

Date: December 7, 2022

**Curriculum Vitae and List of Publications
Dr. Samer Srouji**

1. Personal Data

Name: Samer Srouji	Identity Number: 29117181
Place of Birth: Nazareth, Israel	Date of Birth: 20/8/1972
Date of Immigration:	Family Status: Married + 4
Citizenship status: Israeli	Permanent Address: 14 Shedrot Hanasi
Phone Number: 052-8702712	E-mail: Samer.srouji@gmc.gov.il

2. Proposed academic rank:

3. Education, Academic Degrees, Residencies, and Fellowships

From-To	Institution	Area of Specialty	Degree
1991-1997	The Hebrew University of Jerusalem	Dentistry	DMD
1998-2003	Technion – Israel Institute of Technology/ Rambam Health Care Campus	Oral and Maxillofacial Surgery	Residency (Chief residence 2001-2003)
2010	Baptist Hospital, Miami, Florida Nova University, Florida	Oral and Maxillofacial Surgery (TMJ Surgery)	Fellowship
2017	Cranio-Maxillofacial Surgery Department, Ulm, Germany	3D Maxillofacial Reconstruction	Fellowship
2020	International Association for Dental Research (IADR)		Officer (Israel Division)



2021	AO CMF Faculty Education Program (FEP), Zurich		Fellowship
2022	AO CMF Faculty Education Program (CEP), Germany		Fellowship
1991-1994	The Hebrew University of Jerusalem		B.Sc.
1995-1997	The Hebrew University of Jerusalem	Oral Biology	M.Sc.
2000-2004	Technion – Israel Institute of Technology	Anatomy & Cell Biology	PhD

4. Academic Appointments

From-To	Position	Institute
2020-	Director	Galilee College of Dental Sciences, Galilee Medical Center.
2018-	Director	3D Point of Care, Galilee Medical Center.
2018-	AOCMF Faculty	AO Foundation
2017-	Associate Clinical Professor	Azrieli Faculty of Medicine, Bar-Ilan University
2015-	Director, Head	Oral & Maxillofacial Dept., Galilee Medical Center, Azrieli Faculty of Medicine, Bar-Ilan University
2015-	Head, PI	Tissue engineering Lab. Galilee Medical Center, Azrieli Faculty of Medicine, Bar-Ilan University
2014-2017	Asst. Professor	Technion Faculty of Medicine (Anatomy & Cell Biology)
2008-2013	Lecturer	Technion Faculty of Medicine (Anatomy & Cell Biology)

2003-2014	Senior Oral & Maxillo-facial Surgeon	Carmel Medical Center
2002-2003	Instructor	Oral and Maxillofacial surgery Department, Rambam Medical Center, Faculty of Medicine, Technion

5. Teaching contributions Faculties of Medicine:

From-To	Teaching Role or Position	Institution
2015-	Oral and Maxillofacial & ENT internship, Teaches medical students (three and four-year programs) - 81110 + 81366. 6-8 groups per year. 128 hours per year (two full days in each round).	Azrieli Faculty of Medicine, Bar-Ilan University.
2021-	Founder and lecturer in the course "An Introduction to Tissue Regeneration and 3D Printing – Current Laboratory and Clinical Trends (No. 828140901, 1 Course credit).	Azrieli Faculty of Medicine, Bar-Ilan University.
2004-2014	In-Charge and coordinator of Anatomy II course (Medical Students)	Technion Faculty of Medicine

6. Professional Staff Appointments (at Medical Institutions):

From-To	Position	Institution
2022	Chief Innovation Officer (CINO)	Bar-Ilan University, Azrieli Faculty of Medicine
2022	Member of the Research Administration	Bar-Ilan University, Azrieli Faculty of Medicine

Bar-Ilan University (RA), The Azrieli Faculty of Medicine ,Henrietta Szold st. 8, POB 1589 Safed, Israel
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2019-2021	Member of the Social Committee	Bar-Ilan University, Azrieli Faculty of Medicine
2019-2022	Member of the Ethics Committee	Bar-Ilan University, Azrieli Faculty of Medicine
2019	Member of professional IOMS Association (Israel Oral and Maxillofacial) committee	Israeli Dentistry Association
2017	Examiner at final accreditation of OMS residents	Israeli Dentistry Association
2009-2012	Member	Technion Faculty of Medicine, Graduate students' MD Thesis Committee
2004-2014	Coordinator	Technion Faculty of Medicine, Anatomy II course
2010-	Examiner	MORE EXAMS evaluation of medical students
2008-2014	Research coordinator and principal investigator	Oral and Maxillofacial Surgery Department, Carmel Medical Center

7. Supervision of Graduate , Post-Graduate Students and Medical Students

Name of Student	Degree, Years Supervised	Thesis or Project Title	Publication(s) with student as Author (refer to number in publication list)
Jozafin Haj	M.Sc., 2015	Vascularized bone regeneration utilizing custom made bioreactor	#25



Alexey Khorev	MD, Basic Science Res. 2014	Bone Oozing: Study hemostatic features of albumin-based fibrous mesh, Department of Anesthesiology Carmel Hospital	-
Alaa Khutaba	M.Sc., 2016	VEGF release from nanofibers/ceramic scaffold incorporated with osteoprogenitors cell for bone regeneration	#24
Samira Khoury	M.Sc., 2019	The effect of hyperoxia on stem cells in manipulated adipose tissue	#28
Rima Faddoul	M.Sc., 2019	Manipulated adipose tissue as potential agent to cure endometrial polyp	#32
Manar Ghanem	M.Sc., 2019	Fast identification of novel anti-diabetic natural products aided by in silico techniques	#29
Adi Kasem	DMD, Basic Science Res 2022	Analysis of Gunshot Trauma in maxillofacial surgery	#2 (in review after revision)
Daniel Oren	M.Sc., 2023	Effect of Anti-Angiogenic drugs on tissue healing and regeneration: in vitro and in vivo study.	#16, #20
Adeeb Zoabi	M.Sc., 2023	Microcapillary-network-based scaffold for bone regeneration	#31 #3
Asaf Zigron	Ph.D., 2023	Manipulated adipose tissue coated with CGF as a potential implant to cure soft and bone tissue	#17
Shadi Daoud	PhD 2025	3D printing of costochondral graft based on composite polymers	
Lama Milhim	Ph.D., 2026	3D bioprinting of organ-on-a-chip device for craniofacial tissue characterization	



Deema Matar	M.Sc 2025	Formulation of a mineralized HA-Gelatin hydrogel for rehabilitation of tissue defects	
Samer Imtanes	M.Sc 2025	Regeneration and transplantation of a vascularized dental-pulp system	
Tareza Faraje	M.Sc 2025	Segmentation and Analysis of tooth movement to design 3D-based patient-specific orthodontic appliances	

8. Competitive Research Funding Sources

Year	Funding Agency	Title	Amount
2002	Lazaroff Fund P.I: S. Srouji	Maxillofacial Surgery Research	\$5000
2006	Teva Ltd P.I: E. Livne, Co. P.I: S. Srouji	Stem cells for bone tissue engineering	\$20,000
2006	Medical Implant Systems P.I: E. Livne, Co. P.I: S. Srouji	Dental membrane for guided bone regeneration	\$40,000
2007-8	Israeli Ministry of Industry & Trade P.I: E. Zussman, Co. P.I: S. Srouji	MAGNETON: Development of hybrid dental membranes from electrospun nanofibers	\$40,000
2008	European Union FP7 Angioscaff . P.Is: S. Srouji, E. Livne	Angiogenesis: Inducing bioactive and bioresponsive scaffolds in tissue engineering	€320,000
2009	Lazaroff Fund P.I: S. Srouji	Maxillofacial Surgery Research	\$2500
2010	Johnson & Johnson PIs: S.Srouji, E.Zussman	Novel platform for vascularization of engineered tissue	\$50,000
2010	Technion vice president for research fund P.I: S. Srouji	Platform for vascularization of engineered tissue	\$25,000
2013	Israeli Ministry of Industry & Trade P.I: S. Srouji	NOFAR Regenerative Medicine – Bone regeneration with vascularized network	\$120,000



2015	Israeli Ministry of Industry & Trade P.I O. Ronen, Co P.I: S. Srouji	Magneton- Bone regeneration with vascularized network	\$200,000
2017	Israeli Ministry of Industry & Trade Magnet P.I: S. Srouji	Magneton-Bioactive coating of dental implants	\$200,000
2018	Mafaat MOD	Ballistic Injury "Shaa'r"	250,000 NIS
2019	Mafaat MOD	Ballistic Injury "Shaa'r"	200,000 NIS
2020-2021	Mafaat MOD	Ballistic Injury "Shaa'r"	250,000 NIS
Clinical Research			
2018	Confident ABC	Medical device for sinus detection	20,000\$
2018	Alpha Bio Tec	Single tooth replacement by dental implant and fat tissue augmentation	60,000\$

9. CONFERENCES

1. Participation in organizing conferences

Conference Program Chair:

- Tissue Engineering of Bone and Mucosal Graft, Present and Future, Clinical and Research View, Faculty of Medicine, Haifa, March 2006.
- Galilee Israeli division of the International Association for Dental Research (IADR) in collaboration with Stony Brook University-School of Dental Medicine, (NY). Galilee Medical Research Center, April 2019.
- Nano-Bio Workshop symposium, Galilee Medical Research Center, June 2019
- Galilee College of Dental Sciences, Scientific symposium. Galilee Medical Research Center, February 2020.
- The 1st Gulf Medical University (GMU) – Galilee Medical Center (GMC) Scientific Symposium, Dubai, December 2020.
- The Israeli division of the International Association for Dental Research (IADR) Annual Meeting, Hebrew University-Hadassah School of Dental Medicine, Jerusalem, Israel. June 2021.



Conference Session Chair:

- Bone Regeneration, International Association of Dental Research, Barcelona, Spain, 2010.
- Oral and Maxillofacial Surgery, Annual Meeting, International Association for Dental Research, Israeli Section. Tel-Aviv, 2011
- Non-Invasive Sinus Augmentation, World Congress of Ultrasonic Piezoelectric Bone Surgery (WCUPS) Gyeongju, South Korea, 2013.
- Hard Tissue Regeneration, Annual Meeting, International Association for Dental Research, Israeli Section. Tel-Aviv, 2013.
- Annual Meeting, International Association for Dental Research, Israeli Section. Tel-Aviv, 2015.
- The 29th World Congress of the International College for Maxillo-Facial Surgery - ICMFS 2015, Limassol, Cyprus, 2015.
- International Conference on Oral and Maxillofacial Surgery (ICOMS) 2015 Melbourne Convention and Exhibition Centre, Victoria, Australia, 2015.
- Annual Meeting, International Association for Dental Research, Israeli Section. Tel-Aviv, Israel 2017.
- Israeli Association of Oral and Maxillofacial Surgery Conference, Tel-Aviv, Israel, 2018.
- Israeli Association of Oral and Maxillofacial Surgery Conference, Tel-Aviv, 2019.
- Israeli Association of Oral and Maxillofacial Surgery Conference, Tel-Aviv, 2021.
- PER-IADR, Oral Health Research Congress, Marseille, France 2022.

Conference Chairperson:

- Nano-Bio Nano-Bio Workshop, Nahariya, Israel 2018.
- IDF and Research Bridge, Galilee Medical Research Center, 2018.
- International Multidisciplinary Conference on The Treatment of War Injuries, Galilee Medical Research Center, 2018.
- The Arab Dental Association, Haifa, 2018.
- Galilee College of Dental Sciences, Scientific Conference, Galilee Medical Research Center, 2020.

2. a. Plenary or invited talks

Keynote lecture:

1. A new strategy for bone regeneration: the challenge and the key to success. Bone-tec 2013, Nanyang Technological University (NTU), Singapore, 2013.
2. Wafer-less positioning of the maxilla using patient-specific guides and plates orthognathic surgery. The 2018 International Conference of the Israeli Association of Oral and Maxillofacial Surgery, Tel-Aviv, 2018.
3. 3D printing and bioprinting in Head and Neck Surgery, The Annual meeting of Head and Neck Surgery Association, Tel-Aviv, 2019.
4. Sinus lifting & Sinusitis Can we learn from the complications, The Annual Rhinology ENT meeting, Jerusalem 2021

International:

5. The Mystery of Maxillary Sinus Bone Augmentation; Human Maxillary Sinus Mucosa contains high potential osteoprogenitor cells: In vitro and in vivo study, National Institutes of Health, National Institute of Dental and Craniofacial Research Bethesda, MD, USA, 2007.
6. Novel method of external fixation for femoral critical size defect in immunodeficient nude mice, La Sapienza University and the San Raffaele Science Park, Rome, Italy, 2007.
7. Stem Cell and Sinus Augmentation, Oral and Maxillofacial Surgery Department, (AKH) Medical University of Vienna, Austria, 2008.
8. Bone regeneration in maxillary sinus, Department of Oral and Maxillofacial Surgery, New York University, New York, USA, 2010.
9. Role of the maxillary sinus mucosa in bone regeneration, IADR (International Association of Dental Research), Barcelona Spain, 2010. (Plenary talk in a session entitled "Bone Regeneration").
10. Bone regeneration in oral surgery, Oral and Maxillofacial Surgery Department Jackson Memorial Hospital, Miami, FL, USA, 2011.
11. The mystery of maxillary sinus bone augmentation, World Congress of Ultrasonic Piezoelectric Bone Surgery (WCUPS 2013), Gyeongju, Korea, 2013.
12. The challenge of Bone regeneration in Maxillofacial surgery, World Congress of Ultrasonic Piezoelectric Bone Surgery (WCUPS 2013), Tokyo, Japan, 2014.
13. Fat Tissue for bone regeneration in sinus lifting procedure, Congress of Bone Surgery, Bangkok, Thailand, 2016.
14. Use of buccal fat bed (adipose tissue) for closure of perforation and graft material in a maxillary sinus lifting procedure: clinical results and biological perspective, World congress of Growth factors and stem cells in Dentistry, Athens, Greece, 2016.
15. Dive to CGF and Sticky Bone, World Bone surgery, New Delhi, India, 2017.
16. Severe gunshot Maxillofacial trauma, when and where to start? 23th International Conference of Oral and Maxillofacial Surgery, Hong Kong, 2017.
17. Maxillofacial war Injuries, NATO Centre of Excellence for Military Medicine Budapest, Hungary ,2017.
18. Novel Technique for bone and soft Tissue regeneration World Congress of Ultrasonic Piezoelectric Bone Surgery (WCUPS), Los Angeles, USA 2018.
19. Novel Technique for bone and soft Tissue regeneration, World Bone surgery (Waups) Los Angeles, USA 2018.
20. Severe gunshot maxillofacial trauma, when and where to start? 24th Congress of the European Association for Cranio Maxillo Facial Surgery (ECAMFS 2018), Munich, Germany 2018
21. How to make operative TMJ Arthroscopy Simple. The OSCA (Operative Single Cannula Arthroscopy) Technique. Limassol, Cyprus 2018



22. Gunshot mandibular fractures - How can I improve my results? International Conference on Oral and Maxillofacial Surgery (ICOMS). Rio de Janeiro, Brazil 2019.
23. Operative single cannula TMJ arthroscopy. International Conference on Oral and Maxillofacial Surgery (ICOMS) 2019. Rio de Janeiro, Brazil 2019.
24. 3D orbital reconstruction by PSI. The 2nd Dusseldorf international course 2019, Dusseldorf, Germany 2019.
25. How to make operative TMJ Arthroscopy Simple. The OSCA (Operative Single Cannula Arthroscopy) Technique. International ASTMJS conference. San Diego, USA 2019.
26. Current Treatment of War Injuries to The Midface. MKG Frankfurt, Germany 2019.
27. Novel Technique for bone and soft tissue regeneration World Congress of Ultrasonic Piezoelectric Bone Surgery (WCUPS), Tilburg, Netherlands 2019.
28. AOCMF Faculty Summit Europe & Southern Africa, Toledo, Spain 2019
29. Flow chart for advanced virtual orthognathic planning. AOCMF Seminar-Advances in Orthognathic Surgery, ICMFS Congress. Tel Aviv 2019.
30. The future medicine-3D models and tissue engineering. The Virtual European Researchers' Night, 2019.
31. The debate between wafer and waferless, where is the encounter? AO CMF Seminar-Advances in Orthognathic Surgery, ICMFS Congress. Tel Aviv, 2019.
32. From blood to bone graft: the way to success. LifeNet Health Global Virtual Dental Symposium, (Virtual) 2020.
33. 3D Printing and Virtual Surgical Planning in Maxillofacial Surgery – The pitfalls and the pearls. AAOMS virtual annual meeting, 2020.
34. Medical, Health & Wellness VR. New York University VR/AR. 2021.
35. Medical 3D Technology in CMF – Indian virtual podcast,2021.
36. 3D Point of care, first steps of AR in CMF, are we entering a new era? Shift Medical XR Congress, 2021.
37. Immediate Loading for Atrophic Maxilla using Zygomatic & Pterygoid Implants- Virtual interactive cadaver workshop by Noris Academy collaborated with Gulf Medical University (GMU), Abu-Dhabi 2021
38. Efficacy of operative single cannula arthroscopy in the treatment of the temporomandibular joint disorder. The European Society of TMJ Surgeons (ESTMJS) Groningen, Netherland 2022.
39. How to move from a basic 3D lab to an advanced one for a daily practice in CMF.3D Printing in hospitals forum, Leuven, Belgium 2022.
40. Biological surface coating of dental implant in vitro & in vivo study. Non-Invasive Sinus Augmentation, World Congress of Ultrasonic Piezoelectric Bone Surgery (WCUPS), Hanoi, Vietnam 2022.

National:

41. Human Maxillary Sinus Mucosa contains high potential osteoprogenitor cells: In vitro and in vivo study, Faculty of Dentistry, Tel-Aviv University, Tel-Aviv, 2008.



42. Bone regeneration on maxillofacial surgery, update bone and cartilage regeneration. Orthopedic board of the Rappaport Faculty of Medicine. Technion, Haifa, 2008.
43. The Mystery of Maxillary Sinus Bone Augmentation; Human Maxillary Sinus Mucosa contains high potential osteoprogenitor cells: In vitro and in vivo study, Faculty of Dental Medicine, Hadassah Ein Kerem, Jerusalem, 2009.
44. Reconstruction of hard and soft tissue-based stem cell and nanotechnology: A future spot, Israeli *Otolaryngology* Association, Haifa, 2009.
45. Sinus Augmentation Rhinologic consideration from the Maxillofacial perspective, National Rhinology Conference, Tel-Aviv, 2010.
46. Maxillary Sinus Floor Elevation Following Simultaneous Implant Installation without Graft Material, Israeli Periodontal Society conference, Tel-Aviv, 2012.
47. The Mystery of Maxillary Sinus Schneiderian Membrane, National Rhinology Conference, Modiin, 2013.
48. B-THALASSEMIA major the challenge for Maxillofacial Surgeon, National Hematology Conference, Haemk Medical Center, Afula, 2015.
49. Application of Concentrated Growth Factors in Implantology, Israeli Association of Oral and Maxillofacial Surgery Conference, Tel-Aviv, 2016.
50. How to make operative TMJ Arthroscopy Simple. The OSCA (Operative Single Cannula Arthroscopy) Technique, Israeli Association of Oral and Maxillofacial Surgery Conference, Tel-Aviv, 2017.
51. Wafer-less positioning of the maxilla using patient-specific guides and plates orthognathic surgery. Israeli Association of Oral and Maxillofacial Surgery Conference, Tel-Aviv, 2018.
52. Immediate implant loading in conjunction with CBCT guided implant placement, alongside the inferior alveolar nerve as an alternative to nerve transposition. AlphaBio virtual immediacy symposium, Tel-Aviv, 2020.
53. 3D Printing challenges in healthcare. Thinking outside the box, The biannual conference of the Israeli division for Periodontology and Osseointegration, Tel-Aviv, 2021.
54. Point of Care 3D Printing. 3D Transformation conference. Tel Hashomer, 2021.
55. 3D Virtual Surgical Planning in Maxillofacial complex, in the 4th industrial revolution. IDA Annual Conference. Dentistry and Facial Aesthetics-When Science Art Come Together. Tel Aviv, 2021.
56. Xr in the service of the OMS; Are we there yet?! IAMFS Annual Conference, Tel-Aviv 2021.
57. Setting up a 3D lab at the medical center, Clalit health services conference, Tel-Aviv 2022.
58. Bioprinting and tissue engineering the "Reality and the future", IDIC-Dutch Israel Innovation Center, Organized by Netherland Embassy, Tel-Aviv, 2022.
59. Minimally Invasive Surgery as a Solution for Challenging Cases and Complications in Implantology, The 1st Maxillofacial Prosthodontic Mutual Meeting, Tel-Aviv 2022.



b. Conferences attended and Talks Presented

1. **Srouji S**, Deutsch D. Gene expression of bone sialoprotein-BSP in bones of aging mouse, employing in situ hybridization. 11th International Workshop on Calcified Tissues, Eilat, 1998.
2. **Srouji S**, Blumenfeld I, Lanir Y and Livne E. Healing of bone defects by TGF- β and IGF-1 in old rats. 19th Meeting of Israel Society for Histochemistry and Cytochemistry, Technion, Haifa, 2000.
3. **Srouji S**, Blumenfeld I, and Livne E. Bone defect osteoinduction by TGF- β and IGF-1 released from a biodegradable hydrogel in rat tibia. 47th Annual Meeting, Orthopedic Research Society, San Francisco, USA, 2000.
4. **Srouji S**, Blumenfeld I, Eleftheriou S, Peled M, Rachmiel A, Livne E. Bone osteoinduction by TGF-beta and IGF-1 released from a biodegradable osteoinductive hydrogel in rat tibia. Annual Meeting of Israeli Society for Calcified Tissues Research, Tel Aviv, 2001.
5. **Srouji S**, Rachmeil A, Peled M. Posterior maxillary osteotomy, an aid for prosthodontic problems. Medax-Oral and Maxillofacial Surgery, Tel-Aviv, 2001.
6. **Srouji S**, Blumenfeld I, Peled M, Rachmiel A, Livne E. Bone osteoinduction by TGF- beta and IGF- 1 released biodegradable osteoinductive hydrogel. Tissue Banking 10th Meeting, Eilat, 2001.
7. **Srouji S**, and Livne E. Use of bone marrow stem cells for bone repair in aging. The Center for Multidisciplinary Research in Aging, Ben Gurion University, Beer Sheva, 2001.
8. **Srouji S**, Blumenfeld I, Livne E, Rachmiel A, Peled M. Mandibular defect repair by TGF-beta and IGF-I released from a biodegradable osteoconduction hydrogel. 31st Annual Meeting of IADR, San Diego, USA, 2002.
9. **Sruoji S**, Livne E. Use of bone marrow stem cells (BMSC) impregnated in a biodegradable hydrogel scaffold for the repair of a bone defect. Workshop on Cell Biomechanics and Tissue Engineering. Israel Society for Medical and Biological Engineering, Technion, Haifa, 2002.
10. **Srouji S**, Blumenfeld I, Peled M, Rachmiel A, E Livne, Mandibular defect healing by use of biodegradable hydrogel impregnated with growth factors. Annual Meeting, International Association for Dental Research, Israeli Section. Tel Aviv, 2002.
11. **Srouji S**, and Livne E. Use of bone marrow stem cells (BMSC) impregnated in biodegradable hydrogel scaffold for repair of bone defect. International Workshop on Cell Biomechanics and Tissue Engineering. 25th Meeting of ASBMR, Minneapolis, USA, 2003.
12. **Srouji S**, Livne E. Bone marrow derived stem cells and biological scaffold for bone repair. International Conference, Strategies in Tissue Engineering, Würzburg, Germany, 2004.
13. **Srouji S**, Livne E. Biological scaffold for bone repair. International Workshop: Mesenchymal stem cells, Tours, France, 2004.



14. **Srouji S**, Mouiger G, Livne E. Bone Marrow Stem Cells (MSC) and Growth Factors Impregnated in Biodegradable Scaffold for Bone Repair. Annual meeting AAOMS, San Francisco, USA, 2004.
15. **Srouji S**, Schenzer P, Livne E. Bone marrow stem cells and biodegradable scaffold for cell therapy. FISEB Ilanit Congress, Eilat, 2005.
16. **Srouji S**, Livne E. Bone marrow stem cells and biodegradable scaffold for tissue engineering. 2nd World Congress on Regenerative Medicine, Leipzig, Germany 2005.
17. **Srouji S**, Mouiger G, Livne E. Adult stem cells and biological scaffold for tissue engineering. 17th International Conference on Oral and Maxillofacial Surgery, Vienna, Austria, 2005.
18. **Srouji S**, Livne E, Drachsler I, Shenzer P, Kizhner T. Use of 3D scaffolds and osteoprogenitor cells for bone tissue engineering. 12th International Workshop on Stem Cells and Calcified Tissues. Herzliya, 2006.
19. **Srouji S**, Livne E, Chervinsky S, Zussman E. Use of an electrospun nanofibrous scaffold for bone marrow-derived osteoprogenitor cells differentiation for bone implant repair. 2nd International Conference Strategies in Tissue Engineering. Würzburg, Germany, 2006.
20. **Srouji S**, Livne E, Chervinsky S, Zussman E., Use of an electrospun nanofibrous scaffold for bone marrow-derived osteoprogenitor cells differentiation for bone implant repair. 12th International Workshop on Stem Cells and Calcified Tissues. Herzliya, 2007.
21. **Srouji S**, Kizhner T, Zussman G, Livne E. Electrospun nanofibrous scaffold support bone marrow derived osteoprogenitor stem cells differentiation. XVIII Congress of the European Association for Cranio-MaxilloFacial Surgery, Barcelona, Spain, 2007.
22. **Srouji S**, Kizhner T, Ben David D, Riminucci M, Bianco P, Livne E. The Schneiderian Membrane Contains Osteoprogenitor Cells: In Vivo and In Vitro Study. 20th EAO Annual Scientific Congress – Warsaw, Poland, 2008.
23. **Srouji S**, Kizhner T, Ben David D, Riminucci M, Bianco P. The Schneiderian Membrane Contains Osteoprogenitor Cells. Annual Meeting, International Association for Dental Research, Israeli Section. Tel Aviv, 2009.
24. **Srouji S**, Ben-David D, Lotan R, Riminucci M, E, Bianco P. Bone regeneration in maxillary sinus. IADR (International Association of Dental Research) Barcelona, Spain, 2010.
25. **Srouji S**, Efficacy of Arthroscopic Disc-Repositioning (Discopexy) in Internal Derangement of the Temporomandibular Joint, AAOMS 93rd Annual Meeting Scientific Sessions and Exhibition. Philadelphia, USA 2011.
26. **Srouji S**, Evaluation of osteoconductive potential of bone substitute, Carmel Research Meeting, Haifa, 2012.
27. **Srouji S**, Bone Formation in the Maxillary Sinus lifting Using blood clot alone, Annual Meeting International Association for Dental Research, Israeli Section, Tel Aviv, 2013.
28. Haj T., **Srouji S**, Hybrid scaffold imitating bone extracellular matrix seeded with mesenchymal stem cells (MSCs) for bone regeneration, Annual Meeting International Association for Dental Research, Israeli Section. Tel Aviv, 2013.



29. **Srouji S**, Evaluation of the osteoconductive potential of bone substitutes embedded with Schneiderian membrane- or maxillary bone marrow-derived osteoprogenitor cells, 21st International Conference on Oral and Maxillofacial Surgery, Barcelona, Spain 2013.
30. **Srouji S**, Gaspar R, Mougier G, Maxillary Sinus Floor Elevation Following Simultaneous Implant Installation without Graft Material, 21st International Conference on Oral and Maxillofacial Surgery, Barcelona, Spain 2013.
31. **Srouji S**, using buccal fat bed (adipose tissue) as material graft in Maxillary Sinus lifting procedure International Association for Dental Research Pan European Regional (IADR/PER), Dubrovnik, Croatia 2014.
32. Khutaba A^(s), **Srouji S**, H. Zigdon-Giladi, Hybrid scaffold imitating bone extracellular matrix seeded with mesenchymal stem cells (MSCs) for bone regeneration, Annual Meeting International Association for Dental Research, Israeli Section. Tel Aviv, 2015
33. D. Oren, I Granot, **Srouji S**, Treatment of Langerhans' cell histiocytosis with Maxillofacial involvement. Annual Meeting International Association for Dental Research, Israeli Section. Tel Aviv, 2015.
34. S. Barhum, I Granot, **Srouji S**, Dental management and treatment of sanFilippo syndrome Annual Meeting International Association for Dental Research, Israeli Section. Tel Aviv, 2015.
35. T. Bramnik, A. Kuperman, Granot I, **Srouji S**, Custom made subperiosteal implant in jaws of β -Thalassemia major patient. Annual Meeting International Association for Dental Research, Israeli Section. Tel Aviv, 2015.
36. M. Gendler. Granot I, **Srouji S**, Dental treatment and management under general anesthesia in DiGeorge syndrome. Annual Meeting International Association for Dental Research, Israeli Section. Tel Aviv, 2015.
37. A. Zoabi, **Srouji S**, The extent of surgical trauma may not be a key factor in Medication Related Osteonecrosis of the Jaw (MRONJ) development: An in vivo study in the rat model. Annual Meeting International Association for Dental Research, Israeli Section. Tel Aviv, 2017.
38. D. Oren, **Srouji S**, The effects of anti-angiogenic drugs on endothelial progenitor cells and their impact on MRONJ. Annual Meeting International Association for Dental Research, Israeli Section. Tel Aviv, 2017.
39. A.Zoabi, **Srouji S**, Accuracy and Efficacy of a DICOM-based 3D printed teeth supported guide for Repeated Intra Lesional injections. IAMFS Annual conference, Tel-Avi, 2021.
40. D. Oren, **Srouji S**, Efficacy of Operative Single-cannula Arthroscopy in the Treatment of the Temporomandibular Joint Disorders. IAMFS Annual Conference, Tel-Aviv, 2021.

b. Contributed Talks, Posters and Abstracts

Posters

1. R. Jarjoura-Shoukair, T. Shani, Z. Awadieh, **Srouji S**, I. Granot. Major Erythema Multiforme in a Pediatric Patient: A Case Presentation. The Israeli division of the International Association for Dental Research (IADR) Annual

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- Meeting, Hebrew University-Hadassah School of Dental Medicine, Jerusalem, 2021.
2. Fahoum K, Khoury M, Haim S, Dror A, Oren D, Kablan F, Abramson A, **Srouji S**, Adherence of dentists to World Health Authority guidelines during the pandemic. The Israeli division of the International Association for Dental Research (IADR) annual meeting, Hebrew University-Hadassah School of Dental Medicine, Jerusalem, 2021.
 3. Fahoum K, Khoury M, Absawi L, Costa L, Dror A, Bernfeld N, Oren D, Einy S, Kablan F, **Srouji S**, COVID-19-induced stress among dentists affects pediatric cooperation. The Israeli division of the International Association for Dental Research (IADR) annual meeting, Hebrew University-Hadassah School of Dental Medicine, Jerusalem, 2021.
 4. Meltzer L, Khoury M, Zigron A, Dror A, Bernfeld N, Oren D, **Srouji S**, COVID-19 Effect on Paediatric Dentistry General Anaesthesia Candidates. The Israeli division of the International Association for Dental Research (IADR) annual meeting, Hebrew University-Hadassah School of Dental Medicine, Jerusalem, 2021.
 5. Enssaf Safory, T. Shani, Z. Awadieh, **Srouji S**, I. Granot. Case Report: Herpes Zoster (Shingles). The Israeli division of the International Association for Dental Research (IADR) annual meeting, Hebrew University-Hadassah School of Dental Medicine, Jerusalem, 2021.
 6. Nicole Bernfeld, T. Shani, Z. Awadieh, **Srouji S**, I. Granot. Case Series: Kohlschutter-Tonz Syndrome. The Israeli division of the International Association for Dental Research (IADR) annual meeting, Hebrew University-Hadassah School of Dental Medicine, Jerusalem, 2021.
 7. Zigron A, **Srouji S**, Does Concentrated Growth Factors (CGF) coated titanium implants improve osseointegration? The Israeli division of the International Association for Dental Research (IADR) annual meeting, Hebrew University-Hadassah School of Dental Medicine, Jerusalem, 2021.

c. Refereed papers in conference proceedings

1. **Srouji S**, Kizhner T, Chervinsky S, Zussman E, Livne E. Electrospun nanofibrous scaffold supports bone marrow-derived osteoprogenitor cell differentiation. Eur. Assoc. Cranio-Maxillofacial Surg. Proc. 177-181. Barcelona, Spain 2006.
2. **Srouji S**, - Gunshot mandibular fractures - How can I improve my results? International Conference on Oral and Maxillofacial Surgery (ICOMS). Rio de Janeiro, Brazil 2019.



10. Miscellaneous

Date	Membership
2000	Israel Medical Association
1997	Israel Dental Association
2003	International Association of Dental Research – IADR
1998	Israel Society for Oral & Maxillofacial Surgery
2003	International Oral & Maxillofacial Surgery Association
2012	European Cranio-Maxillofacial Surgery Association
2003	AO foundation
2012	American Society of TMJ Surgeons
2015	European Society of TMJ Surgeons
Date	Honors and Awards
1992	Dean's list for excellence, Faculty of Dental Medicine, Hebrew University, Jerusalem
1993	Dean's list for excellence, Faculty of Dental Medicine, Hebrew University, Jerusalem
1994	B.Sc. cum laude, Faculty of Dental Medicine, Hebrew University, Hadassah, Jerusalem
1997	M.Sc. cum laude, Faculty of Dental Medicine, Hebrew University, Hadassah, Jerusalem
2001	Brookdale Institute Award for Cellular Approaches in Aging, Jerusalem
2002	The Hershel Rich Innovation Award, Technion, Haifa
2005	Outstanding Lecturer Award, Faculty of Medicine, Technion, Haifa
2006	Outstanding Lecturer Award, Faculty of Medicine, Technion, Haifa
2017	1st prize in IAOMFS resident competition (Adeeb Zoabi, Samer Srouji)
2019	1st prize in IAOMFS resident competition (Daniel Oren, Samer Srouji)
2021	3rd prize in IACMS resident competition (Asaf Zigran, Samer Srouji)

Bar-Ilan University (RA), The Azrieli Faculty of Medicine ,Henrietta Szold st. 8, POB 1589 Safed, Israel
Tel: 072 264 4971 • clinicalpromotions.medicine @biu.ac.il



11. Public Scientific Activities Outside the University

<u>From-To</u>	<u>Type of Activity or Appointment</u>
2002-2005	Chief medical consultant, director of the board and founder of Dentosonic Ltd. a start-up company at the Technion ecosystem (TEIC) developing an ultrasound system
2003-2007	European Community project FP6 "Genostem" – Mesenchymal stem cell engineering for connective tissue disorders – Principal Investigator
2004-2008	MAGNET Project "Bereshit" Stem Cell Therapy-Principal Investigator
2013-2017	Member of the scientific advisory board of Bonus Ltd., a biotechnology company, Haifa.
2017-2018	Member of the committee of the Ministry of Health for applying medical equipment in 3D printing at the hospitals.
2018	Founder of Dohana Ltd, a Biomed company that deals with the regeneration of soft tissue and bone based on adipose tissue.
2017-2023	Academic collaboration with Titu Maiorescu University Romania. As part of the <u>Erasmus + Inter-institutional</u> agreement, lecturers from the Galilee College of Dental Sciences delivered concentrated lectures to the Faculty of Dentistry at a university in Romania. The agreement was signed between Bar-Ilan University and Miorescu University in Romania.
2019	Chairperson of 3D orthogenetic planning courses using Proplan software for interns from other departments in Israel, in cooperation with Johnson & Johnson and Materialize.
2019-2020	Faculty member and instructor at the Dusseldorf international course, Germany. Cadaver course in the field of access to facial bones, jaw arthroplasty, and flaps in oral and maxillofacial surgery
2021	Leading the signing of a memorandum of understanding (mou) for cooperation between the Galilee College of Dental Sciences, Galilee Medical Center and the College of Dentistry (Gulf Medical University (GMU), Dubai.
2021	Guest editor on CMF 3D Technology in the Journal of Clinical Medicine (JCM), MDPI group IF= 4.2



2022	Leading the signing of a memorandum of understanding (mou) for cooperation between the Galilee Medical Center and Bar Ilan University and the Eastman Institute for Oral Health at the University of Rochester School of Medicine & Dentistry.
2022	Founder of the BIOBIU innovation program at the Azrieli Faculty of Medicine, Bar Ilan University.
2023	Chairperson AO CMF Trauma principles, Haifa.

12. List of Publications

Thesis:

M.Sc Thesis: Gene expression of bone sialoprotein-BSP in bone of aging mouse, employing *In situ hybridization*, Supervisor: Prof. D. Deutsch

PhD Thesis: Bone marrow stem cells and growth factors in a 3D scaffold for bone repair, Supervisor: Prof. E. Livne

A. Hypothesis-driven research

- Blumenfeld I, **Srouji S**, Lanir Y, Laufer D, Livne E. Enhancement of bone defect healing in old rats by TGF- β and IGF-1. *Exp Gerontol* 2002; 37:553-565.
IF 4.032, Rank: 23/53 (Geriatrics & Gerontology). Contribution A, B,C
Narrative contribution: analyzed data and revised manuscript
- Blumenfeld I, **Srouji S**, Peled M, Livne E. Metalloproteinases (MMP- 2, 3) are involved in TGF- β and IGF-1 - induced bone defect healing in old rats. *Arch Gerontol Geriat* 2002;35:59-69.
IF 3.250, Rank: 34/53 (Geriatrics & Gerontology). Contribution A, B,C
Narrative contribution: analyzed data and revised manuscript
- Srouji S**, Blumenfeld I, Rachmiel A, Livne E. Bone defect repair in rat tibia by TGF-beta1 and IGF-1 released from hydrogel scaffold. *Cell Tissue Bank*. 2004;5(4):223-30.
IF 1.522, Rank: 186/195 (Cell Biology). Contribution A,B,C,D
- Srouji S**, Livne E. Bone marrow stem cells and biological scaffold for bone repair in aging and disease. *Mech Ageing Dev* 2005;126:281-287.
IF 5.432, Rank: 12/53 (Geriatrics & Gerontology). Contribution A,B,C,D
- Srouji S**, Maurice S, Livne E. Microscopy analysis of bone marrow-derived osteoprogenitor cells cultured on hydrogel 3-D scaffold. *Microsc Res Tech*



- 2005;66:132-138.
IF 2.769, Rank: 37/93 (Biology). Contribution A,B,C,D
6. **Srouji S**, Rachmiel A, Blumenfeld I, Livne E. Mandibular defect repair by TGF- β 1 and IGF-1 released from a biodegradable osteoconductive scaffold. J Cranio-Maxillofacial Surg 2005;33:79-84.
IF 2.078 Rank: 61/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
7. Maurice S, **Srouji S**, Livne E. Isolation of progenitor cells from cord blood using adhesion matrices. Cytotechnol 2007;54:121-133.
IF 2.058, Rank: 128/159 (Biotechnology & Applied Microbiology). Contribution A,B,C
Narrative contribution: analyzed data and revised manuscript
8. Román I, Vilalta M, Rodriguez J, Matthies A, **Srouji S**, Livne E, Hubbell J, Rubio Blanco J. Analysis of progenitor cell-scaffold combinations by in vivo non-invasive photonic imaging, Biomaterials 2007;28:2718-28.
IF 12.479, Rank: 2/40 (Materials Science, Biomaterials). Contribution B,C.
Narrative contribution: analyzed data and revised manuscript
9. **Srouji S**, Kizhner T, Suss-Tobi E, Livne E, Zussman E. 3-D Nanofibrous electrospun multilayered construct is an alternative ECM mimicking scaffold. J Mater Sci Mater Med. 2008 Mar;19(3):1249-55.
IF 3.896, Rank: 22/40 (Materials Science, Biomaterials). Contribution A,B,C,D
10. Ben David D, Reznick A, **Srouji S**, Livne E. Exposure to pro-inflammatory cytokines upregulates MMP-9 synthesis by mesenchymal stem cells-derived osteoprogenitors. Histochem Cell Biol 2008;129(5):589-97.
IF 4.304, Rank: 106/195 (Cell Biology). Contribution B,C
Narrative contribution: analyzed data and revised manuscript
11. **Srouji S**, Kizhner T, Ben David D, Riminucci M, Bianco P, Livne E. The Schneiderian membrane contains osteoprogenitor cells: in vivo and in vitro study. Calcif Tissue Int 2009;84(2):138-45.
IF 4.333, Rank: 56/145 (Endocrinology and Metabolism). Contribution A, B, C, D
12. Hamidouche Z, Fromigué O, Ringe J, Haupl T, Vaudin P, **Srouji S**, Livne E, Marie P. Priming integrin α 5 promotes human mesenchymal stromal cell osteoblast differentiation and osteogenesis, Proc Natl Acad Sci USA. 2009;3;106(44):18587-91.
IF 11.205, Rank: 8/73 (Multidisciplinary Sciences). Contribution A,B,C
Narrative contribution: analyzed data and revised manuscript
13. **Srouji S**, Ben-David D, Lotan R, Riminucci M, Livne E, Bianco P. The innate osteogenic potential of the maxillary sinus (Schneiderian) membrane: An ectopic tissue transplant model simulating sinus lifting, Int J Oral Maxillofac Surg 2010;39(8):793-801.
IF 2.789, Rank: 34/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
14. Ben-David D, Kizhner T, Livne E, **Srouji S**, A tissue-like construct of human bone marrow MSCs composite scaffold support in vivo ectopic bone formation. J Tissue Eng Regen Med 2010;4(1):30-7.



- IF 3.963, Rank: 58/159 (Biotechnology & Applied Microbiology). Contribution A,B,C,D
15. Cohen S, Leshansky L, Zussman E, Burman M, **Srouji S**, Livne E, Abramov N, Itskovitz-Eldor J. Repair of full-thickness tendon injury using connective tissue progenitors efficiently derived from human embryonic stem cells and fetal tissues. *Tissue Eng Part A* 2010;16(10):3119-37.
IF 3.845 Rank: 23/40 (Materials Science, Biomaterials). Contribution A,B,C,D
Narrative contribution: analyzed data and revised manuscript
16. Ben-David D, Kizhner T, Kohler T, Müller R, Livne E, **Srouji S**, Cell-scaffold transplant of hydrogel seeded with rat bone marrow progenitors for bone regeneration. *J Craniomaxillofac Surg* 2011;39(5):364-71.
IF 2.078, Rank: 61/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
17. **Srouji S**, Ben-David D, Lotan R, Livne E, Avrahami R, Zussman E. Slow-release hrBMP-2 embedded within electrospun scaffolds for regeneration of bone defect: in vitro and in-vivo evaluation. *Tissue Eng Part A*.2011;17:269-77.
IF 3.845 Rank: 23/40 (Materials Science, Biomaterials). Contribution A,B,C,D
18. **Srouji S**, Ben-David D, Müller R, Kohler T, Zussman E, Livne E. A model for tissue engineering applications - femoral critical size defect in immunodeficient mice. *Tissue Eng Part C* 2011;17(5):597-606.
IF 3.056, Rank: 27/40 (Materials Science, Biomaterials). Contribution A,B,C,D
19. Costa-Pinto AR, Correlo VM, Sol PC, Bhattacharya M, **Srouji S**, Livne E, Reis RL, Neves NM. Chitosan-poly(butylene succinate) scaffolds and human bone marrow stromal cells induce bone repair in a mouse calvaria model. *J Tissue Eng Regen Med* 2012;6(1):21-8.
IF 3.963, Rank: 58/159 (Biotechnology & Applied Microbiology). Contribution B,C.
Narrative contribution: analyzed data and revised manuscript
20. **Srouji S**, Ben-David D, Fromigué O, Vaudin P, Kuhn G, Mueller R, Livne E, Marie PJ. Lentiviral-mediated integrin alpha 5 expression in human adult mesenchymal stromal cells promotes bone repair in mouse cranial and long bone defects. *Hum Gene Ther* 2012 23(2):167-72. (Cover page journal)
IF 5.695, Rank: 30/175 (Genetics & Heredity). Contribution B,C.
21. **Srouji S**, Ben-David D, Riminucci M, Bianco P. Evaluation of the osteoconductive potential of bone substitutes embedded with Schneiderian membrane- or maxillary bone marrow-derived osteoprogenitor cell. *Clin Oral Implants Res* 2013;24(12):1288-94.
IF 5.977, Rank: 6/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
22. Ben-David D, **Srouji S**, Shapira-Schweitzer K, Kossover O, Ivanir E, Kuhn G, Müller R, Seliktar D, Livne E. Low dose BMP-2 treatment for bone repair using a PEGylated fibrinogen hydrogel matrix. *Biomaterials* 2013;34(12):2902-10.
IF 12.479, Rank: 2/40 (Materials Science, Biomaterials). Contribution A,B,C,D
Narrative contribution: analyzed data and revised manuscript
23. Falah M, Rayan A, **Srouji S**, Storage effect on viability and biofunctionality of human adipose tissue-derived stromal cells Cytotherapy 2015;17:1220-1229.



IF 5.414, Rank: 43/140 (Medicine, Research & Experimental). Contribution A,B,C,D

Basic research articles published since last promotion – 2017
(Prof. Srouji's Graduate Students Are underlined)

24. Zigdon-Giladi H, Khutaba A, Elimilich R, Machtei E, **Srouji S**, VEGF release from a polymeric nanofiber scaffold for improved angiogenesis. J Biomed Mater Res A 2017 May 27; 105(10):2712-2721.
IF 4.396, Rank: 18/40 (Materials Science, Biomaterials). Contribution A,B,C,D
25. Haj J, Haj Khalil T, Falah M, Zussman E, **Srouji S**, An ECM-Mimicking, Mesenchymal Stem Cell-Embedded Hybrid Scaffold for Bone Regeneration. Biomed Res Int. 2017;2017:8591073. doi: 10.1155/2017/8591073. Epub 2017 Nov 15.
IF 3.411, Rank: 69/159 (Biotechnology & Applied Microbiology). Contribution A,B,C,D
26. Abu Ammar A, Gruber M, Martin P, Stern O, Jahshan F, Ertracht O, Sela E, **Srouji S**,* Zussman E. Local delivery of mometasone furoate from an eluting endotracheal tube. J Control Release. 2018 Feb 28;272:54-61.
IF 9.776, Rank: 10/257 (Pharmacology & Pharmacy). Contribution A,B,C,D
27. Jahshan F, Ertracht O, Abu Ammar A, Ronen O, **Srouji S**, Apel-Sarid L, Eisenbach N, Atar S, Sela E, Gruber M. A novel rat model for assessment of laryngotracheal injury following transoral intubation. Int J Pediatr Otorhinolaryngol. 2018 Oct;113:4-10.
IF 1.675, Rank: 31/44 (Otorhinolaryngology). Contribution A,B,C,D
Narrative contribution: analyzed data and revised manuscript
28. Khoury S, Haj Khalil T, Palzur E, **Srouji S**, A Multichamber Gas System to Examine the Effect of Multiple Oxygen Conditions on Cell Culture. Tissue Eng Part C Methods. 2021 Jan;27(1):24-34.
IF 3.056, Rank: 27/40 (Materials Science, Biomaterials). Contribution A,B,D
29. Bashkin A, Ghanim M, Abu-Farich B, Rayan M, Miari R, **Srouji S**, Rayan A, Falah M. Forty-One Plant Extracts Screened for Dual Antidiabetic and Antioxidant Functions: Evaluating the Types of Correlation between -Amylase Inhibition and Free Radical Scavenging. Molecules. 2021 Jan 9;26(2):317.
IF 4.411, Rank: 116/297 (Biochemistry & Molecular Biology). Contribution A,B,D
Narrative contribution: analyzed data and revised manuscript
30. Furth N, Shilo S, Cohen N, Erez N, Fedyuk V, Schragar AM, Weinberger A, Dror AA, Zigran A, Shehadeh M, Sela E, **Srouji S**, Amit S, Levy I, Segal E, Dahan R, Jones D, Douek DC, Shema E. Unified platform for genetic and serological detection of COVID-19 with single-molecule technology. PLoS One. 2021 Jul 26;16(7)
IF 3.240, Rank: 26/73 (Multidisciplinary Sciences). Contribution B,C,D
Narrative contribution: analyzed data and revised manuscript
31. Khalil T.H., Zoabi A., Falah M., Nseir N., Ben David D., Laevsky I, Zussman E., Ronen O., Redenski I., **Srouji S**, Micro-Osteo Tubular Scaffolds: A Method for Induction of Bone Tissue Constructs. Regen. Med. 2021 Jun 2(1-12)
IF 1.621, Rank: 32/40 (Materials Science, Biomaterials). Contribution A,B,C,D



32. Fadoul R, Haj Khalil T, Oren D, Sharon A, Dror A, Falah M, Redenski I, **Srouji S**, The Effect of Adipose-Derived Stem Cells on Endometrial Polyps Fibroblasts. Stem Cells Dev. 2022 Jun;31(11-12):311-321.
IF 3.272, Rank: 40/76 (Hematology). Contribution A,B,C,D
33. Warwar Damouny C, Martin P, Vasilyev G, Vilensky R, Fadul R, Redenski I, **Srouji S*** Zussman E. Injectable Hydrogels Based on Inter-Polyelectrolyte Interactions between Hyaluronic Acid, Gelatin, and Cationic Cellulose Nanocrystals. Biomacromolecules. 2022 Jun 23 (8), 3222-3234.
IF: 6.988, Rank: 51/297 (Biochemistry & Molecular Biology). Contribution A,B,C,D

B.Clinical Descriptive Research

1. Rachmiel A, **Srouji S**, Peled M. Alveolar ridge augmentation by distraction osteogenesis. Int J Oral Maxillofac Surg 2001;30:510-517.
IF 2.789, Rank: 34/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C
Narrative contribution: analyzed data and revised manuscript
2. Rachmiel A, Izenbud D, **Srouji S**, Peled M. Bilateral mandibular distraction for patients with compromised airway analyzed by 3-dimensional CT. Int J Oral Maxillofac Surg 2005;34:9-18.
IF 2.789, Rank: 34/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C
Narrative contribution: analyzed data and revised manuscript
3. Rachmiel A, **Srouji S**, Emodi O, Aizenbud D. Distraction osteogenesis for tracheostomy dependent children with severe micrognathia. J Craniofac Surg 2012;23(2):459-63.
IF 1.046, Rank: 188/211 (Surgery). Contribution A,B,C
Narrative contribution: analyzed data and revised manuscript
4. McCain J, Hossameldin RH, **Srouji S**, Maher A. Arthroscopic discopexy is effective in managing temporomandibular joint internal derangement in patients with Wilkes Stage II and III. J Oral Maxillofac Surg 2015;73:391-401
IF 1.895, Rank: 66/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
Narrative contribution: analyzed data and revised manuscript
5. Falah M, **Srouji S**, Using buccal fat pad (adipose tissue) as closure of perforation material graft in maxillary sinus lifting procedure. A preliminary study. Int J Oral Maxillofac Implants. 2016 Jul-Aug;31(4):842-8
IF 2.804, Rank: 32/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
6. Falah M, Dong-Seok S, **Srouji S**, Graftless sinus augmentation with simultaneous dental implant placement: clinical results and biological perspective. Int J Oral Maxillofac Surg 2016 Sep;45(9):1147-53.
IF 2.789, Rank: 34/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
7. **Srouji S**, Oren D, Zoabi A, Husam Z. Temporomandibular joint arthroscopy technique using a single working cannula. Int J Oral Maxillofac Surg 2016 Nov;45(11):1490-1494.
IF 2.789, Rank: 34/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D



8. Gruber M, Doweck I, Roitman A, Uri N, **Srouji S**, Cohen-Kerem R. The role of surgery in necrotizing otitis externa. *Ear Nose Throat J*. 2017 Jan;96(1):E16-E21.
IF 1.697, Rank: 30/44 (Otorhinolaryngology). Contribution B,C
Narrative contribution: analyzed data and revised manuscript

Clinical research articles published since last promotion - 2017

9. Nahlieli O, Boiangiu A, Abramson A, Aba M, Nahlieli D, **Srouji S**, Graftless sinus floor augmentation with an internal-port implant: long-term experience. *Quintessence Int*. 2019;50(7):560-567.
IF 1.677, Rank: 76/91 (Dentistry, Oral Surgery & Medicine). Contribution B,C,D
10. Allon I, Vered M, Kaplan I, Nahlieli O, Yahalom R, Shalmon B, **Srouji S**, Livoff A. Rare variants of head and neck squamous cell carcinoma -differential immunohistochemical profiles. *Acta Histochem*. 2019 Nov;121(8):151444.
IF 2.479, Rank: 155/195 (Cell Biology). Contribution B,D
Narrative contribution: analyzed data and revised manuscript
11. Nahlieli O, Dar RA, Dror AA, Abba M, Sela E, **Srouji S**, Trans-implant treatment of chronic recurrent maxillary sinusitis via dynamic implants with an internal port: Experience with 31 cases. *Int J Oral Maxillofac Surg*. 2020 Jul;49(7):960-965.
IF 2.789, Rank: 34/91 (Dentistry, Oral Surgery & Medicine). Contribution B,C,D
12. Dror AA, Eisenbach N, Taiber S, Morozov NG, Mizrachi M, Zigron A, **Srouji S**, Sela E. Vaccine hesitancy: the next challenge in the fight against COVID-19. *Eur J Epidemiol*. 2020 Aug;35(8):775-779.
IF 8.082, Rank: 12/203 (Public, Environmental & Occupational Health). Contribution B,C,D
Narrative contribution: analyzed data and revised manuscript
13. Dror AA, Eisenbach N, Marshak T, Layous E, Zigron A, Shivatzki S, Morozov NG, Taiber S, Alon EE, Ronen O, Zusman E, **Srouji S**, Sela E. Reduction of allergic rhinitis symptoms with face mask usage during the COVID-19 pandemic. *J Allergy Clin Immunol Pract*. 2020 Nov-Dec;8(10):3590-3593.
IF 8.861, Rank: 3/28 (Allergy). Contribution B,D
Narrative contribution: analyzed data and revised manuscript
14. Sbeit W, Kadah A, Mahamid M, Karayanni H, Mari A, Shani T, **Srouji S**, Khoury T. Oral manifestations of inflammatory bowel disease: the neglected piece of the puzzle. *Eur J Gastroenterol Hepatol*. 2020 Nov;32(11):1422-1431.
IF 2.566, Rank: 75/92 (Gastroenterology & Hepatology). Contribution A,B,C,D
Narrative contribution: analyzed data and revised manuscript
15. Dror AA, Morozov NG, Layous E, Mizrachi M, Daoud A, Eisenbach N, Rayan D, Kaykov E, Marei H, Barhum M, **Srouji S**, Avraham KB, Sela E. United by Hope, Divided by Access: Country Mapping of COVID-19 Information Accessibility and Its Consequences on Pandemic Eradication. *Front Med (Lausanne)*. 2021 Jan 27;7:618337.

- IF 5.091, Rank: 28/168 (Medicine, General & Internal). Contribution B,D
Narrative contribution: analyzed data and revised manuscript
16. Oren D, Dror AA, Zoabi A, Kasem A, Tzadok L, Kablan F, Morozov NG, Safory E, Sela E, **Srouji S**, The impact of delayed surgical intervention following high velocity maxillofacial injuries. *Sci Rep*. 2021 Jan 14;11(1):1379.
IF 4.379, Rank: 17/73 (Multidisciplinary Sciences). Contribution A,B,C,D
17. Zigran A, Dror AA, Morozov NG, Shani T, Haj Khalil T, Eisenbach N, Rayan D, Daoud A, Kablan F, Marei H, Sela E, **Srouji S**, COVID-19 Vaccine Acceptance Among Dental Professionals Based on Employment Status During the Pandemic. *Front Med (Lausanne)*. 2021 Feb 9;8:618403.
IF 5.091, Rank: 28/168 (Medicine, General & Internal). Contribution A,B,C,D
18. Dror AA, Kassis-Karayanni N, Oved A, Daoud A, Eisenbach N, Mizrahi M, Rayan D, Francis S, Layous E, Gutkovich YE, Taiber S, **Srouji S**, Chordekar S, Goldenstein S, Ziv Y, Ronen O, Gruber M, Avraham KB, Sela E. Auditory Performance in Recovered SARS-COV-2 Patients. *Otol Neurotol*. 2021 Jun 1;42(5):666-670.
IF 2.311, Rank: 20/44 (Otorhinolaryngology). Contribution B,D
Narrative contribution: analyzed data and revised manuscript
19. Khoury Absawi M, Fahoum K, Haim S, Dror AA, Oren D, Kablan F, Abramson A, **Srouji S**, COVID-19 knowledge and adherence of dental practitioners to health authority safety guidelines during a pandemic. *Quintessence Int*. 2022 Jan 7;53(2):186-191.
IF 1.677, Rank: 76/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
20. Oren D, Dror AA, Khalil T.H., Zoabi A, Zigran A, Kablan F, **Srouji S**, Comparison between lysis and lavage, intra-articular steroid injectoins and three-point subsynovial steroid injections using operative single-cannla arthroscopy - A retrospective analysis. *J Craniomaxillofac Surg*. 2022 Apr;50(4):336-342.
IF 3.192 Rank: 61/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
21. Kablan F, Oren D, Zigran A, **Srouji S**, Expanding the surgeon's armamentarium – use of the tubing technique to preserve the inferior alveolar nerve during transposition procedure. *J Oral Implantol*. 2022 Jul *Epub ahead of print*
IF: 1.779, Rank: 74/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
22. Slutzky-Goldberg I, Oren D, Faivishevsky V, Zoabi A, Kablan F. **Srouji S**, Socket preparation during auto transplantation: A new treatment protocol. *Quintessence International*, *Epub ahead of print*
IF 1.677, Rank: 76/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D



C. Case reports

1. Oren D, Dror AA, Bramnik T, Sela E, Granot I, **Srouji S**, The power of three-dimensional printing technology in functional restoration of rare maxillomandibular deformity due to genetic disorder: a case report. J Med Case Rep. 2021 Apr 12;15(1):197.
IF 0.885. Contribution A,B,C,D

D. Review papers

1. **Srouji S**, Kizhner T, Livne E. 3D scaffolds for bone marrow stem support. Regen Med 2006;1(4):519-28.
IF 3.963, Rank: 58/159 (Biotechnology & Applied Microbiology). A,B,C,D
2. Zaid H, Raiyn J, Osman M, Falah M, **Srouji S**, Rayan A. In silico modeling techniques for predicting the tertiary structure of human H4 receptor. Front Biosci (Landmark Ed). 2016 Jan 1;21:597-619.
IF 4.009, Rank: 137/297 (Biochemistry & Molecular Biology). Contribution B,C,D
Narrative contribution: analyzed data and revised manuscript

Review Papers published since last promotion - 2017

3. Zoabi A, Redenski I, Oren D, Zigran A, Daoud S, Moskovich L, Kablan F, **Srouji S**, 3D Printing and Virtual Surgical Planning in Oral and Maxillofacial Surgery. J Clin Med. 2022 Apr 24;11(9):2385. Guest Editor
IF 4.241, Rank: 39/168 (Medicine, General & Internal). Contribution A,B,C,D

E. Other publications. (Letter to Editor etc.)

1. **Srouji S**, Falah M, Haritan Y, Tzchori I, Flugelman M. Albumin supplementation to cold injection solution increases viability of endothelial and smooth muscle cells. J Cell Sci Ther 2014;5:4
No IF, Contribution A,B,C,D
2. Falah M, **Srouji S**, A discussion concerning direct bone regeneration on and around inserted dental implants in maxillary sinus lifting procedures without any placement of bony substitutes. Int J Oral Maxillofac Surg. 2015 Dec;44(12):1582-3 (letter to the editor).
IF 2.789, Rank: 34/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
3. Falah M, **Srouji S**, The role of raised Schneiderian membrane versus peeled bony walls in bone formation within the space created during maxillary sinus lifting procedures. Br J Oral Maxillofac Surg. 2016 Jan;54(1):115-6 (letter to the editor).
IF 1.651, Rank: 78/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D

F. Chapters in Books

1. **Srouji S**, Livne E. Scaffolds in Skeletal Repair. *Principles of Bone Regeneration*, Springer; 97-118.2012. Contribution A,B,C

Chapters in Books published since last promotion - 2017

2. **Srouji S**, Joseph McCain. Modern Temporomandibular Joint Arthroscopy: Operative Single- Cannula Arthroscopy. Minimally invasive in Oral and Maxillofacial surgery, Springer;21-44. 2018. **Contribution A,B,C**
3. **Srouji S**, Daniel Oren. Temporomandibular Joint Arthroscopy using Operative Single- Cannula Arthroscope. Temporomandibular Joint Disorders- Principles and Current Practice, Springer;273-295.2021. **Contribution A,B,C,D**

H. Papers in Journals with No IF

1. **Srouji S**, Kizhner T, Livne E. Bone marrow stem cells, 3-D scaffold and growth factors for bone repair. Amer J Appl. Sci 2006;2:25-31.
No IF. Contribution A,B,C,D

since last promotion - 2017

2. Oren D, Kablan F, **Srouji S**, Foot-Controlled Irrigation System in Temporomandibular Arthroscopy: Technical Note. J Maxillofac Oral Surg. 2022 Jun;21(2):688-68.
NO IF. Contribution A,B,C,D
3. Watfa MO, Bernfeld NM, Oren D, Shani T, Zigron A, Sela E, Granot Y, Dror AA, **Srouji S**, Rapid implementation of teledentistry during the Covid-19 lockdown. Advances in Oral and Maxillofacial Surgery. 2021 April-June;2:100031.
NO IF. Contribution A,B,C,D.
4. Karayanni H, Dror AA, Oren D, Sela E, Granot I, **Srouji S**, Exacerbation of chronic myofascial pain during COVID-19, Advances in Oral and Maxillofacial Surgery, Volume 1, 2021, 100019.
NO IF. Contribution A,B,C,D.
5. Khoury Absawi M, Fahoum K, Costa L, Dror AA, Bernfeld NM, Oren D, Einy S, Kablan F, **Srouji S**, COVID-19 induced stress among dentists affecting pediatric cooperation and alter treatment of choice. Advances in Oral and Maxillofacial Surgery, Volume 5, 2022.
NO IF. Contribution A,B,C,D
6. Zoabi A, **Srouji S**, Initial experience with augmented reality for treatment of an orbital floor fracture – a technical note. 3D Printed Medicine,2022,100072.
NO IF. Contribution A,B,C,D
7. The treatment of Syrian war wounded patients - Maxillofacial department, Galilee medical center, Nahariya. Oren D, Kassem A, Dr. Zoabi A, Tsaduk L, Zreik H, Kablan F, Srouji S. The Journal Of The Israeli Dental Association ,Volume no. 36, pages 12-17, January 2019. (In Hebrew)
NO IF. Contribution A,B,C,D
8. Odontogenic cysts in 9 years old child – Case report. Khouri-Absawi M, Nassrallah F, Zreik R, Srouji S. The Journal Of The Israeli Dental Association, volume no.38,pages 6-8, June 2021



NO IF. Contribution A,B,C,D

9. Implications of Covid-19 on oral health and hygiene in children considered for dental treatments under general anesthesia
 Khoury Absawi M. Meltzer L. Dror A., Bernfeld N., Zigran A Oren D, Kablan F, Srouji S. The Journal Of The Israeli Dental Association, volume no. 38,Pages 19-24, June 2021

NO IF. Contribution A,B,C,D

10. Waferless orthognathic treatment, Point of care concept, 3D designing and manufacturing lab at the Maxillofacial department, Galilee medical center, Nahariya. Oren D, Redensky E, Kassem A, Zoabi A, Totri A, Zigran A, Abo-saleh K, Cornili C, Herman A, Kablan F, Eini S, Srouji S. The Journal Of The Israeli Dental Association,(In Hebrew)

NO IF. Contribution A,B,C,D

Under Review Articles

1. Oral Mantle cell lymphoma presenting with paresthesia as an initial symptom: a case report. Oren D, **Srouji S**, BMC Oral Health.
IF 2.757, Rank: 35/91 (Dentistry, Oral Surgery & Medicine). Contribution A,B,C,D
2. Decline in Maxillofacial Injuries During the Pandemic: the Hidden Face of COVID19. Adi Kasem, Idan Redenski, Daniel Oren, **Samer Srouji**, and Fares Kablan J Clin Med. 2022
IF 4.241, Rank: 39/168 (Medicine, General & Internal). Contribution A,B,C,D

13. Patents

Patents
2001, Alveolar bone measurement system WO 2001/000102, US 6,702,746
2003, Bone measurement device and method, WO 2003/009772, US 6,620,101
2006, Electrospun scaffolds and methods of generating and using same, WO 2006/106506, US 20100172952
2009, Medical scaffold, methods of fabrication and using thereof, US 20090074832
2002, Technique for installing dental implant assembly, WO 2002/060333
2002, Hydrogel incorporated with bone growth promoting agents for dental and oral surgery, WO 2002/019937, US 20030175656



2007, Methods of repairing longitudinal bone defects, WO 2002/019887, US 20070276398
2009, Bone-line prosthetic implants, WO 2009/125402
2021, Microcapillary Network based scaffold US 2021/0353828 A
2021, Autologous Bone and Soft Tissue Regeneration 62/156,935 (2015) INT Phase US 2021/0353847
2021, Device and method for treatment of an artificial bone implant with blood 62/249980 (2017 PCT) US 2021/0353828 A

14. Academic Profile

Basic research:

- Development of methods for bone tissue repair in combination with stem cells and a 3D scaffold.
- Reconstruction of bone tissue using three-dimensional scaffolds combined with nanomaterials.
- Development of a vascular system in combination with a three-dimensional scaffold to support the reconstruction of bone repair.
- Development of a microstructure combined with nano fibers and nanomaterials for guided bone regeneration
- Development of methods for the reconstruction of soft tissues and hard tissues using 3D printing, in order to control the microstructure and the mechanical and biochemical properties of the tissues,
- As part of the research, we are developing bio-ink printing materials based on biodegradable polymers, proteins, polysaccharides and stem cells. The development and printing activities include advanced biological printers (such as BioX2) and are carried out in collaboration with the 3D laboratory located in the Department of Oral and Maxillofacial surgery.
- Coating of dental implants and bone substitutes with biological materials in order to accelerate their integration in the bone tissue.

Clinical research:

- Reconstructive surgery, use of autologous growth factors for bone reconstructions.
- Orthogenetic surgeries, facial deformities and TMJ surgery.



- Trauma of the face.
- Endoscopic surgery.
- Surgeries to lift the maxillary sinus without the use of bone graft.
- Development of a method for arthroscopy of the TMJ surgery Operative single cannula arthroscopy (OSCA) which led to the development of a surgical set (Srouji arthroscopy kit).
- Designing models and printing titanium/polymer implants for the treatment of oncology patients/trauma/lesions in the jaws/orthognathic surgery. The activity is carried out in a 3D laboratory "3D Point of Care" The laboratory is involved in the development of models and scaffolds as well as in de facto clinical application, such as treatment of gunshot wounds to the face using advanced geometric models, and 3D printing. In addition, in the planning stages we use visualization and imaging methods utilizing: (Extended Reality) XR, AR (Augmented Reality), VR (Virtual Reality) in the medical field.

Main Research Interests and Achievements

I was born in Nazareth and lived most of my life in Haifa. As a resident of Northern Israel and Galilee, it was obvious to me that I would face many challenges in the transition to "Galilee Medical Center" in 2015. According to the Israel Dental Association and the Israeli ministry of health, the periphery and the Galilee have an immense shortage of specialists in Dentistry, especially in oral and maxillofacial surgery. Due to this situation, many patients have to travel long distances to receive dental care in the center of the country. The lack of dental services was accompanied by the lack of dentistry research, both at the clinical and basic levels. It was therefore envisioned to establish a clinical center that combined all specialties in Dentistry.

In 2015, I became the director of the oral and maxillofacial department, a newly created position at Galilee Medical Center. In two years, the dental scientific council fully acknowledged the department's oral and maxillofacial surgery residency. Additionally, another residency program in oral medicine was approved in the department, and both

were established. The oral medicine department at Galilee Medical Center is the only recognized specializing department in the North of Israel.

As of 2019, the department has received another acknowledgment for pediatric dentistry residency. This is also the only pediatric dentistry department in the North of Israel. This program solved the acute shortage of pediatric dental specialists in the Galilee, as well as providing a revolutionary solution for pediatric dental care. In 2020, I initiated the establishment of the Galilee College of Dental Sciences in the Galilee Medical Center. This college includes various residency programs and training and also dental research in collaboration with the Azrieli faculty of medicine in Safed of Bar Ilan university. During the year 2022, two additional residency programs related to endodontics and orthodontics were established. Having specialists in these fields available within the dental college is life-changing for many patients in the Galilee and the periphery, due to the lack of specialists in these fields. It is hoped that college graduates will provide medical care to Galilee residents at the highest therapeutic level while maintaining close ties to the medical field.

It is my belief that the Galilee Medical Center will promote innovative medical education and research through the interaction of the faculty of medicine from Bar Ilan university. As I envision it, Galilee College of Dental Sciences will become a leading center of clinic, education, and research in the country and worldwide, sharing knowledge with other hospitals, doctors, and the faculty of medicine. It is my hope that the center will become a central anchor for all dentists, specialists, and non-specialists in the region. We are planning to seek recognition for two additional specialties, oral rehabilitation and periodontics, by the end of 2023.

Upon incorporating these two programs, Galilee College of Dental Sciences will be able to offer all specialties in Dentistry (total of seven). In addition to the Hadassah faculty of Dentistry and Tel Aviv University school of Dentistry, Galilee College will become the third largest dental medicine center in the country. As the Galilee College of Dental Sciences develops in the coming years, it will be able to establish itself nationally, and my vision for opening a Dentistry school in the Galilee will come true.

The integration of science in the clinic

Bar-Ilan University (RA), The Azrieli Faculty of Medicine ,Henrietta Szold st. 8, POB 1589 Safed, Israel
Tel: 072 264 4971 • clinicalpromotions.medicine @biu.ac.il



The research topic has been an important component in promoting specialty programs in the college since the opening of specialty programs. My vision is to establish a leading center for tissue reconstruction using 3D printing. In the field of **personalized medicine**, this field is at the forefront. Research on this topic is conducted in two laboratories and a surgical unit that I established:

- i) The **3D Point of Care Laboratory** is a technological knowledge center for designing implants, analyzing data, and developing algorithms for printing.
- ii) The **Tissue Engineering Research Laboratory** focuses on the 3D construction of a living tissue (bone, cartilage, etc.). Research is focused on microstructure, interaction and integration of implants into living tissues.
- iii) The **Minimal Invasive Surgery Unit** focuses on salivary glands and jaw joints (TMJ) to avoid complicated and mutagenic procedures. Research is focused on developing tools and minimally invasive surgical techniques.

The **3D Point of Care lab** was established to utilize the most advanced technologies in the medical world for the design and manufacture of oral and maxillofacial implants. To reduce operating costs and enable the lab's technologies to be incorporated immediately into the clinical care department, I decided early on to facilitate implant design and printing capabilities to department surgeons. This lab is now considered a leading 3D lab in the country that implements its work into the department's daily routine. As a knowledge center, the lab supports clinical applications of implant printing technology in several hospitals and organizations in the country (including Sheba Medical Center and Clalit Health Services).

As a result of the department's acquired experience in the past years, I became an in-demand lecturer in the field, invited talks 34-36, 53-58. Additionally, the lab is recognized as a ground-breaking research center, as an excellence center of Johnson & Johnson, and as a Beta site for some of the largest printing companies, such as Materialise and 3D Systems. The lab has incorporated advanced technologies in the past year, including AR (Augmented Reality), XR (Extended Reality), and VR (Virtual Reality). It was the first time in history that the eye socket (orbital floor) reconstruction



surgical procedure was performed using AR technology in the department. A great deal of interest has been shown in this surgery both in the country and abroad.

While 3D printing is being applied clinically in the 3D printing lab, the **Tissue Engineering Lab** is studying and developing alternatives for 3D live bone tissue. Research focuses on developing printing materials and bio-ink based on degradable polymers, proteins, polysaccharides, and stem cells. An *in-vivo* and *in-vitro* study explores how the type of bio-ink affects the microstructure, interaction and integration of the body tissue. A biological 3D printer (BioX 2.0) was purchased last year. In addition to promoting regenerative research significantly, the printer would allow graduate students to combine the printer with clinical applications at the 3D Point of Care as part of their research.

The **Minimal Invasive Surgery unit** was established last year. Patients in the center of the country are the only ones who can access this innovative field concerning salivary glands. Several complicated and mutagenic surgeries were avoided by using minimally invasive techniques after the unit opened. The unit also performed minimally invasive surgery on jaw joints (TMJ) in addition to salivary gland surgery. OSCA (Operative Single-Cannula Arthroscopy), which is universally recognized, is an example of this field's development by the Minimal Invasive Surgery unit. Using an active cannula, the system revolutionizes classical arthroscopy, which uses two cannulas. The technique was applied with specially developed tools, including equipment for suturing the disk of the joint in collaboration with Tag Ltd. The unit also performs TMJ replacements (temporomandibular joints). The unit has become the only joint replacement center in the country in the past year. A collaboration with Medical TMJ Concepts was involved in this activity.

In recognition of the above activities, I have been accepted into the European Society of TMJ Surgeons (ESTMJ) and the American Society of TMJ Surgeons (ASTMJ). Currently, I am the only Israeli surgeon who has been accepted into both professional organizations. As an international member, I was accepted into both organizations based on the recommendations of worldwide surgeons, my clinical activity, and my contribution to the field. Besides my international organization memberships, I was



accepted into the AO CMF faculty four years ago. Members of the faculty undergo stringent screening, thus joining a small group of oral and maxillofacial surgeons.

An additional channel for leveraging the college's research was the connection with the International Association of Dental Research, IADR. I am an active member of this organization and serve as secretary of the Israeli association of the IADR. A representative of the Bar Ilan University faculty of medicine was appointed association secretary for the first time, alongside representatives from Hebrew University, Tel Aviv University, and the Technion. In the long run, this nomination will have a significant impact on promoting dental research at Galilee Medical Center. Through IADR activities, the college has developed a wide range of dental research programs, resulting in publications in a variety of fields both now and in the future. This important infrastructure for dental research led to publications in joint articles with the Technion (Prof. Eyal Zussman, Prof. Hadar Zigdon).

Further, a collaboration with researchers at Stony Brook University, New York, was established (Professors Miriam Rafailovich and Marcia Simon). Galilee Medical Center hosted the joint research conference that marked the beginning of this collaboration. In 2019, a research collaboration agreement was signed with the Stomatological Hospital of Guangzhou Medical University headed by Prof. Qingbin Zhang, which is on hold until 2023 due to an outbreak of Covid-19.

As we combine the tissue engineering and 3D printing labs with the minimally invasive surgical unit, we fulfill the mission of Galilee College of Dental Sciences to promote Dentistry and advanced technology in the north of Israel. The activity revolutionizes dental care for patients and enriches the region with specialists and groundbreaking research in all fields of Dentistry that are lacking. The combination of science and the clinic taking place at the labs and the medical units of the Galilee College of Dental Sciences are attracting researchers, interns, and doctors who can perform clinical and basic experiments while doing their clinical practice under the same roof in an advanced scientific and technological environment. Graduate students (MSc, PhD) were recruited through the faculty of medicine to work in the research labs. Among



these students are dentists who are enrolled in or will be enrolled in specialty programs at the college.

The realization of my vision in Dentistry, and the transformation of the geographical periphery into an excellence drawing center and innovative ideas for the community, in particular the north region, is both rewarding and humbling.

Most Research Significant Past Achievements

Srouji's research focuses on regenerative medicine in general and bone regeneration in particular. His works incorporate stem cells, growth factors, and scaffolds. Stem cells and the regeneration of bone defects are among his research interests:

Srouji, et al. "Slow-release hrBMP-2 embedded within electrospun scaffolds for regeneration of bone defect: in vitro and in vivo evaluation," Tissue Engineering A, (2011).

Srouji, et al. "Lentiviral-Mediated Integrin $\alpha 5$ Expression in Human Adult Mesenchymal Stromal Cells Promotes Bone Repair in Mouse Cranial and Long-Bone Defect," Human Gene Therapy (2012).

Ben-David D, Srouji S, Shapira-Schweitzer K, Kossover O, Ivanir E, Kuhn G, Müller R, Seliktar D, Livne E. Low dose BMP-2 treatment for bone repair using a PEGylated fibrinogen hydrogel matrix. Biomaterials (2013).

Zigdon-Giladi H, Khutaba A, Elimilich R, Machtei E, Srouji S. VEGF release from a polymeric nanofiber scaffold for improved angiogenesis. J Biomed Mater Res A (2017).

Abu Ammar A, Gruber M, Martin P, Stern O, Jahshan F, Ertracht O, Sela E, Srouji S, Zussman E. Local delivery of mometasone furoate from an eluting endotracheal tube. J Control Release. (2018).*

*Correspondence author

Haj J, Haj Khalil T, Falah M, Zussman E, Srouji S. An ECM-Mimicking, Mesenchymal Stem Cell-Embedded Hybrid Scaffold for Bone Regeneration. Biomed Res Int. (2017).

Khalil, T.H., Zoabi, A., Falah, M., Nseir, N., Ben David, D., Laevsky, I., Zussman, E., Ronen, O., Redenski, I., Srouji, S. Micro-Osteo Tubular Scaffolds: a Method for Induction of Bone Tissue Constructs. Regen. Med. (2021).



R. Fadoul, T. Haj Khalil, D. Oren, A. Sharon, A. A. Dror, M. Falah, I. Redenski, S. Srouji., The Effect of Adipose-Derived Stem Cells on Endometrial Polyps Fibroblasts Stem Cells and Development (2021).

Warwar Damouny, C., Martin, P., Vasilyev, G., Vilensky, R., Fadul, R., Redensk, I., Srouji, S., Zussman, E., Injectable Hydrogels Based on Inter-Polyelectrolyte Interactions between Hyaluronic Acid, Gelatin, and Cationic Cellulose Nanocrystals. Biomacromolecules (2022).*

**Correspondence author*

In these articles, scaffolds based on nano-materials and polymers are described as an infrastructure for bone regeneration and recovery. Scaffolds mimic the microstructure of bones in some cases. In other articles, growth factors are released slowly to accelerate recovery. In addition, there are articles that discuss gene delivery for bone formation and recovery, gene therapy, and stem cell use for treating pathological conditions in the body, Cell Therapy.

Stem cell preservation techniques were also studied in the regenerative medicine field for future clinical applications. Below are two publications related to this topic. One of them was published in the International Society for Cellular Therapy's official journal, *Cytotherapy*.

Srouji S, Falah M, Haritan Y, Tzchori I, Flugelman M. Albumin supplementation to cold injection solution increases viability of endothelial and smooth muscle cells, J Cell Sci Ther (2014).

Falah M, Rayan A, Srouji S. Storage effect on viability and biofunctionality of human adipose tissue-derived stromal cells, Cytotherapy (2015).

An additional work dealt with the survival of stem cells under different oxidation conditions:

Khoury S, Haj Khalil T, Palzur E, Srouji S. A Multichamber Gas System to Examine the Effect of Multiple Oxygen Conditions on Cell Culture. Tissue Eng Part C Methods (2021).



The technique of bone regeneration has been demonstrated in a clinical indication of sinus lifting during the implantation process. This has been published in a number of publications.

- a. **Srouji S**, et al. "The Schneiderian Membrane Contains Osteoprogenitor Cells: In Vivo and In Vitro Study," *Calcif Tissue Int.* (2009).
- b. **Srouji S**, et al. "The innate osteogenic potential of the maxillary sinus (Schneiderian) membrane: an ectopic tissue transplant model simulating sinus lifting," *Int J Oral Maxillofac Surg.* (2010).
- c. **Srouji S**, et al. "Evaluation of the osteoconductive potential of bone substitutes embedded with schneiderian membrane- or maxillary bone marrow-derived osteoprogenitor cells," *Clin Oral Implants Res.* (2013).
- d. Falah M, **Srouji S**, A discussion concerning direct bone regeneration on and around inserted dental implants in maxillary sinus lifting procedures without any placement of bony substitutes. *Int J Oral Maxillofac Surg* (2015).
- e. Falah M, **Srouji S**, Using buccal fat bed (adipose tissue) as closure of perforation and material graft in maxillary sinus lifting procedure. A preliminary study. *Int J Oral Maxillofac Implant Surg.* (2016).
- f. Falah M, **Srouji S**, The role of raised Schneiderian membrane versus peeled bony walls in bone formation within the space created during maxillary sinus lifting procedures. *Brit J Oral Maxillofac Surg* (2015).
- g. Falah M, Dong-Seok S, **Srouji S**, Graftless sinus augmentation with simultaneous dental implant placement: clinical results and biological perspective. *Int J Oral Maxillofac Surg* (2016).
- h. Nahlieli O, Boiangiu A, Abramson A, Aba M, Nahlieli D, **Srouji S**, Graftless sinus floor augmentation with an internal-port implant: long-term experience. *Quintessence Int.* (2019).



- i. Nahlili O, Dar RA, Dror AA, Abba M, Sela E, **Srouji S**, Trans-implant treatment of chronic recurrent maxillary sinusitis via dynamic implants with an internal port: Experience with 31 cases. *Int J Oral Maxillofac Surg.* (2020).

In this article series, the significance of the maxillary sinus membrane was demonstrated and described for the first time. In addition, its crucial role in bone regeneration during sinus lifting was explained. Articles a-b reported for the first time that bone-forming cells are found in the sinus membrane. The discovery has tremendous implications for oral and maxillofacial clinical procedures (article c). Articles b-c describe in detail the pre-clinical research results on this topic. The sinus membrane plays a crucial role in bone regeneration, as proven by pre-clinical studies (basic research).

Furthermore, a revolutionary article was published recently in the *International Journal of Oral Maxillofacial Implants* (article e). For the first time, perforation of the sinus membrane was sealed with a fat implant instead of a bone implant.

This technique was titled **Graftless Sinus Augmentation** and was published in articles g, h, and i. Several of these articles were cited frequently; for instance (Google Scholar), article a was cited 243 times, and article b, 166 times. In light of these publications, Prof. Srouji was invited to speak at conferences around the world (for example, conferences: 5,7,8,10,12,13,18,32,41,43,45,47).

Additionally, Prof. Srouji published clinical research and developments based on basic research work in the field of minimally invasive surgical procedures of the jaw joints and war trauma. A new arthroscopy technique based on a single active cannula was developed by Prof. Srouji in the field of minimally invasive surgical procedures of the jaw joints (TMJ) - operative single cannula arthroscopy (OSCA). Two chapters on this unique procedure were published in the professional literature in the leading journals of oral and maxillofacial surgery.

Srouji S, Oren D, Zoabi A, Husam Z. Temporomandibular joint arthroscopy technique using a single working cannula. *Int J Oral Maxillofac Surg* (2016).



D.Oren, A.A.Dror, T.H.Khalil, A.Zoabi, A.Zigron, F.Kablan, **S.Srouji** Comparison between lysis and lavage, intra-articular steroid injectoins and three-point subsynovial steroid injections using operative single-cannla arthroscopy - A retrospective analysis. *Journal of Cranio-Maxillo-Facial Surgery* (2022).

Srouji S, Joseph McCain. *Modern Temporomandibular Joint Arthroscopy: Operative Single- Cannula Arthroscopy. Minimally invasive in Oral and Maxillofacial surgery*, Springer;(2018).

Srouji S, Daniel Oren. *Temporomandibular Joint Arthroscopy using Operative Single-Cannula Arthroscope. Temporomandibular Joint Disorders-Principles and Current Practice*, (2021).

In the field of war trauma, Prof. Srouji coined a new term - **CRP** - Critical Revascularization Period. An article explains how CRP is important in treating gunshot wounds to avoid complications.

Oren D., Dror AA., Zoabi A., Kasem A., Tzadok L., Kablan F., Morozov NG., Safory E., Sela E., **Srouji S**, *The impact of delayed surgical intervention following high velocity maxillofacial injuries. Sci Rep.* (2021).

A prominent field led by Prof. Srouji is 3D printing. In a special edition of the *Journal Clinical Medicine* (JCM) focusing on 3D in oral and maxillofacial surgery, Prof. Srouji served as guest editor. A review article was requested from Prof. Srouji for this special edition. Leading medical centers around the world contributed articles to this edition, such as Basel, Mayo Clinic, etc.

A. Zoabi, I. Redenski, D. Oren, A. Zigron, S. Daoud, L. Moskovich, F. Kablan, **S. Srouji**, *3D Printing and Virtual Surgical Planning in Oral and Maxillofacial Surgery. Journal of Clinical Medicine (JCM). Guest Editor* (2022).

Prof. Srouji's lab has also published an article describing floor reconstruction of the eye sockets combining Augmented Reality and AR.

A.Zoabi, S.Srouji. *Initial experience with augmented reality for treatment of an orbital floor fracture – a technical note. Annals 3D Printed Medicine* (2022).



In summary, it can be established that the interdisciplinary researches in the basic and clinical science of Prof. Srouji in bone regeneration and its clinical implications are significant contributions to understanding and improving procedures in oral and maxillofacial surgery. These studies will enable new techniques and processes in the field to be developed and improved.