The Regularly Scheduled Meeting of the Board of Education was held at the Blake Building, 25 Ogden Street, West Haven on September 15, 2008. The meeting was called to order by Mark Palmieri, Chairman of the Board of Education at 7:00 p.m. The meeting opened with a pledge to the flag.

**BOARD MEMBERS IN ATTENDANCE:**
Mark Palmieri, Chairman  
Gerald A. Calabritto  
Eric Murillo  
Robert Saley  
M. Toni Paine  
Patrick Egolm  
Howard Horvath Jr.  
Andrew R. DePalma

**BOARD MEMBERS ABSENT:**
T. Sean Maher

**ADMINISTRATORS PRESENT:**
Neil Cavallaro, Superintendent of Schools  
Dave Cappetta, Director of Finance

**CITY OFFICIALS PRESENT:**

**STUDENT REPRESENTATIVES PRESENT:**
Shamsi Aysha

**B. Public Portion**

Chairman Palmieri welcomed everyone and stated we would begin the meeting with the Public Portion.

Todd Tomkins, 770 Savin Avenue a member of the Charter Revision Commission spoke about his idea for the Board of Ed. There are deadlines to be met with the Charter Revision. His idea is that the Board, like the City Council, be elected every four years. Each board member would have a district. The districts would remain the same; right now all the member are at large. He gave out his email tomkinstodd@sbcglobal.net and his phone number is 937-8569 and asked the board to contact him and discuss his idea. He believes there should be ten board members as there are ten districts. Right now we have nine board members and they are all at large. He asked for the board’s input on this.
Neil stated he was sent a letter from the commission stating we were welcome to go before them if we were interested and we responded that we would go anytime they wanted and when that date is arranged we would let the board know about it.

Nancy Rossi, 12 Robin Road stated that several years ago she brought up the same idea of making it 10 board members; the reason being that way it would be mirrored after the city council. Each person would have there own school, PTA, and would be looking out for their own district rather than for ten. In the future I would like to see a clearer split of resources. The teachers are great across the board however when you look at the schools and different districts there is a disparity. I would like to see this corrected in the future. I know there is not a lot of money but when we did have money it seems we spent it on a few schools and did not equally distribute it. I think this would correct itself if there was equal representation for every district.

I hope this is something the charter revision will take a good look at and the Board of Ed.

The board gave thanks.

Jim Cox, 70 Hine Street stated on October 3, 4, and 5th there would be an Art Show (Grades K – 8) on the same weekend as the Apple Festival. The Art Show will be held in the old Silver’s Pharmacy on Campbell Avenue. It is in conjunction with the Open Art Space. There will be five different cities involved in this and there will be shuttle busses from Hamden, Woodmont, New Haven, and Milford. We have artwork from Arts and Ideas (over 200 pieces). This will be a nice weekend and it is a free event. Timeline is Friday from 4:00 – 8:00 PM, Saturday from 10:00 – 8:00 PM and Sunday from 12:00 - 8:00 PM. Everyone is invited to attend.

The board gave thanks.
There were no other speakers
Public Session closed at 7:10 PM

Chairman Palmieri made a correction to the agenda under D. 6 New Business. The year should read 2009 not 2008 for the field trip and just for the record Mr. Maher called and is out of town on business; just wanted that in the minutes.

C. REPORTS
C.1. Administration

Neil Cavallaro welcomed Joanna Price who was present along with Raffaela Fronc. They have been planning this year’s events and are here to listen to Shamsi’s presentation. Neil knows they are excited about the Evolutions Program and asked Raffaela to talk about it.

Raffaela stated that the Evolution Program is run by the Peabody Museum. They take 15 of our students after school over to the Peabody Museum two days a week. There is a math tutorial on Mondays, there are field trips, and there is a 3 day field trip to Washington along with other activities. This is geared towards students that love science
they don’t have to be A students. This is for high school students and they targeted 10th graders.

Neil thanked Joann again on behalf of the board.

Neil spoke briefly on AYP Adequate Yearly Progress. Board members received a packet with the actual press release and information from the Connecticut State Department of Education regarding AYP. This is a nice opportunity to see where we are in comparison to other districts in the state and other schools. Over 60% of the schools and school districts made AYP. He feels that because the standards are remaining the same over the next couple of years the number of districts and schools making AYP will go up. Then, in two years there will be a drastic turnabout. It is very self explanatory and easy to read. This is an excellent reference for the Board.

On Friday he met with a group of Urban School Superintendents. The biggest problem we all have as urban school districts is that we are making good progress but as the standards go up it is hard to get recognized for the good work we are doing. We are looking at strategies to promote how well we are doing and to lobby the legislature for some changes in how the reporting of AYP is done. We will keep you posted.

Neil introduced Bill Reynolds a social studies teacher at WHHS who went to China as part of an exchange program and will share his experience with the board. Bill stated:

I traveled with 18 other administrators and teachers from Connecticut to Beijing and Jinan, Shandong. We spent one week in each city. Beijing was the tourist part of the trip. We visited The Summer Palace, Peking University, The Great Wall, The Forbidden City, Antiques Market and the Olympic sites. During the 2nd week we/I went to the Shandong Province to our sister schools.

The State of Connecticut has a relationship with the Shandong Province, south east of Beijing; there are about 80 Connecticut schools that have partnerships with schools in Shandong. When Ron Stancil visited about 4 years ago he was assigned a Middle School in Wei Fung, When I scheduled to go we were able to change our partnership, our sister school is Jinan #9 High School, Jinan is the capitol city of the Shandong Province. While there I was given a desk and a work area with the English Department for the week. I spent my week with my translator, Hanks (Liu Hao) visiting classes, attending planning meetings and, knowing that I was a history teacher preparing a curriculum on China and Asian studies, a meeting with teachers from the History Dept. discussing what I knew about Chinese History, how accurate my info was, and facts or ideas from their point of view. I also had the chance to teach a class.

Bill showed a slide depicting some of the various places he had visited and the classroom. He presented the Board with a Year Book, a Certificate of Aughenticate for a 3 piece set of silver plated medals of the famous Shandong Province (A Mountain, A Water, A Sage). Jerry Calabritto thought this should be put on display at the high school for
everyone to see. Perhaps next year if they send a teacher to us he/she will be able to see it in the glass case at the high school. The board agreed.

Rob Saley asked how he felt over there; great I had a great time. When you were in Tiananmen Sq. you said you were there for 20 minutes and the police arrived. Actually I was with a group of 19 and 15 didn’t even notice the police cars. They just get out of the car and stand there they don’t come around. Our tour guide said this is not unusual. Any time 20 Americans gather for more than 10 or 20 minutes they will come by.

Howie Horvath asked what the classroom was like. Bill stated there are about 50 students to a classroom and an interesting point is that the students stay in the same classroom and do not move from class to class; rather the teachers go to the students. After each 45 minute class there is a 10 minute break where everyone leaves the classroom and goes outside. There are no bells; the time for a break is announced by music as is the time to return to your classroom. If a student returns a little late the person sitting next to him/her will open the book to the correct page to make sure he/she is prepared. They receive a new book from the government every year. There is a 3 day National Test that is very big in their life. If they don’t do well they shame their family, and their town. If they take a bus, due to the distance they come, they don’t go home during the week they stay there and go home weekends.

Rob asked how long their school day is; time wise about the same as ours. They attend from 8:00 to 12:00 and 2:00 to 5:00. They stopped attending from 7:00 to 9:00 just last year. From 2:00 to 5:00 is usually for specials - Art and Music.

Bill hopefully will be back to introduce some classes beginning with Chinese History and Culture for the next school year.

The board gave thanks.

Neil Cavallaro asked Raffaela Fronc to give the board a little background. This is a program called Discovery For A Cure. It is a 6 week program. All districts in the area can participate and bring their juniors to a one day workshop at Yale where professors talk about their research in the labs. Students choose the area they are interested in and then the selection is made. Out of our district Shamsi was selected and she said she had a great time and did a lot more than she expected.

Shamsi Aysha gave a presentation on obesity at the board meeting. An outline of the presentation is attached.

- The Role of Prolylcarboxypeptidase in Obesity
- Shamsi Aysha
- Diano Lab
- August 22, 2008
Background

**America’s Obesity Epidemic**
“In 1991, only four of 45 states participating in the Center for Disease Control’s (CDC) Behavioral Risk Factor Surveillance System had obesity prevalence rates of 15 to 19 percent and none had obesity prevalence rates greater than 20 percent. By the year 2000, all of the 50 states had obesity prevalence rates of 15 percent or greater, with 35 of the 50 states having obesity prevalence rates as high as 20 percent or greater.”

- www.obesityinamerica.com

It is no doubt that obesity is a huge problem in the United States.

It is widely known that consuming more than the body burns causes weight gain. This can be caused by elevated energy intake, lack of exercise, or a combination of both.

But can weight be associated with ones genes?

Does a person with a history of obesity in their family have a higher chance of becoming obese? Or does it all depend on their diet and daily routine?

Introduction to Experiment

The area most concerned and studied in the central nervous system was the hypothalamus.

The hypothalamus is located just above the brain stem. It is found in all mammals. The human hypothalamus is roughly the size of an almond.

Although it is small in size, it serves a great purpose. **The hypothalamus has a role in controlling body temperature, hunger, thirst, and sleep.**

The Hypothalamus
(Human Brain)

**Prolylcarboxypeptidase (PRCP)**

The main purpose of our experiment was to look at the role of hypothalamus in hunger (or food intake). This experiment further focused on the food intake of **Prolylcarboxypeptidase** (PRCP) wild type and knock out (KO) mice.

PRCP plays a role in the renin-angiotensin (RAS) system. The RAS system regulates blood pressure and water fluid balance in the body.

Neurons expressing PRCP are also localized in the hypothalamus and other parts of the brain.

**PRCP metabolizes (terminates) alpha-melanocyte-stimulating hormone (MSH).** MSH are a class of peptide hormones produced in the pituitary gland.
- MSH released will have many effects: producing melanin (where its name is derived) and darkening the skin.
- MSH released to the brain will other affects: arousal and appetite.
- **MSH is a known appetite suppressant.**
  
  **Hypothesis:** The mice lacking PRCP will be less prone to weight gain and obesity.
- Proopiomelanocortin (POMC) Cells and Neuropeptide Y (NPY).
- POMC are localized in the pituitary, brain, skin, and other peripheral sites. **It serves as a precursor of melanotropic peptides** (such as the alpha-melanocyte-stimulating hormone).
- **Therefore, POMC cells are known to have anorexic effect and suppress food intake.**
- POMC works **reciprocally** with the neuromodulator, NPY.
- NPY is found in the hypothalamus. **If activated, it increases food intake.**
- **Therefore, if NPY is turned “on”, POMC cells are turned “off” and food intake is increased.**
- **If NPY is “off” and POMC cells are “on”, food intake is decreased.**

  **However, the presence of PRCP genes can metabolize the MSH secreted by the POMC cells, therefore might have a role in increasing the food intake.**
- **Experimental Design**
  - This experiment compares the brains a normal brain (PRCP wild type) with brains without PRCP (PRCP KO).
  - Preparing the PRCP Knockouts: **PRCP deletion is done by using gene-trap vectors containing the LacZ reporter gene.**
  - To show a difference visually, a **LacZ staining** was performed.
  - When the tissue is stained with the artificial substrate X-gal, it will turn blue.
  - **Therefore, if the experiment is performed correctly, the KO brains will have a prominent blue staining in the cells that are missing PRCP while the WT brain will have none.**
  - Separate brain slices were stained for POMC cells.
  - The positions of the LacZ genes and the POMC cells were then compared.
- **Experimental Design Continued**
- While the brains of PRCP WT and KO animals were being stained, PRCP WT and KO mice were being observed in the animal room.

- 18 WT and 18 PRCP KO mice were all put on the same high fat diet.

- Their body weight was taken weekly.

- The Mice

- Perfusion

  - To preserve the brains for staining, the mice were perfused with paraformaldehyde.

  - The mice were anesthetized with isoflurane and cardiac perfusion was performed. The heart was first perfused with saline, then with 4% paraformaldehyde solution as fixative.

  - The beating heart would pump the preservative to the brain.

  - Once the perfusion was sufficiently completed the brain was removed from the body.

- The Preserved Brains

  - After the brains were postfixed in more 4% paraformaldehyde overnight, they were ready to be cut.

  - Brains were cut with a vibratome. Brain slices of 50 micrometers were collected from the whole brain.

  - Sections were then rinsed in 0.1M Phosphate Buffer with saline (PBS).

  - The slices were then pretreated and stained in X-gal overnight at 37°C.

- Sagittal Diagram
  (Rat Brain)

- Horizontal Diagram

- LacZ Staining
  Knockout Brain

- Hypothalamus

- Higher magnification
  Hypothalamus
  (dorsomedial nucleus)

- POMC Staining

- Observations
As seen from the staining, the LacZ genes are found in the Hypothalamus area, where the POMC cells are located as well.

This proves that, when present, at least some of the PRCP genes are found the same area as the POMC cells.

Therefore, one can infer that the PRCP gene does indeed interact with the POMC cells.

The Live Mice

Results

Compared to the mice with PRCP (the normal WT), the mice without PRCP (the PRCP KO’s, PRCP knockouts) appear to gain less weight.

Conclusion

The PRCP gene might play a role in obesity.

As seen from the staining, PRCP is found in the same area (hypothalamus) as the POMC cells. PRCP interacts with the POMC cells, in that they eliminate the alpha-MSH the POMC cells create. As stated before, the MSH inhibit food intake.

As seen from the live mice, the mice without PRCP were less prone and more resistant to high fat diet induced obesity than the mice carrying PRCP.

Further Studies and Experiments

For the next experiment, instead performing the LacZ staining and POMC staining separately, one may choose to perform a double staining. That way, one can clearly see where the LacZ genes and POMC cells overlap within the brain.

Further studies with PRCP: As stated before, PRCP plays a key role in regulating blood pressure and water fluid balance in the body. We understand that the lack of PRCP helps inhibit obesity, but how will the lack of PRCP affect the blood pressure of an organism?

Acknowledgements

Dr. Sabrina Diano, Ph.D
Erika Gyengesi, M.Sc.
Nicholas Wallingford
David Tremblay

The Discovery to Cure Program

Department of Obstetrics/Gynecology & Reproductive Sciences and Neurobiology, Yale Medical School
At the end of the presentation Superintendent Cavallaro asked how much study and research went into preparing for this. Shamsi had to read a great deal of material and did her own research.

There were students from various countries involved in this study. Some students were from Spain and China.

Patrick Egolum asked if this experiment had only been done with mice so far; there is no correlation so far with humans. Yes, was the response.

The board gave thanks.

C.1.a Status of Schools
C.1.b Student Representatives
C.1.c Board

Eric Murillo brought up the point of the breathalyzer. There was an article in the paper that mentioned Milford Schools and the breathalyzer. He wanted to know if our board would like to study this and look into it for our school system. Mark stated maybe we can put a committee together and look into it.

Neil said that various towns are implementing it and possibly waiting for some legal challenges from the ACLU so while we pursue it we should keep our eyes on what is going on with the other towns. He will keep us posted.

Toni Paine stated that a few weeks before on a rainy Saturday two students from the high school came to her door and said they were selling tickets for a car wash to benefit the high school. They had a hand numbered ticket which was done on a copy machine. Toni stated that if this is done again they should have their ID tickets with them. Ron Stancil said that he understands that sometimes they pre-sell tickets for a fund raiser – Toni said she understands that but she only had two hours remaining to use the ticket that day to bring her car to get washed; in the rain. She did give them the $5.00 as it did benefit the high school. However, there was no rain date on the ticket and she believes the car wash was Cross Country if anyone wanted to check on this. Toni would like to see the students be reminded to carry their ID Cards with them when promoting a fund raiser.

Jerry Calabritto agrees with Eric Murillo and stated that about three years ago he mentioned the breathalyzer and at that time our attorney from Bertram and Moses said to tread softly. Since Bertram and Moses represents the Milford Board of Education I would think the concerns raised seem to have been answered. I would strongly recommend that Mr. Murillo’s committee go forward and get this in place before the proms start.

On the report you gave us concerning AYP on the second page across the state it looks like the numbers from the districts, high schools and middle schools that have not made AYP have gone up. We did make progress but not adequate progress. This goes hand in
hand with the fact that they raised the bar. I think that because the bar is not going to be raised during the next two years good things will come out of West Haven in the next two years.

Mark Palmieri stated that September 27th is the Homecoming Festival at Oak Grove from 12:00 to 4:00 PM. He stated that the Newsletter had a misprint which stated it was starting at 4:00 PM and for the band to be there at 2:45. Please publicize this correction in the school.

The DECCA Chapter of 2008/2009 wants to cordially invite the board to their Banquet on Thursday, September 18th at SRCC from 6:00 to 9:00 PM.

C.1.d. Committee

D.1. Approval of Minutes:

D.1.a. West Haven Board of Education Regular Meeting, September 2, 2008
7:00 p.m. at the Blake Building (enclosure)

Jerry Calabritto made a motion to approve the minutes
Toni Paine seconded the motion
No discussion
All in favor
The minutes were approved

D.2. Resignations (Certified)
D.3. Resignations (Non-Certified)
D.4. New Hires (Certified)

08-198  Michele Acker, 605 Main Street, West Haven, CT 06516
Assistant Girls Soccer Coach, Bailey Middle School
Salary: $1,950

08-199  Jessica Testani, 757 Wintergreen Avenue, Hamden, CT 06514
Assistant Girls Soccer Coach, WHHS
Salary: $2,100

08-200  Ron Luneau, 6 Trumbull Street, Derby, CT 06418
Assistant Football Coach, WHHS
Salary: $3,500
Toni Paine made a motion to approve D.4. 08-198 – 08-200 inclusive
Patrick Egolum seconded the motion
No discussion
All in favor
Items D.4. 08-198 – 08-200 are approved

D.5. New Hires (Non-Certified)

D.6. New Business

08-201 Request for approval from Robert Mikenis and Pat Libero for approximately 50 students to participate in a Field Trip to Washington D.C. on May 12, 2009 – May 15, 2009. Trip will coincide with the 8th grade curriculum on American History.

Jerry Calabritto made a motion to approve D.6. 08-201
Rob Saley seconded the motion
No discussion
All in favor
Item 08-201 is approved

F. Informational

Mark Palmieri asked for a motion to adjourn the meeting
Jerry Calabritto made a motion to adjourn the meeting
Toni Paine seconded the motion
All in favor

The meeting adjourned at 7:55 PM

Respectfully submitted,

Marylou Amendola
Board Secretary