

# 朱天民教授著作目錄表 – 2018 年

## Journal articles

1. Rytlewski, J., Childress, P., Scofield, D., Khan, F., Alvarez, M., Tucker, A., Harris, J., Peveler, J., Hickman, D., **Chu, TM.**, Kacena, M., Co-housing male mice, with and without segmental bone defect surgery, in preparation for bone healing studies in microgravity. *Journal of Comparative Medicine*, 2018 (in press)
2. Emmakah, A., Arman, H., Alvarez, M., Childress, P., Bidwell, J., Goebel, W., **Chu, TM.**, and Kacena, M. Megakaryocytes Enhance Mesenchymal Stromal Cells Proliferation and Inhibit Differentiation, *Journal of Cellular Biochemistry*, 2018 (in press)
3. Maarafi, A.J., Hara, A., Levon, J.A., **Chu, TM.**, Eckert, G., Lippert, F., The effects of fluoride treatment time and concentration on in vitro caries lesion demineralization and remineralization. *Oral Health and Preventative Dentistry*, 2018 (in press)
4. AlRabiah, M., Labban, N., Levon, J.A., Brown, D.T., **Chu, T.M.**, Bottino, M., Platt, J.A., Bond Strength and durability of universal adhesive agents with lithium disilicate ceramics: A shear bond study. *Journal of Adhesion Science and Technology*, 2018 (In press)
5. Scofield, D. C., J. D. Rytlewski, P. Childress, K. Shah, A. Tucker, F. Khan, J. Peveler, D. Li, T. O. McKinley, T. G. **Chu**, D. L. Hickman and M. A. Kacena "Development of a step-down method for altering male C57BL/6 mouse housing density and hierarchical structure: Preparations for spaceflight studies." *Life Sci Space Res (Amst)* 2018 **17**: 44-50.
6. Bowling, J., D. D. Davidson, S. S. Tholpady, K. Park, G. J. Eckert, T. Katona, T. G. Chu and C. T. Barco "Baseline Biomechanical Properties of Epithelia prior to Tissue Expansion in Dogs." *Plast Reconstr Surg Glob Open* 2018. **6**(5): e1773.
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8. Willard, A., and **Chu, TM.** The Science and Application of IPS e.Max Dental Ceramic. *Kaohsiung Journal of Medical Science* 2018. **34**(4): 238-242.
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10. Liu, WC., Ballenger, B., Algarni, A., Velez, M., **Chu, TM.**, FTIR characterization and release of bovine serum albumin from bioactive glass, *Journal of Applied Biomaterials and Functional Materials*, 2017 **15**(4): p. e347-p355
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## Book chapters

- Chu, T.**; Liu, S.-Y.; Babler, M., Craniofacial Biology, Orthodontics, and Implants. In *Basic and Applied Bone Biology*, Burr, D.; Allen, M., Eds. Elsevier: 2013; pp 225-242.
- Chu, T.-M. G.**, Solid Freeform Fabrication of Tissue Engineering Scaffolds. In *Scaffolding In Tissue Engineering*, Ma, P. X.; Elisseeff, J., Eds. CRC Press: Boca Raton, 2005; pp 139-154.
- Hollister, S. J.; Taboas, J. M.; Schek, R. M.; Lin, C. Y.; **Chu, T. G.**, Design and Fabrication of Bone Tissue Engineering Scaffolds. In *Bone Tissue Engineering*, Hollinger, J. O.; Einhorn, T. A.; Doll, B. A.; Sfeir, C., Eds. CRC Press: Boca Raton, 2004; pp 167-192.
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## Abstracts

- Faculty Development Marketplace: A Forum for Collaboration (Short Talks) 2, Annual Meeting of International Association for Dental Research, Fort Lauderdale, FLA, March 21-24, 2018
- Willard, A.; Hanan, A.; Roberts, H.; **Chu, T.G.**, "Effects of etching on sub-micron features of eMax

- “eMax CAD”, Annual Meeting of International Association for Dental Research, Fort Lauderdale, FL, March 21-24, 2018
13. Hsu, Y.; Sergio, T.; **Chu, T.G.**; Tovar, A., “Multiscale Modeling of Bone Remodeling Process in Implantology using Finite Element Analysis”, Annual Meeting of International Association for Dental Research, Fort Lauderdale, FL, March 21-24, 2018
  14. Emmakah, A.; Quiz, M.; Lin, C.; **Chu, T.G.**, “A Fast Biodegradable Thiol-acrylate Hydrogels as a Cell Carrier for Stromal cell-Assisted Cranial Regeneration”, Annual Meeting of International Association for Dental Research, Fort Lauderdale, FL, March 21-24, 2018
  5. Emmakah, A.; Alvarez, M.; Childress, P.; Goebel, S.; Kacena, M.; Lin, C.; **Chu, T.G.**, “A Fast-degrading Thiol-acrylate Hydrogel as a Cell Carrier for Craniofacial Bone Regeneration”, Society for Biomaterials, Minneapolis, MN, April 5-8, 2017
  6. Alrasheed, R.; Wallace, J.; Cook, N.B.; Matis, B.; **Chu, T.G.**; Platt, J. A., “In Vitro Evaluation of Polymerization Energy for Bulk Fill Composites”, Annual Meeting of the International Association for Dental Research, San Francisco, CA, March 22-25, 2017
  7. Alqahtani, N.; **Chu, T.G.**, “Translucency And Light Transmission Characteristics of Lithium Disilicate Glass Ceramic”, Annual Meeting of the International Association for Dental Research, San Francisco, CA, March 22-25, 2017
  8. Willard, A.; **Chu, T.G.**, “Phase Transformation Kinetics of eMax CAD Dental Ceramic”, Annual Meeting of the International Association for Dental Research, San Francisco, CA, March 22-25, 2017
  9. Emmakah, A.; Greene, T.; Bragg, J.; Lin, C.; Alvarez, M.; Childress, P.; Goebel, S.; Kacena, M.; **Chu, T.G.**, “Cranial regeneration using Stem cells encapsulated in fast-degrading thiol-acrylate hydrogel”, Annual Meeting of the International Association for Dental Research, San Francisco, CA, March 22-25, 2017
  10. Emmakah, A.; Alvarez, M.; Childress, P.; Goebel, S.; Kacena, M.; Lin, C.; **Chu, T.G.**, “A fast-degrading thiol-acrylate hydrogel shows promise as a cell carrier for stem-cell assisted cranial regeneration”, Annual Meeting of the Orthopedic Research Society, San Diego CA, March 19-22, 2017
  11. Al-Johani, H.; Supornpun, N.; **Chu, T.G.**, “Translucency Parameters of Full-Contour- Zirconia Ceramics”, Annual Meeting of the American Association for Dental Research, Los Angeles, CA, March 16-19, 2016
  12. Ballenger, B.; Emmakah, A.; Lin, C.; **Chu, T.G.**, “Degradation and Cell Proliferation in a Fast-Degrading Thio-Acrylate based Hydrogel for Cranial Regeneration”, Annual Meeting of the American Association for Dental Research, Los Angeles, CA, March 16-19, 2016
  13. Emmakah, A.; Cheng, Y.; Alvare, B.; Kacena, M.; **Chu, T.G.**, “Proliferation and Differentiation of Stem Cells Co-Cultured with Megakaryocytes”, Annual Meeting of the American Association for Dental Research, Los Angeles, CA, March 16-19, 2016
  14. Closurdo, L.; Chien, C.; **Chu, T.G.**, “Effects of Sintering Holding Time on Mechanical and Optical Properties of Zirconia”, Annual Meeting of the American Association for Dental Research, Los Angeles, CA, March 16-19, 2016
  15. Oster, M.; Supornpun, N.; **Chu, T.G.**, “Degree of Conversion of Resin Cements Cured Through Varying Thicknesses of Full Contour Zirconia”, Annual Meeting of the American Association for Dental Research, Los Angeles, CA, March 16-19, 2016
  16. Emmakah, A.; Greene, T.; Bragg, J.; Lin, C.; **Chu, T.G.**, “A Fast-Degrading Thio-Acrylate based Hydrogel for Cranial Regeneration”, Annual Meeting of the International Association for Dental Research, Seoul Republic of Korea, June 22-25, 2016
  17. Emmakah, A.; Cheng, Y.; Alvare, M.; Kacena, M.; **Chu, T.G.**, “Megakaryocytes Enhances Proliferation but Delayed Differentiation in Stem Cells” Annual Meeting of the World Biomaterials Congress, Montreal, QC Canada, May 17-22, 2016
  18. Emmakah, A.; Lin, C.; **Chu, T.G.**, “Degradation and Cell Proliferation in a Fast-Degrading Thio-Acrylate based Hydrogel for Cranial Regeneration” Annual Meeting of the World Biomaterials Congress, Montreal, QC Canada, May 17-22, 2016
  19. Tanataweethum, N.; Almousa E.; **Chu, T.G.**, In Vitro Degradation of Magnesium/Dicalcium Phosphate Dihydrate Cement, Annual Meeting of the American Association for Dental Research, Boston, MA, March 11-14, 2015
  20. Ballenger, B.; Nida Tanataweethum; **Chu, T.G.** Characterization of Magnesium/Dicalcium

- Phosphate Dihydrate Composite Scaffolds, Annual Meeting of the American Association for Dental Research, Boston, MA, March 11-14, 2015
21. Oster, M.; Arman, H.E.; Bhimireddy, N.; Tovar, A.; **Chu, T.G.**, Partially Demineralized Scaffolding Scaffold Macroporous Allograft as a Tissue Engineering Scaffold, Annual Meeting of the American Association for Dental Research, Boston, MA, March 11-14, 2015
22. Aster G. Samuel; Tanataweethum, N.; **Chu, T.G.**, "Synthetic Bone Scaffolding for Tissue Engineering: Development of coating to improve mechanical strength of Mg alloy/DCPD composite" 2015 The Society for In Vitro Biology Meeting, Tuscon, AZ, May 30-June 3, 2015
23. Lien, W.; Roberts, H.W.; **Chu, T.G.**, "Optimization of crystalline kinetics, thermal processing, and strength of a dental lithium disilicate glass-ceramic" IUSD Research Day, Indianapolis, IN, April 7, 2014
24. Ballenger, B.; Liu, W.; **Chu, T.G.**, "Effect of Chitosan Coating on BSA Adsorption on Bioactive Glasses" Hinman Student Research Symposium, Memphis, TN, October 31-November 2, 2014
25. Tanataweethum, N.; Liu, W.C.; **Chu, T.G.**, "Poly-L-lactic acid/Dicalcium Phosphate Dihydrate Composite Scaffolds for Bone Tissue Engineering" IUSD Research Day, Indianapolis, IN, April 7, 2014
26. Lien, W.; Roberts, H.W.; **Chu, T.G.**, "Optimization of crystalline kinetics, thermal processing, and strength of a dental lithium disilicates glass-ceramic" Annual Meeting of the American Association for Dental Research, Charlotte, NC, March 19-22, 2014
27. Ballenger, B.; Liu, W.C.; **Chu, T.G.**, "Effect of Chitosan Coating on BSA Adsorption on Bioactive Glasses" Annual Meeting of the American Association for Dental Research, Charlotte, NC, March 19-22, 2014
28. Liu, W.C.; Lien, W.; Bennett, J.; Patel, R.; Tyler Smith, Sherry L. Voytik-Harbin, W. Scott Goebel, **Chu, T.G.**, "Stem Cells Loaded 3D Scaffolds for Craniofacial Bone Repair" Annual Meeting of the American Association for Dental Research, Charlotte, NC, March 19-22, 2014
29. Berman, A.; Zhang, W.; Zhang, H.; Hu, X.; Zhang, J.; Liu, J.; Feng, Z.; **Chu, T.G.**, "Electrochemical Characteristics of AZ31 Magnesium Alloys with Microarc Oxidation Coating" IUSD Research Day, Indianapolis, IN, April 15, 2013
30. Li, D.; A. Scully, **Chu, T.G.**, "Mechanical Property Evaluation of Porous 13-93 Bioactive Glass and GL1550 Borate Glass 3D Scaffolds" IUPUI Research Day, Indianapolis, IN, March 5, 2013.
31. Posritong, S.; **Chu, T.G.**, M. Bottino, A. Borges, "Glass-ceramic Flexural Strength after Hydrofluoric Acid and Unfilled Resin Treatment" IUPUI Research Day, Indianapolis, IN, March 5, 2013
32. Lien, W.; **Chu, T.G.**, "Microstructural Evolution and Physical Behavior of a Lithium Disilicate Glass-Ceramic" IUPUI Research Day, Indianapolis, IN, March 5, 2013
33. Tanataweethum, N.; W.C. Liu, **Chu, T.G.**, "Mechanical Property and Biocompatibility of PLLA Coated DCPD Composite Scaffolds" IUPUI Research Day, Indianapolis, IN, March 5, 2013
34. Liu, W.; I. Robu, M. Leu, M. Velez, **Chu, T.G.**, "Effects of Bioactive Glass Scaffold and BMP-2 in Segmental Defects" IUPUI Research Day, Indianapolis, IN, March 5, 2013
35. Scully, A.; D. Li, **Chu, T.G.**, "Mechanical Property Evaluation of Porous 13-93 Bioactive Glass and GL1550 Borate Glass3D Scaffolds" IUSD Research Day, Indianapolis, IN, April 15, 2013
36. Al-Angari, S.S.; Hara, A.T.; **Chu, T.G.**, J.A. Platt, N.B. Cook, "Mechanical Properties of a New Zinc-Reinforced Glass Ionomer Restorative Material" IUSD Research Day, Indianapolis, IN, April 15, 2013
37. Macpherson, M.E.; J.A. Platt, **Chu, T.G.**, "Polymerization Through Single Apertures: Curing-Front Profiles and Degree of Conversion." IUSD Research Day, Indianapolis, IN, April 15, 2013
38. Lien, W.; D. Li, W.C. Liu, A.L. Campbell, **Chu, T.G.**, "Microstructural Evolution and Physical Behavior of a Lithium Disilicate Glass-Ceramic" IUSD Research Day, Indianapolis, IN, April 15, 2013
39. Bethel, M.; McDowell, S.; Brahmananda R Chitteti, **Chu, T.G.**, Janos Ertl, Brian Mullis, Melissa Kacena, Jeffrey Anglen, "Spacer Composition Influences Properties Of The Masquelet Membrane In Animals And Observed Gene Expression Patterns Of Inducible Membranes In Humans" 29th Annual Meeting of the Orthopaedic Trauma Association, Phoenix, AZ. October 9 - 10, 2013
40. Al-Angari, S.; A. Hara, **Chu, T.G.**, J. Platt, and N.B. Cook, "Mechanical Properties of a New Zinc-Reinforced Glass Ionomer Restorative Material" Annual Meeting of American Association of Dental Research, Seattle, WA, March 13-16, 2013

41. Liu, S.; R. Brown, **Chu, T.G.**, T.R. Katona, and K.T. Stewart, "Insertion and removal torque of immediately-loaded stainless steel mini-screw implants" Annual Meeting of American Association of Dental Research, Seattle, WA, March 13-16, 2013
42. Lien, W.; D. Li, and **Chu, T.G.**, "Microstructural Evolution and Physical Behavior of a Lithium Disilicate Glass-Ceramic" Annual Meeting of American Association of Dental Research, Seattle, WA, March 13-16, 2013
43. Posritong, S.; A.L.S. Borges, **Chu, T.G.**, M.A. Bottino, and M.C. Bottino, "Glass-ceramic Strengthening- Effect of Unfilled Resin Treatment" Annual Meeting of American Association of Dental Research, Seattle, WA, March 13-16, 2013
44. Scully, A.; M. Velez, **Chu, T.G.**, "Mechanical Properties of Porous Silica and Borate Glass Scaffolds" Annual Meeting of American Association of Dental Research, Seattle, WA, March 13-16, 2013
45. Tanataweethum, N.; W.C. Liu, **Chu, T.G.**, "Mechanical property and biocompatibility of PLLA coated DCPD composite scaffolds" Annual Meeting of American Association of Dental Research, Seattle, WA, March 13-16, 2013
46. Macpherson, M.E.; J.A. Platt, and **Chu, T.G.**, "Polymerization Through Single Apertures: Curing-Front Profiles and Degree of Conversion" Annual Meeting of American Association of Dental Research, Seattle, WA, March 13-16, 2013
47. Harris, J; Bemendorfer, Thoma; Bethel, Monique; Wessel, Alexandre; Wilhite, Jonathan; Millikan, Patrick; Burr, David; Fuchs, Robyn; Cheng, Yinghua; **Chu, Tien-Min**; Kacena, Melissa "Thrombopoietin: A Novel Osteoinductive Agent" Annual Meeting of Orthopedic Research Society, San Antonio, TX, January 26-29, 2013
48. Bethel, M.; Patrick D. Millikan, Alexander R. Wessel, Ying-Hua Cheng, Jonathan H. Wilhite, David B. Burr, Robyn K. Fuchs, **Chu, T.G.**, and Melissa A. Kacena "Thrombopoietin: A Novel Regulator of Bone Healing" ASBMR 2012 Annual Meeting, Minneapolis, MN, October 12-15, 2012
49. Velez, M.; S Jung, K.C.R. Kloan, M.C. Leu, D.E. Day, G.E. Hilmas, **Chu, T.G.** "Evaluation of Bioactive Glass Scaffolds Made by Selective Laser Sintering" Innovations in Biomedical Materials 2012, North Raleigh-Midtown, NC, September 10-13, 2012
50. **Chu, T.G.**, Irina S. Robu, Ming Leu, K.C.R. Kolan, D. Day, S. Jung, Mariano Velez "In Vivo Evaluation of Bioactive Glass Scaffolds through Selective Laser Sintering" 9th World Biomaterial Congress, Chengdu, China, June 1-5, 2012
51. Velez, M.; S. Jung, D.E. Day, K. Kolan, M. Leu, G. Hilmas, **Chu, T.G.** " Bioactive Glass Implants for Bone Repari Mad by Selective Laser Sintering (SLS)" The American Ceramic Society's 2012 Glass & Optical Materials Division Annual Meeting, St. Louis, MO, May 20-24, 2012
52. Kacena, M.; Millikan PD, Wessel AR, Bethel M, Cheng Y-H, Burr DB, Fuchs RK, **Chu T-MG**. A novel regulator of bone healing. 2012 Translational Science Meeting, Washington, D.C, April 18-20, 2012
53. Au-Yeung, J.; Steven B. Blanchard, Robert L. Karlinsey, Allen Mackey, and **Chu, T.G.** "Niobium Oxide Coating Enhances Integration in Titanium Implants" Annual Meeting of American Association of Dental Research, Tampa, FL, March 21-24, 2012
54. Hani M.; Nassar and **Chu, T.G.** "Optimizing light-cured composite properties with camphroquinone and butylhydroxytoluene combinations" Annual Meeting of American Association of Dental Research, Tampa, FL, March 21-24, 2012
55. Mullis, B.; Bethel, M., Alge, D., Levenda, J., Hogg., P., and **Chu, T.** "Second Generation Locking Sliding Hip Screw Shows Catastrophic Failure in Biomechanical Testing" AAOS Annual Meeting, San Francisco, CA, February 7- 11, 2012
56. Velez, M.; Krishna C.R. Kolan, Ming C. Leu, Steve Jung, Delbert E. Day, **Chu, T.G.** "In-Vivo Evaluation of 13-93 Bioactive Glass Scaffolds Made by Selective Laser Sintering (SLS)" Annual Meeting of American Ceramic Society, Columbus, OH, Oct. 16-20, 2011
57. **Chu, T.G.**, Naseeba Khouja, Gilbert Chahine, Radovan Kovacevic, Mari Koike, and Toru Okabe, In Vivo Evaluation of Custom-made Dental Implants through Electron Beam Melting, Annual Meeting of Society for Biomaterials, Orlando, FL, April 13-16, 2011
58. Alge, D.L.; Sherry Harbin, W. Scott Goebel, Jeff Bennett, Trevor Treasure, **Chu, T.G.**, " 3D Polymer Reinforced Calcium Phosphate Cement Scaffolds for Bone Tissue Engineering" Annual Meeting of Society for Biomaterials, Orlando, FL, April 13-16, 2011
59. Mackey, A.; R.L. Karlinsey, **Chu, T.G.**, and D.L. Alge, "Optimized Anodization Conditions for

- Niobium-Coated Titanium-Alloy Implant Screws" Annual Meeting of American Association of Dental Research, San Diego, CA, March 16-19, 2011
60. Huang, S.; S. Blanchard, M. Ito, and **Chu, T.G.**, "Hydrofluoric Acid Etching on Titanium and Zirconia Implants" Annual Meeting of American Association of Dental Research, San Diego, CA, March 16-19, 2011
61. Al Dehailan, L. and **Chu, T.G.**, "Mechanical Properties of Novel Calcium Phosphate Resin" Annual Meeting of American Association of Dental Research, San Diego, CA, March 16-19, 2011
62. AlZain, A. and **Chu, T.G.**, "Ion Release and Water Sorption of Novel Calcium Phosphate Resin" Annual Meeting of American Association of Dental Research, San Diego, CA, March 16-19, 2011
63. Gilbert, R.; JB Goldstein, **Chu, T.G.** and RL Stewart, "Increasing Vascularity to Improve Healing of Segmental Defects", 57th Annual Meeting of Orthopedic Research Society in Long Beach, California, January 13 - 16, 2011
64. Stewart, R.; Jessica B. Goldstein, Eddie Hyatt, **Chu, T.G.**, Chu, Shawn R. Gilbert, "Increasing Vascularity to Improve Healing of a Segmental Defect of the Rat Femur", AO North America, 2010 Challenges in Fracture Care Across Disciplines, Phoenix, AZ, November 11-14, 2010
65. Stewart, R.; Joe Cox, Ken Waites, **Chu, T.G.**, "A Biodegradable, Load-Bearing Scaffold as a Carrier for Antibiotics in an Infected Open Fracture", AO North America, 2010 Challenges in Fracture Care Across Disciplines, Phoenix, AZ, November 11-14, 2010
66. Stewart, R.; James Stannard, David Volgas, **Chu, T.G.**, "Have We Hit the Critical Defect Trifecta? Immediate Weight Bearing, Healing and a Biodegradable Carrier in a Canine Model", AO North America, 2010 Challenges in Fracture Care Across Disciplines, Phoenix, AZ, November 11-14, 2010
67. Stewart, R.; Jessica B. Goldstein, Eddie Hyatt, **Chu, T.G.**, Shawn R. Gilbert, "Increasing Vascularity to Improve Healing of a Segmental Defect of the Rat Femur", Annual Meeting of Orthopedic Trauma Association, Baltimore, MD, October 13-16, 2010
68. Khouja, N.; **Chu, T.G.**, Gilbert Chahine, Radovan Kovacevic, Mari Koike, and Toru Okabe, "In vivo evaluation of novel custom-made press-fit implants" Annual Meeting of International Association of Dental Research, Barcelona, Spain, July 14-17, 2010
69. Yeslam, H.; **Chu, T.G.**, Carlos Gonzalez-Cabezas, Melvin Lund, George J Eckert, Michael Cochran, and Masatoshi Ando, "The effect of acid-etching on the remineralization of incipient caries lesions" Annual Meeting of International Association of Dental Research, Barcelona, Spain, July 14-17, 2010
70. Stewart, R.; Joe Cox, Ken Waites, Lynn Duffy, James Stannard, David Volgas, **Chu, T.G.** "The Use of a Biodegradable, Load-Bearing Scaffold as an Antibiotic Carrier in a Rat Open Fracture Model", Annual Meeting of The American Orthopaedic Association, San Diego, CA, June 9-12, 2010
71. Wilhite, J.; **Chu, T.G.**, Melissa Kacena, "A Novel Use of TPO: Healing Critical-Sized Femoral Defects", Garceau-Wray Lectureship, Indiana University School of Medicine, Indianapolis, IN, June 3-4, 2010
72. Stewart, R.; Joseph T. Cox, David Volgas, James Stannard, Lynn Duffy, Ken B. Waites, and **Chu, T.G.**, "Concurrent Release of BMP-2 and Gentamicin in an Infected Open Fracture Model," Annual Meeting of Society for Biomaterials, Seattle, WA, April 21-24, 2010
73. Alge, D. and **Chu, T.G.**, "Mechanical Properties of Poly(propylene fumarate) Reinforced Brushite Cement: Effects of Cement Composition and Powder to Liquid Ratio", Annual Meeting of Society for Biomaterials, Seattle, WA, April 21-24, 2010
74. Alge, D. and **Chu, T.G.**, "Novel poly(propylene fumarate) reinforced brushite composites for bone repair", Annual Meeting of Society for Biomaterials, Seattle, WA, April 21-24, 2010
75. Shin, D.; Steven Blanchard, Michio Ito, and **Chu, T.G.**, "Peri-implant and Perosteal Responses of Titanium and Zirconia Implants in a Rabbit Model" Annual Meeting of Society for Biomaterials, Seattle, WA, April 21-24, 2010
76. Stewart, R.; Joe Cox, **Chu, T.G.**, "A Biodegradable, Load-Bearing Scaffold as a Carrier for Antibiotics in an Infected Open Fracture Model", Annual Meeting of American Association of Orthopedic Surgeons, New Orleans, LA, March 10-13, 2010
77. Shin, D.; Steven Blanchard, Michio Ito, and **Chu, T.G.**, "Perosteal and Peri-Implant Bone Response of Two Different Noncoated Implants" Annual Meeting of American Association of Dental Research, Washington DC, March 3-6, 2010

78. Alge, D. and **Chu, T.G.**, "Poly(propylene fumarate)-Brushite Cement Composites with Strength Comparable to Trabecular Bone", Annual Meeting of American Association of Dental Research, Washington DC, March 3-6, 2010
79. Khouja, N.; **Chu, T.G.**, Gilbert Chahine, Radovan Kovacevic, Mari Koike, and Toru Okabe, "In vivo evaluation of novel experimental implants" Annual Meeting of American Association of Dental Research, Washington DC, March 3-6, 2010
80. Shin, D.; Michio Ito, and **Chu, T.G.**, Preliminary Histomorphometric Comparisons of Two Implant Biomaterials in a Rabbit Model, 2009 Annual Meeting of Academy of Dental Materials, Portland, OR, October 29-31, 2009
81. Stewart, R.; Joe Cox, Ken Waites, James Stannard, David Volgas, **Chu, T.G.**, "The Use of a Biodegradable, Load-Bearing Scaffold as a Carrier for Antibiotics in an Infected Open Fracture Model", 2009 Annual Meeting of Orthopedic Trauma Association, San Diego, CA, October 8-10, 2009
82. Alge, D.; and **Chu, T.G.**, "Poly(propylene fumarate) reinforced calcium phosphate cement scaffolds for bone tissue engineering", 2009 BMES Annual Meeting Pittsburgh, PA, October 7-10, 2009
83. Allen, M.; **Chu, T.G.**, D Kubek, D. Burr, "Exposed bone and oral sequestra following high-dose zoledroante treatment and dental extraction in a beagle dog model", Annual Meeting of The American Society for Bone and Mineral Research, Denver, CO, September, 11-15, 2009
84. Alge, D. and **Chu, T.G.**, "Reinforced 3D Calcium Phosphate Cement Scaffolds via In Situ Polymerization", Annual Meeting of Society for Biomaterials, San Antonio, TX, April, 22-25, 2009
85. Alge, D. and **Chu, T.G.**, "Rapid Conversion to Hydroxyapatite in Brushite Cements Prepared with Hydroxyapatite-based Formulations", Annual Meeting of Society for Biomaterials, San Antonio, TX, April, 22-25, 2009
86. Karunagaran, S. and **Chu, T.G.**, "Storage effect and inhibitor level on properties of model composites", Annual Meeting of American Association of Dental Research, Miami, FL, April 1-4, 2009
87. Stewart, R.L.; Cox, J.T.; **Chu, T.M.**, "The Use of a Biodegradable, Load-Bearing Scaffold as a Carrier for Antibiotics in an Infected Open Fracture Model", Annual Meeting of Orthopedic Research Society, Las Vegas, NV, Feb. 22-25, 2009
88. Stewart, R.L.; Stannard, J.; Volgas, D., Duke, J., and **Chu, T.M.** "Have We Hit the Critical Defect Trifecta? Immediate Weight Bearing, Healing and a Biodegradable Carrier in a Canine Model" Annual Meeting of Orthopedic Research Society, Las Vegas, NV, Feb. 22-25, 2009
89. Stewart, R.L.; Stannard, J.; Volgas, D., Duke, J., and **Chu, T.M.** "Have We Hit the Critical Defect Trifecta? Immediate Weight Bearing, Healing and a Biodegradable Carrier in a Canine Model" 2008 OTA Annual Meeting Denver, CO. Oct. 16 - 18, 2008
90. Alge, D.; W. Scott Goebel, **Chu, T.G.**, "Comparison of the Osteogenic Potential of DPSC and BMMSC using a Donor-Matched Experimental Design", Annual Meeting of The Biomedical Engineering Society, St. Louis, MO, Oct. 2-4, 2008
91. Alge, D.; Dan Zhou, Lyndsey L. Adams, Brandon K. Wyss, Matthew D. Shadday, **Chu, T.G.**, Erik J. Woods and W. Scott Goebel, "Rat Dental Pulp-derived Stem Cells Display Greater Proliferative and Osteogenic Potential Than Bone Marrow-derived Mesenchymal Stem Cells from the Same Donor Rat", Society for Hematology and Stem Cells 37th Annual Scientific Meeting, Boston, MA., July 9-12, 2008
92. Stewart, R.; **Chu, T.G.**, and Duke, Justin, N., "Critical segmental defect regeneration using biodegradable, load bearing scaffold containing BMP-2 in a canine model", Annual Meeting of American Orthopedic Association/Canadian Orthopedic Association, Quebec City, Canada, June 4-7, 2008
93. Alge, D. and **Chu, T.G.**, "Degradation Characteristics of a Novel DCPD Cement Made From MCPM/HA", Annual meeting of American Association of Dental Research, Dallas, TX., April 1-5, 2008
94. Santa Curze, G.; Daniel L. Alge and **Chu, T.G.**, "Effects of Powder to Liquid Ratio on Novel DCPD Cement", Annual meeting of American Association of Dental Research, Dallas, TX., April 1-5, 2008
95. Alge, D.; W. Scott Goebel, **Chu, T.G.**, "Novel polymer-reinforced calcium phosphate cement as mesenchymal stem cell carrier", TMS2008, New Orleans, LA, March 9-13, 2008

96. Stewart, R.; **Chu, Tien-Min G.** and Duke, Justin, N., "Critical segmental defect regeneration using biodegradable, load bearing scaffold containing BMP-2 in a canine model", Annual Meeting of Orthopaedic Research Society, San Francisco, CA, March 5-9, 2008
97. Chern, A.; AC Mackey, RL Kärlinsey, **Chu, T.G.**, "Microstructure Development and Material-Cell Interaction in Niobium Oxide Microcones" Annual meeting of the Academy of Dental Materials, Ft. Lauderdale, FL, Oct. 21-24, 2007
98. Goebel, W.S.; Brandon K. Wyss, Lyndsey L. Adams, **Chu, T.G.**, Feng-Chun Yang, Brandon C. Perry, Michael A. Byers, J. Jeffery Hockema and Erik J. Woods "Collection, cryopreservation and characterization of human tooth-derived MSC for banking and clinical use", Adult Mesenchymal Stem Cells in Regenerative Medicine Conference, Cleveland OH August 2007
99. Katsilieri, I.; **Chu, T.G.**, BK Moore, J Platt "Model Predicting Depth of Cure of Light Activated Composites", Annual Meeting of the Association of American Dental Research, New Orleans, LA, March 21-24, 2007
100. Brown, L.S. and **Chu, T.G.**, "Degradation of Hydrogel from Glycolide-Based Macromer and Polyethylene Glycol Diacrylates," Annual Meeting of the Society for Biomaterials, Chicago, IL, April 18-20, 2007
101. Gonnerman K. and **Chu, T.G.**, "Acidic Degradation of MCPM/TCP Cement," Annual Meeting of the Society for Biomaterials, Chicago, IL, April 18-20, 2007
102. **Chu, T.G.**; P. W. Sargent, S. J. Warden, C. H. Turner, and R. L. Stewart, "Preliminary Evaluation of a Load-Bearing BMP-2 Carrier for Segmental Defect Regeneration," Annual Rocky Mountain Bioengineering Symposium, Terra Haute, IN. (2006, April 7-9)
103. Gonnerman, K.; L. S. Brown, and **Chu, T.G.**, "Effects of Growth Factors on Cell Migration and Alkaline Phosphatase Release," Annual Rocky Mountain Bioengineering Symposium, Terra Haute, IN. (2006, April 7-9)
104. Howk D.E. and **Chu, T.G.**, "Design Variables for Mechanical Properties of Bone Tissue Scaffolds," Annual Rocky Mountain Bioengineering Symposium, Terra Haute, IN. (2006, April 7-9)
105. Metz, J.R.; K. N. Gonnerman, A. Chu, and **Chu, T.G.**, "Effect of Crosslinking Density on Swelling and Mechanical Properties of PEGDA400/PCLTMA900 Hydrogels," Annual Rocky Mountain Bioengineering Symposium, Terra Haute, IN. (2006, April 7-9)
106. Metz, J.R.; P. W. Sargent, and **Chu, T.G.**, "Bovine Albumin Release and Degradation Analysis of Dicalcium Phosphate Dihydrate Cement," Annual Rocky Mountain Bioengineering Symposium, Terra Haute, IN. (2006, April 7-9)
107. **Chu, T.G.**, Warden, S., Turner, C. and Stewart, R." Multiple factor carrier for segmental defect regeneration" Annual Meeting of the Orthopaedic Research Society, Chicago, IL (2006, February 19-22)
108. **Chu, T.G.**, Warden, S., Turner, C. and Stewart, R." Multiple factor carrier for large maxillofacial defect regeneration " Annual Meeting of the American Association of Dental Research, Orlando, FL (2006, March 7-11)
109. Stewart, R., **Chu, T.G.**, Warden, S., and Turner, C. "A Load-Bearing, Biodegradable BMP Carrier for Bone Regeneration in a Segmental Defect" Annual Meeting of Orthopaedic Trauma Association, Ottawa, Ontario, CANADA (2005, October 20-22)
110. **Chu, T.G.**, Stewart, R., Warden, S., Turner, C., and Mikos, A."A load-bearing, biodegradable BMP-2 carrier for bone regeneration in segmental defects" Annual Meeting of the Orthopaedic Research Society, Washington DC (2005, February 20-23)
111. **Chu, T.M.**, Al-Shammari, M., and Platt, J. "Logarithmic Relation Between Curing Time and Curing Depth" Proc. Annual Meeting of the International Association of Dental Research, Honolulu, HI. (2004, March 10-13)
112. Chong, K.H., **Chu, T.M.**, and Chai, J.Y "Probability of Failure for Zirconia Fiber-Reinforced Alumina Ceramics" Proc. Annual Meeting of the International Association of Dental Research, Honolulu, HI. (2004, March 10-13)
113. Hollister, S.J., Flanagan, C.L., Kasemkhani, A., Van Lenthe, H., **Chu, T.M.**, Taboas, J.M., Muller, R., Krebsbach, P.H., and Feinberg, F.E. "Scaffold Pore Design Effects on Bone Ingrowth and Stiffness" Proc. Annual Meeting of the International Association of Dental Research, Honolulu, HI. (2004, March 10-13)
114. Ko, C.C., Douglas, W.H., **Chu, T.M.**, Chang, M.C., Narayanan, R.A., and Hu, W.S. "Forming 3D Scaffold of Hydroxyapatite-Gelatin Nano-Composite Using Mechanical Method and Selective Solid

- "A New Ceramic Etching Method". Proc. 7th World Biomaterial Congress, Sydney, Australia (2004, May 17-21)
115. Hollister, S.J., Van Lenthe, G.H., Flanagan, C.L., Kasemkhani, A., **Chu, T.M.**, Taboas, J.M., Muller, R., Krebsbach, P.H. and Feinberg, S. Is there an optimal pore size and shape for bone regeneration? Proc. 6th Annual International Conference & Exposition, Tissue Engineering Society International, 2003, Orlando, FL. (2003, Dec. 10-13)
116. Hollister, S.J. Flanagan, C.L., Lin, C.Y., Saito, E., Schek, R.M., Taboas, J.M., **Chu, T.M.**, Muller, R., Van Lenthe, G.H., Feinberg, S.E. and Krebsbach, P.H. Experimental Evaluation of Scaffold/Biofactor Constructs for Bone Tissue Engineering. Proc. International Conference on Advanced Technology in Experimental Mechanics 2003, Nagoya, Japan (2003, Sept. 10-12)
117. Diggs, A.; S.J. Hollister, **Chu, T.M.**, "Fabrication and Characterization of 3-D Biphasic Ceramic Scaffolds Composed of Hydroxyapatite and b-Tricalcium Phosphate" Annual Meeting of the Society for Biomaterials, Reno, NV, April 30-May 3, 2003
118. Jongpaiboonkit, L.; **Chu, T.M.**, J.W. Halloran, "Characterization and Rheology Behavior of DCPD Cement Slips for Casting Complex Scaffold" Annual Meeting of the Society for Biomaterials, Reno, NV, April 30-May 3, 2003
119. **Chu, T.M.**, C.L. Flanagan, S.J. Hollister, S.E. Feinberg, J.P. Fisher, A.G. Mikos, "The Mechanical and In Vivo Performance of 3-D Poly(Propylene Fumarate)/Tricalcium Phosphate Scaffolds" Annual Meeting of the Society for Biomaterials, Reno, NV, April 30-May 3, 2003
120. **Chu, T.M.**, J.W. Halloran, S.J. Hollister, S.E. Feinberg, "Mechanical and in vivo performance of hydroxyapatite bone tissue engineering scaffolds" Annual Meeting of the American Ceramic Society, St. Louis, MO. April 28- May 1, 2002
121. **Chu, T.M.**, S.J. Hollister, S.E. Feinberg, J.W. Halloran, and A. Mikos "Manufacturing of bioceramic and blend composites scaffolds with 3-D architecture designs", Midwest Tissue Engineering Consortium Conference, Ann Arbor, MI. April 19-20, 2002
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