
Anelli, Carol	114	Burton, Lynsi	139	Dhingra, Amit	36, 190, 198, 210
Antony, Mary Grace	343	Busselle, Rick	80	Dickerson, Timothy	334
Anusuya-Rangappa, Lohith	11	Cabasag, Citadel	302	Dickinson, J. Thomas	298, 324, 70
Arata, Laura	269	Cain, Kenneth	84	Dillon, Michelle	32
Ardiani, Addressa	300	Call, Douglas	84, 174	Dinges, David F.	69, 287
Austin, Erica	78	Campbell, Joseph Keim	273	Dinh, Thu	89
Baecker, Arnd	299	Campbell, Kim	313	Diversi, Marcelo	206
Bahr, David	49, 132, 133	Canine, Brenda	219	Doerr, Michael	341
Baier, Brian	303	Cannon, William	175	Dolan, Patrick	259, 263, 270
Balakrishnan, Natarajan	197	Carpenter, Susan	162, 327	Dong, Yan	91
Ballinger, Jordan	288, 290, 294	Carpenter-Boggs, Lynne	20, 31	Doyle, Timothy J.	297
Bandyopadhyay, Amit	45, 53, 251	Carter, Diane	342	Drader, Tom	285
Barabasz, Arreed	115	Cas, Ray	65	Druffel, Keri	35
Barabasz, Marianne	115	Casavant, Ken	213, 214, 215	Duan, Ming-rui	323
Barbosa-Canovas, Gustavo V.	173	Casile, Claudette	319	Dun, Shuhui	170
Barritt, Bruce	36	Castro, Diana	206	Duncan, Christina	190
Baxter, Douglas	175	Chan, Winnie	310	Dunley, John	341
Becker, Bruce	116	Chandler, Kyle	267	Dunning, Nicholas	319
Bedgar, Diana	37	Chandoor, Mythreyi	212	Eby, Katie	238
Belenky, Gregory	266, 282, 283, 287	Chang, Jiajia	244	Edgar, Campbell	65
Belzer, Benjamin	180	Chen, Feng	137	Edge-Garza, Daniel	348
Bermudez-Aguirre, Daniela	173	Chen, Jie	212	Edwards, Janet	204
Bernards, Mark	61	Chen, Lee-Wen	54	Eichinger, Dietmar	314
Berthiaume, Gerald	351	Chen, Shulin	212	Eid, Sahar	35
Best, Daniel	252	Chen, Yvonne	78	ElGawady, Mohamed	7, 182
Betz, Drew	206	Chi, Ting	25	Emanuel, Alan	163
Beutel, Marc	55	Cho, Man-Ho	61	Engels, Peter	244
Bevington, John	255	Choi, Seung Mo	22	Engle, Joshua	223
Beyenal, Nurdan	134	Chouinard, Hayley	315	Englund, Karl	54
Bier, Asmeret	286	Christensen, Ciara	115	Erwin, Brock	4
Binder, April K.	325, 329	Christiansen, Allen	172	Espana, Felix	53
Bindler, Ruth	112, 183, 184	Chung, Eunhee	230, 231, 232	Esser, Aaron	203
Bisch, Steven	82	Church, A. Timothy	106, 107	Eubanks, Sherod	254
Black, Margaret	158, 225	Churchill, Lynn	93, 164	Evans, Kate	36
Blank, Sally	233	Clark, Danielle	205	Everett, Jamie	213
Blevins, Shayne	350	Clark, Jennifer	317	Feldman, Max	306
Blossom, Elizabeth	334	Clevenger, Kelsey	104	Feldon, David	113
Blossom, Libby	138	Cohen, Marilyn	78	Feng, Xiaoxing	193
Blume, Doerte	159	Colliers, Margaret	193	Ferguson, Holly	207
Bochdansky, Alexander	321	Collins, Gary S.	151, 250, 255	Fernandes, James	3
Bollens, Stephen	277, 321	Colonnello, Valentina	86	Fields, David	41
Boroughs, Scott	59	Conroy, Richard	58	Fischer, Thomas	51
Borrelli, Steve	337	Cook, Diane	39	Flanagan, Rebecca	281
Bose, Susmita	45, 53, 251	Cooke, Roger	284	Flores, Jeah	275
Bouchet, Andrea	164	Corea, Oliver	61	Flury, Markus	170
Bowen, Angela	282, 283	Cort, John	253	Foltz, John	55

Fortin, Louis	258	Hogan, Jackson	144	Kim, Sung-Jin	37, 314
Frazier, Bruce	312	Hogarth, Cathryn	292	Kirchhoff, Helmut	295
Frear, Craig	34	Holder, Lawrence	39, 172	Kleinhofs, Andris	285
French, Sarah	109	Holmgren, Mark	199, 214	Kliewer, Rachel	140
Friedenberg, Laura	331	Hood, Rebecca	61	Klosterman, Peter	157
Frost, Janet	103	Hossain, Akram	252	Knaack, Charles	59
Fu, Ya-Min	228	Houmes, Stephen	67	Knottnerus, Anne	52
Fyock, Terry	29	Hovanski, Yuri	15	Knowles, Benjamin	290, 294
Galaviz, Selena	155	Huang, Yanhua	91	Knowles, Norman	290
Galbraith, Betty	114	Huffaker, Marca	157	Koditham, Gopinath	197
Galinato, Suzette	34	Hunt, Patricia	303, 332	Koehler, Chris	206
Gallagher, Erin	83	Hunzicker-Dunn, Mary	248	Koepke, Tyson	190
Gaschnig, Richard	120, 121	Huskey, Melynda	208	Koh, David	238
Gates, Brian	224	Hyatt, David	284	Kohalmi, Susanne	61
Gavin, Heather	236	Iacobucci, Paolo	86	Konkel, Michael	281
Ge, Qingwei	180	Iiams, Erika	17	Krishnamoorthy, Bala	71, 72
George, Sharon	324	Ilhan, Ali Ogulcan	147	Krishnamurthy, Hari	12
Gerde, Karen	221	Ingalsbe, Krista	93	Krishnan, Manojkumar	5
Gertseva, Arina	265	Inglebret, Ella	155	Krishnan, Vandhana	190, 198, 210
Gill, Kulvinder	201	Iyer, Suresh	27	Krueger, James M.	93, 164
Girvin, Donald	126	Jansen, Heiko	90, 278	Kulkarni, Gaurav	175
Gloss, Lisa	66	Jarugula, Sridhar	194	Kumar, G. N. Mohan	290
Gollapudi, Sampath	136	Jayaram, Sankar	3	Kumar, Neeraj	201
Golter, Paul	134	Jayaram, Uma	3	Kwon, Lois J.	247
Goodman-Elgar, Melissa	258, 270	Jepsen, Zachery	335	Kyriss, McKenna	160
Grammer, Jean C.	329	Jessup, Eric	213, 214, 215	Lack, Jessica	231
Green, Kimberly	114	Jiang, Long	56	Ladd, Darin	340
Green, Leslie	67	Jiang, Zhihua	26	Lam, Ka-Sum	288
Green, Misty	264	Jin, Yi	160	LaMarche, Brian	126
Greenwood, Steven	182	Johnson, Brett	122	Lang, Andrea	333
Greer, Cory	170	Johnson, Charles	272	Langford, Steven	70, 324
Grier, Colin	259, 263, 270	Johnson, Corey	114	LaPatra, Scott	84
Griswold, Michael	296	Johnson, Damian	172	Lapin, Sergey	157, 170, 247, 327
Grogan, Gary	111	Johnson, E. Carolyn	233	Larios, RoseMarie	94
Gross, Andrew	119	Johnson, Jeanne	316	Larson, Charles	281
Gruen, Phil	179	Johnson, Kara	285	Lattin, Malinda	271
Gu, Yi	298	Johnson, Matthew	245	Lau, Florence T.	311
Gunderson, David	128	Johnson, Monica	274	Laughter, Lisa	1
Gutha, Linga	194, 196	Joireman, Jeffrey	124	Lee, Brian	91
Guyett, Paul	66	Jones, John	149, 319	Lee, Choonseok	37
Ha, Su	9	Jones, Rick	203	Lei, Ming	78
Haase, Winfried	295	Jones, Stephen	191	Leibnitz, Gretal	129
Hadwiger, Lee	28	Joplin, Amber	150	LePage, Jane	119, 257
Haferkamp, Silvia	295	Jordan, Leah	161	Lerner, Sue	206
Hallett, Heather	93, 164	Joshi, K.D.	102, 129	Lewis, Brina	225
Harbertson, James	33	Jun, Se-Young	294	Lewis, Norman	37, 61, 314
Hart, Garret	121, 153	Jung, Sungmin	10	Lewis, Reed	121
Haseltine, Cynthia	279	Kahn, Michael	21	Lewis, Robert	126, 252
Hassold, Terry	245, 303	Kalachev, Leonid V.	287	Li, Ai-Jun	89
Hatefi, Arash	219	Kalyanaraman, Anantharaman	175, 210	Li, Haijun	291
Hawes, Sean	333	Kang, ChulHee	37, 288, 290, 294	Li, Zhimin	212
He, Susan	100	Kang, Sangwon	51	Liang, Bin	328
Hebert, Vincent	119, 257	Kardong-Edgren, Suzan	187	Lin, Chienshung	171
Heidenreich, Linda	144	Karlsson, Amelia	248	Lin, David	52, 92
Hendrickson, Christopher	198	Karthikeyan, Gandhi	194, 195, 197	Lin, Humin	228
Hendrix, W. Frank	202	Katigbak, Marcia	106, 107	Lin, Sean Shih-Yi	9
Hermanson, Fran	308	Kato, Massuo	314	Lin, Yu-Hsuan	216
Hershey, John	92	Katz, Janet	189	Lin, Yusheng	124
Herzog, Thiebaut	156	Kelley, Jane	109	Lindstrom, Nicole	84
Higgins, Stewart	31	Kelly, Brenda	222	Lipe, William	149, 180
Higley, Linda	115	Kemp, Brian	149, 259, 280, 318	Littke, Matt	257
Hildenbrand, Kasee	116	Kennedy, Jae	223	Liu, Haiqin	57
Hill, Laura	206, 208	Ketchum, Raymond	304	Liu, Kun	95
Hindman, Douglas	76	Khachatryan, Hayk	215	Liu, Nan	212
Hinson, John	266	Khan, Enamul	70, 298	Liu, Xiaoyi	228
Hinz, John	322	Kim, Eunjung	288	Lloyd, Sonja	84
Hirai, Michiyo	154	Kim, Hyun Jeong	96	Lohr, Virginia. I.	148
Hiscox, William	246	Kim, Kwan Hee	297	Long, Edward	123
Hoagland, Lori	191	Kim, Min Sik	6	Longstreet, Phil	98

Lucker, Ben	44	Nagaoka, So	332	Ren, Chunbo	75
Lukowski, Susan	117, 259	Namatame, Emiko	88	Reyes, Jose	107
Lyons, Timothy	154	Natarajan, Arun	3	Reynolds, Dennis	101
Ma, Ding	42	Natarajan, Balakrishnan	195	Riley, David	197
MacNeil, Michael	26	Neibergs, Holly L.	29	Ritter, Sue	88, 89, 163
Magrath, Tammy	210	Nelson, Lynne	90, 92	Robbins, Charles	90, 92
Main, Dorrie	36	Nelson, Tamara	105	Roberts, Ken	326
Maizels, Evelyn	248	Nelson-Johnson, Linda	352	Roberts, Nathan	269
Mandhanya, Saurabh	43	Newberry, Ruth C.	86, 310	Roberts, Phil	312
Mao, Li	122, 152	Newhouse, Randal	151, 250	Robinson, Joe	320
Marin-Flores, Oscar	48	Nicol, Erica	337	Rodstrom, R. Andrew	309
Marques, Joaquim	314	Nilson, John H.	325, 329	Rojas, Manuel	166, 167
Marti, Joan	65	Nirmala, Jayaveeramuthu	285	Rolfsmeier, Mike	279
Martin, Robert	196	Nissen, Mark	288, 290, 294	Rollwagen-Bollens, Gretchen	321
Martinez, Shantel	313	Norton, Todd	347	Ross, Carolyn	33, 36
Mastor, Khairul	106	Nott, BreAnne	149	Roy, Mangal	45
Mastorakos, Ioannis	133	Nyquist, Kristofor	159	Rudell, David	36
Matthews, Aja	268	Oakley, Christine	1	Rueda, Alicia	262
Matveev, Konstantin	8	O'English, Mark	337	Rule, Daniel	26
Mazzola, Mark	31	Ohgami, Yusuke	229, 230, 231, 232	Rupp, Justine	1
McCarthy, Keri	339	Okita, Thomas	311	Saar, Dayle	35
McCauley, Peter	287	Olin, Paul	59, 65	Sablani, Shyam	14
McCluskey, Matthew	243	Olmstead, James	24, 36	Salanga, Maria Guadalupe	107
McCool, Donald	170	Olsen, Karl	40	Salehinia, Iman	336
McCoy, Janet	334	O'Neal, Gail	189	Salisbury, Travis	329
McCracken, Vicki	199, 308	O'Neal, Sally	207, 305	Salvador, Michael	346
McCubbin, Laurie	110, 111	Overath, Renee	206	Sampathi, Shilpa	301
McDonald, Judith	254, 256	Overman, Cory	132	Sanford, Jim	160
McGeachy, Heather	2	Overman, Nicole	132	Santos, Nadine	297
McGuire, Jenifer	142	Oygur, Isil	146	Schaeffer, Scott	198, 210
McIlraith, Erin	249, 259	Panksepp, Jaak	154	Schei, Jennifer	165, 166, 167
McKay, Stephanie D.	29	Pappu, Hanu	35, 216	Schmidt, Janet	204
McKinley, James	126	Parker, Louise	206, 208	Schmitter-Edgcombe, Maureen	262
McMoran, Don	19	Parmenter, Brett	317	Schnabel, Robert D.	29
McNabb, Mark	165	Parra, Michael	225	Schneider, Alissa	205
McNamara, John	1	Parsey, Carolyn	262	Schroeder, Brenda	192
Meadows, Gary	227, 228	Parthasarathy, Rashmi	16	Schultz, Marion	74
Medyanik, Sergey	336	Patchoo, Wisarn	51	Schulze-Makuch, Dirk	62
Mekuria, Tefera	194, 196	Pate, Edward	284	Schut, Timothy	220
Meng, Da	174	Patel, Dipali	282, 283	Schwartz, Elissa	157, 247, 327
Merrill, Alex	337	Patridge, Karyn	60	Schwartz, Jennifer	265
Metos, Merik	143	Patten, Ann	37	Seeley, Zachary	251
Meyer, Benjamin	4	Paul, Robbie	189	Seelye, Adriana	275
Michal, Jennifer	26	Paulitz, Timothy	31	Sena, Leslie Jo	73
Middleton, Ryan	241	Peace, Cameron	36, 348	Sergeeva, Anna	87
Milhollan, Jessica	314	Pedrow, Christi	166	Serve, Kinta	158
Miramontes, Lilia	106, 107	Pena, Juan	192	Settles, Matthew	29
Mishra, Vinay	3	Peters, Troy	19	Shaikot, Shariful	6
Mitchell, Debra	296	Peterson, Nina	11	Shelden, Eric	68, 241
Moberg-Williams, Debbie	211	Phillips, Derrick	165, 166, 167	Sheng, Hongyan	200
Moehekar, Pallavi	47	Phillips, Scott	260	Sherfey, Lauri	205
Moinuddin, Syed	37	Pinkleton, Bruce	78	Shin, Shung	99
Monjaraz, Fernanda	168	Pitts, Marvin	47	Shirachi, Donald	230, 231
Monroe, Cara	280	Plummer, Mitchell	170	Shirazi, Behrooz	11
Montfort, Devlin	108	Polello, Jennifer	234	Shirley, Sofia	245
Moore, Danna	74	Porter, Noriko	23	Shockey, Jay	18
Morris, Craig	313	Power, Thomas	112, 184	Short, Robert	268
Morris, Robert	122	Price, Alexander	63	Sial, Ashfaq	341
Moyer, Nathan	72	Quenette, Joel	321	Sias, Patty	79
Mudumbai Chakravarthy, Rasika	177	Quock, Lindsay	230	Sievers, Jason	110, 111
Mulder, Mark	124	Quock, Raymond M.	148, 229, 230, 231, 232	Silva, Deborah	79
Mullendore, Daniel	242	Raju, Archana	176	Simasko, Steve	85
Mullineaux, Conrad W.	295	Randhawa, Harpinder	201	Simons, Amanda	334
Munson, Charles	100	Rayapati, Naidu	194, 195, 197	Sivakumar, Krishnamoorthy	180
Murdoch, Brenda	303	Rector, David	165, 166, 167, 168	Skaer, Tracy	226
Murphy, Kevin	191	Reed, Brooke	326	Slavit, David	105
Murphy, Lesley	313	Reeves, Raymond	122, 152	Smart, Denise	188, 189
Murray, Timothy	200	Reiniati, Isabela	130	Smerdon, Michael	322
Mutti, Jasdeep	201			Smith, Hollie	347

Smith, Jeffery	31	Verma, Sujcet	148	Young, Douglas	34
Smith, Simon	217	Vervoort, Jeff	121	Young, Steve	349
Smith, Trent	315	Villamor, Remedios	33	Yurgel, Svetlana	21
Snekvik, Kevin	84	Villanea, Fernando	318	Zacate, Matthew O.	250
Snyder, Elizabeth	296	Vincent, Kimberly	345	Zanella, Ricardo	29
Sobralse, Mary	185	Vogel, Gregory	327	Zbib, Hussein	49, 132, 133
Sorg, Barbara	91, 278	Vorderstrasse, Beth	236, 237	Zelinski, Lisa	229, 230
Soudi, Afsoon	298	Voth, Christopher	131	Zhang, Hui	227
Souza, Gianne	162	Wakley, Alexa	276	Zhang, Ling	285
Sprunger, Leslie	85	Walker, Berkley	118	Zhang, Tianxi	218
Stadnik, Svetlana	153	Walker, Jennifer	168	Zhang, Zhihong	239
Stanton, Julie	63, 122	Walker, Renée	141	Zhao, Huan	85
Stark, Gemaine	90	Walsh, Douglas	207, 305	Zheng, Liying	135
Steber, Camille	313	Wampole, Jessica	326	Zhou, Yiran	238
Steele, Craig	64	Wandschneider, Philip	315	Zhu, Lijuan	3
Steele, Michael	112, 184	Wang, David	145, 146, 147	Zhu, Yanmin	36, 348
Steffenson, Brian	285	Wang, Kang	38		
Sterling, Lorelei	269	Wang, Qing	89		
Stock, Brian	157	Wang, Tao	236, 237		
Studeman, Sarah	326	Wang, Yi	125		
Sugai, Karrah	259	Wang, Zeping	152		
Sun, Junghwa	334	Ware, Jasmine	90		
Sun, Yan	50	Watanabe, Kunio	170		
Sun, Yannan	291	Waters, Timothy	305		
Swain, Deborah	188	Watts, Jennifer	328		
Swanson, Barry	14	Wayne, Laura	330		
Syamaladevi, Roopesh Mohandas	14	Webb, William	72		
Tallmadge, Rebecca	162	Weeks, Debbie	233		
Tan, Li	4	Weeks, Douglas	234		
Tanaka-Matsumi, Junko	106	Wells, John	98		
Tang, Fengchun	97	Whitacre, Thomas	1		
Tang, Juming	14	Whitcomb, Rebekah	116		
Tariq, Salma	210	Whitehall, Anna	208		
Tarlyn, Nathan	210	Whiting, Matthew	190		
Tarnai, John	74	Whitlock, Robert H.	29		
Tarun, Marianne	243	Whitney, Paul	266		
Taylor, Jerry F.	29	Whitworth, Jonathan	216		
Taylor, Jim	101	Whritenour, Victoria	55		
Ten, Elena	123	Wiater, Michael	163		
Terriff, Colleen	240	Widmer, Sheri	204		
Theodorson, Judy	138	Wieck, Julie	351		
Thiessen, David	134	Wolcott, Michael	54, 56		
Thomas, Ryan	81	Wolff, John	59, 65, 153		
Thorgaard, Gary	64	Wollkind, David	289		
Tian, Ye	71	Woodard, Lisa	234		
Tobey, David	26	Wu, Chenjun	210		
Tompkins, Lindsey	69	Wu, Joan	170		
Tomsovic, Steven	299	Wu, Judy	30		
Tragesser, Sarah	320	Wu, Lora	266, 282, 283		
Trask, Darrin	52	Wuerth, Kelli	157		
Tsai, Meng-Hsin	56	Wyatt, Scott	280		
Tucker, Adrienne	266	Wyatt, Stanford	178		
Tucker, Nathan	68	Wynn, Louise	333		
Turnbull, David	161	Wyrick, John	63, 122, 160		
Turse, Carol	62	Wyrick, Katie	67		
Tzoneva, Monika	328	Wysham, Carol	233		
Ullmo, Denis	299	Xu, Shenghan	4		
Ullrich-French, Sarah	112	Xun, Luying	288, 294		
Valdez-Medina, Jose	106	Yadama, Vikram	125, 131		
Van Amerongen, Herbert	295	Yamamoto, Masahiro	77, 78		
Van Dongen, Hans P.A.	69, 266, 287	Yang, Hong	61		
Van Erp, Harrie	18	Yang, Kun	13		
Van Nortwick, Amy	165	Yang, Zhi	181		
Van Vleet, Steve	204	Yasinitsky, Ann Marie	338		
Van Wie, Bernard	134	Yasinitsky, Gregory	338		
Varrella, Gary	209	Yoder, Jonathan	34		
Vasavada, Anita	52, 135	Yoon, Chang Kyu	169		
Vassao, Daniel	314	You, Chang hun	39		
Vega-Villa, Karina	193	Youn, BuhYun	37, 288, 290, 294		