

CURRICULUM VITAE

Name: Luciano Jose Megale Costa, M.D., Ph.D.

Office: Hematology/Oncology Division (843) 792-4271
Medical University of South Carolina
96 Jonathan Lucas Street - 903 CSB
Mail Stop Code 6350
Charleston, SC 29425

EDUCATION:

Medical Education: Universidade de Sao Paulo
Sao Paulo, Brazil
M.D.
1993 – 1998

Universidade de Sao Paulo
Sao Paulo, Brazil
Ph.D.
2003 – 2006
**Thesis: “Cell Signaling and Translation Initiation Complex
Modulation as Strategy in the Treatment of Renal Cell
Carcinoma”

Postgraduate Training: Universidade de Sao Paulo
Sao Paulo, Brazil
Residency – Internal Medicine
1993 – 2003

University of Colorado Health Sciences Center
Fellowship – Hematology and Medical Oncology
2003 – 2006

Mayo Clinic, Rochester, MN
Fellowship – Blood and Marrow Transplantation
2006 – 2007

Additional Training: AACR Workshop in Cancer Research
Aspen – Colorado
June 30, 2005 – July 6, 2005

FACULTY APPOINTMENTS:

Assistant Professor
Hematology and Medical Oncology
Medical University of South Carolina
Charleston, South Carolina
2008 –

EXPERIENCE/SERVICE:

Lecturer
Hematological Pathology
Sao Paulo University Medical School
Sao Paulo, Brazil
2003

Lecturer
Hematology
ABC Foundation School of Medicine
Sao Paulo, Brazil
2003

Chief Fellow
Hematology/Medical Oncology Fellowship Committee
University of Colorado
2005 – 2006

Member
Hematology and Medical Oncology Fellowship Committee
University of Colorado
2005 – 2006

Member
University of Colorado Cancer Center Protocol Review
And Monitoring Committee
2005 – 2006

BOARD CERTIFICATION:

ECFMG
Step 1 – June 1998
Step 1 – May 2006*
Step 2 – March 2002
Step 3 – February 2006
CSA – passed 21st February 2003

*Retaken in order to fulfill the license requirement in the state of Minnesota that all boards must be taken within 7 years.

LICENSURE:

Michigan (Active)
Minnesota (Active)
Colorado (Inactive)

PROFESSIONAL MEMERSHIPS/ACTIVITIES:

Member, American Society of Hematology

Member, American Society of Clinical Oncology

Member, American Society for Blood and Marrow Transplantation

Member, American Association of Cancer Research

RESEARCH ACTIVITIES:

A. Grants:

1. Travel Grant: American Society of Hematology; 2007
2. Seed Grant: University of Colorado Cancer Center; 2004; \$10,000 Project "EGFR in Renal Cell Carcinoma"
3. Post-Graduate Student Grant: National Research Council; 2003; R\$13,000/year
4. Student Investigator Award: Brazilian National Research Council; 1996 – 1998 R\$3100/year

B. Clinical Protocols:

1. **NCT00366145** A Phase III, Randomized, Double Blind, Placebo-controlled Study to Evaluate the Efficacy and Safety of Prochymal (ExVivo Cultured Adult Human Mesenchymal Stem Cells) Infusion for the Treatment of Steroid-refractory Acute GVHD. Site sub-investigator at Mayo Clinic, Rochester, MN.
2. **NCT00353301** Phase II single arm clinical trial to evaluate the efficacy and safety of the combination of Tarceva® (erlotinib hydrochloride) and Rapamune® (sirolimus) in the treatment of metastatic renal cell carcinoma (accruing). Sub-investigator in this PI initiated trial at University of Colorado Cancer Center.
3. **NCT00244764** A Phase II Study of GW786034 Using a Randomized Discontinuation Design in Subjects With Locally Recurrent or Metastatic Clear-Cell Carcinoma. Site sub-investigator at University of Colorado Cancer Center.
4. **NCT00083889** A Phase III, Randomized Study of SU011248 Versus Interferon-Alpha As First-Line Systemic Therapy for Patients with Metastatic Renal Cell

Carcinoma. Site sub-investigator at University of Colorado Cancer Center.

5. **NCT00111020** Open Label, Non-Comparative Treatment Protocol for the Use of Sorafenib in Patients with Advanced Renal Cell Carcinoma. Site sub-investigator at University of Colorado Cancer Center.
6. **NCT00117637** A Randomized, Open-Label, Multi-Center Phase II Study of First Line Treatment with BAY 43-9006 (Sorafenib) Versus Standard Treatment with Interferon Alpha-2a in Patients with Unresectable and/or Metastatic Renal Cell Carcinoma. Site sub-investigator at University of Colorado Cancer Center.
7. **NCT00130897** A SU011248 Treatment Protocol for Patients with Cytokine-Refractory Metastatic Renal Cell Carcinoma Who Are Ineligible For Participation in Other SU011248 Protocols and May Derive Benefit from Treatment with SU011248. Site sub-investigator at University of Colorado Cancer Center.
8. **NCT00073307** A Phase III Randomized Study of BAY 43-9006 in Patients with Unresectable and/or Metastatic Renal Cell Cancer. Site sub-investigator at University of Colorado Cancer Center.
9. **NCT00081614** A Phase II, Multicenter, Randomized, Double-Blind Clinical Trial to Evaluate the Efficacy and Safety of Tarceva (Erlotinib Hydrochloride) in Combination with Avastin (Bevacizumab) Versus Avastin Alone for Treatment of Metastatic Renal Cell Carcinoma. Site sub-investigator at University of Colorado Cancer Center.

PUBLICATIONS:

A. Articles in Peer – Reviewed Journals:

1. **Costa L.J.**, Micallef I.N, Inwards D.J, Johnston P.B., Porrata L.F., Litzow M.R., Ansell S.M. Effect of the dose per body weight of conditioning chemotherapy on severity of mucositis and risk of relapse after autologous haematopoietic stem cell transplantation in relapsed DLBCL. Br J Haematol (accepted)
2. **Costa L.J.**, Rodriguez V., Porrata L.F., Lacy M.Q., Elliot M.A., Gertz M.A., Gastineau D.A., Litzow M.R. Autologous HSC transplant in t-MDS/AML using cells harvested prior to the development of the secondary malignancy. Bone Marrow Transplant (accepted) 2008
3. **Costa L.J.**, Feldman A.L., Micallef I.N, Inwards D.J, Johnston P.B., Ansell S.M. Germinal center B cell and non-germinal center B cell-like DLBCL have similar outcome following autologous HSC transplantation. Br J Haematol (accepted)
4. **Costa L.J.**, Micallef I.N, Inwards D.J, Johnston P.B., Porrata L.F., Ansell S.M. Time of relapse after initial therapy significantly adds to the prognostic value of the IPI-R in patients with relapsed DLBCL undergoing autologous stem cell transplantation. Bone Marrow Transplant 41:715-20, 2008.

5. **Costa L.J.**, Drabkin H. Renal Cell Carcinoma: New developments in molecular biology and potential for targeted therapies. *Oncologist* 12:1404-15, 2007.
6. Ballonoff A., Kavanagh B., Nash R., Drabkin H., Trotter J., **Costa L.**, Rabinovitch R.. Hodgkin lymphoma-related vanishing bile duct syndrome and idiopathic cholestasis: Statistical analysis of all published cases and literature review. *Acta Oncol* 2007 (in press)
7. **Costa L.J.**, Gemmill R.M., Drabkin H.A. Upstream signaling inhibition enhances the rapamycin effect on growth of Kidney Cancer Cells. *Urology* 69:596-602, 2007.
8. **Costa L.J.** Aspects of mTOR biology and the use of mTOR inhibitors in non-Hodgkin's lymphoma. *Cancer Treat Rev* 33:78-84, 2007.
9. Xavier A.C., Marshall C., La Rosa FG, **Costa L.J.**, Drabkin H., Crawford E.D. Woman with a papillary pulmonary lesion and a complex renal cyst. *Oncology (Williston Park)* 20:1437-1443, 2006
10. Gemmill R.M., Zhou M., **Costa L.J.**, Korch C., Bukowski R.M., Drabkin H. Synergistic Growth Inhibition by Iressa and Rapamycin Is Modulated by VHL Mutations in Renal Cell Carcinoma. *Br J Cancer* 92:2266-2277, 2005
11. Xavier A.C., Siqueira S.A., **Costa L.J.**, Mauad T., Saldiva P.H.. Missed diagnosis in hematological patients - an autopsy study. *Virchows Arch.* 446:225-231, 2005
12. Samano E..S, Ribeiro L.M., Campos A.S., Lewin .F, Filho E.S., Goldenstein P.T., **Costa L.J.**, del Giglio A. Use of complementary and alternative medicine by Brazilian oncologists. *Eur J Cancer Care (Engl)*14:143-148, 2005.
13. del Giglio A., **Costa L.J.** The quality of randomized controlled trials may be better than assumed. *BMJ* 328:24-25, 2004
14. **Costa L.J.**, Xavier A.C., del Giglio A.. "Negative" results in cancer clinical trials – equivalence or poor accrual ?. *Control Clin Trials* 25:525-533, 2004
15. Fonseca F.L., SantAna A.V., Bendit I., Arias V., **Costa L.J.**, Pinhal A.A., del Gilgio A. Systemic chemotherapy induces microsatellite instability in the peripheral blood mononuclear cells of breast cancer patients. *Breast Cancer Res*, 7:R28-R32, 2004
16. Megale **Costa L.J.**, Soares H.P., Gaspar H.A., Trujillo L.G., Santi P.X., Pereira R.S., de Santana T.L., Pinto F.N., del Giglio A. Ratio between positive lymph nodes and total dissected axillaries lymph nodes as an independent prognostic factor for disease-free survival in patients with breast cancer. *Am J Clin Oncol.*27:304-306, 2004
17. **Costa L.J.**, Gallafrio C.T., Franca F.O., del Giglio A. Simultaneous occurrence of Hodgkin disease and tuberculosis: report of three cases. *South Med J.* 97:696-698,

2004

18. **Costa L.J.**, Varella P.C., Del Giglio A. White coat effect in breast cancer patients undergoing chemotherapy. *Eur J Cancer Care* 12:372-373, 2003
19. **Costa L.J.M.**, Varella P.C.S., Giglio A. Weight changes during chemotherapy for breast cancer. *São Paulo Med J* 120:113-117, 2002
20. **Costa L.J.M.**, Giglio A. Manejo da leucemia mielóide crônica (Management of chronic myelocytic leukemia). *Rev Soc Bras Oncol Clin* 1:45-52, 1999
21. Giglio A., **Costa L.J.M.**, Pinczowski H., Varella P.C.S., Luzzi J.R., Neves P. Mota A., Boente P., Sampaio C. Pilot study of the combination of Melphalan, Carboplatin and Etoposide as a conditioning regimen for relapsed lymphoma patients. *Acta Haematol* 102:56-58, 1999
22. **Costa L.J.M.**, Varella P.C.S., Auro del Giglio A Utilização de anticorpos monoclonais em oncologia (The role of monoclonal antibodies in oncology). *Rev Soc Bras Cancerol* 2:32-39, 1998
23. **Costa L.J.M.**; Varella P.C.S.; Arias V.; Auro del Giglio. Síndrome de Sjögren e Linfoma Não Hodgkin: Apresentação de um caso e revisão da literatura. (Sjögren syndrome and non-Hodgkin lymphoma: report of a case and review of the literature). *Bol. Hematol* 9:6-9, 1998
24. **Costa L.J.M.**; Varella P.C.S.; Auro del Giglio. Câncer de Primário desconhecido: uma abordagem para o clínico (Cancer of unknown primary site: an approach for internists) *Rev Bras Clin Terap* 24:77-83, 1998
25. del Giglio A.; Pinczowski H.; Feher O.; Varella P.C.S.; Dimambro I.A.; Luzzi J.R.; Neves P.A.; **Costa L.J.M.**. Quimioterapia de altas doses e transplante autólogo de medua óssea no tratamento de câncer de mama: Revisão da literatura e experiência preliminar do grupo de quimioterapia de altas doses do Hospital Samaritano (High dose chemotherapy and autologous bone marrow transplantation on the treatment of breast cancer: review of the literature and preliminar results from the Samaritan Hospital high dose chemotherapy group). *Rev Bras Mastol* 7:75-82, 1997
26. Blunk V, Bueno L.M., Nicoletti A.G.B, Gasparini F.F, Guedes K.F., Pico K.A., **Costa L.J.M.**, Kanda J.L., Nívola A.C., Giglio A., Zatta S.M., Gertner S.K. Quimioterapia em tumores de cabeça e pescoço (Chemotherapy for head and neck cancer). *Arq Med ABC* 1:2-6, 1997
27. Chaib E.; Bertevello P.; Pinto F.C.G.; Ferreira C.E.H.; Nagahama C.I.; Cahali R.B.; Beer I.; Perini M.V.; Xavier A.C.G.; **Costa L.J.M.** Principais variações do sistema biliar extra-hepático e sua aplicação na técnica de transplante de fígado chamada "split-liver" (Study of the hepatic duct system for application of the split-liver transplantation technique); *Rev Hosp Clin Fac Med S Paulo* 50(6):311-313, 1995

B. Abstracts:

1. **Costa L.J.M.**, Sharma G., Gemmill R.M., Drabkin H. The combination of sorafenib and vorinostat causes synergistic growth inhibition in kidney cancer cells. American Society of Clinical Oncology Genitourinary Cancers Symposium abstract 402, 2008.
2. **Costa L.J.**, Feldman A.L., Micallef I.N, Inwards D.J, Johnston P.B., Ansell S.M. Germinal center B Cell and non-germinal center B cell-like DLBCL have similar clinical features at the time of progression and comparable outcome following autologous HSC transplantation.. American Society of Hematology 49th annual meeting. Blood 110:1901, 2007
3. **Costa L.J.**, Micallef I.N, Inwards D.J, Johnston P.B., Ansell S.M. A Higher Ratio of Dose to actual weight of conditioning chemotherapy leads to more toxicity without improvement in outcome in autologous HSC transplant for DLBCL. American Society of Hematology 49th annual meeting. Blood 110:3017, 2007
4. **Costa L.J.**, Rodriguez V., Porrata L.F., Lacy M.Q., Elliott M.A., Tefferi A., Lust J.A., Letendre L., Colgan J.P., Gertz M.A., Gastineau D.A., Litzow M.R. Experience with autologous HSC transplant in therapy-related MDS/AML using cells harvested prior to the development of the secondary malignancy. American Society of Hematology 49th annual meeting. Blood 110:5099, 2007
5. **Costa L.J.**, Micallef I.N, Inwards D.J, Johnston P.B., Ansell S.M. Time of relapse after initial therapy significantly adds to the prognostic value of the IPI-R in patients with relapsed DLBCL undergoing autologous HSC transplantation. American Society of Hematology 49th annual meeting.. Blood 110:1897, 2007
6. **Costa L.J.**, Kumar S., Dispenzieri A, Hayman SE, Buadi FK, Litzow M.R., Gertz M.A., Lacy M.Q. Allogeneic HSC transplantation for multiple myeloma: A single institution experience.. American Society of Hematology 49th annual meeting. Blood 110:3036, 2007
7. Flaig T.W., Breaker K., Crighton F., Schultz M., **Costa L.J.**, Kim F., Drabkin H.A. The combination of Tarceva and Rapamune in the treatment of advanced renal cell carcinoma: Interim safety and tolerability assessment. V International Kidney Cancer Symposium, 2007.
8. **Costa L.J.**, Gonzalez M., Breaker K., Ellis K., Crighton F., Kim F., Drabkin H.A. Sunitinib malate has activity in advanced RCC previously treated with sorafenib. IV International Kidney Cancer Symposium, 2006.
9. **Costa L.J.M.**, Gemmill R.M., Drabkin H. Preclinical analysis of rapamycin plus EGFR or MEK1/2 inhibitors in renal cell carcinoma (RCC). American Association of Cancer Research annual meeting, 2006.

10. Del Giglio A., Fonseca F.L.A., Santana A., Pinhal M.A.S., Bendit I, **Costa L.J.M.**, Arias V. Microsatellite instability (MSI) and loss of heterozigocidade (LOH) in the peripheral blood mononuclear cells (PBMC) of breast cancer (BC) patients receiving systemic chemotherapy. American Society of Clinical Oncology 40th annual meeting. J Clin Oncol, 22(14S):9628, 2004
11. Tibana Samano E.S., Del Giglio A., Ribeiro L.M., Campos A. S., Lewin F, Valesin Filho E. S., Goldenstein P.T., **Costa L.J.M.** Use of complementary/alternative medicine by Brazilian oncologists. American Society of Clinical Oncology 40th annual meeting. J Clin Oncol 22(14S):8196, 2004
12. Pasqualucci C.A.; **Costa L.J.M.**; Lage S.G. Histometric study of vasa vasorum remodeling in ascending aorta. Eur Heart Jour. 19:36 P418, 1998
13. **Costa L.J.M.**; Caldini, E.G.; Santarém, J.M.; Pasqualucci, C.A Quantificação de colágeno no miocárdio de ratos de diferentes faixas etárias submetidos a exercício aeróbio e anaeróbio (Quantification of collagen in mice myocardium after aerobic and anaerobic activity at different ages). Resumos do IV Simpósio de Iniciação Científica da Universidade de São Paulo, p.237, 1996.
14. **Costa L.J.M.**; Pasqualucci C.A. Ruptura de aorta torácica e hipertensão arterial sistêmica: estudo da remodelação vascular dos vasa vasorum (Rupture of the thoracic aorta and systemic hypertension: study of vasa vasorum remodeling). Resumos do V Simpósio de Iniciação Científica da Universidade de São Paulo, p.221, 1997.
15. Del Giglio A, Pinczowski H.; Feher O.; Varella P.C.S.; Dimambro I.A.; Luzzi J.R.; Neves P.A.; **Costa L.J.M.** High dose chemotherapy (HDC) for metastatic breast cancer(MBC). Preliminary experience of Hospital Samaritano de São Paulo (HSSP) high dose chemotherapy group. Proceedings Convenção Latino Americana da European School of Oncology (ESO) 15:A24, 1997
16. Del Giglio A, Pinczowski H.; Feher O.; Varella P.C.S.; Dimambro I.A.; Luzzi J.R.; Neves P.A.; **Costa L.J.M.** Altas doses de quimioterapia (ADQT) para câncer de mama metastático (CMM): experiência preliminar do grupo de altas doses de quimioterapias do hospital samaritano de São Paulo (HSSP) (High dose chemotherapy (HDC) for metastatic breast cancer(MBC). Preliminary experience of Hospital Samaritano de São Paulo (HSSP) high dose chemotherapy group). Resumos IV Congresso Brasileiro de Oncologia Clínica 58, 1997
17. Pasqualucci C.A.; **Costa L.J.M.** ;Lage S.G. Estudo da remodelação de vasa vasorum na dissecação de aorta ascendente associada à hipertensão arterial sistêmica (Study of vasa vasorum remodeling in ascending aorta dissection related to high blood pressure). Resumos da XIII Reunião Anual da Federação das Sociedades de Biologia Experimental, 1998

18. **Costa, L.J.M.**, Lage S.G., Pasqualucci C.A Associação entre hipertensão arterial sistêmica e dissecção aguda de aorta: contribuição ao conhecimento fisiopatológico (Association between high blood pressure and acute aortic dissection: contribution on understanding of the pathophysiology). Resumos do II Congresso Paulista de Clínica Médica, 1998
19. **Costa L.J.M.**; Varella P.C.S.; del Giglio A. Utilização de anticorpos monoclonais no tratamento de linfoma não-Hodgkin-B de baixo grau recidivado (LNH-B) com expressão de CD20: experiência preliminar em 3 casos (Use of monoclonal antibodies in relapsed low-grade B cell lymphomas with CD 20 expression: preliminary results in three cases). Resumos do II Congresso Paulista de Clínica Médica, 1998

C. Book Chapters:

1. Gemmil R.M., **Costa L.J.**, Medeiros B., Drabkin H. Molecular pathogenesis of renal cancer and related treatment aspects. In diseases of the kidney and urinary tract. Schrier R.W. eds. 8th edition, 2005 .
2. **Costa L.J.**, Kane M. Chemotherapy for head and neck cancer. In ENT secrets. Jafek B.W., Murrow B.W. eds. 3rd edition, 2005.
3. **Costa L.J.M.**, Giglio A. Marcadores moleculares em oncologia (Molecular markers in oncology). In Oncologia Clínica. Brentani M eds., 2003.
4. **Costa L.J.M.**, Giglio A. Quimioterapia em tumores de cabeça e pescoço (Chemotherapy for head and neck cancer). In Manual do residente de cirurgia de cabeça e pescoço. Vergilius J.F. Araújo Filho, Lenine Garcia Brandão, Alberto R. Ferraz eds. São Paulo, Keila & Rosenfeld, 1999.

EDITORIAL AND REVIEW ACTIVITIES:

A. Reviewer

Contemporary Clinical Trials.

Biologics: Targets and Therapy

World Journal of Urology

Cancer Letters

TEACHING:

A. Medical Students

University of Colorado School of Medicine. Hematology; 2005 and 2006.

University of Colorado School of Medicine. Oncology; 2006.

Sao Paulo University Medical School. Sao Paulo, Brazil. Hematopathology, 2003.

ABC Foundation School of Medicine. Sao Paulo, Brazil. Hematology, 2003

B. Residents

Regular lectures for internal medicine residents in leukemia and blood and marrow transplantation. University of Colorado, 2004-2006.

C. Lectures

Mayo Clinic blood and marrow transplantation curriculum. High-dose chemotherapy with hematopoietic stem cell support in Germ Cell Tumors. 2007

Mayo Clinic blood and marrow transplantation curriculum. Current status of transplantation or chronic myelogenous leukemia. 2007

Mayo Clinic blood and marrow transplantation curriculum. Veno-occlusive disease. 2007

Mayo Clinic blood and marrow transplantation curriculum. Transplantation in normal karyotype acute myelogenous leukemia. 2007

Mayo Clinic blood and marrow transplantation curriculum. Acute graft-versus-host disease. 2007

University of Colorado, Division of Medical Oncology Grand Rounds. Normal Karyotype AML. What is coming out of the black box? 2006

University of Colorado, Division of Medical Oncology Grand Rounds. Aspects of mTOR biology. Growth, Translation and Cancer Therapy; 2006

University of Colorado Hematological Malignancies Conference. Early Hodgkin lymphoma; 2006

University of Colorado, Division of Medical Oncology. NF-kB in Kidney Cancer; 2005

University of Colorado, Division of Medical Oncology. Marginal zone B cell lymphoma; 2005

University of Colorado, Division of Medical Oncology. Interpreting cancer literature. What do the negative studies really mean? 2004

University of Colorado Kidney Cancer Support Group. Update on treatment of kidney cancer; 2006.

Leukemia and Lymphoma Society support group; Denver, CO. Waldenström's macroglobulinemia; 2006

University of Colorado Kidney Cancer Support Group. Image techniques in kidney cancer; 2005.

Pouso Alegre School of Medicine. Introduction to study and practice of oncology. Pouso Alegre, Brazil; 2002.

D. Other

Preceptorship in Kidney Cancer. University of Colorado. Cell signaling in kidney cancer; 2005.

USMLE preparatory course- Sao Paulo, Brazil. Immunology, microbiology, pathology and internal medicine, 1999-2002.