

# Moving the *Journal of Pharmacology and Experimental Therapeutics* Forward to Address the Needs of Our Authors and Editors—Editorial

The *Journal of Pharmacology and Experimental Therapeutics* (JPET) is one of the leading journals serving the membership of the American Society for Pharmacology and Experimental Therapeutics (ASPET). JPET focuses on the publication of important and ground-breaking innovative science. We publish original research papers and minireviews dealing with interactions of chemicals with biologic systems. All aspects of pharmacology and therapeutics are within the scope of the Journal. Ensuring the highest scientific quality of JPET depends on the hard work of the editor-in-chief, senior associate editors, editorial advisory board members, and reviewers who give so much time to the journal. Effective, fair, and timely reviews of submitted manuscripts are critical for the vibrancy of JPET. We want to take this opportunity to thank all of you who have been involved in the JPET scientific manuscript review process by providing your expertise as a reviewer. Taken together, each of you has provided dedicated scientific service. It is also our pleasure to recognize Mahmood S. Mozaffari for his ASPET Best Reviewer Award. He handled many submissions efficiently and provided consistently high-quality, thoughtful, and constructive recommendation summaries to the authors.

As we start the new year, we would like to share with you the latest additions to JPET that we hope will address the future needs of our authors and editors. We have addressed the need to improve the author experience and enhance experimental rigor and reproducibility by adding a simplified author checklist to promote experimental rigor and reproducibility (Table 1).

## New and Improved Article Types

**Viewpoint.** We have introduced a new article type called Viewpoint (Greenwood-Van Meerveld, 2022) that was introduced to broaden the scientific content of JPET by inviting an author to present a new or unique perspective on a manuscript recently accepted for publication in JPET. The initial goal is to publish at least one Viewpoint per issue coupled with the editorialized article. Recently, due to the interest received, some issues will include two Viewpoints. Viewpoint articles may comment on existing problems, highlight current advances, and briefly speculate future directions of the topic or provide other points of view. The first Viewpoint by Avvisato et al. (2023) was published in January 2023.

**Minireviews.** JPET continues to publish Minireviews as a platform for discussing concepts and topics of importance and relevance to pharmacology. Minireview submissions may be invited or unsolicited, and JPET encourages those interested in preparing a Minireview manuscript to complete a Presubmission Inquiry to determine whether the topic lies within the scope of the journal. The JPET Minireview guidelines for authors were revised and updated in July 2023 to provide additional guidance in preparing Minireview manuscripts. Page charges are waived for Minireview submissions.

JPET recently launched a new Minireview initiative together with the ASPET Young Scientist Committee to foster the research writing skills of ASPET trainees. This initiative targets senior graduate students and junior postdoctoral fellows with the goal of enhancing writing skills for junior scientists and increasing their opportunities and exposure to the publication system. Young scientist authors may consider expanding critical reviews and syntheses of the literature developed as part of their dissertations as the basis for their Minireview submissions. As part of this initiative, JPET encourages submissions for Minireviews from ASPET graduate students and junior postdoctoral fellows in collaboration with their mentors as corresponding authors. Minireviews submissions received as part of this initiative will undergo the regular review process. There are no submission fees or page charges for publishing a Minireview as part of this initiative and accepted Minireviews will be published immediately online.

**Special Sections.** To increase submissions to *JPET* and to improve the global outreach of the journal, we have focused recent efforts on publishing a series of new Special Sections that feature a series of

TABLE 1  
Additions to the JPET authors checklist to promote experimental rigor and reproducibility

---

Experimental design
<ul style="list-style-type: none"> <li>▪ Include details of sample size justification (power analysis)</li> <li>▪ Was randomization undertaken? If not, provide a valid justification</li> <li>▪ Was experimental blinding performed? If not, provide a valid justification</li> <li>▪ Was gender representation provided? If there is gender bias, provide a justification</li> </ul>
Group sizes
<ul style="list-style-type: none"> <li>▪ Ensure “n” refers to the number of biologic samples, not technical replicates</li> <li>▪ Provide an exact “n” value not a range</li> </ul>
Data analysis and statistics
<ul style="list-style-type: none"> <li>▪ A data and statistical analysis section is provided giving details</li> <li>▪ If ANOVA is used, a statement should be provided indicating that post hoc tests were conducted only if the data are normally distributed</li> <li>▪ Any statistical package or program employed, should be described along with the details of which tests were used</li> <li>▪ The threshold <math>P</math> value deemed to constitute statistical significance (<math>\alpha</math>) should be defined in the Materials and Methods</li> <li>▪ Report 95% confidence intervals (CI) for main outcome variables in addition to <math>P</math> values</li> <li>▪ Do not report standard error means (S.E.M.) as an index of data dispersion</li> <li>▪ Standard deviations (S.D.) should be used for description of normally distributed data, and interquartile range (IQR) for non-normally distributed data</li> </ul>
Outliers and exclusion criteria
<ul style="list-style-type: none"> <li>▪ Define in methods if data were excluded and why?</li> </ul>

---

original basic, translational, and clinical research articles, a mini-review, and an editorial. The first Special Section of 2023 (Santulli, 2023) was entitled *Non-Coding RNAs in Clinical Practice: From Biomarkers to Therapeutic Tools*. This Special Section edited by Gaetano Santulli included 15 featured articles (Ai et al., 2023; Dahariya et al., 2023; El-Daly et al., 2023; Farooqi et al., 2023; Gambardella et al., 2023a,b; Izzo et al., 2023; Liu et al., 2023; Mauro et al., 2023; Mohapatra et al., 2023; Mone et al., 2023; Sangeeth et al., 2023; Traber and Yu, 2023; Wronska, 2023; Yaylın et al., 2023). Overall, the articles in this Special Section represented an overview of the latest advancements in the field of non-coding RNAs, shedding light on their crucial roles as biomarkers of human disorders and their successful applications in innovative therapeutic strategies. In August 2023, JPET published a Special Section on Clinical Pharmacology edited by Giorgio Minotti (Minotti, 2023). This Special Section explored multiple aspects of the interactions between drugs and humans. Eleven articles were published, focusing on topics relevant to pre-approval drug development and post-approval research (Bolognani et al., 2023; Cecchin et al., 2023; Del Buono et al., 2023; Deschaine et al., 2023; Ewer et al., 2023; Frank et al., 2023; Parish et al., 2023; Patrono, 2023; Skarke et al., 2023; Talasaz et al., 2023; Wancewicz et al., 2023). In October 2023, a Special Section on Quantitative Systems Pharmacology: A Foundation to Establish Precision Medicine was published with James Gallo and Annabelle Ballesta serving as guest editors. The special section was made up of five articles and an editorial (Ballesta and Gallo, 2023; Hermange et al., 2023; Hodson et al., 2023; Khera et al., 2023; Pugh et al., 2023; Surendran et al., 2023; Tindall et al., 2023).

Other planned Special Sections to be published in 2024 will include:

- Nanotechnology-based delivery strategies for protein and peptide therapeutics (Jan. 2024);
- Medical countermeasures (February 2024);
- Nanotherapeutics In cancer research (March 2024);
- New pharmacological approaches targeting the immune system (July 2024);
- Therapeutic approaches to treat disorders of the urinary and gastrointestinal tracts (Aug. 2024);
- Clot Formation: Novel Regulators, Drugs, and Targets (September 2024);
- Cannabinoid signaling in human health and disease (Nov. 2024); and
- New therapies and therapeutic targets for post-traumatic stress disorder and related sequelae (Dec. 2024).

In 2025, we are planning special sections focusing on 1) recent trends in the pharmacology of cardiovascular diseases, 2) new therapies for obesity, 3) female cancer pharmacology, 4) new approaches to treat thrombosis, and 5) analgesics. Please consider submitting your research to any of these planned Special Sections by sending a Presubmission Inquiry including title, author information, abstract, and significance statement to *JPET* prior to full submission. The guest editors will review these inquiries, respond to reviewer's comments, and assess whether final approval will be granted for a full submission. There are no submission fees or page charges for publishing in any of these special sections. The accepted manuscript version is published immediately online.

## JPET Fellowship Program

Today there is an increasing demand for qualified manuscript reviewers that is driving the request for peer review at earlier stages of a career. However, there is no formal training in peer review at any stage of an academic career. The tasks, duties, and role of an Associate Editor or Editor within a journal are also, at times, unclear. At JPET, we must play a role in preparing the next generation of reviewers, and there is an unmet need for comprehensive reviewer training, especially for scientists. This program provides more advanced training geared toward the editorial process and outlines the strategy we have taken at JPET to close the gap for this unmet need by providing more formal training for our early career scientists through the JPET editorial fellowship. This 1-year program is designed for senior post-doctoral fellows and junior faculty members with relevant expertise in pharmacology and drug development. This program provides an in-depth opportunity to work with JPET associate editors to learn important elements of the editorial process.

In 2023, we welcomed our inaugural cohort of editorial fellows to JPET (Fig. 1). Fellows at different stages of their career, located within the United States and across the world, were actively engaged in the editorial and review process for JPET. Each fellow was paired with an associate editor for mentorship to learn about the essentials of the peer review and editorial process in addition to having quarterly meetings with the other JPET editorial fellows. The JPET fellowship provides a more personalized perspective regarding the editorial review process while building community to bridge the gap of an unmet need within academia to provide more formal training in the editorial process. We are excited to continue this program in the years ahead and recently selected a second cohort of fellows for 2024.

### Spotlight Emerging Scientific Talent

A unique focus of ASPET journals, including JPET, is to spotlight emerging scientific talent in the field of pharmacology with a Highlighted Trainee Author Award each month. (Fig. 2) This program was launched in September 2019 to recognize trainee authors. Recipients are selected based on a rigorous selection process that includes a recommendation from the corresponding authors and the candidate's curriculum vitae including a list of published work for consideration. The candidates are selected based on five criteria:

- Productivity relative to their level of training;
- Reviewers' rankings of the manuscript (top 15%, 30%, and 70%);
- Contributions to authorship;
- Nomination letter; and
- Involvement with ASPET or other pharmacology-related activities.

In addition to being highlighted in JPET and on the JPET website, Highlighted Trainee Authors are promoted on X (formerly known as Twitter), Facebook, LinkedIn, and Instagram.

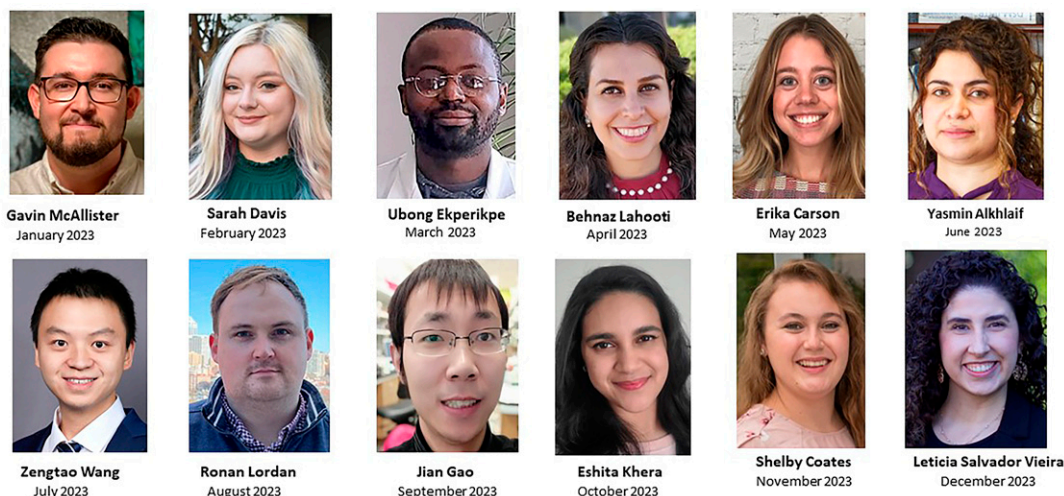
### Improved Social Media Presence and Marketing

In recent times, where science communication is expanding to social media platforms, creating a presence on social media for JPET manuscripts is key to the visibility of scientific articles. A recent publication



**Fig. 1.** The 2023 JPET editorial fellows. Pictured in the top row are Mahmoud Salama Ahmed (Texas Tech University), Patrick Glassman (Temple University), Jace Jones-Tabah (Montreal Neurologic Institute), Mayur K Ladumor (University of Washington), and Catharine Mielnik (University of Toronto). Pictured in the bottom row are Cristina Peterson (University of Minnesota), Nir Qvit (Bar-Ilan University), Julie Rageul (Stony Brook University), Freeborn Rwere (Stanford University), and Zhichao Zhou (Karolinska Institute).

## 2023 Highlighted Trainee Author Award Winners



**Fig. 2.** The 2022–2023 highlighted trainee award winners.

(Jordan et al., 2019) determined that neither Altmetric score, nor mentions on news platforms were correlated with the total number of citations for manuscripts published in 2017 from a single journal. Alternatively, mentions on the social media platform, X, was significantly correlated with the total number of citations. Taken together, these trends noted for other journals highlight the importance of reaching the scientific community in various ways beyond traditional avenues of communication, and social media being highlighted as an important tool to communicate the exciting, cutting-edge science that JPET publishes.

Going forward, the JPET Social media and marketing team is preparing a short paragraph on selected articles that addresses five key points of the article: 1) WHO the research affects or will impact, 2) WHAT the research is about, 3) WHERE the researchers are from, 4) WHY this research (and by the extension, the results of this research) is important, and 5) WILL the research serve as a building block for others, or will it be opening a new way of thinking about a topic? These short media blurbs will be posted on various social media sites to increase visibility of many of our publications.

### Summary and Future Plans for JPET

Although JPET has a strong scientific reputation, submissions to the journal have declined, likely because there are now so many other “specialized” journals in the field of pharmacology. The goal of the JPET editorial team is to return JPET to its rightful position as one of the top pharmacology journals.

We plan on addressing this goal by continuing to provide excellent and timely scientific reviews and publishing the highest quality research and also by introducing new and improved article types such as Viewpoints and Special Sections. Moreover, improving the author's experience will play a key part in the future growth of JPET and the peer-review process. The use of the Presubmission Inquiry process is proving to be enormously popular and is allowing authors to determine the suitability or “fit” of their research for JPET as well as the other ASPET journals. We also concur that the review process should include providing reviewers with automated reports. These reports will include information from image forensics and plagiarism software, as well as tools for assessing experimental rigor, including information on blinding, randomization, sample size calculations, and ethical approval statements. Reviewers should be able to receive and review these reports before initiating their review of a submitted manuscript. These reports will serve as a valuable supporting role in the review process and hopefully allow reviewers to judge papers and submit their reviews in a timely manner.

Beverley Greenwood-Van Meerveld,  Roberto Levi,  
Eric R. Gross,  Joe Blumer, and Susan Wood

## Acknowledgments

Special thanks go to Jackie Perry for the thoughts and suggestions to improve this editorial.

## References

- Ai K, Yi L, Wang Y, and Li Y (2023) CircRNA\_33702 promotes renal fibrosis by targeting the miR-29b-3p/WNT1-inducible signaling pathway protein 1 pathway. *J Pharmacol Exp Ther* **384**:61–71.
- Avvisato R, Jankauskas SS, and Santulli G (2023) Istaroxime and beyond: new therapeutic strategies to specifically activate SERCA and treat heart failure. *J Pharmacol Exp Ther* **384**:227–230.
- Ballesta A and Gallo JM (2023) Quantitative systems pharmacology: a foundation to establish precision medicine—editorial. *J Pharmacol Exp Ther* **387**:27–30.
- Bolognani F, Kruihof AC, Schulthess P, Machacek M, de Kam ML, Bergmann KR, van Gent M, Moerland M, Crenn P, Greig G et al. (2023) Characterization of the pharmacokinetic and pharmacodynamic profile of apraglutide, a glucagon-like peptide-2 analog, in healthy volunteers. *J Pharmacol Exp Ther* **386**:129–137.
- Cecchin E, Posocco B, Mezzalana S, Appetecchia M, and Toffoli G (2023) The role of gender pharmacogenetics in the personalization of drug treatment. *J Pharmacol Exp Ther* **386**:190–197.
- Dahariya S, Raghuwansi S, Thamodaran V, Velayudhan SR, and Gutti RK (2023) Role of long non-coding RNAs in human-induced pluripotent stem cells derived megakaryocytes: a p53, HOX antisense intergenic RNA myeloid 1, and miR-125b interaction study. *J Pharmacol Exp Ther* **384**:92–101.
- Del Buono MG, Damonte JI, Moroni F, Chiabrando JG, Markley R, Turlington J, Trankle CR, Kang L, Biondi-Zoccai G, Kontos MC et al. (2023) Clinical and pharmacological implications of time to treatment with interleukin-1 blockade in ST-segment elevation myocardial infarction. *J Pharmacol Exp Ther* **386**:156–163.
- Deschaine SL, Hedegaard MA, Pince CL, Farokhnia M, Moose JE, Stock IA, Adusumalli S, Akhlaghi F, Hougland JL, Sulima A et al. (2023) Initial pharmacological characterization of a major hydroxy metabolite of PF-5190457: inverse agonist activity of PF-6870961 at the Ghrelin receptor. *J Pharmacol Exp Ther* **386**:117–128.
- El-Daly SM, Gouhar SA, and Abd Elmaged ZY (2023) Circulating microRNAs as reliable tumor biomarkers: opportunities and challenges facing clinical application. *J Pharmacol Exp Ther* **384**:35–51.
- Ewer MS, Palaskas NL, and Herson J (2023) Cardiac monitoring guidelines in clinical trials and post-approval surveillance for patients exposed to anticancer treatments: do the data support the recommendations? *J Pharmacol Exp Ther* **386**:164–168.
- Farooqi AA, Kapanova G, Kalmakhanov S, Kussainov AZ, and Datkhayeva Z (2023) Regulation of ferroptosis by non-coding RNAs: mechanistic insights. *J Pharmacol Exp Ther* **384**:20–27.
- Frank T, Kovar A, Strougo A, Vage C, Teuscher N, and Wong N (2023) Sutimlimab pharmacokinetics and pharmacodynamics in patients with cold agglutinin disease. *J Pharmacol Exp Ther* **386**:143–155.
- Gambardella J, Fiordelisi A, Sorriento D, Cerasuolo F, Buonaiuto A, Avvisato R, Pisani A, Varzideh F, Riccio E, Santulli G et al. (2023a) Mitochondrial microRNAs are dysregulated in patients with Fabry disease. *J Pharmacol Exp Ther* **384**:72–78.
- Gambardella J, Kansakar U, Sardu C, Messina V, Jankauskas SS, Marfella R, Maggi P, Wang X, Mone P, Paolisso G et al. (2023b) Exosomal miR-145 and miR-885 regulate thrombosis in COVID-19. *J Pharmacol Exp Ther* **384**:109–115.
- Greenwood-Van Meerveld B (2022) “Viewpoints”: new article category. *J Pharmacol Exp Ther* **383**:1.
- Hermange G, Courmède P-H, and Plo I (2023) Optimizing IFN alpha therapy against myeloproliferative neoplasms. *J Pharmacol Exp Ther* **387**:31–43.
- Hodson D, Mistry H, Yates J, Farrington P, Staniszewska A, Guzzetti S, Davies M, Aarons L, and Ogungbenro K (2023) Radiation in combination with immune checkpoint blockade and DNA damage response inhibitors in mice: dosage optimization in MC38 syngeneic tumors via modelling and simulation. *J Pharmacol Exp Ther* **387**:44–54.
- Izzo C, Visco V, Gambardella J, Ferruzzi GJ, Rispoli A, Rusciano MR, Toni AL, Virtuoso N, Carrizzo A, Di Pietro P et al. (2023) Cardiovascular Implications of microRNAs in coronavirus disease 2019. *J Pharmacol Exp Ther* **384**:102–108.
- Jordan CJ, Neigh GN, and Carlezon WA (2019) Neuropsychopharmacology (NPP): relationships between online attention and citation counts. *Neuropsychopharmacology* **44**:1513–1515.
- Khera E, Kim J, Stein A, Ratanapanichkich M, and Thurber GM (2023) Mechanistically weighted metric to predict in vivo antibody-receptor occupancy: an analytical approach. *J Pharmacol Exp Ther* **387**:78–91.
- Liu C, Wu X, Gokulnath P, Li G, and Xiao J (2023) The functions and mechanisms of translatable circular RNAs. *J Pharmacol Exp Ther* **384**:52–60.
- Mauro M, Berretta M, Palermo G, Cavalieri V, and La Rocca G (2023) The multiplicity of argonaute complexes in mammalian cells. *J Pharmacol Exp Ther* **384**:1–9.
- Minotti G (2023) A special section on clinical pharmacology—editorial. *J Pharmacol Exp Ther* **386**:115–116.
- Mohapatra S, Winkle M, Ton AN, Nguyen D, and Calin GA (2023) The role of non-coding RNAs in chromosomal instability in cancer. *J Pharmacol Exp Ther* **384**:10–19.
- Mone P, Lombardi A, Kansakar U, Varzideh F, Jankauskas SS, Pansini A, Marzocco S, De Gennaro S, Famiglietti M, Macina G et al. (2023) Empagliflozin improves the microRNA signature of endothelial dysfunction in patients with heart failure with preserved ejection fraction and diabetes. *J Pharmacol Exp Ther* **384**:116–122.
- Parish O, Cannata A, Shamsi A, Jordan-Rios A, Albarjas M, Piper S, Scott P, Bromage D, and McDonagh T (2023) Prognostic role of contraindicated drugs in hospitalized patients with decompensated heart failure. *J Pharmacol Exp Ther* **386**:205–211.
- Patrono C (2023) Cyclooxygenase inhibitors and cancer: the missing pieces. *J Pharmacol Exp Ther* **386**:181–189.
- Pugh K, Davies M, and Powathil G (2023) A mathematical model to investigate the effects of ceralasertib and olaparib in targeting the cellular DNA damage response pathway. *J Pharmacol Exp Ther* **387**:55–65.
- Sangeeth A, Malleswarapu M, Mishra A, and Gutti RK (2023) Long non-coding RNAs as cellular metabolism and haematopoiesis regulators. *J Pharmacol Exp Ther* **384**:79–91.
- Santulli G (2023) Non-coding RNAs in clinical practice: from biomarkers to therapeutic tools. *J Pharmacol Exp Ther* **384**:225–226.
- Skarke C, Lordan R, Barekat K, Naik A, Mathew D, Ohtani T, Greenplate AR, Grant GR, Lahens NF, Gouma S et al. (2023) Modulation of the immune response to severe acute respiratory syndrome coronavirus 2 vaccination by nonsteroidal anti-inflammatory drugs. *J Pharmacol Exp Ther* **386**:198–204.
- Surendran A, Jenner AL, Karimi E, Fiset B, Quail DF, Walsh LA, and Craig M (2023) Agent-based modelling reveals the role of the tumor microenvironment on the short-term success of combination temozolomide/immune checkpoint blockade to treat glioblastoma. *J Pharmacol Exp Ther* **387**:66–77.
- Talasz AH, Sculthorpe R, Pak M, Lipinski M, Roberts C, Markley R, Trankle CR, Canada JM, Wohlford GF, Golino M et al. (2023) Comparison of safety and biological efficacy of anakinra (Kineret) dispensed in polycarbonate plastic versus borosilicate glass syringes: a patient-level analysis of VCUART2 and VCUART3 clinical trials. *J Pharmacol Exp Ther* **386**:138–142.
- Tindall MJ, Cucurull-Sanchez L, Mistry H, and Yates JWT (2023) Quantitative systems pharmacology and machine learning: a match made in heaven or hell? *J Pharmacol Exp Ther* **387**:92–99.
- Traber GM and Yu A-M (2023) RNAi-based therapeutics and novel RNA bioengineering technologies. *J Pharmacol Exp Ther* **384**:133–154.
- Yayilm I, Farooqi AA, Telkoparan-Akillilar P, and Saso L (2023) Interplay between non-coding RNAs and NRF2 in different cancers: spotlight on microRNAs and long non-coding RNAs. *J Pharmacol Exp Ther* **384**:28–34.
- Wanciewicz B, Zhu Y, Fenske RJ, Weeks AM, Wenger K, Pabich S, Daniels M, Punt M, Nall R, Peter DC et al. (2023) Metformin monotherapy alters the human plasma lipidome independent of clinical markers of glycemic control and cardiovascular disease risk in a type 2 diabetes clinical cohort. *J Pharmacol Exp Ther* **386**:169–180.
- Wronska A (2023) The role of microRNA in the development, diagnosis, and treatment of cardiovascular disease: recent developments. *J Pharmacol Exp Ther* **384**:123–132.