

# CONTENTS

Journal of **Cellular  
Biochemistry**

VOLUME 110 • NUMBER 2

CONTENTS ..... i

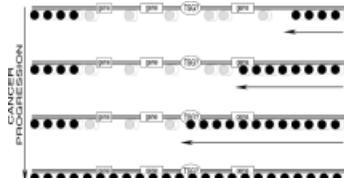
FEATURES ..... v

## VIEW POINT

### The Src/PI3K/Akt Signal Pathway May Play a Key Role in Decreased Drug Efficacy in Obesity-Associated Cancer

Jiezhong Chen ..... 279

PUBLISHED ONLINE 1 APRIL 2010



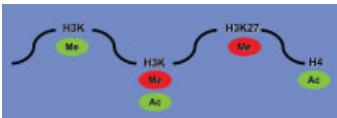
PAGE 285

## PROSPECTS

### More Is Less: Inactivation and Deletion Events and the Search for Tumor Suppressor Genes

W. Edward C. Bradley, Domenic Di Paola, Emmanouil Rampakakis, and Maria Zannis-Hadjopoulos ..... 281

PUBLISHED ONLINE 24 MARCH 2010

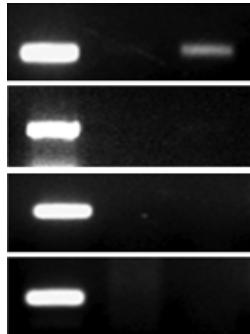


PAGE 291

### Transcriptional Repression in ES Cells

Clara Y. Cheong and Thomas Lufkin ..... 288

PUBLISHED ONLINE 24 MARCH 2010



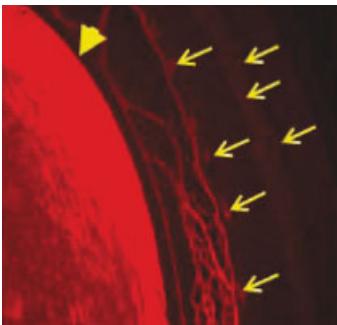
PAGE 297

## ARTICLES

### RpS3 Translation Is Repressed by Interaction With Its Own mRNA

Hag Dong Kim, Tae-Sung Kim, Yoo Jin Joo, Hyun-Seock Shin, Sang-Hwa Kim, Chang-Young Jang, Cheol Eui Lee, and Joon Kim ..... 294

PUBLISHED ONLINE 9 MARCH 2010



PAGE 318

### Effect of IL-1 $\beta$ , PGE<sub>2</sub>, and TGF- $\beta$ 1 on the Expression of OPG and RANKL in Normal and Osteoporotic Primary Human Osteoblasts

Susana Jurado, Natalia García-Giralt, Adolfo Díez-Pérez, Pedro Esbrit, Guy Yoskovitz, Lidia Agueda, Roser Urreizti, Lluís Pérez-Edo, Guillem Saló, Leonardo Mellibovsky, Susana Balcells, Daniel Grinberg, and Xavier Nogués ..... 304

PUBLISHED ONLINE 11 MARCH 2010

### Up-Regulation of Crystallins is Involved in the Neuroprotective Effect of Wolfberry on Survival of Retinal Ganglion Cells in Rat Ocular Hypertension Model

Kin Chiu, Yuan Zhou, Sze-Chun Yeung, Carmen Ka-Ming Lok, Owen O-Cheung Chan, Raymond Chuen-Chung Chang, Kwok-Fai So, and Jin-Fu Chiu ..... 311

PUBLISHED ONLINE 24 MARCH 2010

### Effect of a Synthetic Cannabinoid Agonist on the Proliferation and Invasion of Gastric Cancer Cells

Xiang-Shu Xian, Hyeyeon Park, Yu Kyung Cho, In Seok Lee, Sang Woo Kim, Myung-Gyu Choi, In-Sik Chung, Ki-Hwan Han, and Jae Myung Park ..... 321

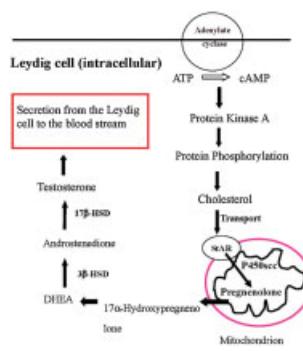
PUBLISHED ONLINE 24 MARCH 2010

**Cover:** Cover shows the crystal structure of the *T. thermophilus* 30S ribosomal subunit (PDB accession 1JG0) revealing the relative positions of the Shine-Dalgarno sequence within the 5'-untranslated region of the mRNA (highlighted red), the G693 loop of the 16S rRNA (homologous to the G961 Loop of eukaryotic 18S rRNA, highlighted green), and the anti-Shine-Dalgarno segment of the 16S rRNA (highlighted blue, not present in eukaryotes). See article in this issue by Meng et al, pages 531–544.

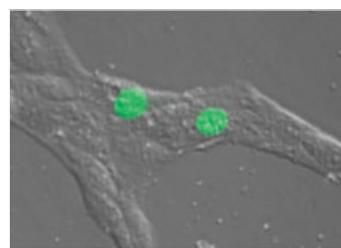


(continued on next page)

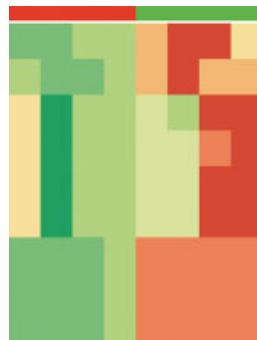
# CONTENTS CONTINUED



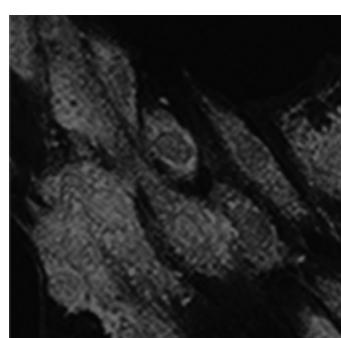
PAGE 341



PAGE 355



PAGE 374



PAGE 385

## Effects of Catechin, Epicatechin and Epigallocatechin Gallate on Testosterone Production in Rat Leydig Cells

*Po-Ling Yu, Hsiao-Fung Pu, Sung-Yun Chen, Shyi-Wu Wang, and*

*Paulus S. Wang . . . . . 333*

PUBLISHED ONLINE 1 APRIL 2010

## VEGF-A Expression in Osteoclasts Is Regulated by NF- $\kappa$ B Induction of HIF-1 $\alpha$

*Diana P. Trebec-Reynolds, Irina Voronov, Johan N.M. Heersche, and*

*Morris F. Manolson . . . . . 343*

PUBLISHED ONLINE 1 APRIL 2010

## A Novel Zinc Finger Protein Zfp637 Behaves as a Repressive Regulator in Myogenic Cellular Differentiation

*Kai Li, Jie Zhang, Jing-jing Ren, Qi Wang, Kai-yong Yang, Zhu-juan Xiong, Yong-qiu Mao, Yan-yu Qi, Xiao-wei Chen, Feng Lan, Xiu-jie Wang, Heng-yi Xiao, Ping Lin, and Yu-quan Wei . . . . . 352*

PUBLISHED ONLINE 16 MARCH 2010

## Arsenite Causes Down-Regulation of Akt and c-Fos, Cell Cycle Dysfunction and Apoptosis in Glutathione-Deficient Cells

*Geetha M. Habib . . . . . 363*

PUBLISHED ONLINE 24 MARCH 2010

## Microarray Analysis of Spaceflown Murine Thymus Tissue Reveals Changes in Gene Expression Regulating Stress and Glucocorticoid Receptors

*Ty W. Lebsack, Vuna Fa, Chris C. Woods, Raphael Gruener, Ann M. Manziello, Michael J. Pecaut, Daila S. Gridley, Louis S. Stodieck, Virginia L. Ferguson, and Dominick DeLuca . . . . . 372*

PUBLISHED ONLINE 8 MARCH 2010

## Heparin Treatment of Vascular Smooth Muscle Cells Results in the Synthesis of the Dual-Specificity Phosphatase MKP-1

*Cheryl Isleib Blaukovitch, Raymond Pugh, Albert C. Gilotti, Daniela Kanyi, and Linda J. Lowe-Krentz . . . . . 382*

PUBLISHED ONLINE 16 MARCH 2010

## Mechanism Underlying Long-Term Regulation of 3-Hydroxy-3-Methylglutaryl Coenzyme A Reductase During L6 Myoblast Differentiation

*Laura Trapani, Chiara Martini, Anna Trentalance, and Valentina Pallottini . . . . . 392*

PUBLISHED ONLINE 24 MARCH 2010

(continued on next page)

# CONTENTS CONTINUED

## A Redox-Linked Novel Pathway for Arsenic-Mediated RET Tyrosine Kinase Activation

*Masashi Kato, Kozue Takeda, Khaled Hossain, Nguyen D. Thang, Yu Kaneko, Mayuko Kumasaka, Osamu Yamanoshita, Noriyuki Uemura, Masahide Takahashi, Nobutaka Ohgami, and Yoshiyuki Kawamoto* ..... 399  
 PUBLISHED ONLINE 16 MARCH 2010

## The Role of the Cysteine Residue in the Chaperone and Anti-Apoptotic Functions of Human Hsp27

*NagaRekha Pasupuleti, Mahesha Gangadhariah, Smitha Padmanabha, Puttur Santhoshkumar, and Ram H. Nagaraj* ..... 408  
 PUBLISHED ONLINE 11 MARCH 2010

## 17 $\beta$ -Estradiol Supplementation Attenuates Ovariectomy-Induced Increases in ATGL Signaling and Reduced Perilipin Expression in Visceral Adipose Tissue

*Lindsay M. Wohlers and Espen E. Spangenburg* ..... 420  
 PUBLISHED ONLINE 24 MARCH 2010

## Rottlerin Inhibits Migration of Follicular Thyroid Carcinoma Cells by PKC $\delta$ -Independent Destabilization of the Focal Adhesion Complex

*Chien-Jung Lin, Chieh-Yu Lin, Ying Chen, Shih-Horng Huang, and Seu-Mei Wang* ..... 428  
 PUBLISHED ONLINE 11 MARCH 2010

## CCAAT/Enhancer Binding Protein Beta Is Up-Regulated in Giant Cell Tumor of Bone and Regulates RANKL Expression

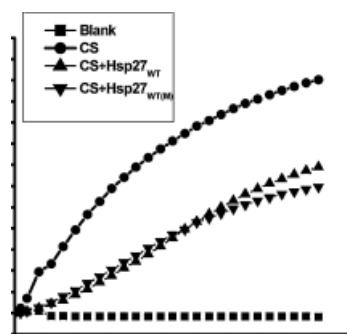
*Patrick Kwok-Shing Ng, Stephen Kwok-Wing Tsui, Carol Po-Ying Lau, Chi-Hang Wong, Winnie Hiu-Ting Wong, Lin Huang, and Shekhar-Madhukar Kumta* ..... 438  
 PUBLISHED ONLINE 11 MARCH 2010

## Curcumin Suppresses Constitutive Activation of STAT-3 by Up-Regulating Protein Inhibitor of Activated STAT-3 (PIAS-3) in Ovarian and Endometrial Cancer Cells

*Manush Saydmohammed, Doina Joseph, and Viqar Syed* ..... 447  
 PUBLISHED ONLINE 16 MARCH 2010

## Hypoxia Decreases Sclerostin Expression and Increases Wnt Signaling in Osteoblasts

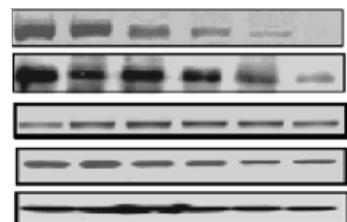
*Damian C. Genetos, Chrisoula A. Toupadakis, Leah F. Raheja, Alice Wong, Savvas E. Papanicolaou, David P. Fyhrie, Gabriela G. Loots, and Clare E. Yellowley* ..... 457  
 PUBLISHED ONLINE 24 MARCH 2010



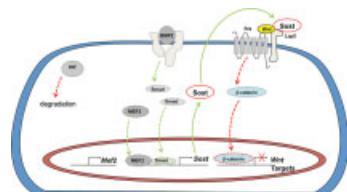
PAGE 415



PAGE 431



PAGE 450

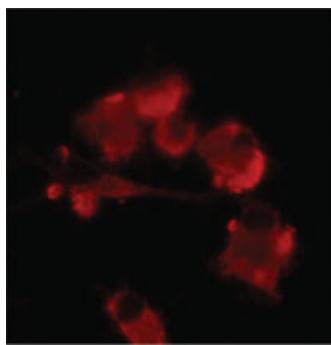


PAGE 465

(continued on next page)

# CONTENTS

CONTINUED



PAGE 471

## *Piscirickettsia salmonis* Induces Apoptosis in Macrophages and Monocyte-Like Cells From Rainbow Trout

Verónica Rojas, Norbel Galanti, Niels C. Bols, Verónica Jiménez, Rodolfo Paredes, and Sergio H. Marshall ..... 468

PUBLISHED ONLINE 26 MARCH 2010

## Connective Tissue Growth Factor (CTGF) Transactivates Nuclear Factor of Activated T-Cells (NFAT) in Cells of the Osteoblastic Lineage

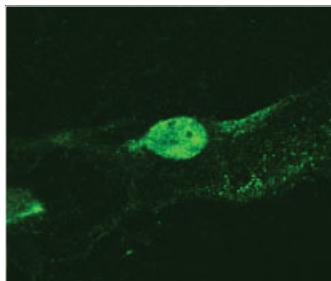
Anna Smerdel-Ramoya, Stefano Zanotti, and Ernesto Canalis ..... 477

PUBLISHED ONLINE 16 MARCH 2010

## Pentapeptide Insertion Mutagenesis of the Hoxa1 Protein: Mapping of Transcription Activation and DNA-Binding Regulatory Domains

Barbara Lambert, Julie Vandeputte, Pierre-Marie Desmet, Bernard Hallet, Sophie Remacle, and René Rezsohazy ..... 484

PUBLISHED ONLINE 24 MARCH 2010



PAGE 480

## Calcium Oscillations Induced by Gambierol in Cerebellar Granule Cells

E. Alonso, C. Vale, M. Sasaki, H. Fuwa, Y. Konno, S. Perez, M.R. Vieytes, and L.M. Botana ..... 497

PUBLISHED ONLINE 24 MARCH 2010

## A Conserved Post-Transcriptional BMP2 Switch in Lung Cells

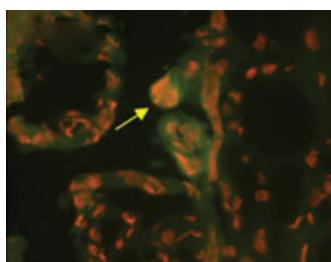
Shan Jiang, David T. Fritz, and Melissa B. Rogers ..... 509

PUBLISHED ONLINE 1 APRIL 2010

## Increased Immortalization-Upregulated Protein 2 (IMUP-2) by Hypoxia Induces Apoptosis of the Trophoblast and Pre-eclampsia

Su Yeon Jeon, Hyun-Jung Lee, Ji Myeong Park, Hyun Min Jung, Jung Ki Yoo, Hey-Jin Lee, Jong-Sung Lee, Dong-Hyun CHA, Jin Kyeoung Kim, and Gi Jin Kim ..... 522

PUBLISHED ONLINE 26 MARCH 2010

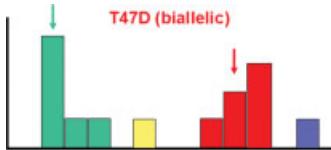


PAGE 526

## The Human *IGF1R* IRES Likely Operates Through a Shine-Dalgarno-Like Interaction With the G961 Loop (E-Site) of the 18S rRNA and Is Kinetically Modulated by a Naturally Polymorphic polyU Loop

Zheng Meng, Nateka L. Jackson, Oleg D. Shcherbakov, Hyoungsoo Choi, and Scott W. Blume ..... 531

PUBLISHED ONLINE 26 MARCH 2010



PAGE 539

Articles published online in Wiley InterScience,  
8 March 2010 through 1 April 2010