TISSUE REPAIR & REGENERATION

June 17-22, 2007
Colby-Sawyer College
New London, NH

2:00 pm - 11:00 pm Arrival and Check-in
6:00 PM Dinner
7:30 pm - 7:40 pm Welcome / Introductory Comments by GRC Site Staff
7:40 pm - 7:45 pm Welcome: Jack Gauldie (McMaster)
7:45 pm - 9:30 pm INFLAMMATION/STRESS MOLECULAR TRIGGERS
Discussion Leader: Luisa DiPietro (Chicago)
7:55 pm - 8:15 pm Chanden Sen (Columbus)
"Dead Cell Clearance in Wound Inflammation"
8:15 pm - 8:25 pm Discussion
8:25 pm - 8:45 pm Hynda Kleinman (NIH)
"Thymosin b4"
8:45 pm - 8:55 pm Discussion
8:55 pm - 9:15 pm Hannu Larjava (U British Columbia)
"Integrin αvβ6, inflammation and wound healing"
9:15 pm - 9:25 pm Discussion
MONDAY
7:30 am - 8:30 am Breakfast
9:00 am - 12:30 pm CELL MIGRATION AND WOUND CLOSURE
Discussion Leader: Fred Grinnell (U Texas)
9:00 am - 9:20 am Pierre Coulombe (Johns Hopkins)
"Keratins influence cell migration"
9:20 am - 9:30 am Discussion
9:30 am - 9:50 am Bill Parks (Seattle)
"Matrix integrins and MMP’s"
9:50 am - 10:00 am Discussion
10:00 AM Coffee Break / Group Photo
10:20 am - 10:40 am Liz Fini (U Florida)
"Epithelial cell migration in the Eye"
10:40 am - 10:50 am Discussion
10:50 am - 11:10 am Fred Grinnell (U Texas)
"3D model of wound closure"
11:10 am - 11:20 am Discussion
11:20 am - 11:30 am Tai-Lan Tuan (USC)
"PAI-1 and Keloid Pathogenesis"
11:30 am - 11:35 am Discussion
11:35 am - 11:45 am Pascal Silberzan (Paris)
"Healing of model wounds: a physicist view"
11:45 am - 11:50 am Discussion
11:50 am - 12:00 pm  Thomas Hunt (UCSF)  
"Glycolysis with oxygen regulates wound closure, cell migration and revascularization"
12:00 pm - 12:05 pm  Discussion 
12:05 pm - 12:30 pm  Further Discussion 
12:30 PM  Lunch 
1:30 pm - 4:00 pm  Free Time 
4:00 pm - 6:00 pm  Poster Session I 
6:00 PM  Dinner 
7:30 pm - 9:30 pm  GROWTH FACTORS IN REPAIR  
Discussion Leader: Kathy Flanders (NIH) 
7:30 pm - 7:50 pm  Sabine Werner (ETH Switzerland)  
"Signaling in wounded skin" 
7:50 pm - 8:00 pm  Discussion 
8:00 pm - 8:20 pm  Gary Grotendorst (Lovelace US)  
"CTGF in repair" 
8:20 pm - 8:30 pm  Discussion 
8:30 pm - 8:50 pm  Lillian Nanney (Vanderbilt)  
"EGF signaling and epidermal closure" 
8:50 pm - 9:00 pm  Discussion 
9:00 pm - 9:10 pm  Boris Hinz (EPFL Switzerland)  
"Myofibroblast contraction activates TGFβ1 from the ECM and establishes a mechanically controlled autocrine loop" 
9:10 pm - 9:15 pm  Discussion 
9:15 pm - 9:25 pm  Bruce Riser (Rosalind Franklin University)  
"TNF-alpha, but not IFN-gamma, Regulates CCN2 (CTGF), Collagen Type I, and Proliferation in Mesangial Cells: Possible Roles in Tissue Repair and Fibrosis in Renal Disease" 
9:25 pm - 9:30 pm  Discussion 
TUESDAY 
7:30 am - 8:30 am  Breakfast 
9:00 am - 12:30 pm  REGENERATION  
Discussion Leader: Maria Sibilia (U Vienna) 
9:00 am - 9:20 am  Ellen Haber-Katz (Philadelphia)  
"Regenerative healing - MRL mouse" 
9:20 am - 9:30 am  Discussion 
9:30 am - 9:50 am  Pascal Dufourcq (Paris)  
"Regeneration in Zebrafish" 
9:50 am - 10:00 am  Discussion 
10:00 AM  Coffee Break 
10:20 am - 10:40 am  Detlef Schuppan (Harvard)  
"Reversibility of Liver Fibrosis" 
10:40 am - 10:50 am  Discussion 
10:50 am - 11:00 am  Martin Kolb (McMaster)  
"Small animal imaging in the assessment of inflammation and repair in lung disease models"
11:00 am - 11:05 am Discussion
11:05 am - 11:15 am David Becker (University College London)
    "Improving diabetic wound healing"
11:15 am - 11:20 am Discussion
11:20 am - 11:30 am Manuela Martins-Green (UCal Riverside)
    "A Novel Function for VEGF During Wound Repair"
11:30 am - 11:35 am Discussion
11:35 am - 11:45 am David Gardiner (UC Irvine)
    "Urodele limb regeneration as a model for wound healing and regeneration in humans"
11:45 am - 11:50 am Discussion
11:50 am - 12:00 pm Craig Crews (Yale)
    "Epithelial positional discontinuity in regenerative wound epidermis formation"
12:00 pm - 12:05 pm Discussion
12:05 pm - 12:30 pm Additional Discussion
12:30 PM Lunch
1:30 pm - 4:00 pm Free Time
4:00 pm - 6:00 pm Poster Session II
6:00 PM Dinner
7:30 pm - 9:30 pm MODELS OF TISSUE REPAIR
    Discussion Leader: Jack Gauldie (McMaster)
    Mike Galko (MD Anderson)
    "Wound healing in Drosophila"
    Discussion
    Paul Martin (Bristol)
    "Wound healing in Zebrafish"
    Discussion
    Tom Mustoe (Chicago)
    "Ischemic models of wound healing"
    Discussion
    Livingston Van de Water (Albany)
    "TGF-beta1 slows the growth of pathogenic myofibroblasts through a mechanism requiring the focal adhesion protein, Hic-5"
9:00 pm - 9:10 pm Discussion
9:10 pm - 9:15 pm Discussion
9:15 pm - 9:25 pm Ryochi Mori (Bristol UK)
    "Molecular mechanisms linking wound inflammation and fibrosis - knockdown of osteopontin leads to rapid repair and reduced scarring"
9:25 pm - 9:30 pm Discussion
WEDNESDAY
7:30 am - 8:30 am Breakfast
9:00 am - 12:30 pm SCARRING AND REGENERATION
    Discussion Leader: Alain Mauviel (INSERM)
    David Warburton (USC)
    "Lung development and repair"
9:00 am - 9:20 am Discussion
9:20 am - 9:30 am Discussion
9:30 am - 9:40 am Friederike Bohm (Zurich)
"The role of FGF Receptor signaling in Liver regeneration and disease"

9:40 am - 9:45 am Discussion
9:45 AM Coffee Break
10:20 am - 10:40 am Erwin Bottinger (Mt Sinai)
"Kidney podocytes and Fibrosis"

10:40 am - 10:50 am Discussion
10:50 am - 11:10 am Paul Noble (Duke)
"Matrix signaling in Fibrosis"

11:10 am - 11:20 am Discussion
11:20 am - 11:40 am Bob Strieter (Virginia)
"Fibrocytes and Lung Repair"

11:40 am - 11:50 am Discussion
11:50 am - 12:00 pm Irena Pastar (New York)
"Deregulation of differentiation and activation pathways in epidermis of chronic wounds"

12:00 pm - 12:05 pm Discussion
12:05 pm - 12:15 pm Daniel Babcock (Houston)
"A genetically tractable model of Wound-induced Inflammation"

12:15 pm - 12:20 pm Discussion
12:20 pm - 12:30 pm Additional Discussion
12:30 PM Lunch
1:30 pm - 4:00 pm Free Time
4:00 pm - 6:00 pm Poster Session III
6:00 PM Dinner
7:30 pm - 9:30 pm BIOENGINEERING
Discussion Leader: Molly Shoichet (Toronto)

7:30 pm - 7:50 pm Jeremy Mao (Columbia)
"Craniofacial Tissue engineering"

7:50 pm - 8:00 pm Discussion
8:00 pm - 8:20 pm David Mooney (Harvard)
"Directed Vascular remodeling"

8:20 pm - 8:30 pm Discussion
8:30 pm - 8:50 pm Molly Shoichet (Toronto)
"Polymer scaffolds and Tissue formation"

8:50 pm - 9:00 pm Discussion
9:00 pm - 9:10 pm Roger DeFilippo (USC)
"In Situ injection of Amniotic Fluid Stem Cells for the development of new renal tissue in the laboratory"

9:10 pm - 9:15 pm Discussion
9:15 pm - 9:25 pm Jeffery Hartgerink (Houston)
"Multi-domain self-assembled Nanofibers as scaffolds for tissue engineering"

9:25 pm - 9:30 pm Discussion
THURSDAY
7:30 am - 8:30 am Breakfast
8:30 am - 9:00 am Business Meeting
(Nominations for the next Vice Chair; Fill out Conference Evaluation Forms; Discuss future Site & Scheduling preferences; Election of the next Vice Chair)

STEM CELLS AND REGENERATION/REPAIR

9:00 am - 12:30 pm
Discussion Leader: Rick Bucala (Yale)
Barry Stripp (Pittsburgh)
"Stem cells in epithelial repair"

9:20 am - 9:30 am Discussion

9:30 am - 9:50 am Diane Krause (Yale)
"Stem cells and epithelium"

9:50 am - 10:00 am Discussion

10:00 AM Coffee Break

10:20 am - 10:40 am Eric Neilson (Vanderbilt)
"EMT in repair"

10:40 am - 10:50 am Discussion

10:50 am - 11:10 am Stephen Nishimura (UCSF)
"Epithelial-mesenchymal trophic unit"

11:10 am - 11:20 am Discussion

11:20 am - 11:40 am George Cotsarelis (Philadelphia)
"Epithelial stem cells in hair follicles"

11:40 am - 12:00 pm Discussion

12:00 pm - 12:20 pm Kari Alitalo (Helsinki)
"Lymphangiogenesis"

12:20 pm - 12:30 pm Discussion

12:30 PM Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session IV

6:00 PM ANGIOGENESIS, LYMPHANGIOGENESIS AND NEUROGENESIS

7:30 pm - 9:30 pm Discussion Leader: Jeffrey Davidson (Vanderbilt)
Phil Stephens (Cardiff)
"Isolation and characterization of multipotent cells from the Oral Mucosa for Tissue Repair and Regeneration"

7:40 pm - 7:45 pm Discussion

7:45 pm - 8:05 pm Nancy Boudreau (UCSF)
"HOX genes in angiogenesis and repair"

8:05 pm - 8:15 pm Discussion

8:15 pm - 8:35 pm Holger Gerhardt (Cancer Res UK)
"Angiogenic sprouting"

8:35 pm - 8:45 pm Discussion

8:45 pm - 9:05 pm Larry Benowitz (Boston)
"Neuronal growth in Tissue Repair"

9:05 pm - 9:15 pm Discussion

9:15 pm - 9:30 pm Additional Discussion

FRIDAY

7:30 am - 8:30 am Breakfast