Informed Prostate Cancer Support Group Inc.
"A 501 C 3 CORPORATION ID # 54-2141691"

February 2015 NEWSLETTER

P.O. Box 420142 San Diego, CA 92142
Phone: 619-890-8447 Web: http://ipcsg.org

We Meet Every Third Saturday (except December)

Monday, February 23, 2015 Volume 8 Issue 1

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Next Meeting
February 21, 2014
10:00AM to Noon

Meeting at

Sanford-Burnham Auditorium

10905 Road to the Cure, San Diego CA 92121

SEE MAP ON THE LAST PAGE

What We Are About

Our Group offers the complete spectrum of information on prevention and treatment. We provide a forum where you can get all your questions answered in one place by men that have lived through the experience. Prostate cancer is very personal. Our goal is to make you more aware of your options before you begin a treatment that has serious side effects that were not properly explained. Impotence, incontinence, and a high rate of recurrence are very common side effects and may be for life. Men who are newly diagnosed with PCa are often overwhelmed by the frightening magnitude of their condition. Networking with our members will help identify what options are best suited for your life style.

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Editor: Gene Van Vleet

PROSTATE CANCER IT'S ONLY 2 WORDS NOT A SENTENCE

Our guest speaker for the January meeting was Bernadette Greenwood, Director of Clinical Services at Desert Medical Imaging which has offices in Indian Wells, Palm Springs and Indio. http://desertmedicalimaging.com/

Bernadette began by tracing the history of prostate biopsies. They were first taken in the 1920's by transperineal needle or open perineal surgically. The first transrectal needle biopsies were performed in the 1930's. Transrectal ultrasonography (TRUS) assisted biopsies started in the 1960's. In

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Video DVD's

DVD's of our meetings are available in our library for $10ea. Refer to the index available in the library. They can also be purchased through our website: http://ipcsg.org Click on the 'Purchase DVDs" button.

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the 1980's transducers were introduced to image the pelvic structures more clearly, PSA testing was introduced as a means to identify the existence of cancer and a systematic biopsy pattern was introduced. MRI guided biopsies began in the 2000's. In the 2010's multiparametric (MP) MRI's came into use. This is mixing several parameters of images together to make a picture that is more clearly defined.

There are 1.2 million random biopsies performed annually in the U.S. which take 6-18 cores with a saturation biopsy taking 60+ cores. Disadvantages of the TRUS guided biopsy are that a needle might miss the tumor, a non-aggressive tumor might be biopsied or the wrong part of a tumor might be biopsied. Gleason scores are rated on the samples taken, so it could well be under-rated. By using MR guided biopsies the Gleason score is more accurate. She presented many slides and graphs that showed the advantages of MR guided biopsies.

The transrectal MR guided biopsy is taken with a small finger-sized titanium needle guide. The patient lays face down on the table with coils on the front and on the back. The needle guide is inserted into the rectum and the needles are inserted into the tumor seen by the imaging. The number of samples taken is relative to the tumor size. This type of biopsy complements the PSA, DRE and TRUS.

This same technique can then be used for delivery of therapy. Desert Medical Imaging is using it to deliver laser therapy. The laser fits into the same small needle guide. While inside the patient, the laser can be contoured to fit the cancerous area. They are watching it as they do it, so they can ensure they are on target. She showed images of the procedure that showed the laser treatment exactly hitting the tumor target.

Dr. John Feller established a beta site for doing this procedure in 2010 and obtained institutional approval to embark on a clinical trial. It is a single institution IRB approved Pilot study (Feasibility Study Phase I) Western IRB Protocol 20140945 posted on www.clinicaltrials.gov. It is non-randomized, uncontrolled and patient funded. It is authorized for 100 patients, 49 had been treated as of our meeting date. Its done in an outpatient setting and no general anesthesia is required. The patient walks in and walks out and generally no bladder catheter is required.

Definitive information, specification and procedures are shown on the DVD of this meeting available from our library at our meetings or through our website: www.ipcsg.org.

FUTURE MEETINGS

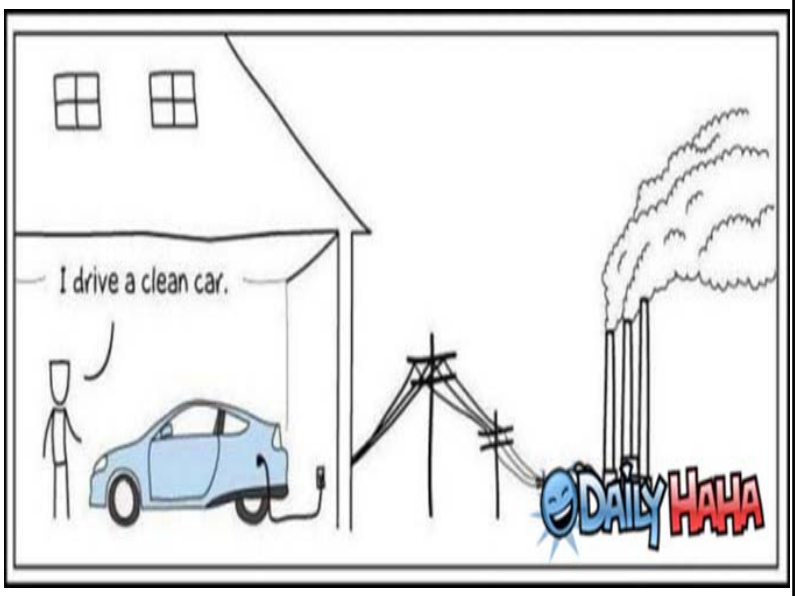
February 21st - Member panel discusses experiences followed by networking among members.

March 21st - Not yet confirmed.

April 18th - Steven G Pratt M.D., F.A.C.S., A.B.I.H.M The role of nutrition and lifestyle in the prevention of disease and optimizing health. www.superhealthyliving.com

June 20th - T. Mike Hsieh, MD. Asst Professor of Surgery, UCSD. Sexual dysfunction including low testosterone and erectile dysfunction

ON THE LIGHTER SIDE



"Have you ever noticed that anybody driving slower than you is an idiot, and anyone going faster than you is a maniac?" — George Carlin
"Even if you are on the right track, you'll get run over if you just sit there." — Will Rogers
"I wrote the story myself. It's about a girl who lost her reputation and never missed it." — Mae West
"A smile is a curve that sets everything straight." — Phyllis Diller
"When I was growing up I always wanted to be someone. Now I realize I should have been more specific." — Lily Tomlin
"How is it possible to have a civil war?" — George Carlin
"The two most common elements in the universe are Hydrogen and stupidity." — Harlan Ellison

Sex after Surgery: A recent article in the Daily Post reported that a man, Dave Harper, has sued St. Paul's Hospital, saying that after his wife had surgery there she lost all interest in sex. A hospital spokesman replied: "Mrs. Harper was admitted for cataract surgery. All we did was correct her eyesight."

INTERESTING ARTICLES

Drug combo suppresses growth of late-stage prostate cancer tumors

From Science Daily, January 27, 2015

Low doses of metformin, a widely used diabetes medication, and a gene inhibitor known as BI2536 can successfully halt the growth of late-stage prostate cancer tumors, a Purdue University study finds.

Prostate cancer causes the second-highest number of cancer-related deaths in men in the U.S., and methods of treating advanced prostate cancer are limited.

Xiaoqi Liu (pronounced zhow-CHEE' LEE'-oo), associate professor of biochemistry and cancer research, and fellow researchers found that the drugs metformin and BI2536 can work together to suppress the spread of prostate cancer that resists all other available treatments, potentially prolonging patients' lives.

"We've found a promising way to treat late-stage prostate cancer," Liu said. "By combining low levels

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of two well-tolerated drugs, the progression of this disease could be significantly delayed. Completely curing the cancer at the advanced stage is pretty much impossible, but this treatment might manage it for a while -- that's exciting."

A number of treatments exist for the earlier stages of prostate cancer, which grows slowly compared with many other cancers. Because prostate cancer cells need the male sex hormone androgen to develop, one way to treat the disease is to suppress androgen -- a process known as castration. If the cancer continues to spread, the patient often undergoes chemotherapy. As a last resort, drugs that block the synthesis of androgen by prostate cancer cells can be used, but these medications only extend a patient's lifespan for several months.

New approaches to treating the most persistent forms of prostate cancer are "urgently needed," Liu said.

Adding to the challenge is the fact that castration treatment can inadvertently encourage the cancer to get tougher. It can heighten oxidative stress on the prostate gland, which increases the expression of Plk1, a gene that has been linked to many cancers. Over-expression of Plk1 can also trigger the synthesis of androgen.

"The goal of castration is to block androgen synthesis," Liu said. "But cancer cells eventually become 'smart' enough to make androgen anyhow, which is why the cancer continues to grow."

Additionally, castration can disrupt the body's metabolism and lead to insulin resistance, which also can stimulate the production of androgen. The cancer will spread until both of these side effects are stopped, Liu said.

Previous studies showed that metformin -- an inexpensive, antidiabetic drug that has been commonly used for more than 40 years -- is particularly potent to prostate cancer tumors.

Working with fellow researchers from Purdue, the University of Wisconsin-Madison and the Indiana University School of Medicine, Liu found that a combination of low levels of metformin and BI2536, a drug that stifles the activity of Plk1, could work in tandem to slow the growth of prostate tumors too advanced for current treatments by promoting the self-destruction of cancer cells and preventing androgen synthesis.

The drugs did not impact healthy prostate cells, a "key finding," Liu said. "Ideally, cancer therapy will have minimal effects on normal cells."

Because metformin helps regulate metabolism, it may reverse some of the metabolic damage caused by castration, he said.

The researchers tested the drugs in a classical cell culture assay of prostate cancer cells and in advanced prostate tumors in mice. Low concentrations of the drugs significantly slowed the development of cancer in both trials. The mice tumors were grown from the tumor cells of a late-stage prostate cancer patient, suggesting that the treatment would prove effective in humans.

"Those results were amazing," Liu said. "These are the first data we've generated from a real patient, so I was almost jumping in the air when I saw that it worked."

Liu said that the next step in the research is to test the combination of drugs in clinical trials. Further research is also needed to understand the underlying mechanism of metformin and why it is effective at suppressing prostate cancer.

Novel imaging technique improves prostate cancer detection

From Science Daily, January 15, 2015

In 2014, prostate cancer was the leading cause of newly diagnosed cancers in men and the second lead-

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ing cause of cancer death in men. Writing in the January 6, 2015 issue of the journal Prostate Cancer and Prostatic Disease, a team of scientists and physicians from the University of California, San Diego School of Medicine, with counterparts at University of California, Los Angeles, describe a novel imaging technique that measurably improves upon current prostate imaging -- and may have significant implications for how patients with prostate cancer are ultimately treated.

"This new approach is a more reliable imaging technique for localizing tumors. It provides a better target for biopsies, especially for smaller tumors," said Rebecca Rakow-Penner, MD, PhD, a research resident in the Department of Radiology and the study's first author.

The technique is also valuable in surgical planning and image staging, said David S. Karow, MD, PhD, assistant professor of radiology at UC San Diego and the study's corresponding author. "Doctors at UC San Diego and UCLA now have a non-invasive imaging method to more accurately assess the local extent of the tumor and possibly predict the grade of the tumor, which can help them more precisely and effectively determine appropriate treatment."

The current standard of care for detecting and diagnosing prostate cancer is contrast enhanced magnetic resonance imaging (MRI), which involves intravenously injecting patients with a contrast agent to highlight blood flow. Greater blood flow is often a requirement of growing cancer cells. When compared to surrounding healthy tissues, it's hoped that contrast enhanced MRIs will reveal the shape and nature of any tumors present.

But many tumors do not significantly differ from surrounding healthy tissues with contrast enhanced MRI and so evade easy detection. An imaging technique called diffusion MRI measures the diffusion of water and has been a standard imaging technique in the brain and an emerging technique in the prostate. Cancer tissues are denser than healthy tissues and typically limit the amount and mobility of water within them. But diffusion MRI suffers from magnetic field artifacts that can distort the actual location of tumors by as much as 1.2 centimeters or roughly half an inch -- a significant distance when surgeons are attempting, for example, to assess whether a tumor extends beyond the prostate and into adjacent nerve bundles.

The new approach described in today's published paper is called restriction spectrum imaging-MRI or RSI-MRI. It corrects for magnetic field distortions and focuses upon water diffusion within tumor cells. By doing both, the ability of imaging to accurately plot a tumor's location is increased and there is a more refined sense of the tumor's extent, said Nathan White, PhD, assistant project scientist at UC San Diego, study co-author and co-inventor of the RSI-MRI technique.

In a related paper to be published in the journal Frontiers in Oncology, the same team of researchers reported that RSI-MRI appears to predict tumor grade. Higher grade tumors correlate with higher restricted water volume in the cancer cells' large nuclei.

"Prostate cancer can often be an indolent disease, where a patient may only require surveillance rather than aggressive surgery," noted co-author Christopher J. Kane, MD, professor of urology at UC San Diego.

"If by imaging we could predict the tumor grade," added Robert Reiter, MD, professor of urology at UCLA, "we may be able to spare some patients from prostate resection and monitor their cancer with imaging."

Surprise: High-dose testosterone therapy helps some men with advanced prostate cancer

From Science Daily, January 7,2015

In a surprising paradox, the male hormone testosterone, generally thought to be a feeder of prostate

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cancer, has been found to suppress some advanced prostate cancers and also may reverse resistance to testosterone-blocking drugs used to treat prostate cancer.

The finding, by scientists at the Johns Hopkins Kimmel Cancer Center, is reported in the Jan. 7 issue of Science Translational Medicine.

Medical oncologist Samuel Denmeade, M.D., who led the small study of 16 patients with metastatic prostate cancer, warns that the timing of testosterone treatment used in his research is critical and difficult to determine, and says men should not try to self-medicate their cancers with testosterone supplements available over the counter.

Previous studies, he adds, have shown that taking testosterone at the wrong time -- particularly by men with symptoms of active cancer progression who have not yet received testosterone-blocking therapy -- can make the disease worse.

In men whose prostate cancer spreads, doctors typically prescribe drugs that block testosterone production, but cancer cells eventually become resistant to this means of reducing the hormone, says Denmeade, a professor of oncology at the Johns Hopkins University School of Medicine. At that point, physicians switch to other drugs, such as enzalutamide, which block testosterone's ability to bind to receptors within prostate cancer cells.

Denmeade says the combination of drugs that block testosterone production and receptors, called androgen deprivation therapy, may make prostate cancer more aggressive over time by enabling prostate cancer cells to subvert attempts to block testosterone receptors. And many men on these drugs experience harsh side effects, including impotence, weight gain, muscle loss and intense fatigue.

"This really is the most lethal form of prostate cancer," says Michael Schweizer, M.D., researcher at Fred Hutchinson Cancer Research Center and contributor to the study during his recent fellowship at Johns Hopkins. "It's the one that's the most resistant, and typically once people progress to this stage it's when we start to worry that they're at a much higher risk for dying from prostate cancer."

With this context, the new study tested an approach based on the idea that if prostate cancer cells were flooded with testosterone, the cells might be killed by the hormone shock. The cells also might react by making fewer receptors, which may make the prostate tumor cells vulnerable once more to androgen deprivation therapy.

For the study, Denmeade and his colleagues enrolled 16 men who had been receiving testosterone-lowering treatment for metastatic prostate cancer at Johns Hopkins. All had been treated previously with at least one type of androgen deprivation therapy and had rising levels of prostate specific antigen (PSA), a blood marker for prostate cancer, and radiographic evidence their cancers were becoming resistant.

The men were given three 28-day cycles of an intramuscular injection of testosterone and two weeks of a chemotherapy drug called etoposide. Men who showed decreases in PSA levels after three cycles were continued on testosterone injections alone.

Of the 16, two did not complete the study: One died of pneumonia and sepsis due to the etoposide, and the other experienced prolonged erection, a side effect of the testosterone.

Of the 14 remaining in the trial, seven experienced a dip in their PSA levels of between 30 and 99 percent, an indication their cancers were stable or lessening in severity. Seven of the men showed no decrease in PSA.

In addition, four of the seven men stayed on testosterone therapy for 12 to 24 months with continued low PSA levels. Of 10 men whose metastatic cancers could be measured with imaging scans, five experienced tumor shrinkage by more than half, including one man whose cancer completely disappeared.

"Surprisingly, we saw PSA reductions in all of 10 men, including four whose PSA didn't change during

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the trial, who were given testosterone-blocking drugs after the testosterone treatment," says Denmeade. The scientists say these results suggest that testosterone therapy has the potential to reverse the resistance that eventually develops to testosterone-blocking drugs like enzalutamide.

Three of the study participants have died since the study began in 2010; the rest are still alive.

During the cycles of etoposide, many of the men experienced the usual side effects of chemotherapy, including nausea, fatigue, hair loss, swelling and low blood counts. In men receiving only the testosterone injection, however, side effects were rare among the men and usually low grade.

Denmeade says that more studies are being planned at Johns Hopkins and other hospitals.

"There has been a groundswell of interest in the idea of reversing resistance to androgen deprivation therapy. We have plenty of anecdotes and some evidence in this small study, but it's important to test it in larger groups of patients," he adds.

NETWORKING

The original and most valuable activity of the INFORMED PROSTATE CANCER SUPPORT GROUP is "networking". We share our experiences and information about prevention and treatment. We offer our support to men recently diagnosed as well as survivors at any stage. Networking with others for the good of all. Many aspects of prostate cancer are complex and confusing. But by sharing our knowledge and experiences we learn the best means of prevention as well as the latest treatments for survival of this disease. So bring your concerns and join us.

Please help us in our outreach efforts. Our speakers bureau consisting of Lyle LaRosh, Gene Van Vleet and George Johnson are available to speak to organizations of which you might be a member. Contact Gene 619-890-8447 or gene@ipcsg.org to coordinate.

Member and Director, John Tassi is the webmaster of our website and welcomes any suggestions to make our website simple and easy to navigate. Check out the Personal Experiences page and send us your story. Go to: http://ipcsg.org

Our brochure provides the group philosophy and explains our goals. Copies may be obtained at our meetings. Please pass them along to friends and contacts.

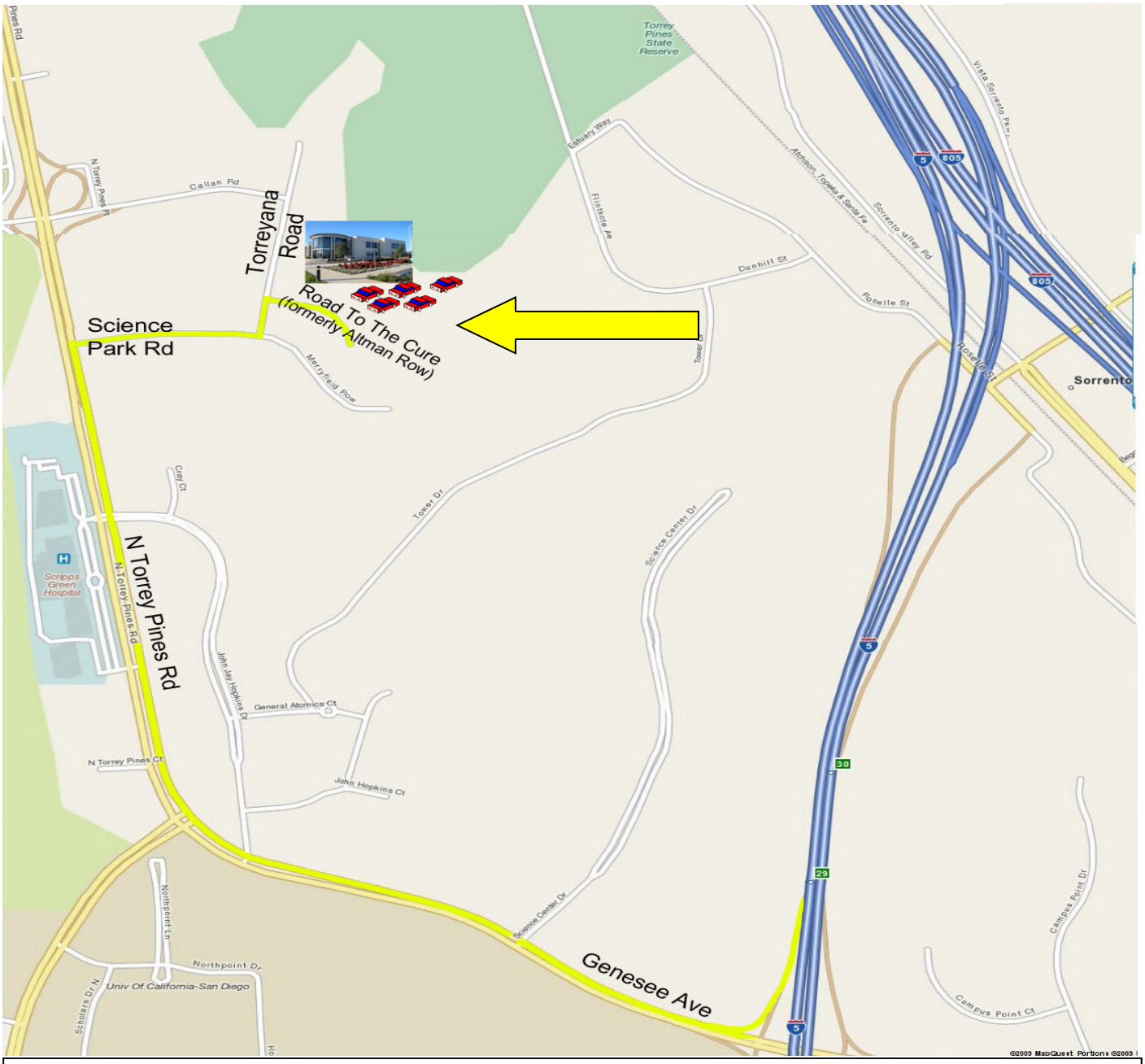
Ads about our Group are in the Union Tribune 2 times prior to a meeting. Watch for them!

FINANCES

We want to thank those of you who have made special donations to IPCSG. Remember that your gifts are tax deductible because we are a 501(c)(3) non-profit organization.

We again are reminding our members and friends to consider giving a large financial contribution to the IPCSG. This can include estate giving as well as giving in memory of a loved one. You can also have a distribution from your IRA made to our account. We need your support. We will, in turn, make contributions from our group to Prostate Cancer researchers and other groups as appropriate for a non-profit organization. Our group ID number is 54-2141691. Corporate donors are welcome!

If you have the internet you can contribute easily by going to our website, http://ipcsg.org and clicking on "Donate" Follow the instructions on that page. OR just mail a check to: IPCSG, P. O. Box 4201042, San Diego CA 92142



Directions to Sanford-Burnham Auditorium
10905 Road to the Cure, San Diego, CA 92121

Take I-5 (north or south) to the Genesee exit (west).
Follow Genesee up the hill, staying right.
Genesee rounds right onto North Torrey Pines Road.
Do not turn into the Sanford-Burnham Medical Institute or Fishman Auditorium
Turn right on Science Park Road.
Turn Left on Torreyana Road.
Turn Right on Road to the Cure (formerly Altman Row).