

Laurel Haydon-Smith Messer, Ph.D, RN CDCES

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EDUCATION

2016- 2019	Doctor of Philosophy (PhD), Discipline: Nursing University of Colorado Denver, Aurora, CO
2006-2009	Masters Public Health (MPH), University of Colorado Denver Aurora, CO
2004-2005	Bachelors Science Nursing (BSN), Nursing Quinnipiac University, Hamden, CT
1995-1999	Bachelors Arts (BA), Biology, Colorado College Colorado Springs, CO

ACADEMIC APPOINTMENTS

2020-	Assistant Professor of Pediatrics Barbara Davis Center for Diabetes, School of Medicine University of Colorado Anschutz, Aurora, CO
2020-	Assistant Professor (Secondary appointment) College of Nursing University of Colorado Anschutz, Aurora, CO
2016-2019	Senior Instructor Barbara Davis Center for Diabetes, School of Medicine, University of Colorado Denver, Aurora, CO

OTHER PROFESSIONAL EXPERIENCE

2011-2019	Research Manager, Pediatric Diabetes Technology Research program Barbara Davis Center for Diabetes, School of Medicine University of Colorado Denver, Aurora, CO Principal Investigators: H. Peter Chase, MD, Robert Slover, MD, David Maahs, MD, PhD, R. Paul Wadwa, MD, Gregory Forlenza, MD
2005-2011	Clinical Research Nurse Barbara Davis Center for Diabetes, School of Medicine University of Colorado Denver, Aurora, CO Principal Investigators: H. Peter Chase, MD, Robert Slover, MD,

	David Maahs, MD, PhD, R. Paul Wadwa, MD, Gregory Forlenza, MD
2003-2004	Clinical Research Coordinator Olin Neuropsychiatry Research Center, Hartford, CT Principal Investigator: Godfrey Pearlson, MD
2001-2002	Clinical Research Technician General Clinical Research Center (GCRC) University of Connecticut Health Center, Farmington, CT
1999-2000	Research Assistant Eleanor Roosevelt Institute for Cancer Research, Denver, CO Principal Investigator: Catherine Kunst, PhD

HONORS AND DISTICTIONS

2011	Mary Tyler Moore and S. Robert Levine Excellence in Clinical Research Award. Accepted on behalf of the Juvenile Diabetes Research Foundation Continuous Glucose Monitoring Study Group
2009	Delta Omega Honorary Society in Public Health
2005	Sigma Theta Tau International Honor Society of Nursing

PROFESSIONAL MEMBERSHIPS

2016 - present	Member, International Society of Pediatric and Adolescent Diabetes
2007 - present	Certified Diabetes Educator, American Association of Diabetes Educator
2005 – present	Member, American Diabetes Association
2005 – present	Registered Nurse, Colorado RN License #0172492
2004 - present	Certified Clinical Research Professional, Society of Clinical Research Associates

COMMITTEE, PROFESSIONAL SERVICE AND PUBLIC OUTREACH

2020-present	JDRF Scientific Program Advisor, Artificial Pancreas Program of Research
2019-present	Cecelia Health Clinical Advisory Board Member
2018-present	Capillary Biomedical Advisory Board Member
2018-present	Tidepool Loop Medical Advisory Committee
2018-present	Consultant and advisory work for Dexcom Inc, Tandem Diabetes Care
2019	Invited Researcher and Speaker for the Children’s Diabetes Foundation: Tied to a Cure Denver Golf Tournament. Denver, CO July 8, 2019
2019	<i>Paradigm Shift: Getting Comfortable with Advanced Diabetes Devices at Camp.</i> Invited speaker. Diabetes Education and Camping Association Hosted Webinar, May 22, 2019
2019	Guest columnist for Diatribe.org “Automated Insulin Delivery: Six Universal Observations and Understandings: December 31, 2019 https://diatribe.org/automated-insulin-delivery-six-universal-observations-and-understandings

- 2018 Conference developer, Faculty Educator and Presenter, “BDC Center of Excellence: Implementing Hybrid Closed Loop Therapy in Pediatrics, University of Colorado, Barbara Davis Center
- 2011 Invited speaker for Juvenile Diabetes Research Foundation Family Rally. Denver, CO, June 25, 2011 *Exercise Well with Diabetes*
- 2011 Mary Tyler Moore and S. Robert Levine Excellence in Clinical Research Award (on behalf of Juvenile Diabetes Research Foundation Continuous Glucose Monitoring Study Group) , JDRF
- 2009 Member, Delta Omega Honorary Society in Public Health
- 2009-2013 Member of Data Safety Monitoring Board for NIH R01DK080831
- 2006-2008 Volunteer Speaker, American Diabetes Association Diabetes Exposition
- 2007-2010 Co-Chair, Juvenile Diabetes Research Foundation CGM teaching Tool Workgroup
- 2005 Member, Sigma Theta Tau International Honor Society of Nursing

LICENSURE/ CERTIFICATIONS

- 2005- present Colorado RN License # 0172492
- 2007- present Certified Diabetes Care and Education Specialist (CDCES),
American Association of Diabetes Educators
- 2004-present Certified Clinical Research Professional (CCRP),
Society of Clinical Research Associates

REVIEW AND REFEREE WORK

- 2020 Grant reviewer, Western Institute of Nursing/Council for the Advancement of Nursing Science Dissertation Grant 2019-2020
- 2019-2020 Grant reviewer, JDRF Strategic Research Agreement (SRA): No (Type) One Left Behind: Expanding Artificial Pancreas Adoption and Access Among Targeted Populations
- 2020-present *Ad hoc* reviewer for Diabetes Care
- 2019-present *Ad hoc* reviewer for PLOS One
- 2019-present *Ad hoc* reviewer for AJOB Empirical Bioethics
- 2019-present *Ad hoc* manuscript reviewer for Diabetic Medicine
- 2017-present *Ad hoc* manuscript reviewer for Journal of Diabetes Technology and Science
- 2013-present *Ad hoc* manuscript reviewer Diabetes Technology and Therapeutics
- 2018 Abstract reviewer for American Diabetes Association Scientific Sessions

INVITED EXTRAMURAL LECTURES, PRESENTATIONS and VISITING SCHOLARSHIP

International

1. *Research and Current Challenges in Diabetes Technology*. Visiting scholar and guest faculty lecturer. Children’s Diabetes Centre Research Symposium, University of Western Australia, Perth, Australia, March 29-30th, 2019.
2. *Update on Technology and Diabetes Care*. Guest faculty lecture. Children’s Diabetes Centre, Community Forum and Symposium, Perth, Australia, March 28th, 2019.

3. *Practical Implementation of Diabetes Technology: It is Time*. Invited Speaker and Yearbook Contributor. Advanced Technologies and Therapies for Diabetes 12th International Conference, Berlin, Germany, February 21, 2019.
4. *The importance of education in Closed-Loop*. Invited Speaker. Advanced Technologies and Therapies for Diabetes 12th International Conference, Berlin, Germany, February 21, 2019.
5. *Practical tips for starting T1D patients on Hybrid Closed Loop*. Invited speaker and co-presenter with Dr. Craig Taplin. Pediatric Endocrinology Society Clinical Update and Case Discussion Course, Toronto, Canada, May 4, 2018.
6. *AP: Managing Expectation, Misconceptions, and Preparing for Success*. Invited speaker and session chair. Advanced Technologies and Therapies for Diabetes 11th International Conference, Vienna, Austria, February 17, 2018.
7. *Practical Issues in School With Diabetes Technology*. Advanced Technologies and Therapies for Diabetes 11th International Conference, Vienna, Austria, February 16, 2018.
8. *Closed Loop Technology in Pediatrics: The diabetes educator perspective*. Invited keynote speaker. 2nd Annual BC Pediatric Diabetes Day, Vancouver, BC, Canada. February 24, 2017
9. *Automated Insulin Delivery (AID) in Pediatrics: The diabetes educator perspective*. Invited Speaker. International Society for Pediatric and Adolescent Diabetes (ISPAD) conference, Valencia, Spain. October 29, 2016.

National

10. *Implementing Automated Insulin Delivery*. Invited speaker. International Society of Pediatric and Adolescent Diabetes Conference, Boston, MA, October 29, 2019.
11. *Real-World Outcomes with Diabetes Devices: Where Are We and How Can We Improve?—Patient Education and Engagement*. Invited speaker. JDRF/NIH/HCT Closed-Loop Research Meeting, American Diabetes Association 78th Scientific Sessions, San Francisco, CA, June 9th, 2019.
12. *Hybrid Closed Loop: Love to Love you Baby*. Invited speaker. American Association of Diabetes Educators Annual Conference, Baltimore, MD August 17, 2018.
13. *Hybrid Closed Loop: What Patients Need to Know*. Invited mini-symposium speaker. American Diabetes Association 78th Scientific Sessions, Orlando, FL June 23, 2018.
14. *Sensor Integrated Pump: Hybrid Closed Loop and Clinical Case Studies*. Invited faculty speaker. Clinical Diabetes Technology Meeting of the Diabetes Technology Society, Houston, TX. April 20, 2017.
15. *Practical Translation of Closed Loop Technology to the Pediatric Clinic—The Diabetes Educator's Perspective*. Invited speaker. American Diabetes Association 75th Scientific Sessions, Boston, MA. June 5, 2016
16. *JDRF Artificial Pancreas Project: An Educator's Perspective on CGM Training*. Invited speaker. American Association of Diabetes Educators Annual Meeting. Washington DC. August 8, 2008

Regional

17. *The Artificial Pancreas: Expectations, Experience and Evolution*. Invited panelist. Insulet hosted event at Achieving Targets In Diabetes Care Conference, Keystone, CO July 14, 2017.
 18. *Use of Technology in Pediatric Type 1 Diabetes*. Invited Speaker. Achieving Targets in Diabetes Care Conference, Keystone, CO. July 15, 2016.
 19. Gage V, Kassels S. *Interpretation of Continuous Glucose Monitoring Data*. Management of Diabetes in Youth Biennial Conference. Keystone, CO. July 19, 2010
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20. *Continuous Glucose Monitoring and Insulin Pumps*. Invited panellist. Management of Diabetes in Youth Biennial Conference. Keystone, CO. July 16, 2008
21. *Practical Aspects of Continuous Glucose Monitoring*. Management of Diabetes in Youth Biennial Conference. Keystone, CO. July 14, 2008.
22. (2006) *Continuous Glucose Monitoring: The Good, The Bad, The Ugly*. Invited panellist. Management of Diabetes in Youth Biennial Conference. Keystone, CO. July 18, 2006
23. *Practical Aspects of Continuous Glucose Monitoring (CGM)*. Management of Diabetes in Youth Biennial Conference. Keystone, CO. July 19, 2006

Local

24. *Current Use of CGM and the Closed Loop Pancreas*. Invited speaker. Diabetes Experience-Based Learning hosted by the Barbara Davis Center, University of Colorado Anschutz Medical Campus, Denver, CO. July 30-31, 2014
25. *Insulin Pumps to a Bionic Pancreas: The Present and Future of Type 1 Diabetes*. Invited speaker. 22nd Annual O'Neil Clinical Update, Children's Hospital Colorado, Aurora, CO. September 25, 2013.
26. *Artificial Pancreas Project: Future Implications for Glucose Monitoring*. Invited panellist. Juvenile Diabetes Research Foundation Annual Conference. Denver, CO. May 19, 2011
27. *Continuous Glucose Monitoring and Insulin Pumps*. Invited panellist. Management of Diabetes in Youth Biennial Conference. Keystone, CO. July 20, 2010
28. *High Prevalence of Hypertension in Rural Western Kenya*. University of Colorado Health Science Center 26th Epidemiologic Research Exchange. Denver, CO. April, 2008

TEACHING EXPERIENCE

February 2019	Guest lecturer, College of Nursing, PhD cohort Research in Progress University of Colorado Anschutz, Aurora, CO
October 2019	Conference lecturer, "Closed-Loop Systems in Managing Diabetes" and "Control-IQ in Clinical Practice", Diabetes Update for Endocrinology Fellows: Diabetes Dialog, October 17-19, Aurora, CO
March 2019	Endocrinology department grand rounds " <i>Importance of Education in Closed Loop Therapy</i> " Perth Children's Hospital, Perth, Australia, March 27 th , 2019
September 2018	Conference Developer, Faculty Educator and Presenter, <i>BDC Center of Excellence: Implementing Hybrid Closed Loop Therapy in Pediatrics</i> , University of Colorado, Barbara Davis Center, Aurora, CO September 13-14, 2018
Jul-Sept 2017	Faculty Educator and Presenter, <i>Implementing Artificial Pancreas Technology in Diabetes—IMPACT Diabetes</i> University of Colorado, Barbara Davis Center, Aurora, CO
March 2017	Visiting scholar lecture, " <i>Pediatric Experience with the Medtronic 670G Artificial Pancreas System</i> " Cincinnati Children's Hospital, Cincinnati, OH. March 17, 2017.
March 2016	Guest lecturer, Department of Bioengineering, BIOE 3071, Bioengineering Lab II University of Colorado Denver, Aurora, CO
March 2015	Guest Lecturer, College of Nursing, Family Nurse Practitioner Clinical Conference University of Colorado Denver, Aurora, CO
2000-2001	High School Teacher, Biology, Health and Medical Sciences George Washington High School, Denver Public Schools, Denver, CO

BOOK and BOOK CHAPTERS

1. Forlenza, G.P., **Messer, L.H.**, Maahs, D.M., Chernavvsky, D. (2019). Artificial Pancreas in Pediatrics. In R.S. Sanchez-Pena & D.R. Chernavvsky (Eds.) *The Artificial Pancreas: Current Situation and Future Directions* (237-254). Cambridge: Elsevier.
2. **Messer, L.M.**, Berget, C., & Forlenza, G.P. (2019). Practical Automated Insulin: Using Hybrid Closed Loop in an Adolescent Boy with Type 1 Diabetes. In B. Draznin (Ed) *Diabetes Tehcnology: Science and Practice*. American Diabetes Association.
3. Chase, H. P., & **Messer, L.** (2016). *Understanding Insulin Pumps and Continuous Glucose Monitors* (3rd ed.). Denver: Children's Diabetes Research Foundation.
4. Chase, H., **Messer, L.**, & Maahs, D. (2011). Continuous Glucose Monitoring. In H. Chase & D. Maahs, *Understanding Diabetes* (12th ed., pp. 295-302). Denver, CO: Children's Diabetes Foundation.
5. **Messer, L.**, Chase, H., & Garg, S. (2011). Insulin Pumps. In H. Chase & S. Garg, *Management of Diabetes in Adults* (1st ed., pp. 145-155). Denver, CO: Children's Diabetes Foundation.

PEER REVIEWED PUBLICATIONS

1. Forlenza, G. P., Buckingham, B. A., Brown, S., Bode, B. W., Levy, C., Criego, A., Wadwa, R.P., Cobry, E., Slover, R.H., **Messer, L.H.** . . . Ly, T. T. (2020). First outpatient evaluation of a tubeless automated insulin delivery system with customizable glucose targets in children and adults with type 1 diabetes. *Diabetes Technol Ther*. doi:10.1089/dia.2020.0546
2. O'Malley, G., **Messer, L. H.**, Levy, C., Pinsker, J. E., Forlenza, G. P., Isganaitis, E., . . . Brown, S. (2020). Clinical Management and Pump Parameter Adjustment of the Control-IQ Closed-loop Control System: Results from a 6-month Multicenter Randomized Clinical Trial. *Diabetes Technol Ther*. doi:10.1089/dia.2020.0472
3. Breton, M. D., Kanapka, L. G., Beck, R. W., Ekhlaspour, L., Forlenza, G. P., Cengiz, E., . . . **iDCL Trial Research Group**. (2020). A Randomized Trial of Closed-Loop Control in Children with Type 1 Diabetes. *N Engl J Med*, 383(9), 836-845.
4. Nimri, R., Battelino, T., Laffel, L. M., Slover, R. H., Schatz, D., Weinzimer, S. A., . . . **NextDREAM Consortium**. (2020). Insulin dose optimization using an automated artificial intelligence-based decision support system in youths with type 1 diabetes. *Nat Med*, 26(9), 1380-1384. doi:10.1038/s41591-020-1045-7
5. **Messer, L. H.**, Berget, C., Vigers, T., Pyle, L., Geno, C., Wadwa, R. P., Driscoll, K. A., & Forlenza, G. P. (2020). Real world hybrid closed-loop discontinuation: Predictors and perceptions of youth discontinuing the 670G system in the first 6 months. *Pediatric Diabetes*, 21(2), 319-327. doi:10.1111/pedi.12971
6. Berget, C., **Messer, L. H.**, Vigers, T., Frohnert, B. I., Pyle, L., Wadwa, R. P., Driscoll, K. A., & Forlenza, G. P. (2020). Six months of hybrid closed loop in the real-world: An evaluation of children and young adults using the 670G system. *Pediatric Diabetes*, 21(2), 310-318. doi:10.1111/pedi.12962
7. **Messer, L. H.**, Campbell, K., Pyle, L., & Forlenza, G. P. (2020). Basal-IQ technology in the real world: satisfaction and reduction of diabetes burden in individuals with type 1 diabetes. *Diabetic Medicine*, e14381. doi:10.1111/dme.14381
8. **Messer, L. H.**, Tanenbaum, M. L., Cook, P. F., Wong, J. J., Hanes, S. J., Driscoll, K. A., & Hood, K. K. (2020). Cost, Hassle, and On-Body Experience: Barriers to Diabetes Device Use in

- Adolescents and Potential Intervention Targets. *Diabetes Technology & Therapeutics*, 22(8). doi:DOI: 10.1089/dia.2019.0509
9. Laffel, L. M., Kanapka, L. G., Beck, R. W., Bergamo, K., Clements, M. A., Criego, A., DeSalvo, D. J., Goland, R., Hood, K., Liljenquist, D., **Messer, L. H.**, Monzavi, R., Mouse, T. J., Prahallad, P., Sherr, J., Simmons, J. H., Wadwa, R. P., Weinstock, R. S., Willi, S. M., Miller, K. M., Group, C. I. i. T. a. Y. A. w. T. D. C. S., & CDE10. (2020). Effect of Continuous Glucose Monitoring on Glycemic Control in Adolescents and Young Adults With Type 1 Diabetes: A Randomized Clinical Trial. *JAMA*, 323(23), 2388-2396. doi:10.1001/jama.2020.6940
 10. Zaharieva, D. P., **Messer, L. H.**, Paldus, B., O'Neal, D. N., Maahs, D. M., & Riddell, M. C. (2020). Glucose Control During Physical Activity and Exercise Using Closed Loop Technology in Adults and Adolescents with Type 1 Diabetes. *Canadian Journal of Diabetes*. doi:10.1016/j.jcjd.2020.06.003
 11. **Messer, L. H.**, & Weinzimer, S. A. (2020). Practical Implementation of Diabetes Technology: Real-World Use. *Diabetes Technology & Therapeutics*, 22(S1), S119-S129. doi:10.1089/dia.2020.2509
 12. Cobry, E. C., Berget, C., **Messer, L. H.**, & Forlenza, G. P. (2020). Review of the Omnipod 5 Automated Glucose Control System Powered by Horizon for the treatment of Type 1 diabetes. *Therapeutic Delivery*. doi:10.4155/tde-2020-0055
 13. Berget, C., Lange, S., **Messer, L.**, & Forlenza, G. P. (2020). A clinical review of the t:slim X2 insulin pump. *Expert Opin Drug Deliv*, 1-13. doi:10.1080/17425247.2020.1814734
 14. **Messer, L. H.**, Sousa, K., & Cook, P. F. (2019). Applying two minds theory to self-management of Type 1 diabetes. *Research in Nursing and Health*, 42(6), 500-508. doi:10.1002/nur.21983
 15. Saunders A, **Messer LH**, Forlenza GP. MiniMed 670G Hybrid Closed Loop Artificial Pancreas System for the Treatment of Type 1 Diabetes Mellitus: Overview of Its Safety and Efficacy. *Expert Rev Med Devices*. 2019.
 16. **Messer LH**, Berget C, Forlenza GP. A Clinical Guide to Advanced Diabetes Devices and Closed-Loop Systems Using the CARES Paradigm. *Diabetes Technol Ther*. 2019;21(8):462-9.
 17. **Messer LH**. Practical Implementation of Diabetes Technology: It Is Time. *Diabetes Technol Ther*. 2019;21(S1):S148-S59.
 18. Berget C, **Messer LH**, Forlenza GP. A Clinical Overview of Insulin Pump Therapy for the Management of Diabetes: Past, Present, and Future of Intensive Therapy. *Diabetes Spectr*. 2019;32(3):194-204.
 19. Forlenza, G. P., Kushner, T., **Messer, L. H.**, Wadwa, R. P., & Sankaranarayanan, S. (2019). Factory-Calibrated Continuous Glucose Monitoring: How and Why It Works, and the Dangers of Reuse Beyond Approved Duration of Wear. *Diabetes Technology & Therapeutics*. doi:10.1089/dia.2018.0401
 20. **Messer, L. H.**, Cook, P., Tanenbaum, M. L., Hanes, S., Driscoll, K. A., & Hood, K. K. (2019). CGM Benefits and Burdens: Two Brief Measures of Continuous Glucose Monitoring. *Diabetes Technol Ther*. 2019, doi.org/10.1177/1932296819832909.
 21. Forlenza GP, Ekhlaspour L, Breton M, Maahs DM, Wadwa RP, DeBoer M, **Messer, LH** et al. Successful At-Home Use of the Tandem Control-IQ Artificial Pancreas System in Young Children During a Randomized Controlled Trial. *Diabetes Technol Ther*. 2019;21(4):159-69.
 22. Berget C, Nii P, Wyckoff L, Patrick K, Brooks-Russell A, **Messer LH**. Equipping School Health Personnel for Diabetes Care with a Competency Framework and Pilot Education Program. *J Sch Health*. 2019;89(9):683-91.
 23. Forlenza GP, **Messer LH**, Berget C, Wadwa RP, Driscoll KA. Biopsychosocial Factors Associated With Satisfaction and Sustained Use of Artificial Pancreas Technology and Its Components: a Call to the Technology Field. *Curr Diab Rep*. 2018;18(11):114.
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24. **Messer LH.** Why Expectations Will Determine the Future of Artificial Pancreas. *Diabetes Technol Ther.* 2018;20(S2):S265-S8.
 25. **Messer LH,** Berget C, Beatson C, Polsky S, Forlenza GP. Preserving Skin Integrity with Chronic Device Use in Diabetes. *Diabetes Technol Ther.* 2018;20(S2):S254-S64.
 26. **Messer LH,** Forlenza GP, Sherr JL, Wadwa RP, Buckingham BA, Weinzimer SA, et al. Optimizing Hybrid Closed-Loop Therapy in Adolescents and Emerging Adults Using the MiniMed 670G System. *Diabetes Care.* 2018;41(4):789-96.
 27. **Messer LH,** Johnson R, Driscoll KA, Jones J. Best friend or spy: a qualitative meta-synthesis on the impact of continuous glucose monitoring on life with Type 1 diabetes. *Diabet Med.* 2018;35(4):409-18.
 28. **Messer LH,** Forlenza GP, Wadwa RP, Weinzimer SA, Sherr JL, Hood KK, et al. The dawn of automated insulin delivery: A new clinical framework to conceptualize insulin administration. *Pediatr Diabetes.* 2018;19(1):14-7.
 29. Forlenza GP, Cameron FM, Ly TT, Lam D, Howsmon DP, Baysal N, **Messer L,** et al. Fully Closed-Loop Multiple Model Probabilistic Predictive Controller Artificial Pancreas Performance in Adolescents and Adults in a Supervised Hotel Setting. *Diabetes Technol Ther.* 2018;20(5):335-43.
 30. Breton MD, Cheriavsky DR, Forlenza GP, DeBoer MD, Robic J, Wadwa RP, **Messer LH,** et al. Closed-Loop Control During Intense Prolonged Outdoor Exercise in Adolescents With Type 1 Diabetes: The Artificial Pancreas Ski Study. *Diabetes Care.* 2017;40(12):1644-50.
 31. Huyett LM, Ly TT, Forlenza GP, Reuschel-DiVirgilio S, **Messer LH,** Wadwa RP, et al. Outpatient Closed-Loop Control with Unannounced Moderate Exercise in Adolescents Using Zone Model Predictive Control. *Diabetes Technol Ther.* 2017;19(6):331-9.
 32. **Messer LH,** Calhoun P, Buckingham B, Wilson DM, Hramiak I, Ly TT, et al. In-home nighttime predictive low glucose suspend experience in children and adults with type 1 diabetes. *Pediatr Diabetes.* 2017;18(5):332-9.
 33. Ly TT, Weinzimer SA, Maahs DM, Sherr JL, Roy A, Grosman B, **Messer, LH** et al. Automated hybrid closed-loop control with a proportional-integral-derivative based system in adolescents and adults with type 1 diabetes: individualizing settings for optimal performance. *Pediatr Diabetes.* 2017;18(5):348-55.
 34. **Messer L.** Set for the Future. *Diabetes Forecast.* 2016;69(2):81-2.
 35. Cescon M, DeSalvo DJ, Ly TT, Maahs DM, **Messer LH,** Buckingham BA, et al. Early Detection of Infusion Set Failure During Insulin Pump Therapy in Type 1 Diabetes. *J Diabetes Sci Technol.* 2016.
 36. Karlin AW, Ly TT, Pyle L, Forlenza GP, **Messer L,** Wadwa RP, et al. Duration of Infusion Set Survival in Lipohypertrophy Versus Nonlipohypertrophied Tissue in Patients with Type 1 Diabetes. *Diabetes Technol Ther.* 2016;18(7):429-35.
 37. Maahs DM, DeSalvo D, Pyle L, Ly T, **Messer L,** Clinton P, et al. Effect of acetaminophen on CGM glucose in an outpatient setting. *Diabetes Care.* 2015;38(10):e158-9.
 38. Wilson DM, Calhoun PM, Maahs DM, Chase HP, **Messer L,** Buckingham BA, et al. Factors associated with nocturnal hypoglycemia in at-risk adolescents and young adults with type 1 diabetes. *Diabetes Technol Ther.* 2015;17(6):385-91.
 39. Hummel K, McFann KK, Realsen J, **Messer LH,** Klingensmith GJ, Chase HP. The increasing onset of type 1 diabetes in children. *J Pediatr.* 2012;161(4):652-7.e1.
 40. Taplin CE, Cobry E, **Messer L,** McFann K, Chase HP, Fiallo-Scharer R. Preventing post-exercise nocturnal hypoglycemia in children with type 1 diabetes. *J Pediatr.* 2010;157(5):784-8.e1.
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41. Cobry E, McFann K, **Messer L**, Gage V, VanderWel B, Horton L, et al. Timing of meal insulin boluses to achieve optimal postprandial glycemic control in patients with type 1 diabetes. *Diabetes Technol Ther*. 2010;12(3):173-7.
42. Vanderwel BW, **Messer LH**, Horton LA, McNair B, Cobry EC, McFann KK, et al. Missed insulin boluses for snacks in youth with type 1 diabetes. *Diabetes Care*. 2010;33(3):507-8.
43. **Messer L**, Ruedy K, Xing D, Coffey J, Englert K, Caswell K, et al. Educating families on real time continuous glucose monitoring: the DirecNet navigator pilot study experience. *Diabetes Educ*. 2009;35(1):124-35.
44. Wadwa RP, Fiallo-Scharer R, Vanderwel B, **Messer LH**, Cobry E, Chase HP. Continuous glucose monitoring in youth with type 1 diabetes. *Diabetes Technol Ther*. 2009;11 Suppl 1:S83-91.
45. **Messer LH**, Sullivan S, Gage V, Kassels S, Chase HP. Continuous Glucose Monitoring: A Class for Patients and Families (Part 2). *Infusystems*. 2010;7(1):1-3.
46. **Messer LH**, Sullivan S, Gage V, Kassels S, Chase HP. Continuous Glucose Monitoring: A Class for Patients and Families (Part 1). *Infusystems*. 2009;6(4):29-32.
47. Kishiyama CM, Burdick PL, Cobry EC, Gage VL, **Messer LH**, McFann K, et al. A pilot trial of pramlintide home usage in adolescents with type 1 diabetes. *Pediatrics*. 2009;124(5):1344-7.
48. Fox L, Dontchev M, Ruedy K, Beck R, Kollman C, **Messer L**, et al. Relative inaccuracy of the A1cNow in children with type 1 diabetes. *Diabetes Care*. 2007;30(1):135-7.
49. Kunst CB, **Messer L**, Gordon J, Haines J, Patterson D. Genetic mapping of a mouse modifier gene that can prevent ALS onset. *Genomics*. 2000;70(2):181-9.

PEER-REVIEWED ABSTRACTS AND POSTERS

1. Wong, J.W., Hanes, S., **Messer, L.H.**, Tanenbaum, M., Hood, K.K. (2019) Barriers to Diabetes Device Uptake: Examining Adolescents' Unique Perspectives. Poster presented at the International Society of Pediatric and Adolescent Diabetes 45th Annual Conference, Boston, MA.
2. **Messer, L.H.**, Hanes S.J., Tabatabai, I., DiMeglio, L.A., Hannon, T., Forlenza, G.P., Woerner, S., Lange, S., Driscoll, K.A., Hood, K.K., Rodriguez, H., Buckingham, B.A. (2019) Novel Telehealth Support Intervention for Young Children Using HCL. Poster presented at the American Diabetes Association 79th Scientific Sessions, San Francisco, CA.
3. Berget, C., **Messer, L.H.**, Vigers, T. Wadwa, R.P., Slover, R., Pyle, L. Driscoll, K.A., Forlenza, G.P. Hybrid Closed Loop Therapy in the Real World: 6 month Clinical Observation of Youth with Type 1 Diabetes (2019). Oral presentation (C. Berget) at the Advanced Technology & Treatments for Diabetes. *Diabetes Technol Ther*. 2019;21:S1(A18)
4. **Messer, L. H.**, Jost, E., Towers, L., Lange, S., Slover, R., Wadwa, P., & Forlenza, G. P. (2018). *Making the Most of Predictive Low Glucose Suspend (PLGS)*. Poster presented at the American Association of Diabetes Educators Annual Conference, Baltimore, MD.
5. Berget, C., **Messer, L. H.**, Westfall, E., Forlenza, G. P., & Driscoll, K. A. (2018). *Real World Use of Hybrid Closed Loop Therapy in Pediatric Patients with Type 1 Diabetes: A Clinical Observation Study*. Paper presented at the International Society for Pediatric and Adolescent Diabetes 44th Annual Conference, Hyderabad, India.
6. **Messer L**, Jost E, Berget C, Westfall E, Min J, Ambers E, et al. Automated Insulin Delivery (Artificial Pancreas) on the Horizon: Educational Considerations for Youth with Type 1 Diabetes. *J Pediatr Nurs*. 2017;34:104.

7. Berget, C., **Messer, L. H.**, Pyle, L., Westfall, E., Forlenza, G. P., & Driscoll, K. A. (2018). Real-World Use of Hybrid Closed-Loop Therapy in Pediatric Patients with Type 1 Diabetes. *Diabetes*, 67(Supplement 1). doi:doi.org/10.2337/db18-977-P
 8. Berget, C., Thomas, S., **Messer, L. H.**, Owen, S., Thivener, K., Slover, R. H., . . . Alonso, G. T. (2018). A Clinical Training Program for Hybrid Closed-Loop Therapy in a Pediatric Diabetes Clinic. *Diabetes*, 67(Supplement 1). doi:doi.org/10.2337/db18-1255-P
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