

Workshop on  
Immunopathological Diseases and Therapeutics



**UCLA**  
Jonsson Comprehensive Cancer Center



**UNIVERSITY OF CATANIA**  
Department of Biomedical Sciences

First International Workshop on  
**Prognostic and Therapeutic Roles  
of Yin Yang 1 in Cancer**

May 24 - 26, 2009

*Organizers:*

**Benjamin Bonavida, Ph.D.**  
(UCLA, Los Angeles, CA, USA)

**Franca Stivala, M.D., Ph.D.**  
(University of Catania, Catania, Italy)

University of Catania - "Villa Citelli"  
Via Tomaselli, 31 - Catania, Italy

## Workshop Secretariat

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**LEGA ITALIANA PER LA  
LOTTA CONTRO I TUMORI - SEZIONE PROVINCIALE DI CATANIA**

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**c/o Department of Biomedical Sciences, University of Catania**

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Email: [workshopyy1@gmail.com](mailto:workshopyy1@gmail.com)

*Dear Colleague,*

*Welcome to Catania for having join us at the First International Workshop on “Prognostic and Therapeutic Roles of Yin Yang 1 in Cancer”.*

*The transcription factor Yin Yang 1 (YY1) is known to have a fundamental role in normal biological processes such as embryogenesis, differentiation, regulation and cell proliferation. YY1 exerts its effects on genes involved in these processes via its ability to initiate, activate, or repress transcription depending upon the context in which it binds.*

*The role of YY1 in cancer has not been examined until recently. Recent findings demonstrated that the expression level of YY1 in tumors plays several roles in cancer progression and response to therapeutic-induced apoptosis. In addition, YY1 has been implicated as a prognostic biomarker in several cancers. Hence, it became evident that the regulation of YY1 expression in cancer and the development of novel therapeutics targeting YY1 are novel avenues in the fight against cancer. Therefore, an international workshop has been conceived to provide a forum for discussion and integration of findings by experts in the field. This workshop will focus on the biochemistry, transcription, gene regulation, involvement in resistance and metastasis, prognostic significance and novel targeted therapies.*

*Franca Stivala, M.D., Ph.D.*

*Benjamin Bonavida, Ph.D.*

## **General Information**

**Website address:** <http://www.unict.it/workshopyy1>

### **Workshop site**

Villa Citelli, Via Tomaselli, 31 - Catania, Italy. It is located in the center of Catania, 5 km from the airport. From the airport you may easily reach the workshop site and/or the hotels by taxi. Catania enjoys good weather conditions during this period. Average temperature 25°C.

### **Highlights of Catania**

For detailed information, please visit the suggested websites listed below or ask to Workshop Secretariat:

<http://www.bestofsicily.com/catania.htm>

<http://www.geoetnaexplorer.it/>

## **Workshop Organizers**

B. Bonavida, Ph.D. (UCLA, CA, USA)

F. Stivala, M.D., Ph.D. (Catania, Italy)

## **Scientific Advisory Committee**

M.Z. Atassi (Houston, TX, USA)

J. Berenson (Los Angeles, CA, USA)

B. Bonavida (Los Angeles, CA, USA)

N. D'Alessandro (Palermo, Italy)

T. Efferth (Heidelberg, Germany)

J. McCubrey, (Greenville, NC, USA)

C. Napoli (Naples, Italy)

F. Nicoletti (Catania, Italy)

D. Spandidos (Crete, Greece)

K. Umezawa (Yokohama, Japan)

## **Local Organizers**

G. Iacona (Catania, Italy)

M. Libra (Catania, Italy)

G. Malaponte (Catania, Italy)

L. Malaguarnera (Catania, Italy)

M.C. Mazzarino (Catania, Italy)

F. Nicoletti (Catania, Italy)

S. Trivali (Catania, Italy)

The organizer acknowledge the contribution of the Scientific advisory Committee.

The organizing committee gratefully acknowledges the generous support and participation of the following institutions and companies:



Provincia Regionale di Catania



Università degli Studi di Catania

Facoltà di Medicina e Chirurgia



Ordine dei Medici Chirurghi e Odontoiatri di Catania



Lega Italiana per la Lotta contro i Tumori  
Sezione Provinciale di Catania



Roche

*We Innovate Healthcare*



Astrazeneca



Harlan



Ontario



Neogenics, Inc.



BiogenIdec, Inc.



Transforming Discovery Into Care

## Speakers

M. Atchison (Pennsylvania, USA)  
S. Baritaki (Los Angeles, CA, USA)  
R. Bordonaro (Catania, Italy)  
A. Buonadonna (Aviano, Italy)  
B. Bonavida (Los Angeles, CA, USA)  
R.J. Byers (Manchester, UK)  
M. Caruso (Catania, Italy)  
N. D'Alessandro (Palermo, Italy)  
T. Efferth (Heidelberg, Germany)  
H. Garban (Los Angeles, CA, USA)  
D. Giuffrida (Catania, Italy)  
A.R. Jazirehi (Los Angeles, CA, USA)  
J. Kim (Baton Rouge, USA)  
M. Libra (Catania, Italy)  
J.A. McCubrey (Greenville, NC, USA)  
L. Militello (Los Angeles, USA)  
C. Napoli (Naples, Italy)  
M. Pierotti (Milan, Italy)  
D. Seligson (Los Angeles, CA, USA)  
K. Umezawa (Yokohama, Japan)  
J.C. Willey (Toledo, OH, USA)

## Chairs

M.Z. Atassi (Houston, Texas, USA)  
B. Bonavida (Los Angeles, CA, USA)  
F. Catalano (Catania, Italy)  
F. Ferrà (Catania, Italy)  
M. Libra (Catania, Italy)  
L. Malaguarnera (Catania, Italy)  
G. Malaponte (Catania, Italy)  
M.C. Mazzarino (Catania, Italy)  
J. McCubrey (Greenville, NC, USA)  
C. Napoli (Naples, Italy)

F. Nicoletti (Catania, Italy)  
D. Spandidos (Crete, Greece)  
F. Stivala (Catania, Italy)  
A. Veronesi (Aviano, Italy)  
K. Yeung (Toledo, OH, USA)

## Discussants

M.Z. Atassi (Houston, Texas, USA)  
J. Berenson (Los Angeles, CA, USA)  
B. Bonavida (Los Angeles, CA, USA)  
R.J. Byers (Manchester, UK)  
S. Canevari (Milan, Italy)  
F. Catalano (Catania, Italy)  
N. D'Alessandro (Palermo, Italy)  
T. Efferth (Heidelberg, Germany)  
F. Ferrà (Catania, Italy)  
M. Libra (Catania, Italy)  
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F. Nicoletti (Catania, Italy)  
M. Pierotti (Milan, Italy)  
D. Spandidos (Crete, Greece)  
F. Stivala (Catania, Italy)  
S. Travali (Catania, Italy)  
K. Umezawa (Yokohama, Japan)  
A. Veronesi (Aviano, Italy)  
K. Yeung (Toledo, OH, USA)





# Program

**Sunday May 24<sup>th</sup>, 2009**

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**6:00-8:00 pm Opening Ceremony**  
Aula Magna - Palazzo dell'Università

**Welcome Address by:**

The Rector of the University  
**Antonino Recca**

The Dean of the Faculty of Medicine and Surgery  
**Francesco Basile**

**Introduction by the Organizers:**

**Franca Stivala**  
**Benjamin Bonavida**

**Welcome Cocktail**  
Palazzo dell'Università

**Monday May 25<sup>th</sup>, 2009**

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8:00-08:30 am **General Introduction**  
**F. Stivala; B. Bonavida**

8:30-10:00 am **SESSION 1: Biochemistry and gene regulation of YY1**  
*Chairs: Z. Atassi, K. Yeung*

**M. Atchison**

Function of YY1 in PcG Repression and B Cell Biology (20 min)

**J. Kim**

Genomic Imprinting and Transcription Factor YY1 (20 min)

**H. Garban**

Yin-Yang 1 (YY1): Genetic Factor, Epigenetic Regulator and More... (20 min)

10:00-10:30 am **Discussion and concluding remarks**

*Discussants: Z. Atassi, T. Efferth, K. Yeung, K. Umezawa*

10:30-11:00 am **Coffee Break**

11:00-12:30 pm **SESSION 2: Role of YY1 in the pathogenesis of cancer**  
*Chairs: F. Nicoletti, D. Spandidos*

**C. Napoli**

The Role of Yin Yang 1 Protein in Malignancy of the Bone (20 min)

**J. Willey**

Role of Polymorphic YY1/E2F1 Recognition Site in Regulation of ERCC5 (XPG) DNA Repair Gene and Determination of Risk for Lung Cancer (20 min)

**L. Militello**

Clinical Significance of Both the Cytoplasmic and Nuclear Overexpression of YY1 in Multiple Myeloma (20 min)

**M. Libra**

Implication and Prognostic Significance of Yin Yang 1 in Diffuse Large B-cell Lymphoma (20 min)

12:30-1:00 pm **Discussion and concluding remarks**

*Discussants: S. Canevari, C. Napoli, F. Nicoletti, D. Spandidos*

1:00-3:00 pm **Lunch**

**Monday May 25<sup>th</sup>, 2009**

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3:00-4:30 pm **SESSION 3: Regulation of drug and immune resistance  
by YY1 in cancer**

*Chairs: J. McCubrey, K. Umezawa*

**S. Baritaki**

Yin-Yang 1 (YY1) is a Tumor Immune-Suppressor Gene Product (20 min)

**T. Efferth**

Cytoplasmic and Nuclear Inhibition of YY1 by a Combination Treatment of Malignant B cells by the Anti-Malarial Artesunate and the Anti-CD20 Antibody Rituximab (20 min)

**B. Bonavida**

Clinical Significance of the Inhibition of YY1 Activity and Expression by Therapeutic Anti-Cancer Antibodies (20 min)

**A.R. Jazirehi**

The Direct Role of the microRNA(miR)-29 in the Inhibition of YY1 Expression and Activity and the Reversal of Tumor Cell Resistance to Apoptosis by TRAIL (20 min)

4:30-5:00 pm **Discussion and concluding remarks**

*Discussants: N. D'Alessandro, M.C. Mazzarino,*

**J. A. McCubrey**

7:30 pm ***Dinner***

**Tuesday May 26<sup>th</sup>, 2009**

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8:30-10:00 am **SESSION 4: Diagnostic and prognostic roles of YY1**  
*Chairs: F. Stivala, M. Libra*

**R.J. Byers**

YY1 is a Prognostic Marker in Follicular Lymphoma (20 min)

**N. D'Alessandro**

Alteration of the YY1/RKIP ratio is a frequent molecular event in hepatocellular carcinoma (20 min)

**D. Seligson**

Prognostic significance of YY1 in prostate Cancer (20 min)

10:00-10:30 am **Discussion and concluding remarks**  
*Discussants: M. Libra, M. Pierotti, F. Stivala*

10:30-11:00 am **Coffee Break**

11:00-12:30 pm **SESSION 5: YY1 as target for therapeutics**  
*Chairs: C. Napoli, L. Malaguarnera*

**K. Umezawa**

Clinical Significance of Both the Screening of Transcription Factor Inhibitors and Application to Yin Yang 1 Studies (20 min)

**J.A. McCubrey**

Rationale for Targeting of YY1 in Drug Resistant Cancers (20 min)

12:30-1:00 pm **Discussion and concluding remarks**  
*Discussants: S. Trivali, R.J. Byers, C. Napoli*

1:00-2:30 pm **Lunch**

Tuesday May 26<sup>th</sup>, 2009

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- 2:30-4:30 pm **SATELLITE SYMPOSIUM**  
**Lessons to learn from novel therapeutic applications in cancer**  
*Chairs:* **B. Bonavida, F. Ferràù, A. Veronesi, F. Catalano**
- M. Pierotti**  
From molecular modeling to clinical response in targeted therapy of tyrosine Kinase pathways (20 min)
- P. Casali**  
Gastrointestinal stromal tumors: Novel therapeutic approaches (20 min)
- M. Caruso**  
Monoclonal Anti-Epidermal Growth Factor Receptor Antibody in ORL Cancer (20 min)
- A. Buonadonna**  
Efficacy of anti-VEGF and anti-EGFR in Human Colon Cancer (20 min)
- D. Giuffrida**  
Target Therapy in the breast cancer treatment (20 min)
- R. Bordonaro**  
New therapeutic strategies for renal cancer (20 min)
- 4:30-5:00 pm **Discussion and concluding remarks**  
*Discussants:* **B. Bonavida, F. Ferràù, A. Veronesi, F. Catalano**
- 5:00 pm **Closing remarks**  
**F. Stivala and B. Bonavida**



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