



Diabetes Care: “Lagniappe” and “Seeing Is Believing”!

Diabetes Care 2016;39:1069–1071 | DOI: 10.2337/dc16-0891

With this issue, our editorial team celebrates its 4.5-year mark in overseeing the scientific aspects of *Diabetes Care*. As you have come to expect, we have been consistent in our attempts to update you on our progress by informing you of all the changes, innovations, and successes of the journal. We still feel that each issue provides new information that does more than provide an incremental contribution to new knowledge—it also offers providers translational perspectives that relate new findings to everyday clinical practice and poses new questions to the research community.

We feel this past year has been nothing short of spectacular for the journal! A year ago, in the July 2015 issue, we titled our report “Status of *Diabetes Care*: New Challenges, New Concepts, New Measures—Focusing on the Future!” as we felt the journal was at that time very much on an uphill trajectory (1). In the January 2016 issue, we titled our report “Building Momentum: Taking on the Real ‘Issues’ of *Diabetes Care*!” (2). In that issue, we described what has become an incredibly well-received initiative at the journal: frequent special thematic monthly issues that focus on timely and important clinical care and clinical research topics.

The thematic issues to date, which at that time numbered 10, were summarized in a table in the January 2016 issue (2). For example, our October 2015 issue focused on the recommendations and other guidelines for care from the American Diabetes Association (ADA) in the form of Position Statements, Scientific Statements, and Consensus Reports, described collectively as “Guiding Principles for Diabetes Care” (3). We ended the calendar year by dedicating our December 2015 issue to highlight insulin use after 90 years (4). In that issue, we provided a collection of articles that demonstrated the diversity of recent innovations in the clinical use of insulin and suggested that insulin remains the “little black dress” fit for all diabetes managements.

To sustain our momentum, we opened the 2016 calendar year with a January issue dedicated to gestational diabetes mellitus (5). Our May 2016 issue focused on diabetes and cardiovascular disease (6). The June 2016 issue was devoted to providing the latest data supporting bariatric/metabolic surgery as a new treatment option in the management of type 2 diabetes (7). The centerpiece of the June 2016 collection was the new evidence-based guidelines for surgical treatment of type 2 diabetes, which are based on a large body of evidence including randomized clinical trials showing that in most cases surgery can markedly reduce blood sugar levels or maintain adequate glycemic control despite major reduction in medication usage (8). Finally, in this July 2016 issue, we present a collection of articles providing state-of-the-art updates on the artificial pancreas (AP). These include reports on multinational home-use AP trials, studies in young children, use of multihormonal approaches to mitigate meal-related hyperglycemia, and discussions of AP study designs and outcome measures (see the special article collection “Artificial Pancreas” in this issue) (9).

As related above, our continuing quest is to keep the journal fresh and to increase your anticipation of each monthly issue. To this end, we propose the concept of a “lagniappe” added to each of our efforts (10). This is a regional term used primarily in the local geographic area influenced by New Orleans, LA. Given the culture of the area, the term is thought of as being more “Cajun” or Louisiana Creole French. Taken literally, it means providing you “a little something extra!” (10). This term was very fitting for the theme of our most recent *Diabetes Care* Symposium, held at the ADA Scientific Sessions in New Orleans, both because of the location of the meeting and with respect to the novelty and diversity of topics that were presented.

William T. Cefalu,¹ Andrew J.M. Boulton,²
William V. Tamborlane,³
Robert G. Moses,⁴ Derek LeRoith,⁵
Eddie L. Greene,⁶ Frank B. Hu,⁷
George Bakris,⁸ Judith Wylie-Rosett,⁹
Julio Rosenstock,¹⁰ Katie Weinger,¹¹
Lawrence Blonde,¹² Mary de Groot,¹³
Stephen S. Rich,¹⁴ David D’Alessio,¹⁵
Matthew C. Riddle,¹⁶ and Lyn Reynolds¹⁷

¹Pennington Biomedical Research Center, Louisiana State University, Baton Rouge, LA

²Manchester Diabetes Centre, University of Manchester, Manchester, U.K.

³Department of Pediatrics, Yale University School of Medicine, New Haven, CT

⁴ISLHD, Wollongong, New South Wales, Australia

⁵Division of Endocrinology, Diabetes and Bone Disease, Icahn School of Medicine at Mount Sinai, New York, NY

⁶Division of Nephrology and Hypertension, Mayo Clinic, Rochester, MN

⁷Departments of Nutrition and Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA

⁸ASH Comprehensive Hypertension Center, Department of Medicine, Division of Endocrinology, Diabetes and Metabolism, The University of Chicago Medicine, Chicago, IL

⁹Department of Epidemiology and Population Health, Albert Einstein College of Medicine, Bronx, NY

¹⁰Dallas Diabetes and Endocrine Center at Medical City, Dallas, TX

¹¹Joslin Diabetes Center, Harvard Medical School, Boston, MA

¹²Ochsner Diabetes Clinical Research Unit, Frank Riddick Diabetes Institute, Department of Endocrinology, Ochsner Medical Center, New Orleans, LA

¹³Indiana University School of Medicine, Indianapolis, IN

¹⁴Department of Public Health Sciences, University of Virginia, Charlottesville, VA

¹⁵Division of Endocrinology, Diabetes and Metabolism, Duke University, Durham, NC

¹⁶Division of Endocrinology, Diabetes and Clinical Nutrition, Oregon Health & Science University, Portland, OR

¹⁷American Diabetes Association, Indianapolis, IN

Corresponding author: William T. Cefalu, cefaluwt@pbrc.edu.

© 2016 by the American Diabetes Association. Readers may use this article as long as the work is properly cited, the use is educational and not for profit, and the work is not altered.

Our *Diabetes Care* Symposium, held each year during the ADA's Scientific Sessions, has clearly become our editorial team's most visible signature event. As has become our pattern, each year we refine the format and content of this event. Thus, it is not surprising that this year, at our 5th Annual *Diabetes Care* Symposium, we did provide "a little something extra." Specifically, the symposium covered an incredible array of topics that are now presented as articles and featured in a special section in this issue of *Diabetes Care* (see "Diabetes Care Symposium" in this issue). Specifically, these topics ranged from a discussion of the National Institutes of Health Precision Medicine Initiative by Fradkin et al. (11) to a discussion of the role of precision medicine in diabetes by Florez (12). The symposium featured two stellar talks by Ele Ferrannini (13) and Sunder Mudaliar (14), who provided complementary and supporting perspectives on updates and insights on the molecular mechanisms to explain the surprising cardiovascular protection findings from the BI 10773 (Empagliflozin) Cardiovascular Outcome Event Trial in Type 2 Diabetes Mellitus Patients (EMPA-REG OUTCOME). The symposium also included an update by the Action to Control Cardiovascular Risk in Diabetes Follow-On (ACCORDION) Eye/ACORDION study groups (15). They reported on the first study in persons with type 2 diabetes of 10 years' duration and established cardiovascular disease (unlike the newly diagnosed participants of the UK Prospective Diabetes Study [UKPDS]) that prior intensive glycemic control continued to reduce diabetic retinopathy progression, despite similar A1C levels when the Action to Control Cardiovascular Risk in Diabetes (ACCORD) study ended (15). Finally, Purnell et al. (16) reported on remission rates after laparoscopic surgery from the Longitudinal Assessment of Bariatric Surgery (LABS) study.

As we have also stated in progress reports this year, the continued success of our symposium at the Scientific Sessions was such that the journal was honored to be asked to coordinate such a symposium at the International Diabetes Federation (IDF) World Diabetes Congress, 30 November–4 December 2015, in Vancouver, BC, Canada. The IDF-ADA Translational Symposium was entitled

"Translational Diabetes Research with Immediate Clinical Impact," and the articles for that symposium were also featured in a special symposium section in the January 2016 issue of *Diabetes Care* (2).

Another feature of the ADA's symposium that was started last year was the recognition of those individuals who have devoted their lives to diabetes research and care and whom we have featured in our Profiles in Progress initiative. Several times a year *Diabetes Care* publishes an article honoring a researcher or provider who has made notable contributions in the field of diabetes and who has served as a role model and mentor for many of our readers. In a brief ceremony this year held at the symposium, we recognized Drs. Trevor Orchard, Philip E. Cryer, Abbas E. Kitabchi, and Maria Buse as recipients of our Profiles in Progress honor, who were featured in our September, December, March, and June issues, respectively.

"Lagniappe," as you will see below, is also a perfect term to characterize this month's issue, given its array of timely and provocative articles. These include a comprehensive and thought-provoking perspective on diabetes prevention strategies and issues resulting from our annual *Diabetes Care* Editors' Expert Forum that was convened to discuss these issues. This article represents the latest thoughts and comments on diabetes prevention from the world leaders and investigators of the landmark prevention trials (17). As outlined in the opening, the narrative provides a summary of seminal prevention trials, followed by a discussion of considerations for selecting appropriate populations for intervention and the clinical implications of the various diagnostic criteria for prediabetes. The narrative continues by outlining knowledge gaps in need of elucidation. In a thought-provoking section, the authors discuss a possible new avenue for securing regulatory approval for a prevention-related indication for metformin as well as specific considerations for future pharmacologic interventions to delay the onset of type 2 diabetes. The narrative concludes with descriptions of some innovative, pragmatic translational initiatives already underway around the world (17).

Also in this issue is a debate on whether to relax restrictions on metformin use in renal dysfunction, which is

most timely given a recent U.S. Food and Drug Administration decision. This takes the form of a Point-Counterpoint discussion on the "pros" and "cons" of relaxing the renal restrictions for metformin use. In taking the Point perspective, Drs. Kalantar-Zadeh and Kovesdy provide their argument that while there is little evidence of the potential benefits of metformin in kidney disease, just considering the sheer numbers of metformin users and the high fatality rate of its associated lactic acidosis, they suggest that the appropriate practice is to avoid metformin use in any person with an estimated glomerular filtration rate (eGFR) <45 mL/min/1.73 m² or in those at high risk of acute kidney injury irrespective of underlying eGFR (18). However, in the Counterpoint narrative, Drs. Bakris and Molitch (19) argue that the data from a very large analysis demonstrate clearly that serum creatinine should be supplanted with eGFR as criteria for metformin use and, second, that the incidence of lactic acidosis is elevated only in those with a reduced eGFR who become dehydrated for various reasons or exposed to some toxin resulting in acute kidney injury. Their position seems in line with the most recent U.S. Food and Drug Administration recommendation.

Finally, in our attempt to continue to innovate and provide unique educational messages for our readers, we have added another new and exciting manuscript category and format to the journal. This category is called "Clinical Images in Diabetes." As outlined in detail in our revised instructions for authors, Clinical Images in Diabetes is intended to provide modern pictorial views on the pathogenesis of diabetes or its complications, with the aim of linking the clinical course of diabetes and related pathologies with their underlying physiological mechanisms. By presenting highly novel clinical summaries regarding one to no more than three patient descriptions per article, Clinical Images in Diabetes serves as a valuable educational tool to better understand the pathophysiology of diabetes, enhance disease diagnosis, and offer guidance for optimized clinical treatments. The overall intent is to better understand the course of disease by aligning the clinical course to the pathophysiology of disease suggested by

imaging analysis provided by biopsies, whole-body imaging, videos, and other technologies.

Our first “lagniappe,” in the form of a Clinical Images in Diabetes contribution, appears in this issue of *Diabetes Care* as presented by Jacobsen et al. (20) from the University of Florida. They discuss a clinical course of a particular patient while providing representative immunohistochemistry images. The patient is a 26-year-old African American female whose severe presentation and progression of autoantibody-positive diabetes with incongruous C-peptide and histologic findings provide another unique example of disease variability and heterogeneity.

In closing, we hope you agree that *Diabetes Care* has had a great year. Our editorial team remains proud of the quality and diversity of the information published recently and our continuing effort to provide “a little something extra” when possible. Of course, we recognize the enormous contribution of you, the authors, for submitting novel manuscripts and greatly appreciate the legion of reviewers who have donated their time and expertise to make sure that manuscripts are rigorously reviewed and strengthened. Yes, we have been at this for 4.5 years, but we have yet to feel the momentum slowing. We will continue to work hard to improve the journal and present the best original findings in new ways. We offer the present issue as an example of these efforts, including both a little something extra and some images that may test the saying that “seeing is believing.”

Acknowledgments. W.T.C. is supported in part by National Institutes of Health (NIH) grant 1U54-GM-104940, which funds the Louisiana

Clinical and Translational Science Center, and NIH grant P50-AT-002776. The editorial committee recognizes that the work of the journal and progress made to date would not be possible without the dedicated work and continued support provided by additional staff in the ADA editorial office: Shannon Potts, Jane Lucas, Joan Garrett, and Raquel Castillo-Orozco. In addition, the editorial committee recognizes Chris Kohler and his team at the ADA publishing office for their incredible ideas on new formatting, support for our symposium and expert forums, and work on promoting the journal through dissemination of information. The editorial committee would also like to thank Anne Gooch at the Pennington Biomedical Research Center for her assistance with the journal. As always, the editorial committee applauds the effort of Dr. Robert Ratner, Chief Scientific and Medical Officer of the ADA, for his stance in allowing us complete editorial freedom.

References

1. Cefalu WT, Boulton AJ, Boulton AJ, et al. Status of *Diabetes Care*: new challenges, new concepts, new measures—focusing on the future! *Diabetes Care* 2015;38:1177–1180
2. Cefalu WT, Boulton AJM, Tamborlane WV, et al. Building momentum: taking on the real “issues” of *Diabetes Care*! *Diabetes Care* 2016;39:10–12
3. Cefalu WT, Chiang JL. Guiding principles for diabetes care. *Diabetes Care* 2015;38:1955–1957
4. Cefalu WT, Rosenstock J, LeRoith D, Riddle MC. Insulin’s role in diabetes management: after 90 years, still considered the essential “black dress.” *Diabetes Care* 2015;38:2200–2203
5. Moses RG, Cefalu WT. Considerations in the management of gestational diabetes mellitus: “you are what your mother ate!” *Diabetes Care* 2016;39:13–15
6. Cefalu WT, Rosenstock J, LeRoith D, Blonde L, Riddle MC. Getting to the “heart” of the matter on diabetic cardiovascular disease: “thanks for the memory.” *Diabetes Care* 2016;39:664–667
7. Cefalu WT, Rubino F, Cummings DE. Metabolic surgery for type 2 diabetes: changing the landscape of diabetes care. *Diabetes Care* 2016;39:857–860
8. Rubino F, Nathan DM, Eckel RH, et al.; Delegates of the 2nd Diabetes Surgery Summit. Metabolic surgery in the treatment algorithm for type 2 diabetes: a joint statement by international diabetes organizations. *Diabetes Care* 2016;39:861–877
9. Kovatchev B, Tamborlane WV, Cefalu WT, Cobelli C. The artificial pancreas in 2016: a digital treatment ecosystem for diabetes. *Diabetes Care* 2016;39:1123–1126
10. Lagniappe [Internet]. Available from <http://www.merriam-webster.com/thesaurus/lagniappe>. Accessed 17 April 2016
11. Fradkin JE, Hanlon MC, Rodgers GP. NIH Precision Medicine Initiative: implications for diabetes research. *Diabetes Care* 2016;39:1080–1084
12. Florez JC. Precision medicine in diabetes: is it time? *Diabetes Care* 2016;39:1085–1088
13. Ferrannini E, Mark M, Mayoux E. CV protection in the EMPA-REG OUTCOME trial: a “thrifty substrate” hypothesis. *Diabetes Care* 2016;39:1108–1114
14. Mudaliar S, Alloju S, Henry RR. Can a shift in fuel energetics explain the beneficial cardiovascular outcomes in the EMPA-REG OUTCOME study? A unifying hypothesis. *Diabetes Care* 2016;39:1115–1122
15. The Action to Control Cardiovascular Risk in Diabetes Follow-On (ACCORDION) Eye Study Group and the Action to Control Cardiovascular Risk in Diabetes Follow-On (ACCORDION) Study Group. Persistent effects of intensive glycemic control on retinopathy in type 2 diabetes in the Action to Control Cardiovascular Risk in Diabetes (ACCORD) Follow-On study. *Diabetes Care* 2016;39:1089–1100
16. Purnell JQ, Selzer F, Wahed AS, et al. Type 2 diabetes remission rates after laparoscopic gastric bypass and gastric banding: results of the Longitudinal Assessment of Bariatric Surgery Study. *Diabetes Care* 2016;39:1101–1107
17. Cefalu WT, Buse JB, Tuomilehto J, et al. Update and next steps for real-world translation of interventions for type 2 diabetes prevention: reflections from a *Diabetes Care* Editors’ Expert Forum. *Diabetes Care* 2016;39:1186–1201
18. Kalantar-Zadeh K, Kovesdy CP. Should restrictions be relaxed for metformin use in chronic kidney disease? No, we should never again compromise safety! *Diabetes Care* 2016;39:1281–1286
19. Bakris GL, Molitch ME. Should restrictions be relaxed for metformin use in chronic kidney disease? Yes, they should be relaxed! What’s the fuss? *Diabetes Care* 2016;39:1287–1291
20. Jacobsen LM, Atkinson MA, Campbell-Thompson M, Schatz DA. Presumptive type 1 diabetes with comorbidities and rapid progression despite numerous insulin-positive islets. *Diabetes Care* 2016;39:1292–1294