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Clinical Pharmacology & Therapeutics: Past, Present and Future

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Abstract

Clinical Pharmacology & Therapeutics (CPT), the definitive and timely source for advances in human therapeutics, transcends the drug discovery, development, regulation and utilization continuum to catalyze, evolve and disseminate discipline-transformative knowledge. Prioritized themes and multidisciplinary content drive the science and practice of clinical pharmacology, offering a trusted point of reference. An authoritative herald across global communities, *CPT* is a timeless information vehicle at the vanguard of discovery, translation and application ushering therapeutic innovation into modern health care.

A decade into joining the editorial team of *Clinical Pharmacology & Therapeutics* (*CPT*), we here reflect on the Journal's ongoing evolution. *CPT* is foremost an enduring asset of the American Society of Clinical Pharmacology and Therapeutics, and more broadly an authoritative source of knowledge in the dynamic discipline of clinical pharmacology and human therapeutics.[1] Recognized as a premier vehicle for disseminating new concepts, ideas, and information, *CPT* serves as a principle and trusted portal to the discipline.[2] It has steadily anchored a multi-disciplinary field central to translational and applied clinical medicine, advancing human health by focusing on the nature, activity, efficacy and regulatory analysis of therapeutics.[3] Building on a platform of key values at the core of clinical pharmacology and therapeutics, *CPT* has matured into a global forum at the center of diversified communities of practice driving discovery, development, regulation and utilization of therapeutics, the DDRU continuum, in this evolving time of systems biology and precision therapeutics.[2] Indeed, as in past years, each of our thematic issues in 2016 underscores key advances, or emerging domains, within the field including therapeutic innovations,[4] precision medicine,[5] big data,[6] therapeutic optimization,[7] epigenetics,[8,9] the microbiome,[10] pregnancy and lactation,[11] thrombosis,[12] immune-oncology,[13] rare diseases,[14] transporters,[15] and adaptive biomedical innovation[16].

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CPT has in fact expanded its utility, appeal, and relevance, underscored by a 25% increase in manuscript downloads in 2016 compared to the previous year. As utilization has increased, the Journal continues to support a rigorous peer review program, orchestrated by Associate Editors with deep domain expertise covering the landscape of clinical pharmacology and its many facets.[1] In that context, peer review seeks to identify manuscripts that describe new therapeutic paradigms, reveal novel mechanistic insights, define evolving regulatory strategies, or in other ways transform or expand the dimensions of practice in clinical pharmacology. The impact of the content of *CPT* can be appreciated by considering the breadth of its audience, with more than 2,000,000 online page views in the last two years. The high quality of papers published and their ability to influence the discipline is highlighted by the continued outstanding performance of the impact factor, which was at 7.268 in 2015. The consistency of impact maintains *CPT* as a top journal publishing original research articles in the category of pharmacology and pharmacy of the Institute for Scientific Information (ISI).

Beyond original research, *CPT* serves as an essential vehicle to expand the dimensionality of the discipline of clinical pharmacology for clinicians, drug developers, laboratory scientists and regulators, across multinational communities of practice. The Journal highlights emerging scientific fields, developing therapeutic innovations, advances in the science of drug development, and evolving regulatory strategies that complement the application of new platform technologies, to keep our readership informed and current about the broad evolution of this highly vibrant discipline.[17–19] Moreover, the Journal showcases current controversies in the field, highlights notable achievements by our members, and serves as a scholarly forum for discussion and debate that underscores the relevance of our discipline to societal issues around the globe.[19] This has been accomplished, in part, by experimenting with innovative thematic content over the last 10 years which, in many ways, has evolved into a unique identity for the Journal. Established components which have garnered popularity with the readership include Commentaries[20] and Point-Counterpoint, which offer context for practice-changing science in original research papers or thoughtfully highlight ongoing controversies and debates in our discipline. Macroscopy[21] continues to remind us that our discipline impacts, and is impacted by, the larger canvas of geopolitical, socioeconomic, and environmental issues that bind us in a global community. The latest innovations in molecular, clinical, and regulatory sciences are showcased in Opinion pieces, including Discovery,[22] Translation,[23] and Development[24,25]. Moreover, State of the Art[26] and Reviews[27] offer authoritative synthetized content, reflected by their high rate of citations, providing in-depth analysis of emerging trends in the practice of clinical pharmacology.

Beyond those established components, during the last 5 years we added new content to *CPT*, to continue the evolution of the journal and keep the readership ahead of advancing trends in the discipline. Innovation in precision medicine, with a particular focus on therapeutic selection reflecting the molecular fingerprints of pathobiology, is revolutionizing patient management. In turn, these advances have been driven by the dual engines of discovery and development, fed by the deconvolution of elemental biology coupled with technology platforms that are transforming medicine. To capture these developments for the readership, which span the continuum from discovery to application, we instituted an annual January

issue dedicated to Therapeutic Innovations that are changing the practice of healthcare.[28, 29] Further, in recognition of the essential role that drug development plays in the evolution of biological discoveries into human therapies, we have developed a strategic focus on Clinical Trials,[30, 31] the essential bridge between scientific and technical innovation and clinical translation and application. Moreover, it is clear that genetics and genomics have transformed our understanding of drug action, permitting the optimization of therapeutics for individuals and populations. One challenge in productively linking science and medicine generally, and in translating genomic discoveries in the laboratory to better therapies in patients specifically, is advancing experimental insights into clinical practice. In that regard, we have been privileged to collaborate with the Pharmacogenomics Research Network (PGRN), the Pharmacogenomics Knowledge Base (PharmGKB), and the Clinical Pharmacogenetics Implementation Consortium (CPIC)[32–34] to disseminate practice guidelines that define how practitioners can use genetic and genomic information to best tailor therapies to individual patients.

As a discipline leader, *Clinical Pharmacology & Therapeutics* translates relevant progress in science and technology into innovations that maintain wellness and health and transform the management of disease. In an effort to keep readership on the advancing edge of the technological wave and maintain its relevance to careers in the discipline, we will embark on several new initiatives during the next stage of the Journal's evolution. We have heard the voices of the readership which have underscored the importance of a greater focus on showcasing original research from our membership across diverse communities of practice. Thus, we are working with our Wiley publishing colleagues and ASCPT to create the ability and greater opportunities to publish a larger number of original research articles that span the DDRU continuum in each issue. In that context, we invite members of the Society, specifically, and the discipline overall to submit original research for consideration by the Journal. Also, the popularity of CPICs, reflecting the importance of expertly curated information to translate innovation into practice, is driving our efforts to explore the possibility of collaborations with other organizations to produce practice guidelines advancing diagnosis and treatment. Further, we recognize the increasing contribution of investigators at the earliest stages of molecular discoveries to the discipline of clinical pharmacology and the development of innovations in diagnosis and treatment. Thus, we will expand the overall focus of the journal to include original research at the earliest stages of the DDRU continuum. Moreover, the ASCPT publication portfolio has expanded with the addition of *Clinical and Translational Science*, and we are looking forward to increasing our interactions, along with *CPT: Pharmacometrics & Systems Pharmacology*, to maximize the synergies that these inter-related journals offer. With these combined efforts, *CPT* looks forward to expanding and enhancing the relevance of our content, disseminating transformative science, and catalyzing discussions about issues confronting the discipline that are essential to our highly diverse communities of practice.

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