

EDITORIAL**Love in the time of COVID-19**

“Change is good” was the theme of an address given by Brian Napack, President and CEO of Wiley, the publisher of the *American Journal Medical Genetics* (AJMG), at a recent Wiley Editor Symposium in the Spring of 2019. And change is good for the AJMG as well (Muenke, 2017; Muenke, 2019). With this issue comes a change in leadership as the current Editor-in-Chief. (Figure 1) steps down from this position, which also allows a time for reflection.

As part of a team of healthcare providers at the National Institutes of Health (NIH), I witnessed first-hand the suffering experienced during the active phase of the Ebola outbreak in West Africa, in Sierra Leone (November 2015) and as part of an NIH Ebola vaccination team in Liberia (August 2018). In contrast to our carefully planned work to assist with the Ebola outbreaks, most of us felt unprepared for the current Coronavirus Disease 2019 (COVID-19) pandemic. Over a quarter of confirmed global deaths (over 200,000) have occurred in the US (over 60,000 at the writing of this editorial at the end of April 2020). The personal tragedies compound the individual losses of life. COVID-19 precipitated a downturn in the global economy, with a record loss of jobs (more than 26 million have filed for unemployment in the US alone). Loss of life and loss of way of life lead to unprecedented challenges for people and society.

The current situation has been compared by some to a fictional story told by Gabriel García Márquez in *Love in the Time of Cholera*, which was first published in Spanish in 1985 (see Figure 2). The connection between the reality of the COVID-19 in the US and around the world and the magical realism in a story set in a Caribbean Sea harbor town in Colombia is tenuous at best. There are some parallels, though: anxiety, fear, and suffering throughout the population, and the frantic search for a cure for those seriously affected by COVID-19, similar to Dr. Urbino's passion for finding a cholera cure in the book. Other similarities between the current COVID-19 pandemic and the fictional cholera outbreak described by García Márquez include personal resilience and indomitable spirit under trying circumstances...and that life after the pandemic is not the same.

Many of us who work in the field of genetics regularly encounter patients and families who inspire us with their resilience and ability to face adversity. And many of us chose this field for the privilege of serving these families, helping them through difficult times, and working with them to improve outcomes and quality of life. On a personal note, I have worked with families who have a child with holoprosencephaly (HPE, supported by a group called Families for HoPE, www.familiesforhope.org) for over three decades. Many of them have taught me more about resilience through their personal example than I would have ever learned otherwise. In our fields, gains are not easy – they require great work, sacrifice, and usually take



FIGURE 1 Maximilian Muenke, outgoing Editor-in-Chief, photo at Weverton Cliffs, Maryland along the Appalachian Trail

much longer than any of us would have anticipated. I do not mean to glibly compare the current pandemic to the field of genetics or imply that they are the same. But there are lessons that we can learn from both about perseverance in the face of adversity.

Winston Churchill is credited with the quote, “Never let a good crisis go to waste”. Churchill was referring to the Yalta Conference in February 1945, which took place at the end of World War II. This conference involved a meeting between himself, Stalin, and Roosevelt, which led to the formation of the United Nations and created an opportunity in the midst of a crisis. While mentioning this quote may sound tone-deaf and insensitive to us now, some of the ideas may yet be helpful. The current pandemic is exposing many issues and challenges in our society. For medical fields, examples include disparities in access to healthcare, lack of optimal funding for important institutions like the Center for Disease Control and Prevention (CDC) or the National Institutes of Health (NIH), and lessons about preparedness. We also learn how important it is to care for and protect the most vulnerable – from the elderly and individuals with underlying medical

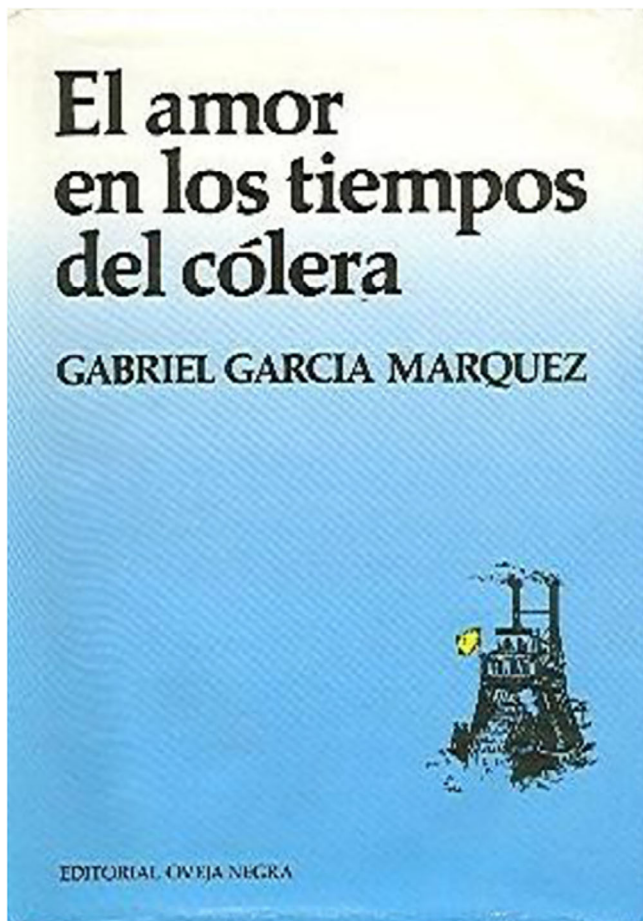


FIGURE 2 Book cover of the original publication of “Love in the Time of Cholera”

conditions to healthcare workers, grocery staff, and delivery drivers, to name just a few. I think it is fair to say that none of us would have wanted to learn these lessons in such a hard way, but perhaps we can apply knowledge we gain from facing the current challenges to improving society and helping more people.

Other lessons learned during the COVID-19 pandemic for medical genetics practice include the utility of telemedicine, which until now was largely used only for patients in remote locations, but which may well become the new norm after being employed successfully while patients, their families and healthcare providers are isolated at home. Likewise, the use of distance learning - from high-school through college and beyond - has skyrocketed as students and teachers are home-bound. As an example of this in genetics, the American College of Medical Genetics and Genomics (ACMG), in collaboration with the American Board of Medical Genetics and Genomics (ABMGG), have designed a *Curated Collection of Educational Recordings* that is free of charge to trainees in Medical Genetics and Genomics residency and fellowship programs, as well as students in Genetic Counseling training programs (ACMG, 2020). Lessons learned from these new models of teaching the next generation of healthcare professionals in medical genetics and genomics may well be incorporated in (re)designing future didactics in our field.

Change can be good for the Journal as well. Some changes have been outlined previously (Muenke, 2019) and include international additions of experts in the field, with more colleagues from around the world appointed to the editorial leadership team of the AJMG. As the field of genetics impacts more areas of science and medicine, the goal of my successors will be to continue to expand the clinical, scientific, and demographic diversity of this dedicated and passionate group to ensure that important topics are examined from a variety of lenses, and in ways that will resonate with an even broader audience.


In a similar spirit of globalization, the AJMG was the first to publish an entire series on children and adults with common genetic syndromes from geographical regions that have been thus far underrepresented in the literature and which may be underrecognized by healthcare professionals (Koretzky et al., 2016; Muenke, Adeyemo, & Kruszka, 2016). The first of these articles, which was followed by many others, studied individuals with Down syndrome (Kruszka et al., 2017). A new series of case reports has been added to the AJMG: *Case Reports in Diverse Populations* (Girisha, Wonkam, & Muenke, 2018), focusing on less common genetic conditions that are not well delineated in non-European ancestries.

An expansion of the scope of articles also includes papers that expand the phenotypes of congenital genetic disorders to prenatal and adult descriptions: *Genetic Syndromes Prenatally* (planned) and *Genetic Syndromes in Adults* (Slavotinek & Muenke, 2019). The goal of this expansion was to ensure that the AJMG can be true to its roots, but also that it can evolve, reach, and be relevant to a wider readership than ever. Last but not least, we have published a small number of articles to date in the new series: *Beyond the Double Helix* (Alkuraya, 2020; Regier, Smith, & Byers, 2020), which aims to describe extensions of the work of geneticists to new fields and areas, and to again speak to a wider audience.

After 11 years at the Children's Hospital of Philadelphia and 22 years at the NIH, having enjoyed direct patient care for all 33 years, directed a research program for 29 years and Medical Genetics Residency and Fellowship training programs for 26 years, and having had the privilege to work with Wiley as Founding Editor-in-Chief (EIC) for *Molecular Genetics and Genomic Medicine (MGGM)* for 5 years and EIC for the *American Journal of Medical Genetics* (“my favorite journal”) for 3 ½ years, I have decided that it was time for a change. In October 2019, I took on a new role as the Chief Executive Officer (CEO) of the American College of Medical Genetics and Genomics (ACMG). With this Editorial, I would like to express my gratitude for the dedicated work of my colleagues on the leadership team of the AJMG, the Deputy Editors-in-Chiefs, the Associate Editors, members of the Editorial Board, and the team of colleagues at Wiley. Last, but not least, a sincere thanks goes to the many friends of the Journal - the authors and readers - for their continued support, as they, like me value the *American Journal of Medical Genetics* simply as the best journal in medical genetics.

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AUTHOR NOTE

Maximilian Muenke wrote this Editorial in his personal capacity. The views expressed are his own and do not necessarily represent the views of the American College of Medical Genetics and Genomics (ACMG) where he is the Chief Executive Officer, or the National Human Genome Research Institute (NHGRI), National Institutes of Health (NIH) where he is a Special Volunteer.