

The AACC New York Metro Section is proud to present:

The 2016 Van Slyke Award Dinner and Lecture

Laurence Cole, Ph.D.
Medical Director, USA hCG Reference Service

“Hyperglycosylated hCG”

DATE: Thursday October 6, 2016

TIME:

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| Registration | 5:00 pm |
| Reception | 5:30 pm |
| Dinner | 6:00 pm |
| Award & Lecture | 7:00 pm |

LOCATION: Siemens Healthcare Diagnostics
511 Benedict Avenue
Tarrytown, NY

RSVP by September 29, 2016 to Barbara Ciero
(Barbara.ciero@siemens.com)

AACC Members and Non-Members are welcome.
ACCENT Continuing Education Credits will be offered by AACC.

Transportation will be available to bring members to and from Manhattan and Tarrytown. The shuttle will depart from Memorial Sloan Kettering (1250 First Avenue) at 5:30 pm on October 6.
To reserve a seat on the shuttle, please email Katie Thoren (thorenk@mskcc.org).

Sponsored by: Siemens Healthcare Diagnostics

Abstract:

Hyperglycosylated hCG was discovered by Dr. Cole in 1987. It is a molecule that shares amino acid sequence with the hormone hCG but has larger O-linked sugar structures. It is a complete independent molecule to the hormone hCG. Hyperglycosylated hCG is an autocrine produced by cytotrophoblast cells that antagonizes a TGF- β 2 receptor. It drives implantation of the blastocyst at 3 weeks gestation and deep implantation at 10-18 weeks gestation. In controlling implantation of the blastocyst, deficient hyperglycosylated hCG production causes biochemical pregnancies, spontaneous abortion of pregnancy, and ectopic pregnancies, or all pregnancy failures. The B152 hyperglycosylated hCG assay on the day of pregnancy implantation is an absolute test for 100% of pregnancy failures.

At 10 to 18 weeks gestation hyperglycosylated hCG is a test for screening for preeclampsia and gestational hypertension which occurs in the latter part of the second trimester and third trimester of pregnancy. Preeclampsia/gestational hypertension cases appear in the 3rd percentile with extremely low hyperglycosylated hCG levels. If a sample is detected in the 3rd percentile at 10-18 weeks gestation 52 of 72 samples (72% of cases) will turn out to develop preeclampsia/gestational hypertension. The hyperglycosylated hCG test detected 52 of 84 (62% of cases), showing that 62% of preeclampsia/gestational hypertension cases are due to hyperglycosylated hCG deficiency at the time of deep implantation.

Hyperglycosylated hCG and its free β -subunit are produced by all human cancer cells. Hyperglycosylated hCG and its free β -subunit feedback to a TGF- β 2 receptor on cancer cells and drives cancer growth and cancer invasion. An antibody to hyperglycosylated hCG, B152, has been shown to freeze all human cancers generating oncostasis.

The Van Slyke Award:

The Van Slyke Award is the highest academic award presented by the AACC New York Metropolitan Section and has been presented annually since 1957. The award honors an outstanding individual in the memory of Dr. Donald Van Slyke who laid the foundation of modern clinical chemistry by his work over three decades in the early 20th century.