

Editorial

The AALAS Journals: 2017 in Review

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The November 2017 issue of the *Journal of the American Association for Laboratory Animal Science (JAALAS)* volume 56 and the December 2017 issue of *Comparative Medicine (CM)* volume 67 mark the end of another year for the AALAS journals. Our sincere thanks go again to the talented support the journals receive from art director Amy Tippett, scientific editor Amy Frazier,

and editorial specialist, Virginia Dawson. This team together continues to sustain a timely flow of well-edited and professionally presented information through the entire process from manuscript submission to publication.

Publication statistics for the journals remain steady (Table 1, Figure 1). Acceptance rates were 61% for *CM* and 48% for *JAA-*

Table 1. Journal statistics

| <i>JAALAS</i> | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|
| Total submissions | 132 | 172 | 167 | 191 | 170 | 179 | 158 | 148 | 162 | 163 |
| International | 52 | 61 | 52 | 71 | 57 | 74 | 75 | 54 | 60 | 64 |
| % international | 39 | 35 | 31 | 37 | 34 | 41 | 59 | 36 | 37 | 39 |
| Disposition of submissions | | | | | | | | | | |
| Referred to <i>CM</i> | 11 | 15 | 18 | 31 | 16 | 17 | 25 | 23 | 36 | 19 |
| Withdrawn | 6 | 4 | 8 | 5 | 5 | 3 | 4 | 4 | 0 | 3 |
| Rejected | 35 | 41 | 43 | 55 | 64 | 75 | 62 | 44 | 60 | 50 |
| Accepted | 73 | 93 | 91 | 90 | 75 | 80 | 91 | 62 | 75 | 77 |
| Total number reviewed* | 108 | 134 | 134 | 145 | 139 | 155 | 153 | 106 | 135 | 127 |
| % reviewed | 82 | 78 | 80 | 76 | 82 | 87 | 97 | 72 | 83 | 78 |
| % accepted of those reviewed | 68 | 69 | 68 | 62 | 54 | 52 | 59 | 58 | 56 | 61 |
| Days from submission to | | | | | | | | | | |
| first decision | 28 | 28 | 28 | 28 | 28 | 28 | 32 | 34 | 36 | 35 |
| final decision | 66 | 64 | 62 | 62 | 50 | 56 | 75 | 60 | 66 | 68 |
| Manuscripts printed** | 62 | 68 | 90 | 96 | 79 | 71 | 88 | 67 | 90 | 82 |
| Manuscript pages printed | 732 | 840 | 916 | 993 | 872 | 810 | 727 | 446 | 828 | 581 |
| Average pages per manuscript | 5.7 | 5.9 | 5.8 | 6.4 | 6.8 | 11.4 | 8.3 | 6.7 | 9.2 | 7.1 |
| Impact factor | 0.517 | 0.950 | 0.805 | 0.708 | 1.145 | *** | 1.118 | 0.906 | 1.195 | NA |
| 5-year impact factor | | | | | | | | | 1.545 | |
| <i>CM</i> | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Total submissions | 126 | 158 | 138 | 162 | 171 | 169 | 135 | 127 | 140 | 129 |
| International | 50 | 86 | 55 | 73 | 76 | 89 | 80 | 66 | 59 | 73 |
| % international | 40 | 54 | 40 | 45 | 44 | 53 | 59 | 52 | 42 | 57 |
| Disposition of submissions | | | | | | | | | | |
| Referred to <i>JAALAS</i> | 24 | 39 | 36 | 31 | 29 | 23 | 12 | 9 | 12 | 15 |
| Withdrawn | 8 | 6 | 6 | 4 | 3 | 6 | 1 | 0 | 3 | 3 |
| Rejected | 37 | 51 | 35 | 54 | 75 | 69 | 75 | 54 | 54 | 62 |
| Accepted | 56 | 47 | 61 | 57 | 64 | 63 | 45 | 56 | 53 | 58 |
| Total number reviewed* | 93 | 98 | 96 | 111 | 139 | 132 | 120 | 110 | 107 | 120 |
| % reviewed | 74 | 62 | 70 | 69 | 81 | 78 | 89 | 87 | 76 | 93 |
| % accepted of those reviewed | 60 | 48 | 64 | 51 | 46 | 48 | 38 | 51 | 50 | 48 |
| Days from submission to | | | | | | | | | | |
| first decision | 32 | 28 | 28 | 28 | 24 | 24 | 28 | 24 | 29 | 27 |
| final decision | 62 | 53 | 61 | 53 | 46 | 42 | 45 | 47 | 56 | 55 |
| Manuscripts printed** | 63 | 59 | 55 | 60 | 68 | 60 | 58 | 59 | 62 | 60 |
| Pages published, articles | 623 | 613 | 520 | 576 | 568 | 547 | 436 | 401 | 502 | 477 |
| Average pages per article | 7.4 | 7.7 | 6.9 | 7.0 | 6.7 | 9.1 | 7.5 | 6.8 | 8.1 | 8.0 |
| Impact factor | 1.089 | 1.094 | 1.205 | 1.052 | 1.120 | *** | 0.742 | 1.00 | 0.832 | NA |
| 5-year impact factor | | | | | | | | | 1.175 | |

*, some articles submitted in 2017 were still under review in 2018

** , some of the articles published in 2017 were accepted in 2016

***, impact factors for 2013 were calculated based on 3 issues, rather than 6, for each journal and as a result were inaccurate.

†, combined full text and pdf downloads from PubMedCentral and Ingenta

NA, not yet available

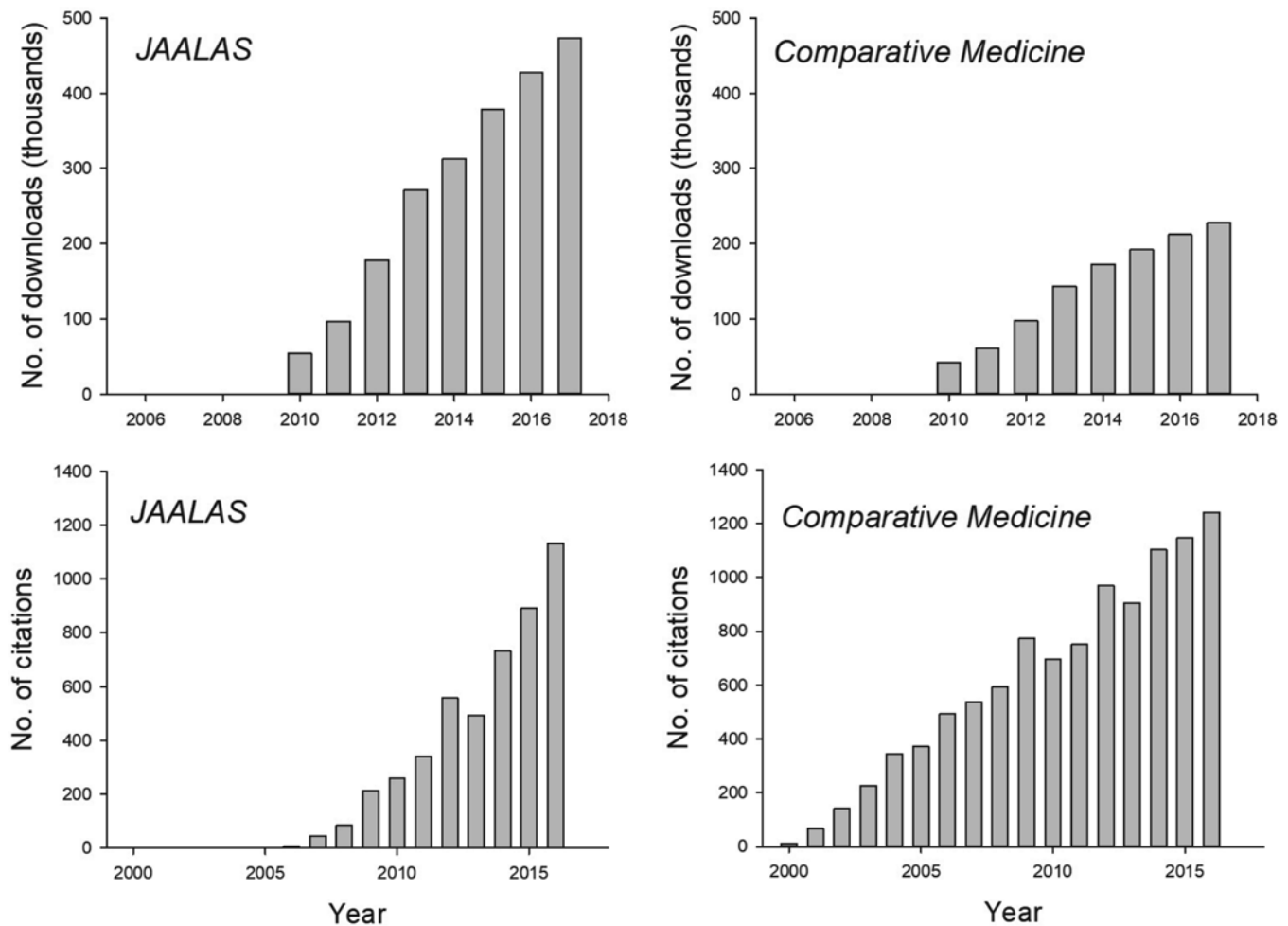


Figure 1.

LAS (Table 1). These percentages are consistent with previous years and allow us to obtain an adequate amount of high-quality content for each issue. Prospective authors should be aware that as more submissions are received, standards for acceptance will be higher. For example, manuscripts that contain relatively little data (only 1 table or figure) will be viewed as less desirable than articles that present a substantive and comprehensive investigation of a research question.

The number of downloaded articles for the two journals really highlight the value of the AALAS publications (Figure 1, Tables 2 and 3). As you can see, articles from the 2 journals are downloaded hundreds of thousands of times each year, and many articles have been downloaded thousands of times a year for many years after the publication date. These data show that even though the journal impact factors are not high, the articles are used by the community we serve and are durable in terms of content. The number of citations from both journals also continues to grow annually, with JAALAS citations increasing exponentially since the journal was re-named in 2005 (Figure 2). The list of top 10 cited articles has several new additions this year (Tables 4 and 5). An interesting feature of this information is that for both JAALAS and CM, only 2 articles for each made both the top ten cited and downloaded lists. This suggests that different audiences are using most of the publications in the lists, some with focus on publishing (the cited articles) and others on information (the download articles). Also, the top articles downloaded from Ingenta were different from those downloaded from PubMedCen-

tral (PMC), suggesting that different readers use these 2 avenues. Ingenta downloads were 6 to 7% of the total downloads in 2016 and 2017, the only years for which those data are available.

A notable highlight of 2017 was the special topic issue (issue 3) in *Comparative Medicine* entitled, "Infectious Disease Research: Animal Models and Risk Management." Edited by Jason Villano, this timely compilation of information and recommended practices included articles on institutional oversight of research involving biohazards, personal protective equipment, viral vector biosafety, general considerations for infectious disease research involving animals, and animal models for research on Ebola virus, Zika virus, and arthropod-borne viruses. We commend these editors and authors for their valuable contribution to promoting safe and effective research on infectious organisms. Readers interested in guest-editing a special topic issue in either journal should not hesitate to contact the editors or staff to explore the feasibility of a contribution.

Since November 2016, the journals have been using an article-based workflow, as opposed to an issue-based workflow. This means that accepted papers are no longer assigned to a specific future issue. Rather, printed issues are comprised of the first 10 completed articles for CM and the first 15 for JAALAS. This approach allows individual articles to get online and in print as quickly as possible. As soon as an article is approved in its final form, the article is immediately published to Fast Track so it can be cited without completion or publication of the journal issue. This new approach has helped to speed up the publication pro-

Table 2. *Comparative Medicine* - Top 10 Downloaded Articles from PubMed Central

| Article | Live in PMC | Total Requests | | | |
|--|-------------|----------------|-------|-------|-------|
| | | 2014 | 2015 | 2016 | 2017 |
| Graham ML, Janecek JL, Kittredge JA, Hering BJ, Schuurman HJ. 2011. The streptozotocin-induced diabetic nude mouse model: differences between animals from different sources. <i>61</i> :356–360. | 2/1/2012 | 5203 | 8759 | 9735 | 10205 |
| Lynch WJ, Nicholson KL, Dance ME, Morgan RW, Foley PL. 2010. Animal models of substance abuse and addiction: implications for science, animal welfare, and society. <i>60</i> :177–188. | 12/1/2010 | 4039 | 6825 | 6504 | 9679 |
| Novak MA, Meyer JS. 2009. Alopecia: possible causes and treatments, particularly in captive nonhuman primates. <i>59</i> :18–26. | 8/1/2009 | 18992 | 16504 | 12492 | 8621 |
| Ericsson AC, Hagan CE, Davis DJ, Franklin CL. 2014. Segmented Filamentous bacteria: commensal microbes with potential effects on research. <i>64</i> :90–98. | 10/1/2014 | ** | ** | 3700 | 5119 |
| Cray C, Zaias J, Altman NH. 2009. Acute phase response in animals: a review. <i>59</i> :517–526.*** | 6/1/2010 | 4467 | 6629 | 5378 | 4656 |
| Tartarov I, Panda A, Petkov D, Kolappaswamy K, Thompson K, Kavirayani A, Lipsky MM, Elson E, Davis, CC, Martin SS, DeTolla LJ. 2012. Effect of magnetic fields on tumor growth and viability. <i>61</i> :339–345. | 2/1/2012 | 2107 | 3083 | 3504 | 4459 |
| Nemzek JA, Hugunin KM, Opp MR. 2008. Modeling sepsis in the laboratory: merging sound science with animal well-being. <i>58</i> :120–128. | 7/17/2009 | 2530 | 3597 | 3645 | 4450 |
| Casals JB, Pieri NC, Feitosa ML, Ercolin AC, Roballo KC, Barreto RS, Bressan FF, Martins DS, Miglino MA, Ambrósio CE. 2011. The use of animal models for stroke research: a review. <i>61</i> :305–313. | 2/1/2012 | 2932 | 4273 | 4391 | 4209 |
| Toth LA, Bhargava P. 2013. Animal models of sleep disorders. <i>63</i> :91–104. | 10/1/2013 | ** | ** | 3161 | 4126 |
| Bagi CM, Berryman E, Moalli MR. 2011. Comparative bone anatomy of commonly used laboratory animals: implications for drug discovery. <i>61</i> :76–85. | 8/1/2011 | ** | ** | ** | 4046 |

** New to top ten downloaded list

*** Also on the top ten cited list for 2017

Table 3. *JAALAS* - Top 10 Downloaded Articles from PubMed Central

| Article | Live in PMC | Total Requests | | | |
|---|-------------|----------------|-------|-------|-------|
| | | 2014 | 2015 | 2016 | 2017 |
| Turner PV, Brabb T, Pekow C, Vasbinder MA. 2011. Administration of substances to laboratory animals: routes of administration and factors to consider. <i>50</i> :600–613.*** | 3/1/2012 | 21404 | 31034 | 40670 | 48836 |
| Turner PV, Pekow C, Vasbinder MA, Brabb T. 2011. Administration of substances to laboratory animals: equipment considerations, vehicle selection, and solute preparation. <i>50</i> :614–627. | 3/1/2012 | 8262 | 13013 | 13610 | 13568 |
| Duran-Struuck R, Dysko RC. 2009. Principles of bone marrow transplantation (BMT): providing optimal veterinary and husbandry care to irradiated mice in BMT studies. <i>48</i> :11–22.*** | 7/1/2009 | 8328 | 11634 | 10792 | 10265 |
| Matthews KA, Taylor DK. 2011. Assessment of sterility in fluid bags maintained for chronic use. <i>50</i> :708–712. | 3/1/2012 | ** | ** | ** | 7190 |
| Cray C, Rodriguez M, Zaias J, Altman NH. 2009. Effects of storage temperature and time on clinical biochemical parameters from rat serum. <i>48</i> :202–204. | 9/1/2009 | 3822 | 5974 | 6273 | 6343 |
| Marx JO, Vudathala D, Murphy L, Rankin S, Hankenson FC. 2014. Antibiotic administration in the drinking water of mice. <i>53</i> :301–306. | 11/1/14 | ** | ** | 4059 | 6004 |
| Fernandez I, Pena A, Del Teso N, Perez V, Rodriguez-Cuesta J. 2010. Clinical biochemistry parameters in C57BL/6J mice after blood collection from the submandibular vein and retroorbital plexus. <i>49</i> :202–206. | 9/1/2010 | 3109 | 6178 | 5861 | 5800 |
| Turner DE, Daugherty EK, Altier C, Mauer KJ. 2010. Efficacy and limitations of an ATP-based monitoring system. <i>49</i> :190–195. | 9/1/2010 | 4112 | 7131 | 6614 | 5733 |
| Zaias J, Mineau M, Cray C, Yoon D, Altman NH. 2009. Reference values for serum proteins of common laboratory rodent strains. <i>48</i> :387–390. | 1/1/2010 | 2490 | 4266 | 4929 | 5518 |
| Keen JN, Austin M, Huang L, Messing S, Wyatt JD. 2010. Efficacy of soaking in 70% isopropyl alcohol on aerobic bacterial decontamination of surgical instruments and gloves for serial mouse laparotomies. <i>49</i> :832–837. | 5/1/11 | ** | ** | 4059 | 4243 |

** New to top ten downloaded list

*** Also a top ten cited article in 2017

Table 4. Comparative Medicine - Top 10 cited articles*

| Article | Publication year | Total number of citations as of | | | |
|---|------------------|---------------------------------|--------------|--------------|---------------|
| | | May 6, 2015 | Apr. 4, 2016 | Mar. 1, 2017 | Feb. 14, 2018 |
| Cray C, Zaias J, Altman NH. Acute phase response in animals: a review. 59:517–526.*** | 2009 | 137 | 178 | 223 | 287 |
| Lelovas PP, Xanthos TT, Thoma SE, Lyritis GP, Dontas IA. The laboratory rat as an animal model for osteoporosis research. 58:424–430. | 2008 | 134 | 162 | 164 | 203 |
| Mansfield K. Marmoset models commonly used in biomedical research. 53:383–392. | 2003 | 122 | 143 | 160 | 175 |
| Abbott DH, Barnett DK, Colman RJ, Yamamoto ME, Schultz-Darken NJ. Aspects of common marmoset basic biology and life history important for biomedical research. 53:339–350. | 2003 | 99 | 110 | 121 | 139 |
| Dyson MC, Alloosh M, Vuchetich JP, Mokelke EA, Sturek M. Components of metabolic syndrome and coronary artery disease in female Ossabaw swine fed excess atherogenic diet. 56:35–45. | 2006 | 93 | 104 | 113 | 124 |
| Callicott RJ, Womack JE. Real-time PCR for measurement of mouse telomeres. 56:17–22. | 2006 | 74 | 82 | 97 | 110 |
| Arras M, Autenried P, Rettich A, Spaeni D, Rüllicke T. Optimization of intraperitoneal injection anesthesia in mice: drugs, dosages, adverse effects, and anesthesia depth. 51:443–456. | 2001 | 67 | 79 | 86 | 93 |
| Martini L, Fini M, Giavaresi G, Giardino R. Sheep model in orthopedic research: a literature review. 51:292–299. | 2001 | ** | ** | 80 | 92 |
| Hsu CC, Riley LK, Wills HM, Livingston RS. Persistent infection with and serologic cross-reactivity of three novel murine noroviruses. 56:247–251. | 2006 | 73 | 80 | 81 | 86 |
| Garner JP, Weisker SM, Dufour B, Mench JA. Barbering (fur and whisker trimming) by laboratory mice as a model of human trichotillomania and obsessive-compulsive spectrum disorders. 54:216–224. | 2004 | 70 | 76 | 80 | 85 |

*Data collected from Web of Science

** New to top ten cited list

*** Also on the top ten downloaded list for 2017

Table 5. JAALAS - Top 10 cited articles*

| Article | Publication year | Total number of citations as of | | | |
|--|------------------|---------------------------------|--------------|--------------|---------------|
| | | May 6, 2015 | Apr. 4, 2016 | Mar. 1, 2017 | Feb. 14, 2018 |
| Portfors CV. Types and functions of ultrasonic vocalizations in laboratory rats and mice. 46:28–34. | 2007 | 138 | 172 | 191 | 219 |
| Turner PV, Brabb T, Pekow C, Vashbinder MA. Administration of substances to laboratory animals: routes of administration and factors to consider. 50:600–613.*** | 2011 | ** | 48 | 81 | 135 |
| Wilson JM, Bunte RM, Carty AJ. Evaluation of rapid cooling and tricainemethanesulfonate (MS222) as methods of euthanasia in zebrafish (<i>Danio rerio</i>). 48:785–789. | 2009 | 34 | 49 | 63 | 89 |
| Matsumiya LC, Sorge RE, Sotocinal SG, Tabaka JM, Wieskopf JS, Zaloum A, King OD, Mogil JS. Using the mouse grimace scale to reevaluate the efficacy of postoperative analgesics in laboratory mice. 51:42–49. | 2012 | 28 | 44 | 56 | 68 |
| Hess SE, Rohr S, Dufour BD, Gaskill BN, Pajor EA, Garner JP. Home improvement: C57BL/6J mice given more naturalistic nesting materials build better nests. 47:25–31. | 2008 | ** | 43 | 52 | 61 |
| Duran-Struuck R, Dysko RC. Principles of bone marrow transplantation (BMT): Providing optimal veterinary husbandry care to irradiated mice in BMT studies. 48:11–22.*** | 2009 | ** | ** | 44 | 56 |
| Probst RJ, Lim JM, Bird DN, Pole GL, Sato AK, Claybaugh JR. Gender differences in the blood volume of conscious Sprague-Dawley rats. 45:49–52. | 2006 | 30 | 35 | 39 | 49 |
| Fernandez I, Pena A, Del Teso N, Perez V, Rodriguez-Cuesta J. Clinical biochemistry parameters in C57BL/6J mice after blood collection from the submandibular vein and retroorbital plexus. 49:202–206.*** | 2010 | ** | ** | ** | 49 |
| Buitrago S, Martin TE, Tetens-Woodring J, Belicha-Villanueva A, Wilding GE. Safety and efficacy of various combinations of injectable anesthetics in BALB/c mice. 47:11–17. | 2008 | ** | ** | 41 | 47 |
| Foley PL, Liang H, Crichlow AR. Evaluation of a sustained release formulation of buprenorphine for analgesia in rats. 50:198–204. | 2011 | ** | ** | 37 | 46 |

*Data collected from Web of Science

** New to top ten cited list

*** Also a top ten downloaded article in 2017

Table 6. Journals with greatest number of citations of and citations in AALAS journals in 2017

| Rank | Cited <i>Comp Med</i> articles | Cited in <i>Comp Med</i> articles | Cited JAALAS articles | Cited in JAALAS articles |
|------|---------------------------------|--|----------------------------------|---------------------------------|
| 1 | <i>PLOS One</i> (63) | <i>Comp Med</i> (58) | JAALAS (138) | JAALAS (138) |
| 2 | <i>Comp Med</i> (58) | JAALAS (56) | <i>PLOS One</i> (69) | <i>Lab Animal-UK</i> (99) |
| 3 | JAALAS (40) | <i>J Med Primatol</i> (38) | <i>Comp Med</i> (56) | CTLAS (62) |
| 4 | <i>Vet Pathol</i> (37) | <i>Guide Care Use LA</i> (31) | <i>Lab Animal</i> (43) | <i>Lab Anim Sci</i> (42) |
| 5 | <i>J Med Primatol</i> (24) | <i>Vet Pathol</i> (28) | <i>Lab Animal-UK</i> (36) | <i>Guide Car Use LA</i> (41) |
| 6 | <i>Zebrafish</i> (21) | <i>Circulation</i> (23)* | <i>Appl Anim Behav Sci</i> (21)* | <i>Comp Med</i> (40) |
| 7 | <i>J Zoo Wildlife Med</i> (20)* | PNAS (23)* | <i>Zebrafish</i> (21)* | <i>Appl Anim Behav Sci</i> (38) |
| 8 | <i>Sci-Rep-UK</i> (20)* | <i>PLOS One</i> (23)* | <i>Sci-Rep-UK</i> (16)* | Non-traditional (34) |
| 9 | <i>Lab Animal</i> (19)* | <i>Blood</i> (19)* | <i>Vet Path</i> (16)* | <i>Am J Primatol</i> (33) |
| 10 | <i>Tox Path</i> (19)* | JAVMA (19)* <i>Lab Animal Sci</i> (19)* | <i>Exp Anim Tokyo</i> (14) | <i>Physiol Behav</i> (29) |

*Tied rank

cess. In the past, we experienced a backlog of articles; however, since the implementation of this new method, the backlog of articles has been diminished. For example, we had several JAALAS articles that were accepted for publication in July and went to press in the September issue.

In October 2017, staff began using social media as a tool to help promote the journals. We are using the AALAS LinkedIn group (comprised of 6,147 members) to provide free exposure for the journals and to increase traffic to our website and our potential customer base. We hope this new approach will help the authors' network, give them valuable exposure, and increase overall customer satisfaction.

Several software enhancements to the journals will begin in the first quarter 2018. "iThenticate" gives the editors and staff the ability to check a manuscript for plagiarism at any point during the process: submission, acceptance, or just prior to pub-

lication. A new membership to "CrossRef" will configure our site to assign a digital object identifier (DOI) to manuscripts that have received a decision type of accept. A DOI is a string of numbers, letters and symbols used to permanently identify an article or document and link to it on the web. The DOI helps readers to easily locate an article from the citation and is also an advantage to prospective authors, as their accepted work will be easier to locate and cite. "Reviewer Locator" has been extended for 2018. This tool generates a list of prospective reviewers and is being used by the editors to help decrease the overall time in peer review.

As always, we welcome suggestions for improvements in the journals and encourage readers and authors to give us your opinions, perspective, concerns, and suggestions. You have our continued thanks for your support in the development and growth of the journals.