PROGRAM

The American Society for Matrix Biology
November 1-4, 2006
Nashville Convention Center, Nashville, Tennessee
Organizers: Jeff Davidson, Billy Hudson, Linda Sandell, and Roy Zent

Wednesday, November 1
12:00-9:00 PM Registration
(Nashville Convention Center (NCC))

4:00-6:00 PM Special Interest Groups
(Organizer: Bill Parks)

I. Mechanisms of Gene Regulation in Connective Tissue Development (Room 207)

Leaders: Audrey McAlinden, Washington University, St. Louis, and Jane B. Lian, University of Massachusetts

Gene Focusing during Mesenchymal Stem Cell Transdifferentiation. George E. Plopper**,** Rensselaer Polytechnic Institute, Troy, NY.

Transcriptional Mechanisms Regulating Development of the Osteoblast Phenotype. Jane B. Lian, University of Massachusetts, Worcester, MA.

Flil Repression Activates a Profibrotic Gene Program in Mouse Skin In Vivo. Maria Trojanowska, Medical University of South Carolina, Charleston, SC.

Transcriptional and Post-transcriptional Co-regulation of Type II Collagen Gene Expression. Audrey McAlinden, Washington University, St. Louis, MO.

mRNA Stability Controls Elastogenesis. William C. Parks**,** University of Washington, Seattle, WA.

Nuclear Localization of Bmp-2. Laura C. Bridgewater, Brigham Young University, Salt Lake City, UT.

II. Regulation of Capillary Morphogenesis by Extracellular Matrix (Room 211)

Leader: Donald Senger, Beth Israel Deaconess Medical Center, Boston, MA, and George Davis, University of Missouri, Columbia, MO.

Opposite Signaling to the Cytoskeleton by Interstitial Collagen and Basement Membrane Laminin: Consequences for Capillary Morphogenesis. Donald Senger**,** Beth Israel Deaconess Medical Center, Boston, MA.

Mechanisms of $\alpha_2\beta_1$ Integrin Dependent Capillary Morphogenesis Induced by Type I Collagen. James San Antonio, Thomas Jefferson University, Philadelphia, PA.

Co-regulation of Endothelial Cell Lumen Formation by Integrins and MT1-MMP-dependent Proteolysis in 3D Collagen Matrices. George Davis, University of Missouri, Columbia, MO.

Fibroblasts, Matrix and the Regulation of Endothelial Sprouting. Chris Hughes, University of California, Irvine, CA.

Thrombospondin-1 Controls Capillary Morphogenesis by Modulating Redox Signaling. David Roberts, NIH, Bethesda, MD.

The Clot Thickens: Endorepellin and Platelet Mediated Angiogenesis. Gregory Bix, Thomas Jefferson University, Philadelphia, PA.

Wednesday, November 1
4:00-6:00 PM
Special Interest Groups

III. Molecular Mechanisms of Matrix in Inflammation (Room 212)

Leaders: Shukti Chakravarti, Johns Hopkins University, Baltimore, MD and Pyong Woo Park, Baylor College of Medicine, Waco, TX.

Regulation of Integrins and Angiogenesis by Syndecan-1. Alan Rapraeger, University of Wisconsin, Madison, WI.

Modulation of Growth Factor Signaling Pathways by Lumican in Corneal Wound Repair. Shukti Chakravarti, Johns Hopkins University, Baltimore, MD.

Dysregulated Expression of HSPGs in Intestinal Epithelial Cells Mediate Protein Losing Enteropathy. Hudson Freeze, Burnham Institute, La Jolla, CA.

Unexpected Roles of Perlecan in Skeletal Development and Diseases. Eri Arikawa-Hirasawa, Juntendo University, Toyko, Japan.

MyD88 Regulates the Expression of Hyaluronan Synthases and Proteoglycans in Endotoxin-induced Acute Lung Injury. Charles Frevert, University of Washington, Seattle, WA.

IV. Computational and Mathematical Methods in Matrix Biology (Room 213-214)

Leaders: Muhammad H. Zaman, University of Texas, Austin, TX and Alissa Weaver, Vanderbilt University, Nashville, TN.

Integrin-ECM Interactions Studied through Novel Computer Simulations. Muhammad H. Zaman , University of Texas, Austin, TX.

Modeling Approaches to Understand Invadopodia Formation and Function. Alissa Weaver, Vanderbilt University, Nashville, TN.

Computational Imaging of the ECM during Embryogenesis. Andras Czirok**,** University of Kansas, Lawrence, KS.

Molecular Dynamics of Cell Migration on ECM Surfaces. Junhwan Jeon, Vanderbilt University, Nashville, TN.

Open Discussion: The Need and Status of Computational and Mathematical Methods in Matrix Biology. Moderator: Brenda Rongish**,** University of Kansas, Lawrence, KS

6:00-7:00 PM Opening Reception in the NCC Center Exhibit Hall

7:00-7:15 PM Welcome and Introduction (NCC Ballroom)
Linda Sandell (President, ASMB)
Jeff Balser (Associate Vice Chancellor Research, Vanderbilt University)

S1 **7:15 -8:00 PM Keynote Lecture (Dedicated to Karl Piez and Anita Roberts):**
TGF-beta Regulation of Stromal-Epithelial Interactions. Hal Moses, Vanderbilt University, Nashville, TN.

8:00-9:00 PM Reception resumes in the NCC Center Exhibit Hall

Thursday, November 2
7:00 AM-7:00 PM Registration
(NCC Center Exhibit Hall)

7:30-8:30 AM Breakfast
(NCC Center Exhibit Hall)

8:30-10:00 AM Plenary Session I
(NCC Ballroom)

Signaling and Development
Moderator: **Charles Little**

S2 **8:30 AM** **ADAMS: Key Molecules in EGFR-signaling and Cancer.** Carl Blobel, Cornell University, Ithaca, NY.

S3 **9:05 AM** **Stem Cells and Their Niche in Planarians.** Kiyokzu Agata, Kyoto University, Kyoto, JAPAN.

64 **9:40 AM** **Loss of PDGFRα Signaling in the Lumbar Dermis Causes *spina bifida*** Elizabeth A. Pickett, Robert C. Anderson, Mai Hoang, Michelle D. Tallquist. University of Texas Southwestern Medical Center, Dallas TX.

10:00 AM Coffee break
(NCC Center Exhibit Hall)

10:30 AM-Noon Plenary Session II
(NCC Ballroom)

Genetic Diseases and Pathobiology
Moderator: **Lynn Sakai**

S4 **10:30 AM** **Fibrillin Roles in Bone Mass Maintenance.** Francesco Ramirez, Robert Wood Johnson Medical School, New Brunswick, NJ.

11:05 AM **Pathogenesis and Treatment Strategies for Marfan Syndrome and Other TGFbeta Vasculopathies.** Hal Dietz, Johns Hopkins University, Baltimore, MD.

162 **11:40 AM** **ADAMTS10 Interacts with Fibrillin in Weill-Marchesani Syndrome.** Wendy E. Kutz , Lauren W. Wang, Douglas R. Keene, Lynn Y. Sakai, Suneel S. Apte. Department of Biomedical Engineering, Cleveland Clinic, Cleveland, OH.

12:00-12:10 PM **Tribute to Karl Piez.**

12:10-1:30 PM **Lunch on your own.**

Thursday, November 2
1:30-3:00 PM Concurrent Sessions A
(NCC Ballroom)

I. Tissue Engineering

Moderator:
David Caplan

S5 **1:30 PM Bioengineered Protein Scaffolds to Direct Cell and Tissue Function.** David Kaplan, Tufts University, Medford, MA.

4 **2:00 PM Collagen-Hyaluronic Acid Matrices: Effect on Angiogenic Sprouting.** Cristina Borselli, Olimpia Oliviero, Paolo A. Netti. Interdisciplinary Research Centre on Biomedical Material (CRIB), University Federico II, Naples, Italy.

6 **2:20 PM Novel Incorporation of Elastin in Tissue Engineered Blood Vessels.** J Broiles, R Nerem, T Wight. Georgia Institute of Technology, Atlanta, GA.

9 **2:40 PM Differential Regulation of Acellular Dermal Matrix Transition.** Christopher T. Wagner, Sharon L. Bourke, David J. McQuillan. LifeCell Corporation, Branchburg, NJ.

II. Microbes, Inflammation and Matrix
Moderator:
Magnus Hook

S6 **1:30 PM Microbes and Matrix.** Magnus Hook, University of Texas, Houston, TX.

75 **2:00 PM Shed E-cadherin Controls Influx of CD103+ DEndritic Cells.** John K. McGuire, Anne M. Manicone, AM. University of Washington, Seattle, WA.

117 **2:20 PM Hyposialylation of ß1 Integrins Activates α4ß1 Receptors.** Alencia V. Woodard-Grice, Alexis C. McBrayer, Susan L. Bellis. University of Alabama, Birmingham, AL

219 **2:40 PM HepiI Peptide of Thrombospondin-1 Alters The Foreign Body Response.** M. Sweetwyne, B. Sun, M.A. Pallero, J. Murphy-Ullrich. University of Alabama, Birmingham, AL.

III. Cellular Responses to Mechanical Stimuli
Moderator:
Martin Schwartz

S7 **1:30 PM Integrins and Extracellular Matrix in the Endothelial Response to Fluid Shear Stress.** Martin Schwartz, University of Virginia, Charlottesville, VA.

15 **2:00 PM Hypertension Induced Cardiovascular Remodeling in ELN+/- Mice.** Jessica E. Wagenseil, Russell H. Knutsen, Robert P. Mecham. Washington University School of Medicine, St. Louis, MO.

20 **2:20 PM MG-63 Contraction of Collagen Modulates Increases in MMP-1 and -3.** Justin Parreno, Geoff Herd, David A. Hart. University of Calgary, Calgary, AB, CANADA.

18 **2:40 PM Growth-Induced Strain Determines the Anisotropy in Perichondrium.** Jasper Foolen, Corrinus C. van Donkelaar, Rik Huiskes. Eindhoven University of Technology, The Netherlands.

3:00 PM Coffee Break
(NCC Center Exhibit Hall)

Thursday, November 2
3:30-5:00 PM Concurrent Sessions B
(NCC Ballroom)

I. Elastic Tissue
Moderator:
Elaine Davis

3:30 PM Elastic Fiber Assembly: Insights from Transgenic Mouse Models. Elaine Davis, McGill University, Montreal, Quebec, Canada.

32 **4:00 PM Characterization of the C-Terminus of Mature Elastin.** Thomas J. Broekelmann, Chris H. Ciliberto, Jessica E. Wagenseil, Adrian Shifren, Robert P. Mecham. Washington University Medical School, Saint Louis, MO.

36 **4:20 PM Evidence for Elastic Fiber Repair in Emphysema.** Richard A. Pierce, Jason C. Woods, G. Alexander Patterson, Joel D. Cooper, James C. Hogg. Washington University School of Medicine, St. Louis, MO.

28 **4:40 PM SMC-derived Elastases And Uterine Artery Remodelling in Pregnancy.** L Harris, P Baker, R Keogh, J Cartwright, G Whitley, J Aplin. University of Manchester, UK.

II. Stem Cells
***Moderator*:**
Rocky Tuan

S8 **3:30 PM Nanofibrous Scaffold for Skeletal Tissue Engineering.** Rocky Tuan, NIH, Bethesda, MD.

44 **4:00 PM Endothelial Cell Matrix Influences MSC Stem Cell Differentiation.** Thomas P. Lozito, Catherine K. Kuo, Juan M. Taboas, Rocky S. Tuan. NIH, Bethesda, MD.

45 **4:20 PM Wnt-induced Secreted Protein 1 Regulates Osteoblastic Activity.** Colette A. Inkson, Yanming Bi, Sergi Kuznetsov, Pamela Robey, Marian F. Young. NIH, Bethesda, MD.

41 **4:40 PM Regulation of Marrow Stromal Cell Differentiation by TSP2.** Andrea I. Alford, Scott Mariouw, Hailu Shitaye, Kurt D. Hankenson. University of Michigan, MI.

III. Development
Moderator
Reinhard Faessler

S9 **3:30 PM Role of integrin-fibronectin Interaction for Differentiation and Morphogenesis.** Reinhard Faessler, Max-Planck-Institute of Biochemistry, Martinsried, Germany.

55 **4:00 PM LH3 and Type XVIII Collagen are Critical for Motor Axon Migration.** Valerie A. Schneider, Michael Granato. University of Pennsylvania, Philadelphia, PA.

49 **4:20 PM Potential Role of DPP in Epithelial-Mesenchymal Interactions.** Keith Alvares, Yashpal S. Kanwar, Arthur Veis. Northwestern University, Chicago, IL.

61 **4:40 PM ADAMTS-ECM Interaction Modulates BMP Developmental Control.** John Fessler, Ryusuke Momota, Chino Cresse, Kavita Chavan, Liselotte Fessler. UCLA, Los Angeles, CA.

5:00-7:00 PM Poster Session
(NCC Center Exhibit Hall)

Friday, November 3
7:00 AM-7:00 PM Registration
(NCC Center Exhibit Hall)

7:30-8:30 AM Breakfast
(NCC Center Exhibit Hall)

8:30-10:00AM Plenary III
(NCC Ballroom)

Structural Biology: ECM Assembly and Integrin Biology
Moderator: **Jean Schwarzbauer**

S10 **8:30 AM** **Molecular Recognition in the Assembly of Collagens: A Pivotal Role for Terminal Noncollagenous Domains.** Billy Hudson, Vanderbilt University, Nashville, TN.

S11 **9:05 AM** **Integrin Cytoplasmic Domain - Small Face but Big Player.** Jun Qin, The Cleveland Clinic Foundation, Cleveland, OH

116 **9:40 AM** **Young Investigator Award, David A. Calderwood**
Another Factor Cooperates With Talin To Activate ß1 Integrins Mohamed Bouaouina, Yatish Lad, David A. Calderwood. Yale University School of Medicine, CT.

10:00 AM Coffee break
(NCC Center Exhibit Hall)

10:30 AM-Noon Plenary Session IV
(NCC Ballroom)

Glycoconjugates and ECM
Moderator: **Renato Iozzo**

10:30 AM **The Ligand/RAGE Axis- Implications for Adaptive Immunity and the Complications of Diabetes.** Ann Marie Schmidt, Columbia University, New York, NY.

S12 **11:05 AM** **New Functions for Glycoconjugates.** Jacques Baenziger, Washington University, St. Louis, MO.

96 **11:40 AM** **gD 3-O-Sulfotransferases Make Anticoagulant Heparan Sulfate.** Sassan Hajmohammadi, Roger Lawrence, Jeffery D. Esko, Nicholas W. Shworak. Dartmouth Medical School, Lebanon, NH.

12:15-1:15 PM Special Lunch Symposium

Connective tissue growth factor and CCN proteins as novel therapeutic targets: A lunchtime symposium sponsored by FibroGen. Speakers and topics include: David Liu: CTGF role in disease and therapeutics development; Karen Lyons: Highlights, current concepts and new directions - Summary of CCN Workshop in Okayama (October 2006); Sonali Sonnyal: Genetic approaches to investigate role of CTGF in scleroderma; John Chirgwin: Role of CTGF and Cyr61 in cancer - Bone involvement in breast and prostate cancer. *Participation limited to 200 on a first come, first served basis. To attend, sign-up at registration desk.*

Friday, November 3
1:30-3:00 PM Concurrent Sessions C
(NCC Ballroom)

I. Mechanisms of Fibrosis

Moderator:
Ambra Pozzi

S13 **1:30 PM Role of Integrin α1β1 in Renal Fibrosis.** Ambra Pozzi, Vanderbilt University, Nashville, TN.

70 **2:00 PM Caveolin-1 Scaffolding Domain Inhibits Lung Fibrosis.** Stanley Hoffman, Mathieu Richard, Michael Bonner, Richard M. Silver, Elena Tourkina. Medical University of South Carolina, Charleston, SC.

71 **2:20 PM Role of DDR Collagen Receptors in Lung Fibrosis.** Cindy Lee, Mayank Singal, Manja Friese-Hamim, Wolfgang F. Vogel. University of Toronto, Ontario, Canada.

74 **2:40 PM Suppression of Fli1 Activates Profibrotic Gene Program *in vivo.*** Margaret Markiewicz, Yoshihide Asano, Watson K. Dennis, Maria Trojanowska. Medical University of South Carolina, Charleston, SC.

II. Proteoglycans

Moderator:
Scott Selleck

S14 **1:30 PM HSPG Functions in Patterning: From Fish to Flies and Back Again.** Scott Selleck, University of Minnesota, Minneapolis, MN.

8 **2:00 PM In Vivo Guided Regeneration of Small Diameter Arteries.** G. Abatangelo, S. Lepidi, V. Vindigni, B. Zaban, R. Cortivo. University of Padua, Italy.

82 **2:20 PM Reduced Perlecan Results in Skeletal Dysplasia: A New Mouse Model.** Kathryn D. Rodgers, Takako Sasaki, Attila Aszodi, Reinhard Faessler, Olena Jacenko. University of Pennsylvania School of Veterinary Medicine, Philadelphia, PA.

85 **2:40 PM A Role for DTDST and Syndecan-2 in Fibronectin Matrix Assembly.** Leontine L. Galante, Jean E. Schwarzbauer. Princeton University, Princeton, NJ.

III. Matrix Metalloproteinases

Moderator:
Lynn Matrisian

S15 **1:30 PM The Complex Biology of Matrix Metalloproteinases.** Lynn Matrisian, Vanderbilt University, Nashville, TN.

103 **2:00PM TIMP-2 Regulates Myogenesis *In Vitro*.** Gentian Lluri, Garret D. Langlois, Paul D. Soloway, Diane M. Jaworski. University of Vermont College of Medicine, Burlington, VT.

224 **2:20 PM Crosstalk between SPARC and MMP9 in Pancreatic Cancer Progression.** S. Muneer, E. Mira, SA. Arnold, G. Korpanty, AW. Beck, SE. Holloway, S. Manes, RA. Brekken. University of Texas-Southwestern Medical Center, Dallas, TX.

131 **2:40 PM ADAM-17: A Central Regulator of Angiogenesis** Pal Gooz, Monika Gooz, Aleksander Baldys, Stanley Hoffman. Medical University of South Carolina, Charleston, SC.

3:00 PM Coffee Break
(NCC Center Exhibit Hall)

Friday, November 3
3:30-5:00 PM Concurrent Sessions D
(NCC Ballroom)

I. Matrix Receptors

Moderator:
Sanford Shattil

S16 **3:30 PM Platelet Tectonics: Unearthing Secrets of Integrin Signaling.** Sanford Shattil, University of California, San Diego, CA.

118 **4:00 PM CD151-mediated Inhibition of De-Adhesion Blocks Metastasis.** Andries Zijlstra, John D. Lewis, Heidi Stuhlmann, James P. Quigley. The Scripps Research Institute, La Jolla, CA.

119 **4:20 PM Beta1 Integrin is Required For Ureteric Bud Branching Development.** Xi Zhang, Glenda Mernaugh, Sergio Coffa, Gilbert Moeckel, Cord Brackebusch, Reinhard Fassler, Ambra Pozzi, Roy Zent. Vanderbilt University, Nashville, TN.

115 **4:40 PM Sdc1 Inhibits Tumor Invasion By Blocking α3β1 Integrin Signaling.** Yan Ji, Alan C. Rapraeger. University of Wisconsin, Madison, WI.

II. Angio and Vasculogenesis
Moderator:
Ram Sasisekharan

3:30 PM Angio and Vasculogenesis. (Sponsored by NAVBO) Ram Sasisekharan, Massachusetts Institute of Technology, Cambridge, MA.

137 **4:00 PM Actin' Up: Endorepellin and Endothelial Morphogenesis.** Gregory Bix, Michelle Burrows, Remedios Castello, Jason Zoeller, Rex A. Iozzo, Christopher Cardi, Mathew L. Thakur, Renato V. Iozzo. Thomas Jefferson University, Philadelphia, PA.

139 **4:20 PM Enhanced Recovery From Ischemia In Thrombospondin-2-Null Mice.** Marie M. Krady, Jianmin Zeng, Themis R. Kyriakides. Yale University, New Haven, CT.

142 **4:40 PM Syndecan-1 & Heparanase Enhance VEGF Association with Endothelia.** Yang Yang, Ashley E. Frith, Allison Theus, Veronica MacLeod, Ralph D. Sanderson. University of Alabama, Birmingham, AL.

III. Pathogenesis of Genetic Disease
Moderator:
Peter Byers

S17 **3:30 PM Molecular Mechanisms of Inherited Collagen Disorders.** Peter Byers, University of Washington, Seattle, WA.

147 **4:00 PM Recessive Lethal Form of OI Caused by Null Mutations in *CRTAP*.** A.M. Barnes, W. Chang, R. Morello, W.A. Cabral, M. Weis, D.R. Eyre, S. Leikin, J.J. Mulvihill, B. Lee, J.C. Marini. NIH, Bethesda, MD.

153 **4:20 PM Prolyl 3-Hydroxylation and Recessive Osteogenesis Imperfecta.** Roy Morello, Terry Bertin, John Hicks, Patrizio Castagnola, Francis H. Glorieux, Hans Peter Bachinger, Peter H. Byers, David R. Eyre, Brendan F. Boyce, Brendan Lee. Baylor College of Medicine, Houston, TX.

155 **4:40 PM A Spectrum of Dominant Collagen VI Mutations in Bethlem Myopathy.** Naomi L. Baker, Matthias Mörgelin, Rishika A. Pace, Naomi E. Adams, John F. Bateman, Shireen R. Lamandé. University of Melbourne, Parkville, Australia.

5:00 – 5:30 PM Business Meeting
(NCC Ballroom)

5:00-7:00 PM Poster Session
(NCC Center Exhibit Hall)

7:00-10:00 PM Gala Event
(Country Music Hall of Fame)

Saturday, November 4
7:30-8:30 AM Breakfast
(NCC Ballroom Hallway)

8:30-10:00 AM Plenary V
(NCC Ballroom)

Advanced Applications of Mass Spectrometry
Moderator: Cornelia Farnum

8:30 AM ***In situ*** **Molecular Profiling/ Imaging of Proteins in Tissues by MALDI-MS.** Richard Caprioli, Vanderbilt University, Nashville, TN.

S18 **9:05 AM** **Protein Adduction by Reactive Electrophiles and Its Consequences.** Daniel Liebler, Vanderbilt University, Nashville, TN.

9:40 AM **Senior Investigator Award, Bjorn Olsen.** Harvard University, Boston, MA.

10:00 AM Coffee break
(NCC Ballroom Hallway)

Saturday, November 4
10:30 AM-Noon Concurrent Sessions E
(NCC Ballroom)

I. Collagens and Bones
Moderator:
Richard Wenstrup

S19 **10:30 AM Ehlers Danlos Syndrome: Cooperativity of col5a1 and col11a1 in Development.** Richard Wenstrup, Cincinnati Children's Hospital, Cincinnati, OH.

173 **11:00 AM Abnormal Matrix in S1Pcko Mice Leads to Lack of Bone Formation.** Debabrata Patra, Xiaoyun Xing, Jennifer Bryan, Linda J. Sandell. Washington University School of Medicine, St. Louis, MO.

190 **11:20 AM Type XXVII Collagen is Made by Mature Hypertrophic Chondrocytes.** James M. Pace, Rebecca Hjorten, Uwe Hansen, Robert A. Underwood, Russell J. Fernandes, Deborah Krakow, Peter Bruckner, Robin Jacquet, William J. Landis, Peter H. Byers. University of Washington, Seattle, WA.

178 **11:40 AM Supramolecular Organization of Heterotypic Fibrils by Decorin.** Uwe Hansen, Daniela G. Seidler, Peter Bruckner. Muenster, Germany.

II. Basement Membranes
Moderator:
Jouni Uitto

S20 **10:30 AM Molecular Pathology of the Cutaneous Basement Membrane Zone.** Jouni Uitto, Thomas Jefferson University, Philadelphia, PA.

198 **11:00 AM Laminin-Nidogen Interaction in the Induction of AChR Clustering.** Sergei Smirnov, David Harrison, Karen McKee, Ulrike Mayer, Peter D. Yurchenco. Robert Wood Johnson Medical School, Piscataway, NJ.

203 **11:20 AM A Novel Crosslink Confers Immune Privilege to Goodpasture Epitope.** Roberto M. Vanacore, Amy J. Ham, Parvin Todd, Dorin B. Borza, Billy G. Hudson. Vanderbilt University, Nashville, TN.

199 **11:40 AM Reciprocal Stabilization of Fraser Syndrome-associated Proteins.** Daiji Kiyozumi, Nagisa Sugimoto, Kiyotoshi Sekiguchi. Institute for Protein Research, Osaka University, Osaka, Japan.

III. Matrix Modulators
Moderator:
Karen Lyons

S21 **10:30 AM Roles of CCN Proteins in Disease and Development.** Karen Lyons, University of California, Los Angeles, CA.

212 **11:00 AM CTGF(CCN2) is Essential for Fibroblast Function.** Andrew Leask, Laura Kennedy, Xu Shi-wen, David E. Carter, Karen M. Lyons, Carol M. Black, David J. Abraham. University of Western Ontario, Ontario, Canada

232 **11:20 AM Regulation of BMPs by Fibrillin.** Gerhard F. Sengle, Robert N. Ono, Noe L. Charbonneau, Lynn Y. Sakai. Oregon Health and Science University, Portland, OR.

216 **11:40 AM SPARC Regulates Procollagen I Processing and Cell Binding.** Tyler Rentz, Felicitta Poobalarahi, Amy D. Bradshaw. Medical University of South Carolina, Charleston, SC.