

Personal

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Profile

- More than 25 years of successful management experience in global large and small biotech/pharma in biologics product development
- Drug development expertise includes antibodies, cell and gene therapies and small molecules for oncology, genetic diseases and immunotherapy
- Experienced in translating product concepts into clinical trials: >15 INDs; >20 Phase I-III clinical trials (US, Europe, Russia, Japan)
- Corporate responsibilities included: development planning, building and managing scientific and CMC teams, biomarker development, intellectual property and budget management: involved in raising >\$300M; 2 IPOs
- Served in executive management roles (CSO, Senior Vice President, Vice President) and as company director
- Managed teams of up to 35; budgetary responsibility of \$20M+/year
- Managed pharma collaborations: RPR/ Aventis, Colgate-Palmolive, Chiron, Bayer, Green Cross/ Mitsubishi, SiRNA/ Merck, Ziopharm, Oncolys etc.; member of Joint Steering Committees
- Adjunct Faculty member in Dept. Experimental Therapeutics at MD Anderson Cancer Center; published >120 scientific manuscripts
- Special Advisor to the Chief Scientific Officer of the MDACC Moonshots
- Consultant for academic centers, biopharma, investment banks

Education

- 2007** **Jesse H. Jones Graduate School of Management, Rice University,**
Life Sciences Entrepreneurship Certificate Program
- 1989** **University of Massachusetts Medical School, Worcester, MA**
Ph.D., Department of Molecular Genetics and Microbiology
- 1985** **University of California at Los Angeles, Los Angeles, CA**
M.S., Molecular Biology Institute
- 1982** **Kings College, University of London, United Kingdom**
B.Sc. (honors), Department of Cell and Molecular Biology

Career Summary

2011 – present

MultiVir Inc.

Chief Scientific Officer

MultiVir uses multiple vector platforms (Adenovirus, vaccinia, HSV, retrovirus) to deliver immunotherapies and tumor suppressor genes in combination with checkpoint inhibitors; currently has 3 INDs approved by FDA. Responsibilities include CMC and FDA interactions, scientific management, biomarker identification, manufacturing contracts and IP development

DNASolve Biopharma Consulting

Principal

Consulting on: IND/ program management/ product development plans and operations; gene and cellular engineering for CARs and TCRs; CMC/ process development/ release assays/regulatory document authoring/ review, oncology drug development, immunotherapy, nanoparticles, antibody drug conjugates and drug delivery for companies and major academic centers

2008 – 2011

Intrexon Corporation, Germantown MD

Senior Vice President, Translational Medicine

Senior Vice President, Clinical Research and Development

Developed Intrexon's first two drugs (currently in Phase II trials) and built drug/ technology pipeline; led to many corporate collaborations

1997 – 2008

Introgen Therapeutics, Houston TX

Introgen Research Institute

Vice President, Research

Associate VP, Clinical Research

Director of Research and Development

Built drug pipeline leading to new clinical candidates (Phase I-III)

2002 – 2006

MD Anderson Cancer Center, Houston TX

Adjunct Faculty, Division of Cancer Medicine

1995 -1997

Chiron Corporation, Emeryville CA

Staff Scientist

1988 - 1995 **Viagene Inc., San Diego CA**
Senior Scientist,
Research Scientist II
Research Scientist I

Professional Experience

2011 – current **MultiVir / DNASolve Consulting**

- Chief Scientific Officer for MultiVir (part-time)
- Manage viral product manufacture, release- and stability-testing at CMO to ensure drug supply for 3 clinical trials
- Manage non-clinical studies to enable new IND filings
- Identified novel biomarker-discussed development plan with CBER and CDRH
- Manage RAC and FDA CMC and non-clinical filings
- Consulting practice for multiple T cell engineering companies (CAR-T and TCR)
- Developed project and staffing plans for engineered T- cell products
- Completed process development and tech transfer to cGMP laboratory
- Developed assays and release criteria for retrovirus, lentivirus and engineered T cell products
- Developed and staffed Project Management function at MD Anderson Cancer Center (MDACC) for Moonshots program (8 Project Managers)
- Co-ordinated budgets, timelines and scientific deliverables across 8 disease site programs in MDACC Moonshots program

2008 – 2011 **Intrexon Corp.**

- Responsibilities included: Translational Medicine, Clinical Research, Regulatory Affairs and CMC. Budgetary responsibility \$15-20+M/ year
- Assembled Early Clinical Research and Translational Medicine programs (>30 scientists) for oncology, immunotherapy, cell engineering and hemophilia

- Completed Preclinical studies and initiated first two company clinical trials using engineered immune cells and Adenovirus administration of IL-12
- Evaluated IL-12 immunotherapy products in metastatic melanoma patients
- Identified clinical biomarkers to define activity of IL-12-based therapies
- Developed pipeline and two additional drug candidates for clinical translation; resulted in three corporate partnerships
- Served on partnership Joint Steering Committee
- Conducted business and technical analyses of business opportunities; provided strategic direction to R&D group; responsible for multiple sites
- Established metrics for transitioning drug candidates into clinical trials

1997 – 2008 Introgen Therapeutics

- Responsible for molecular pharmacology and clinical research (Phase I-III) in trials for melanoma, lung, breast, esophageal cancers and SCCHN
- Discovered molecular biomarker to identify patients responding to ADVEXIN® using integrated proteomics and genomics approaches
- Developed first gene therapy drug for rare familial cancer (Li Fraumeni syndrome); submitted IND in USA and Europe
- Designed and authored biomarker, PK and PD reports for BLA and EMEA filings
- Managed internal Research team and extramural team (> 30 researchers)
- Developed INGN 241 (IL-24) anti-cancer program: in-licensed as Discovery project in 1998; managed program up to Phase III trials.
- Established and coordinated Project Teams, encompassing research/ development/ quality/ regulatory/ clinical
- Developed INGN 225 Immunotherapy Program using p53-expressing dendritic cells – Phase I/II trial in SCLC; Phase I/II trial in breast cancer; Randomized Phase II trial in ES-SCLC with PI at Moffitt Cancer Center
- Responsible for FUS1 nanoparticle program – first systemic nanoparticle clinical trial for lung cancer

- Support ADVEXIN clinical program in Phase II and III trials; developed potency, clinical pharmacology, biomarker and release assays
- Presented at FDA, EMEA and Recombinant DNA Advisory Committee meetings
- Integrated molecular pharmacology and diagnostics into development programs
- Managed programs with RPR/ Aventis; Colgate-Palmolive; VirRx etc.
- Established novel strategic alliances (industrial and academic)
- Manage Scientific Advisory Board and KOLs

1988 – 1997 Chiron Corp. (acquired Viagene Inc.)

- Project Manager for two clinical research programs: (i) the first clinical trial evaluating stem cells transduced with ribozymes as anti-HIV therapeutics (with RPI, currently in Phase II trials) and (ii) the second program evaluated intracellular antibodies against HIV (with Dana Farber Cancer Institute and VRI).
- Development of immunotherapeutics against HIV-1, HBV, HCV, CMV and HSV
- Management of Collaborative Programs Research Group
- Developed rheumatoid arthritis program at Chiron
- Established *in vivo* gene delivery technologies and models for immune stimulation
- Development of surrogate assays for clinical endpoints for immunotherapeutics

Invited Speaker

- iSBTc Biologics Development Meeting, February 2008
- ISCGT Meeting, Mumbai, India, November 2007 (Chairman)
- ISCGT Meeting, Chiba, Japan, October 2006 (co-chair)
- ISCGT Meeting, Shenzhen China, December 2005 (co-chair)
- American Society for Gene Therapy, 2002 - 2008
- International Conference on Gene Therapy of Cancer, San Diego CA, 2001-2007
- Vaccines Meeting, London, 2002

- AACR, San Francisco, 2002; 2005
- University of California at Los Angeles, 1999; 2001
- International Workshop on IL-10, Berlin, Germany, 2001
- Grand Rounds, MD Anderson Cancer Center, Houston, TX: 2001, 2004, 2006
- European Society of Gene Therapy Meeting, Stockholm, Sweden, 2000
- European Society of Gene Therapy Meeting, Munich, Germany, 1999
- Mayo Clinic: Viral Vectors Symposium, 1999
- Karolinska Institute, Stockholm, Sweden, 1998
- Molecular Therapies Meeting, Trieste, Italy, 1996
- National Cancer Institute, 1994, 1995, 1996
- Glutathione Centennial, Osaka, Japan, 1989 (co-chair)

Consulting/Advisory Committees

- Texas Emerging Technology Fund - RCIC Review Committee Member
- CPRIT Commercialization Committee (invited when I lived in MD)
- MD Anderson Cancer Center - Adjunct Faculty, Dept. of Exp. Therapeutics
- Rice University – Advisory Board for NIH and NSF Biotechnology Training Programs
- National Cancer Institute – SBIR/ STTR Grant Reviewer (since 2000)
- National Cancer Institute – RAID (Rapid Access to Interventional Development) Committee member
- National Cancer Institute - Cancer Chemoprevention (ad hoc member)
- Alliance for Cancer Gene Therapy (private philanthropic organization) – Reviewer
- Advisor/ reviewer for Dutch and Italian Government National Cancer Institutes
- Editorial Board: *Molecular Therapy*; *Frontiers in Bioscience*; *Cancer Gene Therapy*
- Reviewer for numerous journals including: *Cancer Research*, *Oncogene*, *Clinical Cancer Research*, *Molecular Therapy*, *Gene Therapy*, *Human Gene Therapy*,

Arthritis and Rheumatism, Journal of Gene Medicine, Cell Proliferation, Acta Sinica etc.

Grants Awarded/Pending

1. **Chada S** and Jolly D. "Trans-activation-based HIV-1 detection assay". SBIR Grant R43 AI31295-01 (Funded 1990, Total: \$100,000). Role: co-investigator
2. **Chada S** and Newburger PE. "Generation of stable VSV-G retroviral producer cells." STTR Grant 1R41DK50490-01 (Funded 07/95, Total: \$100,000). Role: PI
3. Firestein G and **Chada S**. "Gene Therapy for Rheumatoid Arthritis" STAR Grant (Strategic Targets for Alliances in Research). (Funded 10/96, Total: \$200,000). Role: co-PI
4. Craik C and **Chada S**. "Generation of Trans-Dominant Proteases as Inhibitors of HIV-1 Replication" STAR Grant (Strategic Targets for Alliances in Research). (Funded 05/97, Total: \$200,000); co-PI
5. **Chada S** "Novel Gene Therapeutic for the Treatment of Lung Cancer" SBIR Grant 1R43CA86587-01 (Funded 03/00, Total: \$240,000). Role: PI
6. Grimm EA and **Chada S** "Novel gene therapy for Melanoma" STTR grant (Funded 06/01 \$496,000)
7. Tofilon P and **Chada S**. "Radiosensitization using Adenoviral delivered single chain antibody against ras". STTR grant (Funded 04/01 \$205,000). Role: co-PI
8. **Chada S**. "Combination treatment for breast cancer using Ad-mda7 plus Herceptin". SBIR grant (Funded 07/02 \$185,000). Role: PI
9. Grimm EA and **Chada S** "Phase II clinical trial for Melanoma using INGN 241" STTR grant (Funded 06/03 \$1,975,000). Role: co-PI
10. Heller R, **Chada S**, Ugen K "Efficient Delivery of DNA Vaccines for Bioterrorism Infectious Agents" (submitted to NIAID, \$3,850,000). Role: co-investigator
11. **Chada S** "Nanoparticle delivery for treatment of lung cancer". SBIR grant (Funded 07/07; \$251,000). Role: PI
12. **Chada S** "Novel Therapeutic for the Treatment of Pancreatic Cancer" SBIR FLAIR Phase II Grant (submitted to NCI, Total: \$3,966,875). Role: PI

Patents and Applications

1. **Chada S**, Bodner M, Barber J, Jolly D and DeJesus C. "Anti-Cancer Immunotherapeutics." US Patent # 5,693,522 (1996)
2. **Chada S**, Bodner M, Barber J, Jolly D and DeJesus C. "Immunotherapeutic Vector Constructs." European Patent # EP00615453 (1997)
3. Gruber H, Jolly D, Respass J, Laikind P, Chang S, **Chada S**, Warner J, Barber J and St Louis D. "Recombinant Retroviruses delivering vector constructs to target cells." US Patent # 5,691,177 (1997)

4. **Chada S** and Dubensky T. "New bacteriophage mediated gene transfer systems with modified tail fibers capable of transfecting eukaryotic cells." US Patent # 5,736,388 (1997)
5. Barber J, Chang S, Jolly D, Respass J, **Chada S**, Gruber H, Laikind P, St Louis D, and Warner J. "Method for making replication defective retroviral vectors for infecting human cells." US Patent # 5,856,185 (1999)
6. Respass J, DePolo N, **Chada S**, Sauter S, Bodner M, and Driver D. "Crossless Retroviral Vectors I" US Patent #6,013,517 (2000)
7. Respass J, DePolo N, **Chada S**, Sauter S, Bodner M, and Driver D. "Crossless Retroviral Vectors II" US Patent #6,333,195 (2001)
8. Gruber H, Jolly DJ, Respass JG, Laikind PK, Barber JR, Warner JF, St Louis D, **Chada S** and Chang SM. "Method for Inhibiting Tumor Cells". US Patent #6,410,326 (2002)
9. Gruber H, Jolly D, Respass J, Laikind P, **Chada S**, Chang S, Barber J, Warner J and St Louis D. "Recombinant Retroviruses " Patent Application 08/344,743 (1989)
10. Lee W, Serbin J, Jolly D, Barber, J, Chang S and **Chada S**. "Compositions and Methods for treating or preventing FeLV and FIV." Patent Application PCT/WO 9406921 (1992)
11. **Chada S**, Banks T and Moore M.. "Gene delivery vehicle-targeting ligands". Patent Application PCT/WO 9724446 (1995)
12. **Chada S**, DePolo N, Sauter S, Robbins J, Jolly D, Manning WC, Murphy JE and Ralston RO. "Toxic Protein Expressing Producer cell lines and Viruses" Patent Application PCT/WO 9724452 (1995)
13. Song E, **Chada S**, Lee V and Jolly D. "Immunostimulation mediated by gene-modified dendritic cells" Patent Application PCT/WO 9724447 (1996)
14. **Chada S**, Moore MD and Jolly DJ. "Non-immunogenic prodrug activating enzymes and markers for gene therapy" Patent Application PCT/ WO 9830709 (1997)
15. **Chada S**, McCormack JE and Jolly DJ. "Methods for treating or preventing arthritis utilizing gene therapy" Patent Application PCT/WO 9911292 (1997)
16. Almond B, Wilson D, **Chada S** and Zumstein L. "Multigene vectors" Patent Application (1997)
17. **Chada S**, Gabrilovich D and Carbone D. "Ad-p53 immunostimulation" Patent Application (1998)
18. **Chada S** and Mhashilkar A. "Gene modified dendritic cells for the treatment of cancer and autoimmune diseases". Patent Application (1998)
19. McCormack JE, **Chada S** and Jolly DJ. "Compositions and methods for treating arthritis utilizing gene therapy" Patent Application PCT/ WO 09911292A2 (1999)
20. **Chada S** and Mhashilkar A. "Methods for the treatment of hyperproliferative disease using human mda-7" Patent Application (1999)
21. **Chada S** "MDA-7 is a novel immune modulator" Patent Application (1999)
22. **Chada S**, Ramesh R, Mhashilkar A, Schrock R and Grimm EA. "Methods For Treating Diseases By Inhibition Of Angiogenesis" Patent Application (1999)
23. Mukhopadaya T, Mhashilkar A, Roth JA and **Chada S**. "Novel small molecules for treatment of hyperproliferative diseases" Patent Application (2000)

24. Zoldhelyi P and **Chada S**. "PTEN gene transfer in the prevention and treatment of injury-induced vascular smooth muscle cell proliferation" Patent Application (2001)
25. **Chada S**, Paeter A, Mhashilkar A and Swisher S. "Enhancement of antigen presentation" Patent Application (2002)
26. **Chada S**, Mumm J, Mhashilkar A and Grimm EA. "Methods for purification and uses of MDA-7/IL-24 protein" Patent Application (2002)

Publications (total of 122)

1. Chou CC, Davis RC, Thomason A, Slovin J, Yasuda G, **Chada S**, Wright J, Fuller ML, Nelson R, and Salser W. "Active transcription of repeat sequences during terminal differentiation of HL60 cells." In: *Molecular Biology of Development*, eds. Davidson EG and Firtel RA, Cetus-UCLA Symposia on Molecular and Cellular Biology, Vol. 19. Alan R. Liss Inc. New York, pp. 459-480 (1984).
2. Teraoka S, Concannon P, Chou CC, Fuller ML, **Chada S**, Wong A, Wright J, Kania S, Snyder C, Hwa J, Davis RC, Nelson R, Thomason A, and Salser W. "Gene regulation during myeloid differentiation: characterization of novel ferritin genes and reintroduction of their genomic clones into a cell line that differentiates in vitro." In: *Proteins of Iron Storage and Transport*, eds. Spik G, Montreuil J, Crichton RR, and Mazurier J. Elsevier, Science, Amsterdam, pp. 349-356 (1985).
3. Chou C, Gatti RA, Fuller M, Concannon P, Wong A, **Chada S**, Davis R, and Salser W. "Structure and expression of ferritin genes in a human promyelocytic cell line that differentiates in vitro." *Molecular and Cellular Biology* 6:566-573 (1986).
4. Davis RC, Thomason AR, Fuller ML, Slovin JP, Chou CC, **Chada S**, Gatti RA, and Salser W. "mRNA species regulated during the differentiation of HL-60 cells to macrophages and neutrophils." *Developmental Biology* 119:164-174 (1987).
5. Davis RC, Thomason A, Fuller ML, Chou CC, **Chada S**, Slovin J, and Salser W. "Isolation and characterization of genes regulated during myeloid differentiation." In: *Molecular Approaches to Developmental Biology*, eds. Firtel RA and Davidson EH, UCLA Symposia on Molecular and Cellular Biology, Vol. 51. Alan R. Liss, New York, pp:521-532 (1987).
6. **Chada S**, Whitney C, and Newburger, PE. "Control of expression of the human glutathione peroxidase gene by selenium." In: *OxyRadicals in Molecular Biology and Pathology*, eds. Cerutti P, Fridovich I, and McCord J, UCLA Symposia on Molecular and Cellular Biology Vol. 82. Alan R. Liss, New York, pp.273-288 (1988).
7. Holland CA, **Chada S**, Wright J, Whitney C, Harigaya K, Greenberger J, Newburger PE. "Differentiation of Human Hematopoietic Cells Increases Expression of a Gene Transferred by a Retroviral Vector." *J. Leukocyte Biology* 46:221-229 (1989).
8. **Chada S**, Whitney C, and Newburger PE. "Post-transcriptional regulation of glutathione peroxidase gene expression by selenium in the HL-60 human myeloid cell line." *Blood* 74:2535-2541 (1989).
9. **Chada S** and Newburger PE. "Incorporation of selenocysteine at a UGA termination codon in the human glutathione peroxidase gene". In: *Glutathione Centennial; Molecular Perspectives and Clinical Implications*, eds. Taniguchi N, Higashi T, Sakamoto Y, and Meister A. Academic Press, Inc, San Diego pp:145-160 (1989).
10. **Chada S**, LeBeau M, and Newburger PE. "Isolation and chromosomal localization of the human glutathione peroxidase gene." *Genomics* 6:268-271 (1990).

11. Warner JF, Anderson CG, Laube L, Jolly D, Townsend K, **Chada S** and St. Louis D. "Induction of HIV-specific CTL and antibody responses in mice using retroviral vector transduced cells." *AIDS Research and Human Retroviruses* 7:645-655 (1991).
12. Jolly J, **Chada S**, Townsend K, DeJesus C, Chang S, Weinhold K, Anderson CG, Lynn A, Bodner M, Barber J, and Warner J. "CTL cross reactivity between HIV strains." *AIDS Research and Human Retroviruses* 8:1379-1381 (1992).
13. Warner JF, Anderson CG, Laube L, Jolly D, Irwin M and **Chada S**. "Immunotherapy using retroviral vectors" In "*Molecular Basis of Immune Responses*" eds. Nariuchi, H et al. Academic Press, Inc, San Diego. pp.155-165 (1993).
14. Warner JF, Anderson CG, Laube L, Townsend K, Lee W, Irwin M, **Chada S** and Jolly D. "Induction of HIV-specific immune responses using retroviral vectors". In *7th 'Colloque des Cent Gardes' on Retroviruses of Human AIDS and Related Animal Diseases*" eds. Girard, M and Valette, L. pp. 263-269 (1993).
15. **Chada S**, DeJesus C, Townsend K, Lee W, Laube L, Jolly D, Chang S and Warner J. "Cross-reactive lysis of human targets infected with prototypic and clinical HIV-1 strains by murine anti HIV-1 IIIB env specific CTL." *Journal of Virology* 67:3409-3417 (1993)
16. Thor G, Sepulveda H, **Chada S** and Dutton RW. "A monoclonal antibody that distinguishes between a phosphorylated, beta-2 microglobulin associated and a non-phosphorylated, free heavy chain of MHC class I." *Journal of Immunology*.151:1-14 (1993)
17. Sajjadi N, Kamantigue E, Edwards W, Howard T, Jolly D and **Chada S**. "Recombinant retroviral vector delivered intramuscularly localizes to the site of injection in mice." *Human Gene Therapy* 5:693-699 (1994)
18. Irwin M, Laube L, Lee V, Austin M, **Chada S**, Anderson C-G, Townsend K, Jolly D and Warner J. "Direct injection of a recombinant retroviral vector induces HIV specific immune responses in mice and nonhuman primates". *Journal of Virology* 68:5036-5044 (1994)
19. Shen Q, **Chada S**, Whitney C and Newburger PEN. "Regulation of the human cellular glutathione peroxidase gene during monomyelocytic differentiation." *Blood* 84:3902-3908 (1994)
20. Newburger PEN, Malawista S, Dinauer M, Gelbart T, Woodman R, **Chada S**, Shen Q, von Blaricom G, Quie P and Curnutte J. "Chronic Granulomatous Disease and glutathione peroxidase deficiency, revisited" *Blood* 84:3861-3869 (1994)
21. Driver DA, Latham EM, Polo JM, Belli BA, Banks TA, **Chada S**, Brumm D, Chang SM, Mento SJ,, Jolly DJ, and Dubensky T. "Layered amplification of gene expression with a DNA gene delivery system." *Ann N Y Acad Sci* 772: 261-264 (1995)
22. Fouts T R, Tuskan R G, **Chada S**, Hone D and Lewis G K. "Construction and Immunogenicity of *Salmonella typhimurium* Vaccine Vectors that express HIV-1 gp160." *Vaccine* 13: 1797-1705 (1996)
23. T. W. Dubensky, Driver DA, Polo JM, Belli BA, **Chada S**, Brumm D, Banks TA, Mento SJ, Jolly DJ and Chang SM. "Sindbis virus DNA-based expression vectors: utility for *in vitro* and *in vivo* gene transfer." *Journal of Virology* 70: 508-519 (1996)
24. Kamantigue E, Edwards W, **Chada S**, Brumm, D, Austin M, Irwin M, Mento S and Sajjadi N. "Evidence for localization of biologically active recombinant retroviral vector to lymph nodes and the site of injection in mice injected intramuscularly". *Gene Therapy* 3: 128-136 (1996)
25. Song ES, Lee V, Suhr CD, Brumm D, Lynn A, Jolly DJ, Warner JF, **Chada S**. "Mechanisms of retroviral mediated *in vivo* gene transfer and antigen presentation." *Proceedings of the National Academy of Sciences, U S A* 94:1943-1948 (1997)

26. Kline RM and **Chada S**. "Killing The Last Cell: Using The Immune System To Fight Cancer." *MIT Technology Review*. June:48-55 (1997)
27. McCray PB Jr, Wang G, Kline JN, Zabner J, **Chada S**, Jolly DJ, Chang SM, Davidson BL. "Alveolar macrophages inhibit retrovirus-mediated gene transfer to airway epithelia". *Human Gene Therapy* 8:1087-1093 (1997)
28. Ghivizzani SC, Lechman EC, Tio C, Mule KM, **Chada S**, McCormack J, Evans CH and Robbins PD. "Direct retrovirus-mediated gene transfer to the synovium of the rabbit knee: implications for arthritis gene therapy". *Gene Therapy*. 4:977-982 (1997)
29. Von Schwedler U, Townsend K, **Chada S**, Jolly DJ, Elder J, Chang S and Lee WT. "Retroviral mediated expression of FIV envelope/rev induces CD8+ CTL responses in mice". *Intervirology* 40(4):271-276 (1997)
30. Nguyen KHY, Boyle DL, McCormack JE, **Chada S** and Firestein G. "Direct synovial gene transfer with retroviral vectors in rat adjuvant arthritis". *Journal of Rheumatology* 25: 1118-1125 (1998)
31. Bouvet M, Bold RJ, Evans DB, Abbruzzese J, Chaio P, McConkey D, Chandra J, Lee J, **Chada S**, Fang B and Roth JA. "Adenovirus mediated p53 tumor suppressor gene therapy induces apoptosis and suppresses growth of pancreatic cancer cells". *Annals of Surgical Oncology*. 5(8):681-8 (1998)
32. Ishida T, **Chada S**, Stipanov M, Nadaf S, Ciernik FI, Gabrilovich DI and Carbone DP. "Dendritic cells transduced with wild type p53 gene elicit potent anti-tumor immune responses". *Clinical and Experimental Immunology*. 117(2):244-51 (1999)
33. Boyle DL, Nguyen KHY, Zhaung S, McCormack JE, **Chada S**, and Firestein GS. "Intra-articular IL-4 gene therapy in arthritis: Clinical efficacy and enhanced Th2 activity". *Gene Therapy*. 6:1911-1918 (1999)
34. Russell JS, Lang FF, Huet T, Janicot M, **Chada S**, Wilson DR and Tofilon PJ. "Radiosensitization of human tumor cell lines induced by the adenovirus-mediated expression of an anti-ras single chain antibody fragment". *Cancer Research*. 59(20):5239-44 (1999)
35. Saeki T, Mhashilkar AM, Roth JA, Branch C, **Chada S** and Ramesh R. "Tumor-suppressive effects by adenovirus-mediated *mda-7* gene transfer in non-small cell lung cancer cell *in vitro*". *Gene Therapy* 7: 2051-2057 (2000)
36. Mhashilkar AM, Schrock RD, Hindi M, Liao J, Sieger K, Kourouma F, Zou-Yang H, Onishi E, Takh O, Vedvick T, Fanger G, Stewart L, Watson GJ, Snary D, Fisher PB, Saeki T, Roth JA, Ramesh R and **Chada S**. "Melanoma-Differentiation Associated Gene (*mda-7*): A Novel Anti-Tumor Gene for Cancer Gene Therapy". *Molecular Medicine*, 7(4): 271-282 (2001). Cover article.
37. Nikitina EY, Clark JI, Benyen J, **Chada S**, Virmani AK, Carbone DP and Gabrilovich DI. "Generation of Anti-tumor Cytotoxic T Lymphocytes from Peripheral Blood of Cancer Patients using Dendritic cells transduced with Wild Type p53 Gene". *Clinical Cancer Research*, 7:127-135 (2001). Accompanying editorial 7:2-4 (2001)
38. Mhashilkar A, **Chada S**, Roth JA, and Ramesh R. "Gene therapy: Therapeutic approaches and implications". *Biotechnology Advances* 19: 279-297 (2001)
39. Saeki T, Mhashilkar AM, Swanson X, Zou-Yang H, Zumstein L, Sieger K, Branch CD, Roth JA, **Chada S** and Ramesh R. "Inhibition of human lung cancer growth following adenovirus-mediated *mda-7* gene expression *in vivo*". *Oncogene* 21(29): 4558-66 (2002)
40. Khimani AH, Mhashilkar A, O'Malley M, Mayer P, Killian JB, **Chada S** and Lott, ST. "Bioinformatics Array Data And Housekeeping Genes: A Pendulum Of Normalization". *Biotechniques* (2004)

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45. Stewart AL, Mhashilkar AM, Yang X-H, Ekmekcioglu S, Saito Y, Sieger K, Schrock RD, Onishi E, Swanson X, Mumm JB, Zumstein L, Watson G, Snary D, Roth JA, Grimm EA, Ramesh R and **Chada S**. "PI3K Blockade by Ad-PTEN Inhibits Invasion and Induces Apoptosis in Radial Growth Phase and Metastatic Melanoma Cells". *Molecular Medicine*. 8:451-462 (2002) Cover article
46. Caudell E, Mumm J, Poindexter N, Ekmekcioglu S, Mhashilkar A, Yang X-H, Sieger K, **Chada S** and Grimm EA. "MDA-7 is a Novel Th1 Cytokine that is Antagonized by IL-10". *Journal of Immunology* 168: 6041-6046 (2002)
47. Cao XX, Mohiuddin I, **Chada S**, Mhashilkar AM, Ozvaran M, McConkey DJ, Smythe WR. "Adenoviral Transfer Of The *mda-7* Gene Leads To Caspase-Mediated Apoptosis In Mesothelioma Cells, And Is Abrogated By Over-Expression Of *bcl-xl*". *Molecular Medicine* 8(12):869-76 (2002)
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