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

JUNE 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)

Tuesday, June 09, 2015 Volume 8 Issue 6

Next Meeting
JUNE 20 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.

Table of Contents

Pg.
#1 What We Are About
#1 Video DVD's
#1-2 Feb. Meeting Recap
#3 Future Meetings
#3,4 On the Lighter Side
#4-9 Noteworthy Articles
#9 Networking, Finances
#10 Directions and Map to Where We Meet

Editor: Gene Van Vleet

PROSTATE CANCER IT'S ONLY 2 WORDS NOT A SENTENCE

Our guest speaker for the May meeting was Dr. Ross Schwartzberg, Neuroradiologist from Imaging Healthcare Specialists, who spoke about multi-parametric MRI imaging and image guided biopsies.

He opened with examples of patients' Multi-Parametric MRI's (MP-MRI) scans which demonstrated its advantages in identifying and locating prostate cancer (PCa) tumors. He iterated, as we often do, that PCa is still the only cancer where it is not routine to get imaging before making treatment decisions. He is dedicating his efforts to develop

(Continued on page 2)

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.

The DVD of each meeting is available by the next meeting date.

(Continued from page 1)

imaging programs to help identify the extent of PCa involvement. Standard transrectal ultrasound (TRUS) biopsies detect less than 1% of the volume of the prostate gland. It may not be necessary to treat the whole gland when MP-MRI can help identify the extent of involvement.

He discussed the Tesla terminology. It relates to the size of the magnet used. A 3T magnet can develop a more clear image than a 1.5T magnet, but he believes it is better to develop the technology for the 1.5T magnet because of its lower cost and availability which can be more readily available to the community. He cited Dr. Feller at Desert Imaging in Palm Springs (Bernadette Greenwood spoke about this at our January 2015 meeting) and Dr. Russell Low of Sharp Children's and MRI center (he spoke to us March, 2014) as those that have highly developed techniques using a 1.5T magnet.

As compared to other organs such as the liver or kidneys, which all look the same under imaging, each prostate gland is different.

He demonstrated the MP-MRI advantages which combines:

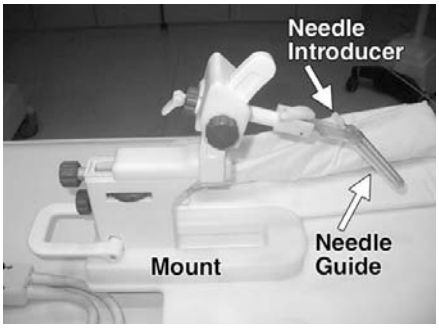
T2-Weighted Imaging which provides anatomic information about the prostate gland. It offers detailed visualizations of the prostate gland and its distinct zones.

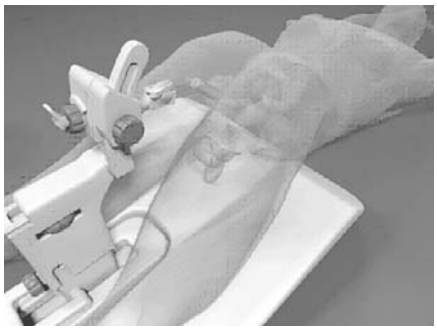
Diffusion-Weighted Imaging (DWI) measures the motion of water molecules within the prostate to provide useful functional data about cancers. This sequence produces an ADC value for different areas of the prostate gland. ADC values measure the degree of motion through different tissues. Lower ADC values appear in cancerous tissue than in healthy tissue. Also, ADC values correlate with Gleason scores, with lower ADC values indicating a higher Gleason score.

Dynamic Contrast Enhanced Imaging (DCE) uses a contrast agent to evaluate blood flow through the prostate. Cancerous tissue absorbs the contrast agent more quickly than healthy tissue, which is apparent in DCE images. The role of DCE imaging is secondary to T2-Weighted Imaging & DWI,, but it can help to detect small but significant cancers misses by the other two sequences.

By using the combined information provided by the MP-MRI, biopsies can be precisely guided to the suspicious areas. In random biopsies, important cancers are missed, some clinically significant cancers are identified by chance and some are undergraded because the needle doesn't exactly find the cancer. An MP-MRI guided biopsy is a better method to help locate and identify high-risk vs low-risk cancers.

The following are pictures of device used for MP-MRI guided biopsies and how it is placed in the patient:





In his practice, he does the MP-MRI image and the biopsy one day apart. An endorectal coil is not used in the MP-MRI. The cost is $575 and a referral is needed. Any doctor can provide a referral. He said he could provide doctors who will give a referral if you call him. He gave permission to provide his website and cell phone number. http://www.imaginghealthcare.com/ 858-945-8398.

As always, much more detail is available on the DVD which will be available by the next meeting date in the library or in our website: www.ipcsg.org/shop/

FUTURE MEETINGS

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

July 18th - Donna Hansel MD, PhD, Division Chief of Anatomic Pathology UCSD and an expert in genito-urinary pathology, will speak about the Gleason biopsy test.

Aug 15th - Not yet committed

Sep 19th - Franklin Gaylis, MD, FACS, Chief Scientific Officer, Genesis Healthcare Partners. Perspective on Active Surveillance and Genomics

Oct 17th - Not yet committed

Nov 21st - Richard Lam, M.D., Research Director, Prostate Oncology Specialists: Updates and recent treatment developments

December - No Meeting

ON THE LIGHTER SIDE

Real Headlines:

Include your Children when Baking Cookies
Iraqi Head Seeks Arms
Two Sisters Reunited after 18 Years in Checkout Counter
Astronaut Takes Blame for Gas in Spacecraft
March Planned For Next August
20-Year Friendship Ends at Altar

Just Thinkin'

What happens if you get scared half to death twice?
Taxation WITH representation isn't so hot, either!
Consciousness: that annoying time between naps.
It's lonely at the top, but you eat better.

"Its a perfectly good face, Sparhawk." "It covers the front of my head. What else can you expect from a face?" — David Eddings, The Diamond Throne

"Okay you guys, pair up in threes!" — Yogi Berra

(Continued on page 4)

(Continued from page 3)

"Why are there five syllables in the word "monosyllabic"?" — Steven Wright

Where lipstick is concerned, the important thing is not color, but to accept God's final word on where your lips end." — Jerry Seinfeld

"If you had to identify, in one word, the reason why the human race has not achieved, and never will achieve, its full potential, that word would be 'meetings." — Dave Barry

INTERESTING ARTICLES

Fewer Men Get PSA Cancer Test

From NewsMax Monday, 18 May 2015

Fewer American men are receiving prostate cancer screening in the wake of a national panel's conclusion that the test does men more harm than good, a new study finds.

What's more, primary care doctors appear to have broadly accepted the U.S. Preventive Services Task Force's (USPSTF) ruling that the harms of prostate screening outweigh the benefits, according to a second study.

Both studies are scheduled for presentation Sunday at the annual meeting of the American Urological Association in New Orleans.

The overall rate of PSA testing dropped 50 percent at primary care clinics operated by Oregon Health & Science University (OHSU) after the task force recommended against such screening, findings from the first study show.

The test measures blood levels of a protein called prostate-specific antigen (PSA). Elevated PSA levels can be an indication of prostate cancer.

The urologists behind these studies fear that the task force's recommendation will lead to more men dying of prostate cancer that could have been detected and treated.

"Primary care screening patterns have changed as a result of the USPSTF recommendation, and it's not changed in a good direction," said Dr. Ryan Werntz, a urologic surgeon and lead author of the Oregon study.

But Dr. Otis Brawley, chief medical officer for the American Cancer Society, believes the numbers reflect a positive trend -- more doctors taking to heart the potential harms that can come from prostate cancer screening.

"I see a movement away from large-scale, thoughtless screening to much more focused, thoughtful screening, with informed decision-making going on between doctor and patient," Brawley said.

The task force in May 2012 issued a final recommendation against using the PSA test to screen for prostate cancer.

Men with prostate cancer usually don't die from their cancer, the panel concluded. On the other hand, surgery or radiation therapy to treat prostate cancer can lead to impotence or incontinence, significantly harming a man's quality of life to cure a cancer that likely isn't life-threatening.

The task force's recommendation appears to have struck a nerve with primary care doctors who can make PSA screening a part of regular patient exams.

At OHSU-operated medical clinics, the rate of PSA screening in new patients 40 or older declined from 14 percent in the years prior to the task force recommendation to 7 percent in the years after, Werntz said.

The decline was most pronounced in men aged 50 to 70, with PSA screening dropping from about 19

(Continued on page 5)

(Continued from page 4)

percent to 8 percent. "These are the men that are most likely to benefit from screening, and there was a 56 percent decrease in their PSA screening rate," Werntz said.

However, no significant change in PSA testing occurred in men in their 40s or men older than 70, the researchers found.

Despite the controversy surrounding the task force recommendation, many Massachusetts doctors believe the panel made the right call, a survey found.

About 80 percent said they believe that routine PSA screening offers more harm than benefit to patients, said Dr. Jennifer Yates, lead author of the second study.

In addition, about one-third of the 73 physicians surveyed said PSA screening does not decrease a person's chances of dying from prostate cancer.

"I think that is very telling about how primary care doctors feel about prostate cancer screening," said Yates, who is an assistant professor of urology at the University of Massachusetts Medical School in Worcester.

Yates also found a lot of misunderstanding about the task force recommendation. A majority wrongly thought it also recommended against digital rectal exams for prostate cancer, and as a result more than one-third said they perform fewer rectal exams.

Yates said the USPSTF recommendation goes further than PSA testing guidelines issued by the American Urological Association and the American Cancer Society. Those groups note the concern over PSA testing, but suggest that doctors and patients talk about the pros and cons of prostate cancer screening and proceed from there.

"Urologists are concerned it will become a blanket application to all patients that they will not be screened at all, when what we want is a selective application targeted to specific patients," Yates said

---

New screening method for prostate cancer recurrence

From Medical Press, May 16, 2015

The American Cancer Society estimated that 220,800 new cases of prostate cancer will be diagnosed in the United States in 2015. Approximately 27,540 men will die of the disease, accounting for 5 percent of all cancer deaths.

A common treatment for prostate cancer is a prostatectomy, in which all or part of the prostate gland is removed. Recent studies have shown that this procedure is often over-prescribed. As early as 2010, the New England Journal of Medicine reported that such a procedure extended the lives of just 1 patient in 48. Side effects from the surgery, including urinary incontinence and impotence, can affect the quality of life of the patient.

"For every 20 surgery procedures to take out the prostate, it is estimated that only one life is saved," said Gabriel Popescu, director of the Quantitative Light Imaging Laboratory (QLI) and senior author on the study. "For the other 19 people, they would be better left alone, because with removing the prostate, the quality of life goes down dramatically. So if you had a tool that could tell which patient will actually be more likely to have a bad outcome, then you could more aggressively treat that case."

On a study funded by the National Science Foundation and Agilent Technologies, researchers employed spatial light interference microscopy (SLIM), a label-free method, to perform localized measurements of light scattering in prostatectomy tissue microarrays. The quantitative phase imaging (QPI) performed by the SLIM examines the anisotropy, or the difference in a material's physical properties, as light is scattered through the stroma, the tissue surrounding the prostate glands. The results can be found in

(Continued on page 6)

(Continued from page 5)

an article "Prediction of Prostate Cancer Recurrence using Quantitative Phase Imaging," published in Scientific Reports.

The researchers found that the higher value of anisotropy indicated that the tissue is more organized. A lower value indicated that the various components within the tissue are fragmented and disorganized.

"We found that for patients who had bad outcomes, the connective tissue around the glands (stroma) is more disorganized than in the case of patients who have better outcomes," said Shamira Sridharan, a graduate research assistant in the QLI Lab, and the lead author of the study.

"Among individuals who undergo prostatectomy, there are a few statistical tools that take various clinical parameters into consideration and then predict the risk for recurrence," said Sridharan. "But among people who are in the intermediate risk for recurrence, those methods often fail, so this might lead to under- or overtreatment. Clearly, more accurate tools are necessary for predicting recurrence among that cohort."

For example, says Sridharan, after a prostatectomy is performed, the tumor is graded by the pathologist and, in combination with other surgical parameters such as the surgical margin positivity, whether the cancer has invaded into the lymph nodes, extra-prostatic extensions, and PSA levels, a recurrence risk is assigned. However, some of this information is only available post-surgery. By examining the quality of the tissue surrounding the cancerous glands, the researchers believe they can determine progression of the disease at the pre-surgical, or biopsy stage.

The study of 181 tissue samples obtained from the National Cancer Institute-sponsored Cooperative Prostate Tissue Resource (CPCTR) were from individuals who had already undergone a prostatectomy, approximately half who had no recurrence and half who did. SLIM was able to identify those in which the cancer would reappear.

The study is the result of collaborative work between the QLI Lab and three board-certified pathologists: Drs. Andre Balla and Virgilia Macias from the University of Illinois at Chicago, and Dr. Krishnarao Tangella from Presence Covenant Medical Center in Urbana, Illinois.

"It is rather remarkable that the difference between cancers with bad outcomes and good outcomes is found not in the malignant cells, but in the tissue adjacent to the cancer. Possibly, this is because the body can recognize which tumors are more aggressive and react to them," said Balla.

An established method of screening for prostate cancer is the prostate-specific antigen (PSA) test.

"PSA is a very good tool in terms of predicting the recurrence of prostate cancer in an individual who's undergone a prostatectomy," said Sridharan. "But when PSA screening first started, there was a huge spike in the number of prostate cancer cases diagnosed. So if a screening tool is indeed good, you would see an initial spike, but after that the cases would level off. With PSA that leveling off never happened. The number of cases diagnosed remained high, so now the United States Preventative Task Force no longer recommends routine screening for PSA."

"Based on the PSA levels, many patients underwent a biopsy and prostatectomy," explained Popescu. "After prostatectomy serum PSA levels go to nearly zero because it is produced almost exclusively in the prostate. So PSA is great tool after prostatectomy in terms of predicting recurrence if the level starts to climb up again, indicating that the cancer has spread to other sites in the body. But in that pre-diagnosis stage, it's not particularly great because it can lead to over-diagnosis.

"The idea behind our method is that, if we can predict recurrence after prostatectomy, chances are we can predict recurrence at a biopsy level, before any radical surgery is performed.

"What SLIM is very good at is to make invisible objects visible with nanoscale sensitivity," said Popescu. "So we pick these structural details without the need for staining, which can introduce new vari-

(Continued on page 7)

(Continued from page 6)

ables into the specimen.

"Our dream is for everyone to have SLIM capabilities in their labs," said Popescu. "One can imagine that a SLIM-based tissue imager will scan biopsies in a clinic and, paired with software that is intelligent enough to look for these specific markers, will provide the pathologist with valuable new information. This additional information will translate into more accurate diagnosis and prognosis."

"SLIM has excellent potential to add value to the existing methods available to pathologists and improve the accuracy of prognosis," said Tangella.

To further that goal, the QLI is working with students based in the lab of Minh Do, a part-time faculty member in Image Formation and Processing at the Beckman Institute, to build software that will find patterns in the tissue that are relevant for diagnosis and prognosis.

"We are currently working diligently to validate these initial results on a variety of patient populations." said Balla.

"The next step is trying to help with patient treatment decisions and translating this to the biopsy, pre-surgery stage," said Sridharan. "This method is very promising and demonstrates the potential to help with determining who should undergo active surveillance versus surgical treatment."

Aggressive prostate cancer biomarker identified

From Medical News Today,14 April 2015

Researchers from the University of Michigan investigating bone formation have made a surprise discovery with the potential to be a breakthrough in the study of prostate cancer. The team has discovered a previously unidentified biomarker that could affect the diagnosis and treatment of the disease.

An image of the prostate gland.

The researchers first discovered the role of Runx2 in bone cells but then went on to find that it was also operative in prostate cancer cells.

The study, published in Oncogene, suggests that a protein called Runx2 whose function is to produce bone may also control the growth of prostate cells. This protein could provide a potential new target for anticancer drugs.

"If this biomarker does indeed control the growth of prostate cells, it's a new signal that's not been seen before and could provide a potential new drug target for prostate cancer," says study author Dr. Renny Franceschi. "It could also be a potential biomarker to discriminate between fast- and slow-growing tumors."

A biomarker is a characteristic that indicates the medical state of a patient as observed from outside the patient.

"[In the context of prostate cancer] there's a big interest in trying to find biomarkers to discriminate between aggressive and nonaggressive disease," explains Dr. Franceschi.

The speed at which prostate cancer grows can vary dramatically. Individuals with slow-growing prostate cancer can die of natural causes before their cancer begins to metastasize, whereas aggressive forms of the disease can spread very quickly indeed.

Although the American Cancer Society (ACS) estimate that around 27,540 people will die from prostate cancer in the US this year, they state that most men diagnosed with the disease do not die from it. Over 2.9 million men in the US who have been diagnosed with prostate cancer are still alive today.

Discovery made by researchers who usually study bone formation

The study represents a departure for Dr. Franceschi - a professor of dentistry, biological chemistry

(Continued on page 8)

(Continued from page 7)

and biomedical engineering - and his colleagues. Previously, the primary focus of their laboratory has been the study of signals regulating the formation and function of osteoblasts - cells that produce bone.

"We discovered this regulatory mechanism in bone cells, but subsequently found it was also operative in prostate cancer cells," he explains. "This is the first paper the lab has published on cancer."

Adding a phosphate group to Runx2, the researchers theorized, changes the protein's structure and activates specific genes in bone and prostate cancer cells. The process, referred to as phosphorylation, has different results in these different cells, however.

In bone cells, phosphorylation leads to the formation of healthy bone. Unusually, in prostate cancer cells, Runx2 and the newly activated genes promote the growth of tumors and the spreading of cancer. After inhibiting the ability of Runx2 to be phosphorylated in cancer cells, the researchers found that the rate of tumor growth was reduced.

The team then collaborated with researchers in Italy to examine tissue samples from 129 prostate cancer patients. They found little or no Runx2 phosphorylation in patients with normal prostate, benign prostate or prostatitis. This finding suggests that Runx2 phosphorylation is only associated with more aggressive forms of prostate cancer.

After this initial discovery, the team will now aim to expand on their observations and determine a causal relationship between Runx2 phosphorylation and prostate cancer. In order to do this, they will compare how prostate cancer develops in normal mice and mice lacking the Runx2 protein in their prostates.

Statin use linked with delayed progression of prostate cancer

From Medical News Today, Sunday 10 May 2015

According to a new study published in JAMA Oncology, men undergoing androgen deprivation therapy for prostate cancer had the disease progress less quickly if they were also using cholesterol-lowering statins.

Previous research has found that there may be a link between statin use and improved outcomes for prostate cancer.

Previous research has found that there may be a link between statin use and improved outcomes for prostate cancer. But researchers have not had much data on how outcome is affected by statins in combination with androgen deprivation therapy (ADT) - the "cornerstone" treatment for metastatic hormone-sensitive prostate cancer.

The researchers behind the study, from the Dana-Farber Cancer Institute in Boston, MA, investigated a transporter gene that allows various drugs and hormones to enter cells.

As well as being used by statins to enter cells, this gene - SLCO2B1 - is also used by the testosterone precursor dehydroepiandrosterone sulfate (DHEAS).

The Dana-Farber team wanted to find out whether statins would interfere with the ability of DHEAS to penetrate cells, and if so, whether this could delay resistance to ADT. To do this, the researchers analyzed statin use in 926 patients who initiated ADT for prostate cancer between 1996 and 2013.

Time to disease progression varied between statin users and non-users

They found that 31% of the participants were taking a statin when they began ADT. After 6 years, the disease progressed in 70% of the patients while they were receiving ADT.

The researchers then compared the median disease progression times of patients who had been taking statins with patients who had not been taking statins. They found that the median time to disease pro-

(Continued on page 9)

(Continued from page 8)

gression among statin users was longer at 27.5 months than it was for non-users at 17.4 months.

The authors write:

"Our in vitro finding that statins competitively reduce DHEAS uptake, thus effectively decreasing the available intratumoral androgen pool, affords a plausible mechanism to support the clinical observation of prolonged TTP [time to progression] in statin users."

Jorge D. Ramos and Dr. Evan Y. Yu, of University of Washington School of Medicine in Seattle, write in a related editorial that the study is a "compelling argument for a biologic mechanism of action of statins in advanced prostate cancer through competitive inhibition of the uptake of DHEAS via SLCO2B1-encoded transporters."

However, Ramos and Yu point out that "randomized, prospective validation of the clinical benefits of statin use in advanced prostate cancer is necessary" to confirm the findings.

While the current study provides a framework for future evaluation, Ramos and Yu conclude that "the current data are not sufficient to support incorporation of statin use into clinical oncology practice for patients with prostate cancer and additional studies are required."

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

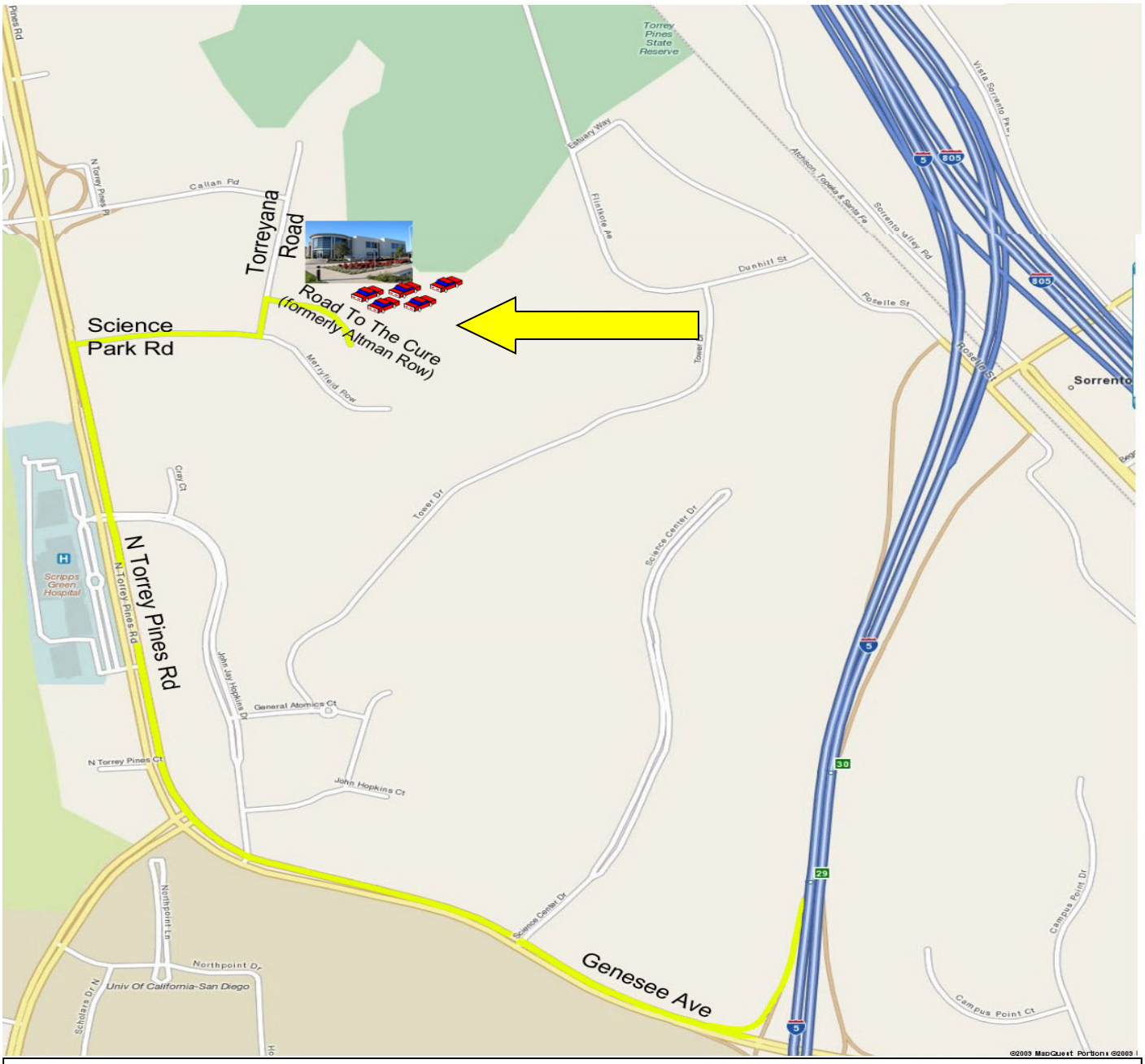
Our brochure provides the group philosophy and explains our goals. Copies may be obtained at our meetings. Please pass them along to friends and contacts.

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 <u>special donations</u> to IPCSG. Remember that your gifts are <u>tax deductible</u> 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. <u>Corporate donors are welcome!</u> If you have the internet you can contribute easily by going to our website, <u>http://ipcsg.org</u> 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).