Southwest Chapter News

AMERICAN MEDICAL WRITERS ASSOCIATION

July 2004

July Meeting

Charles Lloyd, PharmD, NASA Bioastronautics Education and Outreach Program

11:30 a.m. to 1:30 p.m., Saturday, July 31, 2004
Villa Capri restaurant, Clear Lake, Texas

In what has become a summer tradition, the Southwest Chapter of the American Medical Writers Association (AMWA) will meet for a luncheon presentation on Saturday, July 31, at Villa Capri restaurant in Clear Lake. Charles Lloyd, PharmD, the program manager for the NASA Bioastronautics Education and Outreach Program, will be the guest speaker.

Dr. Lloyd is excited to share with AMWA Southwest his knowledge of

- the human exploration of space;
- the NASA Bioastronautics program and its approach to mitigating the physiological challenges that space flight poses to humans;
- advances in space medicine;
- where space research is headed in the future; and
- the influence of science writers on small- and large-scale decision-making.

In his more than 15 years at NASA, Dr. Lloyd has served as the manager for medical operations for the International Space Station, deputy division chief in the Human Adaptation and Countermeasures Office, and manager of the Biomedical Research and Countermeasures Program, among other appointments. He has been awarded the NASA, Johnson Space Center Certificate of Commendation.

As program manager for the Bioastronautics Education and Outreach Program, Dr. Lloyd oversees the development of educational and outreach materials, workshops, conferences, and Web sites designed to teach people of all ages about the human life sciences. The major areas of emphasis are on all of the human physiologic disciplines, the spacecraft environment and human factors that influence the design and operation of space flight vehicles, and medical operations that support the health and safety of crewmembers. The overall mission of the program is to share the dreams and challenges of the human exploration of space and the benefits to life on earth.

Continued on page 2

July meeting to feature speaker from NASA

Continued from page 1

To register for this event, please RSVP via e-mail by Tuesday, July 27, to Natasha Calder at natasha.calder@cyberonics.com. Include your first and last name, address, and telephone number. In addition, please indicate whether registrants are AMWA members or nonmembers. Please be prepared to pay ($20 for members or $22 for nonmembers) by cash or check (payable to AMWA Southwest) at the door on the day of the event or mail your check to Natasha Calder at 4300 Bay Area Blvd, Apt. 2120, Houston TX 77058. Owing to the headcount guarantee required by the restaurant, no tentative registrations can be accepted. Payment will be required for each e-mail registration received.

Entrees may be selected on the day of the event. Choices include chicken marsala with pasta of the day, grilled fish with roasted potatoes al forno, rigatoni primavera with fresh vegetables (vegetarian), and lasagna.

Directions to Villa Capri: From I-45, take the NASA Road 1 exit and head east. After about 6 miles, you should see the Hilton hotel on your right. Villa Capri is about 2 miles past the Hilton, also on the right.

AMWA Southwest Chapter's 5th Annual Career Roundtables and Business Meeting a Success

More than 30 members and guests turned out for the fifth annual career roundtables discussion and business meeting at Baba Yega's restaurant in May. President Kate Ó Súilleabháin, MA, began the meeting by thanking the members for all of their contributions during her tenure as president and by recognizing one member in particular who has worked so hard for the chapter over the years as our treasurer—Chris Wogan. Chris was presented with a certificate of recognition as well as a gift certificate to Barnes and Noble. The winner of the third annual AMWA Southwest Chapter Scholarship for Biomedical Communication, Lubna Patrawala, also attended the May meeting and was awarded a certificate of recognition, $500, and a complimentary 1-year membership in AMWA. (Please see Lubna's winning essay on page 3.)

Following the presentations, the new chapter board members were voted into office. The new officers are Natasha Calder, president; Penny Logan, MS, president-elect/program chair; Hai Nguyen, assistant program chair; Chris Wogan, ELS, treasurer; Katie Matias, secretary; Dawn Chalaire, newsletter editor; and Lorraine Cherry, PhD, Tom Gegeny, MS, and Jane Krauhs, PhD, ELS, directors-at-large. (A complete list of officers, directors, and committee leaders can be found on page 5.)

As incoming president, Natasha Calder presented Kate with a plaque and gave her profound thanks for all of Kate's dedication and contributions to the Southwest Chapter over the years. After the

Continued on page 3

5th Annual Career Roundtables and Business Meeting a Success

Continued from page 2

business meeting and the award presentation, members and guests dined on a buffet-style meal of chicken marsala and vegetarian pasta. The leaders of the four roundtable topics began their discussions over dinner.

Back by popular demand this year, Tom Gegeny, director and editor at The Center for AIDS: Hope and Remembrance Project (CFA) of Houston, led a discussion on the principles of layout and design. Lorraine Cherry, PhD, a freelance medical writer, led a discussion on starting and running a freelance medical writing business. Joe Ensor, PhD, a research statistician at The University of Texas M. D. Anderson Cancer Center Department of Biostatistics, led a discussion on the common statistical mistakes/flaws in biomedical research and in biomedical publications. And Karen F. Phillips, ELS, scientific manager at M. D. Anderson Cancer Center and managing editor of the Journal of Clinical Ultrasound, led a discussion on designing and editing slides for effective presentations.

Winning Essay
2004 John P. McGovern Student Scholarship

Prospective Identification of Prostate Cancer Stem Cells

By Lubna Patrawala

Stem cells have long been known to play an important role in health and disease. Due to their ability to self-renew and their broad developmental potential, stem cells offer an unlimited source of replacement cells to treat a multitude of diseases including Alzheimer's disease, Parkinson's disease, spinal cord injuries, and diabetes (Tu et al, 2002). Additionally, parallels have been drawn between stem cells and cancer cells. Cancer cells, like stem cells, also self-renew and contain phenotypically diverse cells. For example, malignant gliomas are known to express glial, neuronal as well as neural stem cell markers in the same tumor (Reya et al, 2001). Similar observations in a diverse range of cancers lead to the notion that malignant tumors consist of a subset of cells that have the properties of stem cells. These cancer stem cells (CSC) have unlimited proliferation potential and can self-renew to generate additional CSC as well as more differentiated cancer cells with limited proliferation potential. CSC could theoretically arise from either a normal stem cell that is the target of tumorigenic transformation or from a more restricted progenitor cell or a mature cell that accumulates mutations conferring it with stem cell-like properties (Pardal et al, 2003).

The existence of CSC was first demonstrated in acute myeloid leukemia (AML), where surface markers were used to distinguish cancer stem cells from non-stem cancer cells (Bonnet and Dick, 1997). The defined CSC population was phenotypically similar to normal hematopoietic stem cells and only this subset was able to induce leukemia in immunodeficient mice, lending credence to the idea that only AML stem cells can give rise to a population of leukemia cells that lack the ability to proliferate extensively. This study was recently followed up with similar studies in breast cancer (Al-Hajj et al, 2003) and glioblastoma (Singh et al, 2003), where intrinsic differences among cancer cells were found in terms of their ability to proliferate and form tumors *in vivo.*

Continued on page 4

John P. McGovern Student Scholarship Winning Essay

Continued from page 3

Our research focuses on the prospective identification of putative CSC in prostate cancer, one of the major malignancies afflicting American males. In fact, several groups have reported the isolation of putative prostate stem cells, which also appear to have an extended proliferative capacity and broad developmental potential. Based on the above discussion, it seems reasonable to hypothesize that prostatic stem cells may represent the best targets for tumorigenic transformation and that prostate cancers must contain a small population of CSC, which are the only cells to have the tumor-initiating ability. The identification of CSC in solid tumors such as breast cancer is encouraging and perhaps demonstrates a common theme in the formation of cancer.

Indeed, we have several pieces of evidence supporting the prostate CSC hypothesis. Using the classical assays described for identification of CSC in other tissues, we have found that only a small population of prostate cancer cells obtained, both *in vivo* from tumors and *in vitro* from established cancer cell lines, have the ability to form clones and initiate spheres. These cells can be tracked using marker expression and unlike their nonstem counterparts, they can give rise to a tumor when transplanted into immunodeficient mice (Patrawala et al, unpublished results). Identification of this population has significant implications in designing therapeutic tools to help prostate cancer patients. Study of gene expression differences between the non-stem cancer cells and CSC will allow us to more effectively classify, diagnose and treat prostate cancer. Most importantly, as CSC are perhaps the only cells that have the ability to metastasize, prospective identification and molecular characterization of prostate CSC will allow us to specifically target pathways that are necessary for the maintenance of the CSC identity thereby hindering metastatic disease.

References

1. Al-Hajj, M., Wicha, M.S., Benito-Hernandez A., Morrison, S.J., and Clarke, M.F. Prospective identification of tumorigenic breast cancer cells. Proc. Natl. Acad. Sci. USA 100, 3983-3988, 2003.
2. Collins, A.T., Habib, F.K., Maitland, N.J., Neal, D.E. Identification and isolation of human prostate epithelial stem cells based on alpha(2)beta(1)-integrin expression. J. Cell Sci. 114, 3865-3872, 2001.
3. Hanahan, D., and Weinberg, R.A. Hallmarks of cancer. Cell 100, 57-70, 2000.
4. Isaacs, J.T. Control of cell proliferation and cell death in the normal and neoplastic prostate: a stem cell model. *In* Benign Prostatic Hyperplasia, Vol. 87-2881, 1984.
5. Pardal, R., Clarke, M.F., and Morrison, S.J. Applying the principles of stem-cell biology to cancer. Nature Reviews – Cancer, vol. 3, 895-902, 2003.
6. Reya, T., Morrison, S.J., Clarke, M.F., and Weissman, I.L. Stem cells, cancer, and cancer stem cells. Nature 414, 105-111, 2001.
7. Singh, S.K., Clarke, I.D., Terasaki, M., Bonn, V.E., Hawkins, C., Squire, J., and Dirks, P.B. Identification of a cancer stem cell in human brain tumors. Cancer Res. 63, 5821-5828, 2003.
8. Tu, S.M., Lin, S.W., and Logothesis, C.J. Stem-cell origin of metastasis and heterogeneity in solid tumors. Oncology 3, 508-513, 2002.

*This work is supported by grants from National Cancer Institute, American Cancer Society, Department of Defense, and Burroughs-Wellcome Fund.

AMWA Southwest Chapter News

Dawn Chalaire
441 12th S.E.
Paris, TX 75460

Phone: 903.784.1450
E-mail: dchalair@mdanderson.org

Southwest Chapter Officers and Directors, 2004-2005

Elected Officers

President
Natasha Calder
(281) 228-7519
natasha.calder@cyber-onics.com

Program Chair/President-Elect
Penny Logan, MS
(281) 863-3260
plogan@lexgen.com

Assistant Program Chair
Hai Nguyen
281-333-0190 ext. 37
hnguyen@futron.com

Past President
Kate Ó Súilleabháin, MA
Caitcinnor@aol.com

Treasurer
Chris Wogan, ELS
(713) 792-3160
cwogan@mdanderson.org

Secretary
Katie Matias
(713) 792-3158
kpmatias@mdanderson.org

Newsletter Editor
Dawn Chalaire
(903) 784-1450
dchalair@mdanderson.org

Web Site Manager
Ann Sutton
(713) 745-2205
asutton@mdanderson.org

Directors-at-Large

Crissy Chambers
CChambers@heart.thi.tmc.edu

Lorraine Cherry, PhD
(713) 868-1549
lcherry@netropolis.net

Thomas Gegeny, MS, ELS
(713) 527-8219
tom@centerforaids.org

Jane M. Krauhs, PhD, ELS
(281) 212-1470
jkrauhs@wylehou.com

Susan Madigan, RN
(713) 745-1205
smadigan@hal-pc.org

Regional Directors

Arkansas
Caroline Simmons
(501) 320-5048
SimmonsCarolineJ@uams.edu

Central Texas
Lori S. Brix
(512) 458-1191, ext. 16
brix@silentpartners.com

Dallas (North TX)
Melissa Weber
(214) 820-4754
melissa_a23@hotmail.com

Louisiana
Paula Zimlicki
(225) 231-5549, ext. 3523
mkt-pmz@womans.com

New Mexico
Janet Yagoda Shagam, PhD
(505) 298-2163
janetyagoda@nasw.org

Oklahoma
Lynne H. Smith
(405) 816-3805
lynne@hellersmith.com

Committees

Professional/Chapter Liaison
Jocelyn Williams
jwilliams@rpsionline.com

Membership/Publicity Chair
David Galloway
(713) 794-1106
dgallowa@mdanderson.org

Student Scholarship
Grace Darling
(214) 824-0154
darlingg@airmail.net

E-group Moderator
David Galloway
(713) 794-1106
dgallowa@mdanderson.org

McGovern Award
Pamela Paradis Tice, ELS(D)
(713) 798-3652
pptice@bcm.tmc.edu