

**Dr. Michael Peppis Bartellas**  
**MD., MSc in Med (AHSR)., BSc (Hons)**

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## Education

### Degrees and Diplomas

2019/6-Ongoing	Postgraduate Training in Otolaryngology-Head & Neck Surgery University of Ottawa – In Progress
2015/9-2019/4	Degree of Doctor of Medicine Memorial University of Newfoundland
2013/9 -2015/9	Master of Science in Medicine- Applied Health Services Research Memorial University of Newfoundland- Completed Thesis Title: A Narrative Approach: Barriers and Facilitators to Access and Care in Services for Youth Eating Disorders in Atlantic Canada.
2012/9-2013/6	Industrial Carpentry-Red Seal Certificate Program College of the North Atlantic- Carbonear Campus- Diploma Completed
2008/9 - 2012/6	Bachelor of Science - Integrated Science: Health Sciences (Honours) Carleton University – Completed Thesis Title: An Attempt to Eliminate Disgust Reactions Induced by Wheel Running in Rats.

### Credentials

2019/4	Advanced Care Life Support
2019/4	Basic Life Support
2018/6	Neonatal Resuscitation Program
2017/12	Inter-professional Transition to Practice Training
2017/5	Basic Life Support for Healthcare Providers
2017/3	University of Wollongong- Bioprinting: 3D Printing Body Parts
2016/12	Inter-professional Conflict Resolution Training
2016/12	Inter-professional Communication Skills Training
2015/12	Inter-professional Team Functioning Skills Training
2014/3	Dale Carnegie course in Effective Speaking and Human Relations (In progress)
2013/10	Personal Health Information Act certificate
2013/10	TCPS 2 - Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans
2000/1	Tae Kwon Do- First Degree Black Belt- Park's Tae Kwon Do Federation

### Recognitions

2019/03	Recipient of Memorial University of Newfoundland's Mel Woodward Cup
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2018/11	Recipient of the National AFMC John Ruedy Award for Innovation in Medical Education
2018/11	CMA Young Leader Award Nominee Nominated by the Newfoundland and Labrador Medical Association
2018/10	SIM one-SIM Innovator Award Finalist- The MED 3D Network The network which I co-founded has been nominated for this national recognition.
2017/10	Invited Guest of Honour- Newfoundland and Labrador House of Assembly I was recognized by the Minister of Health and Community Services at the provincial House of Assembly for my continued work in health care leadership and innovation.
2017/6	The Canadian Medical Hall of Fame Award This award seeks to recognize medical students who demonstrate outstanding potential as future leaders and innovators of health care in Canada.
2017/4	The Wesley and Jeanne Drodge Award in Simulation Memorial University of Newfoundland, Faculty of Medicine
2017/3	Student Innovation Fund Award Memorial University of Newfoundland
2016/4	2016 Mach-Gaensslen Foundation of Canada Grant Recipient Memorial University of Newfoundland
2015/10	2015 Fellow of the School of Graduate Studies Memorial University of Newfoundland
2015/1	2015 Renata Elizabeth Withers Memorial Scholarship Eating Disorder Foundation of Newfoundland and Labrador
2014/8	2014 Faculty of Medicine-Dean's Fellowship Award Memorial University of Newfoundland, Faculty of Medicine
2014/4	ARTC Applied Health Services Research Award Memorial University of Newfoundland, Faculty of Medicine
2014/3	The Faculty of Medicine Graduate Scholarship Memorial University of Newfoundland, Faculty of Medicine
2013/6	President's Medal of Excellence - Distinction College of the North Atlantic
2013/6	Class of 2013 Valedictorian - Distinction College of the North Atlantic
2012/12	Avian Group - Storm Petrel Scholarship College of the North Atlantic
2012/6 & 2014/6	CIS Academic All-Canadian Athlete - Distinction Memorial University of Newfoundland
2011/9	Ian H. Griffith Memorial Scholarship Carleton University
2010/4-2012/4	Carleton University Dean's list recipient - Distinction Carleton University

- 2010/9 David A. Golden Scholarship  
Carleton University
- 2010/5 The Greek Community of Newfoundland and Labrador Scholarship

### Academic Work Experience

- 2018/1-present day MED 3D Network Co-Founder  
Memorial University of Newfoundland  
MED 3D Network is an interconnected collective of design, 3D printing and simulation labs across rural Newfoundland and Labrador and beyond. With advanced 3D modeling and printing capabilities, MED 3D Network strives to advance simulation training and clinical application within regional healthcare authorities across the province.
- 2016/8-present day MUN MED 3D Co-Founder and Advisor  
Memorial University of Newfoundland  
I co-founded the first biomedical 3D printing laboratory in Newfoundland and Labrador. We have evolved into a department within the Faculty of Medicine. We have 5 full time employees which ensure that our projects reach completion. We currently have 120 projects under management. In my current position my major role is to ensure sustainability, and governance.
- 2015/5-2015/6 Visiting Research Associate  
University of Prince Edward Island Young Lives Research Laboratory  
Conducting participant interviews and organizing recruitment for the ACCESS-MH project in Prince Edward Island and Nova Scotia.
- 2014/4- 2014/8 Research Assistant- Full-time Summer Internship  
St. Mary's Research Centre, Montreal  
Aiding in relevant academic background research for the St. Mary's Hospital and McGill University Health Experiences project. Tasks included recruiting, literature reviewing, grant proposal writing, and project coordination and execution.

### Non-Academic Work Experience

- 2018/6-present Co-founder/Chief Executive Officer- PolyUnity Technologies Inc.  
A Canadian technology company focused on distributing high-quality medical simulations. The company's mission is to empower health care providers to utilize 3D printing as a means to create medical simulations.
- 2017/10- present day Director-Advisory Board- MUN MED 3D  
I act as one member of the advisory board to continue the vision and development of MUN MED 3D.
- 2014/8- present day Co-founder/Chief Operating Officer- Bendr Technologies Inc.  
I am a co-founder of Bendr Technologies, which is a company that is focused on developing mobile applications. Our initial application is a social networking app called *Bendr*.
- 2013/5 - 2013/9 Apprentice Carpenter - Full-time - Feildians Athletic Grounds Association  
I aided in development of a new construction project. I was responsible for physical work carried out, ordering appropriate materials and meeting specific deadlines made by the contractor.

## Research

1. Goudie C, Kinnin J, Bartellas M, et al. (April 03, 2019). The Use of 3D Printed Vasculature for Simulation-based Medical Education Within Interventional Radiology. *Cureus* 11(4): e4381. doi:10.7759/cureus.4381
2. Patey C, Norman P, Bishop N, Bartellas M, Dubrowski A. (December 21, 2018). Development, Evaluation, and Implementation of a New 3D Printed Tongue Depressor Dispenser. *Cureus* 10(12): e3764. doi:10.7759/cureus.3764
3. Bartellas, M., Ryan, S., Pickett, T. (2018). The Power of 3D Printing in Healthcare and Beyond. Keynote presentation. SIMTECH Simulation Symposium. St. John's, Canada. November 29<sup>th</sup>, 2018.
4. Goudie, C., Kinnin, J., Bartellas, M., Gullipali, R., Dubrowski, A. (2018). *The Use of 3D Printed Vasculature as a Simulation Tool within an Interventional Radiology Interest Group*. Submitted Manuscript. *Cureus* ( ): e. doi:10.7759/cureus.
5. Dubrowski, A., Ryan, S., Bartellas, M., Pickett, A., Hoover, K., & Paterno, G. (2018). *The Coldest 3D Print on Earth for Simulation Based Education*. *Cureus* 9(8): e.
6. Bartellas, M. 3D Printing in Otolaryngology: Beyond MUN MED 3D. Visiting Guest Speaker. Grand Rounds, Otolaryngology- Head & Neck Surgery, Western University. London, Canada. April 11<sup>th</sup>, 2018.
7. Pickett, A., Healey, T., Stuckless, T. L., Feltham, A. M., Ryan, S., Bartellas, M. (2018). *The Use of Three-Dimensional Printing in Immobilization of Patient's Hand During Radiation Treatment of Grade II Squamous Cell Carcinoma of Proximal Phalanx Co-Morbid with Late Stage Dementia*. *Journal of Medical Imaging and Radiation Sciences*, 49(1), S16.
8. Pickett A. T., Healey T. Stuckless T., Feltham A., Bartellas M., Ryan S. *The Use of Three-Dimensional Printing in Immobilization of Patient's Hand During Radiation Treatment of Grade II Squamous Cell Carcinoma of Proximal Phalanx Co-Morbid with Late Stage Dementia*. Poster Presentation. Radiation Therapy: Inquire, Inspire, Innovate (RTi3) Conference. Toronto, Canada. March 2<sup>nd</sup>, 2018.
9. Bartellas M. *Creating a Low-Cost 3D Printing Medical Unit*. Ultimaker. Retrieved from <https://ultimaker.com/en/blog/49527-creating-a-low-cost-3d-printing-medical-unit>. February 2018.
10. Bartellas, M., Tibbo, J., Angel, D., Rideout, A., & Gillis, J. (2018). *Three-Dimensional Printing: A Novel Approach to the Creation of Obturator Prostheses Following Palatal Resection for Malignant Palate Tumors*. *Journal of Craniofacial Surgery*, 29(1), e12-e15.
11. Bartellas M. *MUN MED 3D and Otolaryngology- Head & Neck Surgery*. Invited Lecturer. 7<sup>th</sup> Canadian Society of Otolaryngology – Head and Neck Surgery Undergraduate Education Retreat. St. John's, Canada. November 2017.
12. Doucet G, Ryan S, Bartellas M, et al. (August 18, 2017). *Modelling and Manufacturing of a 3D Printed Trachea for Cricothyroidotomy Simulation*. *Cureus* 9(8): e1575. doi:10.7759/cureus.1575
13. Small C, Bartellas M, Furey A. *3D printing of calcaneal fractures: An analysis of interobserver reliability in using the Sanders classification system*. Oral Presentation. Ottawa, Canada. Canadian Orthopedic Association Annual Meeting. June 2017.
14. Bartellas M, Tibbo J, Angel D, Rideout A, Gillis J. *Creating a Palatal Obturator using Freeware and a Low-Cost Three-Dimensional Printer*. Oral Presentation in the Facial Plastic and Reconstructive Surgery session. Canadian Society of Otolaryngology – Head and Neck Surgery- 71<sup>st</sup> Annual Meeting. Saskatoon, Canada. June 2017.

15. Bartellas M, Ryan S, Pickett T. *Three-Dimensional Printing of a Hemorrhagic Cervical Cancer Model for Postgraduate Gynecological Training*. Oral Presentation. Medical Education Scholarship Forum. St. John's, Canada. June 2017.
16. Bartellas M, Ryan S. *Three-Dimensional Printing of a Hemorrhagic Cervical Cancer Model for Postgraduate Gynecological Training*. Oral Presentation. Obstetrics and Gynecology Resident's Research Day. St. John's, Canada. May 2017.
17. Kinnin J, Ravindra G, Bartellas M. *Interventional radiology education using 3D printed vasculature*. Educational exhibit. Canadian Association of Radiologists 80th annual scientific meeting. Montreal, Quebec. April 2017.
18. Bartellas M, Tibbo J, Angel D, Rideout A, Gillis J. *Creating a Palatal Obturator using Freeware and a Low-Cost Three-Dimensional Printer*. Oral Presentation. The Newfoundland Surgical Society Meeting. Corner Brook, Canada. March 2017.
19. Bartellas M, Tibbo J, Angel D, Rideout A, Gillis J. *Creating a Palatal Obturator using Freeware and a Low-Cost Three-Dimensional Printer*. Oral Presentation. Memorial University of Newfoundland Medical Student Research Forum. St. John's, Canada. February 2017.
20. Bartellas M, Ryan S, Doucet G, et al. (January 01, 2017) *Three-Dimensional Printing of a Hemorrhagic Cervical Cancer Model for Postgraduate Gynecological Training*. *Cureus* 9(1): e950. doi:10.7759/cureus.950
21. Bartellas M (2016) *Three-Dimensional Printing and Medical Education: A Narrative Review of the Literature*. *Cureus* 8(1): e.
22. Bartellas M. *Three-Dimensional Printing and Medical Education: A Narrative Review of the Literature*. Poster Presentation. Canadian Surgery Forum-Canadian Association of General Surgery. Toronto, Canada. September 2016.
23. Bartellas, M. (2016). *Three-dimensional printing and medical education*. *Canadian Journal of Surgery*, 59(4 Supple 1), S86-S87.
24. Bartellas M. *A Narrative Approach: Barriers and Facilitators to Access and Care in Services for Youth Eating Disorders in Atlantic Canada*. Oral Presentation. 2016 Crossroads Interdisciplinary Student Health Research Conference. Halifax, Canada. March 2016.
25. Bartellas, M. (2016). *Three-Dimensional Printing and Medical Education: A Narrative Review of the Literature*. *University of Ottawa Journal of Medicine*, 6(1), 38-43. doi:<http://dx.doi.org/10.18192/uojm.v6i1.1515>
26. Bartellas, M. (2015). *A Narrative Approach: Barriers and Facilitators to Access and Care in Services for Youth Eating Disorders in Atlantic Canada* (Masters dissertation, Memorial University of Newfoundland).
27. Bartellas M. *A Narrative Approach: Barriers and Facilitators to Access and Care in Services for Youth Eating Disorders in Atlantic Canada*. Oral Presentation. Memorial University of Newfoundland Medical Student Research Forum. St. John's, Canada. February 2016.
28. Bartellas M. *A Narrative Approach: Barriers and Facilitators to Access and Care in Services for Youth Eating Disorders in Atlantic Canada*. Oral Presentation. Community-Based Primary Health Care (CBPHC) Innovations: Third Annual Meeting, Hosted by CIHR's Institutes of Population and Public Health (IPPH) & Health Services and Policy Research (IHSPR). Ottawa, Canada. November 2015.
29. Bartellas, M. Bell B. *Patient journey mapping for research and parent/community engagement*. Workshop Facilitator. Atlantic Summer Institute Symposium on Child & Youth Mental Health. Charlottetown, Canada. August 2015.

30. Bartellas M. A *Qualitative Approach to Exploring Barriers and Facilitators in Access to Child and Youth Eating Disorders Services in Newfoundland and Labrador*. Oral Presentation. The Primary Healthcare Partnership Forum 2014. St. John's, Canada. September 2014.

## Activities

### Grants

- 2019/4                      NRC-IRAP: Development of PolyUnity Medical Three-Dimensional Printing Web Application Database  
Funding amount: \$ 35,193.60  
Applicant: Dr. Michael Bartellas on behalf of PolyUnity Tech.
- 2017/10                     ACOA (BDP)- MUN Faculty of Medicine's 3D Printing Initiative  
Project: Healthcare Solutions, Medical Education and Three-dimensional Printing in Newfoundland and Labrador  
Funding amount: \$1,423,867  
Co-Applicants: Dr. Adam Dubrowski, Michael Bartellas, Stephen Ryan  
Dr. Gary Paterno, Travis Pickett
- 2016/5                     Teaching and Learning Framework- Memorial University of Newfoundland  
Project: Three-Dimensional Printing Collaboration Initiative to Enhance Biomedical Innovation and Student Interest.  
Status: In third and final round of evaluation  
Funding amount: \$25,000  
Applicants: Michael Bartellas (Principal Applicant), Dr. Gary Paterno, Dr. Stephen Shorlin, Dr. Heidi Coombs-Thorne, Stephen Ryan

### Reviewer

- 2019/4-Present            *PLOS ONE*: Peer Reviewer

### Event Participation

- 2018/9/15                7th Annual Emergencies in Otolaryngology-Head and Neck Surgery Boot Camp  
London, Ontario  
I designed a cricothyroidotomy simulation model for this event, and helped to run this station.
- 2018/9/13                Digital Health Innovation Roundtable- Participant  
Ottawa, Canada
- 2018/5/23                Discovery Days- Memorial University of Newfoundland- Key Note Speaker  
St. John's, Canada
- 2017/9/28 -  
2017/10/8                EDIT: Expo for Design, Innovation & Technology  
Toronto, Canada  
Work completed by our laboratory was requested to be included in the Care exhibition at this 10-day long expo designed to explore the future.

- 2017/9/11 Government of Newfoundland and Labrador, Department of Health  
St. John's, Canada  
I was invited to speak about our laboratory and biomedical research at this Health Research Session.
- 2017/5/10 Mini Medical School, Memorial University- Invited Lecturer  
St. John's, Canada
- 2017/5/29 Memorial University- Premier Hand-A-Thon Event  
St. John's, Canada  
I organized production of 15 3D printed prosthetic hands, that were assembled at the event and distributed to children in need living in Zimbabwe.
- 2016/9-2017/6 Sanofi Biogenius Competition; Newfoundland Regional Science Fair; Canada-Wide Science Fair  
Mount Allison; St. John's; Regina, Canada  
I mentored a high school student in developing her science fair project ""It's only Brain Surgery!" Using 3D Printing to develop a simulation tool to train Non-Neurosurgeons to perform Craniotomies for Trauma." She was awarded the biomedical award, a university entrance scholarship, Youth Can Innovate award, and a gold medal prize at the Canada-Wide Science fair.
- 2017/4/5 Memorial University-Canadian Society for Mechanical Engineering Night  
St. John's, Canada  
I mentored a mechanical engineering group Capstone Project, a low-cost hand prosthesis that utilized EMG sensors to control the grasping function.
- 2017/1/25 Memorial University's Faculty of Medicine- STEM day for elementary students- Organizer/Host  
St. John's, Canada
- 2017/1/17 Memorial University's Faculty of Medicine, Medicine Research Open House- Presenter  
St. John's, Canada
- 2016/11/26 Memorial University, Orthopedic and General Surgery Residents Research Day- Presenter/Top Place  
St. John's, Canada
- 2016/10/13-2016/10/15 The Royal College of Physicians and Surgeons of Canada- Simulation Summit- Adjunct Presenter  
St. John's, Canada
- 2016/9/27 Hacking Health-St. John's- Presenter  
St. Johns, Canada
- 2016/5/28 Body Works Exhibition- Memorial University, Faculty of Medicine- Volunteer/Presenter  
St. John's, Canada
- 2016/2/3 Provincial Government House- Invited Guest (Master's Research)  
Newfoundland and Labrador, Canada
- 2016/1/15 Ascension Collegiate (High School)- Presenter  
Newfoundland and Labrador, Canada
- 2015/11/24 Newfoundland and Labrador Centre for Applied Health Research Exchange Group- Eating Disorders, Disordered Eating, and Body Image- Presenter (Master's Research)  
Newfoundland and Labrador, Canada
- 2015/10/29 MUN Pre-Med Society Interest Night- Panelist
- 2015/9/16 Eating Disorder Foundation of Newfoundland and Labrador- Presenter  
Newfoundland and Labrador, Canada
- 2014/10/27 Memorial University of Newfoundland-3 Minute Thesis- Presenter (Master's Research)  
St. John's, Canada

2014/6/4- 2014/6/6	Barriers and Facilitators in Child & Youth Mental Health in Atlantic Canada- Patient Journey Workshop- Participant Charlottetown, Canada
2014/5/12 - 2014/5/15	Canadian Association of Health Services and Policy Research Conference- Participant Toronto, Canada
2013/12/5 - 2013/12/6	Atlantic Regional Training Centre- Access to Mental Health Services Workshop- Participant Halifax, Canada
2012/11/2 - 2012/11/3	Canadian Federation of Students-Newfoundland and Labrador – Class Representative St. John's, Canada
2012/3/21 - 2012/3/22	Angel Business Development Program Conference- Participant St. John's, Canada
2008/2/7- 2008/2/9	Newfoundland and Labrador Youth Parliament- Participant St. John's, Canada

### Community and Volunteer Activities

2016/2017	Biomedical Engineering Interest Group- Founder
2016/2017	MUN Monte Carlo Gala- Auction Committee
2016/2017	MUN Undergraduate Medical Education-Interview Committee
2016/2-present day 2015/9- present day	MUN Medicine Class of 2019- Surgery Representative Janeway Childrens Hospital- Reading Program
2015/9-2015/11	MUN Monte Carlo-Boys of 2019 Representative
2015/9- 2017/9	Arts and Medicine Interest Group MUN- President
2015/9- 2016/9	MUN Medicine Gateway Program-Volunteer
2014/1-2015/5	Ballroom Dancing-Participant
2014/3-2015/3	High School Science Fair Judge-Volunteer
2013/11- present day	The Night Caps-Performer
2013/9- present day 2013/8 – 2014/3	Newman Sound Men's Choir- Performer Atlantic Light Theatre- Performer
2011/9 - 2014/5	Memorial University of Newfoundland- Varsity Athlete (Soccer)
2011/6-2015/6	Janeway Children's Health & Rehabilitation Centre Telethon-Volunteer
2009/5 -2014/5	Feildians Athletic Association- Senior Men's Provincial League- Athlete/Volunteer
2006/12 – present day	St. Thomas Church Christmas Hampers-Volunteer
1998/9 – present day	Greek Community of Newfoundland and Labrador- Member/Performer
2012/9 - 2013/6	College of the North Atlantic Student Council Member-Program Representative
2012/10 - 2012/12	Peter MacDonald Productions- Performer/Violinist
2010/9 - 2011/4	Carleton University Community Service Centre-Local/International Volunteer
2009/9 - 2011/4	Carleton University Student Emergency Response Team-Volunteer



2007/2 - 2010/5	The Dance Centre- Participant/Performer
2001/10 - 2008/10	St. John's Soccer Club, All-Star Program- Athlete
2008/5 - 2008/8	Memorial University of Newfoundland, Biomedical laboratory- Volunteer
2002/9 - 2006/8	Newfoundland and Labrador Soccer Association, Provincial Team- Athlete

## Committee Memberships

2017/1-present day- Education Fellow	Ultimaker Pioneer Program
2016/11- present day- Founding member	3D Printing Special Interest Group (SIG)- Radiological Society of North America
2016/11-present day- Trainee member	Radiological Society of North America (RSNA)
2016/1-present day- Student Member	Canadian Association of General Surgeons (CAGS)
2013/11-present day - Committee Member	The Newfoundland and Labrador Centre for Applied Health Research- Research Exchange Group on Eating Disorders, Disordered Eating and Body Image. - Memorial University of Newfoundland
2014/5 – 2014/5 - Student Member	Canadian Association for Health Services and Policy Research (CAHSPR)

## Media Features

- Samson A. *Students lend a hand at the 'hand-a-thon' for children with disabilities*. CBC News. Retrieved from <http://www.cbc.ca/news/canada/newfoundland-labrador/mun-med-3d-hand-a-thon-1.4134510>.
- Harding R. *MUN students hope to change medicine with 3D printing*. NTV News. Retrieved from <http://ntv.ca/mun-students-hope-to-change-medicine-with-3d-printing/>.
- Osmond M. *Family of Physicians*. MUN Gazette. Retrieved from <https://gazette.mun.ca/student-life/family-of-physicians/>.
- Osmond M. *Health care education, in 3D*. MUNMED magazine, Faculty of Medicine, Memorial University of Newfoundland. Pg. 6-8. Retrieved from [https://www.med.mun.ca/getdoc/bb6e15cb-7cba-4e83-89d2-43c0b6b4e39f/MUNMED\\_Winter2017-\(1\).aspx](https://www.med.mun.ca/getdoc/bb6e15cb-7cba-4e83-89d2-43c0b6b4e39f/MUNMED_Winter2017-(1).aspx).
- Gillis M. 'Ironman hands': MUN medical students using 3D printers to make prosthetics. CBC News. Retrieved from <http://www.cbc.ca/news/canada/newfoundland-labrador/3d-printer-prosthetic-hands-1.4052760>
- VOCM local news. 'It's Only Brain Surgery': Student Takes Science Fair Title For Training Tool. Retrieved from: <http://vocm.com/news/its-only-brain-surgery-student-takes-science-fair-title-for-training-tool/>
- Blades T. *Meet an award-winning medical student with big plans and lots of hope for NL*. Retrieved from <http://www.cbc.ca/listen/shows/on-the-go/episode/14413717>
- Osmond M. *'A lasting difference' -Student recognized by Canadian Medical Hall of Fame*. Retrieved from <https://gazette.mun.ca/student-life/a-lasting-difference/>
- VOCM News. *MUN Medical Student Receives National Award*. Retrieved from <http://vocm.com/news/mun-medical-student-receives-national-award/>
- Scott C. *How to start a medical 3D printing lab*. Retrieved from <https://3dprint.com/203749/medical-3d-printing-lab/>.