

# Author Index

- Abastado, Jean-Pierre, 130  
Achour, Adnane, 19  
Adler, Guido, 559  
Adler, Heiko, 438  
Ager, Ann, 198  
Aghai, Zubai, 601  
Alem, Farhang, 464  
Altman, John D., 350  
Altork, Susan R., 350  
Álvarez, Susana, 530  
Alves-Filho, José C., 609  
Amendoeira, Fabio C., 590  
Ames, Erik, 163  
Arnold, Roland R., 492  
Artlett, Carol M., 350  
Asano, Koichiro, 541  
Avril, Marie-Françoise, 130  
Axthelm, Michael K., 269
- Bachmann, Martin F., 230  
Baltimore, David, 5  
Barao, Isabel, 163  
Barber, Amorette, 72  
Bartczak, Agata, 249  
Bassett, Garrett, 34  
Bauer, Stefan, 438  
Baugh, John A., 601  
Bazzy-Asaad, Alia, 601  
Beertsen, Wouter, 475  
Bell, J. Jeremiah, 179  
Benedict, Chris A., 238  
BenMohamed, Lbachir, 426  
Best, Al M., 281  
Bettahi, Ilham, 426  
Bhandari, Vineet, 601  
Bitmansour, Arlene D., 269  
Blanco, Almudena, 530  
Blank, Christian, 335  
Bopp, Tobias, 146  
Boppana, Ramanamurthy, 79  
Borenstein, Todd, 89  
Borrego, Francisco, 409  
Brandt, Vicky L., 3  
Braughton, Kevin R., 500  
Brem-Exner, Beate G., 335  
Bristow, Cynthia L., 492  
Brown, Charles R., 350  
Bucala, Richard J., 601  
Buckler, Jodi L., 34  
Bunting, Michaeline, 590  
Burgess, Steven J., 409  
Burns, James M., Jr., 444  
Buus, Søren, 426  
Buxhoeveden, Nicole, 89  
Byrnes-Blake, Kelly, 580
- Can, Ismail, 207  
Cantor, Harvey, 25  
Cao, Rongyue, 58  
Carragher, Damian M., 454  
Casanova, Jean-Laurent, 647  
Castro-Faria-Neto, Hugo C., 590  
Catron, Drew M., 156  
Cattral, Mark, 249  
Cazalis, Marie-Angélique, 655  
Center, David M., 402  
Chakravarty, Sumana, 64  
Chappert, Pascal, 327  
Chen, Jianzhu, 171  
Chen, Qingmei, 58  
Chen, Xinrong, 138  
Chentoufi, Aziz Alami, 426
- Chilton, Paula M., 49  
Chimini, Giovanna, 300  
Choi, Yongwon, 34  
Chong, Anita S., 261  
Chrabieh, Maya, 647  
Christ, Julia, 418  
Clark, David A., 249  
Cockburn, Ian A., 64  
Cohn, Lauren, 522  
Colarusso, Pina, 510  
Coligan, John E., 409  
Cording, Sascha, 146  
Cruikshank, William W., 402  
Cunha, Fernando Q., 609  
Curtis, Jeffrey L., 483  
Cvoro, Aleksandra, 630  
Cybulsky, Myron I., 249
- Dai, Hehua, 113  
Dai, Zhenhua, 113  
Dalheimer, Stacy L., 156  
Dal-Secco, Daniela, 609  
Dang, Yongjun, 222  
Danos, Olivier, 327  
Dasgupta, Gargi, 426  
Dauner, Joseph G., 291  
Davoust, Jean M., 327  
DeLeo, Frank R., 500  
de Oliveira Nascimento, Danielle  
De Trez, Carl, 238  
Dewhurst, Stephen, 300  
Diao, Jun, 249  
Diken, Mustafa, 309  
DiLillo, David J., 361  
Di Meo, Fernando, 492  
Ding, Jin Wen, 261  
Ding, Qiang, 637  
Divekar, Rohit D., 179  
Do, Duc H., 350  
Donnelly, Seamas C., 601  
Douek, Daniel C., 269  
Downey, Greg, 249  
Droin, Nathalie, 238  
Dzuira, James D., 601
- Edgar, John B., 269  
Eisen, Herman N., 171  
Elias, Jack A., 522  
Elliott, James I., 300  
Ellis, Jason S., 179  
Ellsworth, Jeff L., 580  
El Shikh, Mohey Eldin, 281  
Enelow, Richard I., 25  
Engel, Renate, 391  
Engelhard, Victor H., 130  
Eskelinen, Eeva-Liisa, 475  
Esplin, Brandt L., 138  
Everts, Vincent, 475
- Fan, Juan, 601  
Fändrich, Fred, 335  
Farber, Joshua M., 214  
Farkas, Stefan, 335  
Ferreira, Sérgio H., 609  
Finkelman, Fred D., 44  
Fojo, Antonio Tito, 89  
Foley, Jason, 89  
Foley, John F., 214  
Fowler, Daniel H., 89  
Franklin, Aaron, 492  
Freitas, Addressa, 609  
Frenzel, Christian, 30
- Fresno, Manuel, 530  
Frutuoso, Valber S., 590  
Fu, Yang-Xin, 238  
Fugier-Vivier, Isabelle J., 49  
Fukunaga, Koichi, 541  
Fulton, James, 238  
Furukawa, Koichi, 39
- Galle, Peter R., 30  
Gallimore, Awen, 198  
Gao, Ji-Liang, 569  
Garcette, Marylène, 130  
García-Sastre, Adolfo, 64, 171  
Garrett, Karla P., 138  
Gause, William C., 464  
Ge, Qing, 171  
Geissler, Edward K., 335  
Gendrel, Dominique, 647  
Goldwich, Andreas, 372  
Gommerman, Jennifer, 249  
Gonzalez-Begne, Mireya, 300  
Gorzynski, Reginald R., 249  
Grabowski, Margarete, 391  
Gracely, Edward J., 350  
Graff-Dubois, Stéphanie, 130  
Graffmann, Nina, 418  
Grant, David, 249  
Grespan, Renata, 609  
Gross, David-Alexandre, 327  
Grusby, Michael J., 522  
Guggemoos, Simone, 438  
Guillaume, Philippe, 391  
Guillet, Jean-Gérard, 130  
Guloglu, F. Betul, 179  
Gupta, Shalini, 79  
Gupta, Sonal, 106
- Ha, Suk-won, 238  
Haas, Karen M., 361  
Hahn, Sabine S. C., 372  
Hallett, William H. D., 163  
Hamacher, Nels, 580  
Hamaguchi, Yasuhito, 361  
Hamann, Alf, 146  
Hamed, Hossein, 464  
Hamm, Svetlana, 438  
Han, Soo, 89  
Hangel, Doris, 438  
Hannah, Jeffrey R., 34  
Hanson, Joshua T., 89  
Harder, Brandon, 580  
Harris, Estelle S., 590  
Harris, Heather A., 630  
Hartson, Louise, 454  
He, Wei, 249  
Hedrick, Michael N., 214  
Heit, Antje, 438  
Higgins, Christopher F., 300  
Hillsamer, Peter, 122  
Hirai, Hiroyuki, 541  
Hirata, Koichi, 39  
Hiroi, Takachika, 319  
Hitomi, Kaori, 207  
Hoeman, Christine M., 179  
Homer, Robert, 25, 522  
Honda, Shin-ichiro, 207  
Hu, Buqu, 522  
Huang, Yiming, 49  
Huang, Zhaofeng, 106  
Huber, Christoph, 309, 391  
Hudig, Dorothy, 163  
Huehn, Jochen, 146

- Hulliger, Sara, 510  
Hutchens, Martha, 483  
Hutchinson, James A., 335
- Ikeda, Eiji, 541  
Ildstad, Suzanne T., 49  
Inoue, Seiichiro, 335  
Intan, Ratna S., 391  
Ishida, Yuko, 569  
Ishizaka, Akitoshi, 541
- Jacob, Joshy, 291  
Jain, Renu, 179  
Jakus, Zoltán, 618  
Javadi, Mojib, 249  
Jenkins, Marc K., 156  
Jin, Liang, 58  
Jordan, Kimberly R., 188  
Jouanguy, Emmanuelle, 647  
Jung, Unsu, 89
- Kagawa, Shizuko, 541  
Kagyo, Junko, 541  
Kaminuma, Osamu, 319  
Kämpgen, Eckhart, 372  
Kanai, Takanori, 383  
Kantardzic, Nermina, 89  
Kappler, John W., 188  
Kato, Masashi, 130  
Katsetos, Christos D., 350  
Katsikis, Peter D., 350  
Kaufman, Howard L., 550  
Kawai, Toshihisa, 609  
Kearney, John F., 230  
Kedl, Ross M., 188  
Kelsoe, Garnett, 361  
Kettunen, Mika, 601  
Kevill, Katharine A., 601  
Kim, Chang H., 122  
Kim, Gregory G., 34  
Kim, Taesoo, 34  
Kincade, Paul W., 138  
King, Carolyn G., 34  
Kitamura, Fujiko, 319  
Kitamura, Noriko, 319  
Knechtle, Stuart J., 335  
Kobayashi, Takashi, 34  
Koehl, Gudrun E., 335  
Koscik, Cheryl, 249  
Kozlowski, Mark T., 492  
Kreiswirth, Barry N., 500  
Kreiter, Sebastian, 309  
Kronenberg, Katharina, 335  
Kuball, Jürgen, 391  
Kubes, Paul, 510  
Kurita, Naoki, 207  
Kusser, Kim, 454
- Lamberth, Kasper, 426  
Lantry, Megan, 580  
Lauer, Uta, 146  
Leboeuf, Marylène, 327  
Lee, Hyun-Hee, 179  
Lee, Jeeho, 122  
Legido, Agustin, 350  
Leithäuser, Frank, 559  
Leitman, Dale C., 630  
Leng, Lin, 601  
Lengagne, Renée, 130  
Levy, Gary, 249  
Lewis, Katherine E., 580  
Lewis, Kenneth B., 580  
Lewis, Mark G., 350  
Li, Jianping, 58  
Li, Taiming, 58  
Liblau, Roland, 327  
Lim, Hyung W., 122  
Lin, Hongxia, 464
- Liu, Hao, 249  
Liu, Jingjing, 58  
Liu, Jun O., 222  
Liu, Ming Feng, 249  
Liu, Qian, 464  
Liu, Wei, 522  
Liu, Zhugong, 464  
Ljunggren, Hans-Gustaf, 19  
Lohse, Ansgar W., 30  
Longhi, M. Paula, 198  
Lorenzo, Lazaro, 647  
Lorrot, Mathie, 647  
Lukacs, Nicholas W., 483  
Luker, Gary D., 483  
Luker, Kathryn E., 483  
Lund, Frances E., 454  
Lutz, Manfred B., 372
- Ma, Lianli, 261  
Maknojia, Asif, 249  
Mamani-Matsuda, Maria, 647  
Manicassamy, Santhakumar, 106  
Manuel, Justin, 249  
Mariotti, Jacopo, 89  
Marusina, Alina I., 409  
Matsumoto, Yukie, 39  
Matsuoka, Mitsuo, 25  
Matthay, Michael A., 637  
Maurer, Mark, 580  
McCarthy, Doug, 249  
McDonald, Courtney L., 601  
McIntyre, Thomas M., 590  
McMahan, Rachel H., 188  
Meier, Stefanie, 372  
Melvin, James E., 300  
Mestriner, Fabiola L., 609  
Miossec, Pierre, 655  
Miossec, Vincent, 655  
Mishra, Gyan C., 79  
Misra, Ravi S., 454  
Mitra, Debashis, 79  
Miyasho, Taku, 541  
Miyatake, Shoichiro, 319  
Miyawaki, Atsushi, 319  
Miyazaki, Yasunari, 590  
Miyoshi, Hiroyuki, 319  
Mizue, Yuka, 601  
Mócsai, Attila, 618  
Mohebbi, Amir, 426  
Molkentin, Jeffery D., 106  
Mong, Phyllus Y., 550  
Moore, Bethany B., 637  
Moore, Yolonda, 113  
Moquin, Amy, 454  
Motarjemi, Milad, 163  
Mueller, Daniel L., 156  
Mueller, Yvonne M., 350  
Muñoz-Fernández, María Ángeles, 530  
Murphy, Kenneth M., 238  
Murphy, Philip M., 569  
Murphy, Theresa, 238  
Murphy, William J., 163
- Nagata, Kinya, 541  
Nakahashi-Oda, Chigusa, 207  
Nakajima, Takeshi, 541  
Nakamura, Masataka, 541  
Nakano, Takako, 207  
Napimoga, Marcelo H., 609  
Németh, Tamás, 618  
Nemoto, Yasuhiro, 383  
Nesburn, Anthony B., 426  
Neurath, Markus F., 30  
Nguyen, Alex, 426  
Niess, Jan Hendrik, 559  
Niimi, Kyoko, 541  
Norman, M. Ursula, 510  
Norris, Paula S., 238
- Núñez, Gabriel, 483
- O'Connor, Christine L., 601  
Oettinger, Marjorie A., 5  
Oguma, Tsuyoshi, 541  
Oh, Jason Z., 188  
Oh, Sun-Young, 522  
Okamoto, Ryuichi, 383  
Olman, Mitchell A., 637  
Orekov, Tatyana, 44  
Osterloh, Phillip, 309  
Otto, Michael, 500  
Overstreet, Michael G., 64
- Pachot, Alexandre, 655  
Palazzolo-Ballance, Amy M., 500  
Pardoll, Drew M., 188  
Pathmanathan, Ishani, 409  
Pearce, Erika L., 34  
Pei, Yuan, 222  
Pesce, John T., 464  
Peters-Golden, Marc, 637  
Petritus, Patricia M., 444  
Petrulio, Christian, 550  
Pfeffer, Klaus, 238  
Phelan, James D., 44  
Phillips, M. James, 249  
Picard, Capucine, 647  
Picker, Louis J., 269  
Pipelng, Matthew R., 188  
Podschun, Rainer, 475  
Pons, Charlotte, 647  
Potter, Karen, 238  
Prescott, Stephen M., 590  
Prévost-Blondel, Armelle, 130  
Price, David A., 269  
Puel, Anne, 647
- Rameau, Philippe, 327  
Randall, Troy D., 454  
Rangel-Moreno, Javier, 454  
Ratajczak, Mariusz Z., 49  
Reimann, Jörg, 559  
Rene, Shirley, 580  
Renia, Laurent, 130  
Reniere, Michelle L., 500  
Reyes-Mugica, Miguel, 601  
Rezzoug, Francine, 49  
Richards, Hannah, 198  
Romero, Pedro, 391  
Roth, David B., 3
- Saftig, Paul, 475  
Saha, Bhaskar, 79  
Sahin, Ugur, 309  
Sakamoto, Naoya, 383  
Santourlidis, Simeon, 418  
Sattler, Christine, 335  
Sayama, Koichi, 541  
Sayers, Thomas J., 163  
Schanie, Carrie L., 49  
Schatz, David G., 5  
Schild, Hansjörg, 309  
Schlitt, Hans J., 335  
Schmitt, Edgar, 146  
Schneider, Kirsten, 238  
Schreiber, Sandra, 372  
Schröder, Bernd, 475  
Schubert, Ulrich, 372  
Schuchmann, Marcus, 30  
Sebastian, Martin, 309  
Selmi, Abderraouf, 309  
Sentman, Charles L., 72  
Shalev, Itay, 249  
Shang, Weirong, 106  
Shanker, Anil, 163  
Shen, Ching-Hung, 171  
Shen, Jikun, 261

- Shibuya, Akira, 207  
 Shibuya, Kazuko, 207  
 Shiomi, Tetsuya, 541  
 Shiraiishi, Yoshiki, 541  
 Siebler, Juergen, 30  
 Siewert, Christiane, 146  
 Singh, Satya P., 214  
 Skaar, Eric P., 500  
 Slansky, Jill E., 188  
 Sonstein, Joanne, 483  
 Sottile, Peter, 483  
 Souto, Fabricio O., 609  
 Stafforini, Diana M., 590  
 Stockholm, Daniel, 327  
 Sturdevant, Daniel E., 500  
 Sugita, Masahiko, 39  
 Sukumar, Selvakumar, 281  
 Sun, Yunxiao, 58  
 Sun, Zuoming, 106  
 Suzuki, Yusuke, 541  
 Szakal, Andras K., 281  
  
 Tahara-Hanaoka, Satoko, 207  
 Takihara, Takahisa, 541  
 Talay, Oezcan, 171  
 Tamang, David L., 163  
 Tanner, Michael K., 49  
 Tartar, Danielle M., 179  
 Tatomer, Deirdre, 630  
 Taylor, Simon R. J., 300  
 Tedder, Thomas F., 361  
 Tee, Meng-Kian, 630  
 Telford, William, 89  
 Tew, John G., 281  
 Theobald, Matthias, 391  
 Toh, Myew-Ling, 655  
 Tomita, Takayuki, 383  
 Totsuka, Teruji, 383  
 Tournadre, Anne, 655  
 Trepel, Jane B., 89  
 Trucy, Maylis, 492  
 Tsuchiya, Kiichiro, 383  
 Türeci, Özlem, 309  
 Turka, Laurence A., 34  
  
 Tuzova, Marina, 402  
  
 Uchida, Junji, 361  
 Ueda, Soichiro, 541  
 Ueda, Yoshihiro, 361  
 Uhrberg, Markus, 418  
 Underwood, Sara, 580  
 Urban, Joseph F., Jr., 464  
  
 Van Kaer, Luc, 39  
 Verbeek, J. Sjef, 261, 618  
 Vieira, Silvio M., 609  
 Vieira-de-Abreu, Adriana, 590  
 Villinger, Francois, 550  
 Visich, Jennifer, 580  
 Voss, Ralf-Holger, 391  
  
 Waggie, Kimberly S., 580  
 Wagner, Claudia S., 19  
 Wagner, Ralf, 372  
 Wakaki, Misa, 541  
 Walker, Joshua M., 269  
 Wan, Bo, 222  
 Wan, Ni, 113  
 Wang, Qin, 550  
 Wang, Tao, 113  
 Wang, Yu, 58  
 Ware, Carl F., 238  
 Ware, Lorraine B., 637  
 Watanabe, Mamoru, 383  
 Webb, Carol F., 138  
 Wechsler, Steven L., 426  
 Welner, Robert S., 138  
 Weyrich, Andrew S., 590  
 White, Kimberly E., 637  
 Whitmire, Jeanette, 464  
 Willemsen, Ralph A., 391  
 Willenborg, Marion, 475  
 Williams, Ifor R., 291  
 Winston, Ronald, 492  
 Winter, Erin, 249  
 Wirtz, Stefan, 30  
 Wolkowicz, Roland, 492  
  
 Won, Woong-Jai, 230  
 Wong, Elaine, 89  
 Wong, Kit Man, 249  
 Wright, Kate, 198  
 Wu, Jiaxue, 222  
 Wu, Jie, 58  
 Wu, Michelle, 426  
 Wu, Yongzhong, 281  
 Wysoczynski, Marcin, 49  
  
 Xiao, Zhi-Xiong J., 402  
 Xiong, Qiyang, 58  
  
 Yang, Kaiyong, 361  
 Yang, Xianmei, 222  
 Yarke, Cory A., 156  
 Yi, Qing, 222  
 Yin, Dengping, 261  
 Yu, Long, 222  
 Yu, Ping, 179  
 Yuki, Nobuhiro, 39  
  
 Zaghoulani, Habib, 179  
 Zavala, Fidel, 64  
 Zeng, Huasong, 261  
 Zhang, Hongwei H., 214  
 Zhang, Li, 249  
 Zhang, Na, 156  
 Zhang, Tong, 72  
 Zhang, Xiuli, 426  
 Zhang, Yujun, 402  
 Zheng, Tao, 522  
 Zheng, Xin Xiao, 113  
 Zhou, Jing, 25  
 Zhou, Tingting, 261  
 Zhou, Yuan, 655  
 Zhu, Aihua, 58  
 Zhu, Ping, 222  
 Zhu, Xiaoming, 426  
 Zhu, Zhou, 522  
 Zimmerman, Guy A., 590  
 Zirogianni, Angelika, 475  
 Zogovic, Tatjana, 630  
 Zrioual, Saloua, 655

# *The Journal of Immunology*

## Information for Authors

Go to [www.jimmunol.org](http://www.jimmunol.org) for the most up-to-date instructions and manuscript submission forms.

Editorial Office E-mail: [infoji@aai.org](mailto:infoji@aai.org)  
Phone: 301-634-7197 Fax: 301-634-7829

### ABOUT THE JOURNAL

*The Journal of Immunology* (*The JI*) is owned and published by The American Association of Immunologists, Inc. (AAI). It has an impact factor of 6.293, placing it 11th among all publications focused on immunology. *The JI* is cited more than any other immunology journal (117,464 citations in 2006). In 2006, *The JI* published 1,845 manuscripts in over 16,000 pages. This effort is supported by a trained publication and editorial services staff using customized software to track and deliver manuscripts for review and for final publication online and in print.

Other important facts:

Scope: Basic and clinical studies in all aspects of immunology. Circulation as of 9/15/06: 7,225.

Publication schedule: Printed and posted online twice each month. Print issues publish on the 1st and the 15th of each month.

Average time from submission to initial decision: 37 days.

Average time from acceptance to print: 7.5 weeks.

Acceptance rate in 2006: 45% for full-length papers, 23% for Cutting Edge papers.

### JOURNAL SCOPE AND CONTENT

**Full-Length Articles:** *The JI* publishes novel peer-reviewed findings in all areas of experimental immunology. Manuscripts are published in the following sections:

Cellular Immunology and Immune Regulation  
Clinical Immunology  
Host Defense  
Immunogenetics  
Inflammation  
Molecular and Structural Immunology

Major criteria for acceptance are quality, originality, clarity, and conciseness. Submission of a manuscript implies that the data have not been published previously and will not be submitted for publication elsewhere while the manuscript is under review.

Descriptions of new reagents, research techniques, or clinical case reports usually are appropriate only to the extent they provide innovative insight into unresolved problems or represent major breakthroughs.

*The JI* will not publish descriptive manuscripts that report the identification of epitopes recognized by B or T cells, unless such identification can be considered of unusual immunological significance. *The JI* usually will not publish the definition of peptide binding motifs for previously uncharacterized MHC products, regardless of species or method used. Similarly, *The JI* usually will not publish surveys of possible or actual epitopes from pathogens not previously examined for T cell epitopes. Authors should address the immunological significance explicitly and convincingly

when submitting a paper that may fall into the above categories. Those wishing to report the identification of epitopes may do so at the Immune Epitope Database and Analysis Resource ([www.immuneepitope.org/home/do](http://www.immuneepitope.org/home/do)).

*The JI* will consider for publication comparative analysis of proteins of immunological interest (intra- or inter-species comparisons) only if such manuscripts transcend a simple descriptive examination and reveal aspects of significance to evolution and/or function of such proteins that are not intuitively obvious.

*The JI* will publish manuscripts that describe the characterization of the three-dimensional structure of antibody-defined epitopes, antigen-antibody, or peptide-MHC complexes only if such structures reveal features that are unique in an immunologically relevant manner. *The JI* usually will not publish structures of new MHC allelic products not previously crystallized, homologs from previously uncharacterized species, or peptide-MHC complexes composed of known MHC allelic products but with different peptides. Reports of the three-dimensional structures of allergens or other antigens likewise also fall under this description. The editors consider the atomic structure of antigen-antibody, MHC-peptide, and TCR-MHC complexes sufficiently well established to insist on immunological relevance as a criterion for publication in *The JI*.

**Cutting Edge Articles:** Cutting Edge is the rapid publication section of *The JI*, presenting short reports describing significant advances in an area of immunology. Manuscripts submitted for consideration in this section should present scientifically sound and novel research in a clear and concise fashion and contain conclusions of unusual interest to immunologists that are justified from the data presented. Chief criteria for acceptance are scientific novelty and quality, originality, clarity, and conciseness. In addition to research articles, the Cutting Edge section publishes invited brief commentaries on controversial subjects of broad interest to immunologists.

**In This Issue:** A small number of papers regarded by reviewers and editors as the top 10% in their field are highlighted in this section.

**Letters to the Editor:** The Editor-in-Chief invites brief letters (250 words or less) of general interest, commenting on work published in *The JI* within the previous three months. A limited number of letters will be selected for publication. The authors of the original work will be invited to respond, and both the original letter and the authors' response will be published together. If you are interested in commenting on a published paper, e-mail the Editor-in-Chief at [eic@aai.org](mailto:eic@aai.org).

**Pillars of Immunology:** In the first issue of each month, *The JI* reprints papers regarded as classics in the field. An invited commentary accompanies each reprinted article. Suggestions for significant articles may be made by e-mail to the Editor-in-Chief at [eic@aai.org](mailto:eic@aai.org).

**Brief Reviews:** *The JI* publishes a small number of invited reviews on a regular basis. These reviews are four to six journal pages in length, including illustrations and references. They cover a focused area on the advancing edge of immunology and provide a balanced view of current research that can be understood by researchers outside of that specialty. Authors interested in submitting an article to Brief Reviews should submit a proposal, including an outline of the proposed review, by e-mail to the Editor-in-Chief at [eic@aai.org](mailto:eic@aai.org).

#### EDITORIAL POLICIES REGARDING MANUSCRIPT SUBMISSION

**Prior publication:** Submission of a manuscript to *The JI* implies that the content has not been published previously and will not be submitted for publication elsewhere while the manuscript is under review. *The JI* considers research results (excluding abstracts and student dissertations) to have already been published if they are publicly available with a fixed content, i.e., content is in an unalterable form, and are citable in any language.

Previous publication of a particular figure may not prevent subsequent publication in *The JI* if that figure is essential to the submitted paper and does not constitute the major contribution. Previously published portions of a paper must be accompanied by a permission release from the copyright holder and must be cited.

Preprints, whether paper copies or noncitable postings on a publicly accessible website, are not considered publications, nor are poster presentations of work at a conference. An invited paper published in a non-peer-reviewed journal, however, would be considered a prior publication.

Submissions of previously published research, as defined by the criteria, must contain a disclosure statement; it is at the Editor-in-Chief's discretion whether to allow peer review of the work in these instances.

**Copyright:** All manuscripts are considered the property of AAI from the time of submission. Should AAI not publish the paper, AAI releases its rights therein at the time the manuscript is returned to the corresponding author. Manuscripts published in *The JI* become the sole property of, with all rights in copyright reserved to, The American Association of Immunologists, Inc. (AAI). The corresponding author, on behalf of all authors, signs a copyright transfer form. Authors of articles written as part of their official duties as employees of the U.S. government are exempt from this requirement for transfer of copyright.

**NIH Manuscript Submission Request:** For more information, go to About the NIH Public Access Policy ([www.jimmunol.org/misc/nihpolicyi4a.shtml](http://www.jimmunol.org/misc/nihpolicyi4a.shtml)). If the research described in the submitted manuscript has been funded in whole or in part by the National Institutes of Health (NIH), the following applies:

1. The NIH has adopted a voluntary policy that requests authors of NIH-funded research to submit their accepted manuscripts to the NIH PubMed Central repository.

2. **The NIH program is voluntary and authors do not have to participate.** NIH officials have given public assurances that there will be no repercussions if authors choose not to participate.

3. The AAI does not support this policy, which it views as a costly, duplicative effort by NIH that diverts federal dollars from biomedical research and threatens the integrity of the scientific record by creating multiple versions of the same article and allowing public dissemination of an unfinalized manuscript. The policy also puts authors at risk of inadvertently violating copyright agreements with the journals that publish their works. For more information on the AAI's concerns about the NIH policy, go to About the NIH Public Access Policy.

4. Despite the AAI's serious concerns about this policy, the AAI will accommodate authors who wish to submit their manuscripts to NIH, as described below. The AAI grants the undersigned corresponding author a onetime waiver permitting him or her to submit to NIH PubMed Central this manuscript, if accepted for publication by *The JI*, provided:

a) that the corresponding author agrees to instruct NIH to release the manuscript to the public no earlier than 12 months after final publication in *The JI*;

b) that the corresponding author agrees that no changes or modifications will be made to the version of the manuscript that has been accepted by *The JI*;

c) that this onetime waiver granted by the AAI applies solely to deposition into NIH PubMed Central and does not extend to any other repository, agency, or entity; and

d) that the corresponding author agrees to, **and will include in the text of the abstract submitted to PMC**, the following disclaimer: "This is an author-produced version of a manuscript accepted for publication in *The Journal of Immunology (The JI)*. The American Association of Immunologists, Inc. (the AAI), publisher of *The JI*, holds the copyright to this manuscript. This manuscript has not yet been copyedited or subjected to editorial proofreading by *The JI*; hence, it may differ from the final version published in *The JI* (online and in print). The AAI (*The JI*) is not liable for errors or omissions in this author-produced version of the manuscript or in any version derived from it by the National Institutes of Health or any other third party. The final, citable version of record can be found at [www.jimmunol.org](http://www.jimmunol.org)."

**Duplicate Publication and Scientific Fraud:** In case of possible scientific misconduct, i.e., suspected fabrication or falsification of data, double publication, or plagiarism, the Editor-in-Chief will attempt to clarify the matter with each of the authors. Should that fail to resolve the situation satisfactorily, the Editor-in-Chief will contact the institution of the corresponding author. The institution should then make an inquiry and report to the Editor-in-Chief. Until the matter is clarified, no papers by any authors on the disputed manuscript will be considered for publication. If scientific misconduct is confirmed by institutional review, the Editor-in-Chief will report it to the Publications Committee. The Publications Committee, in consultation with the Council of AAI, will decide appropriate action.

**Embargo Policy:** For manuscripts considered to be in press, or approved for publication, *the public release of information should not precede the actual publication of the work*. The publication date is defined as the date the first copy is mailed from the printer or the first day the issue is posted full-text online. Please note that the issue date and mail date do not necessarily coincide. This embargo policy protects the peer review process and the newsworthiness of the scientific content of published articles and minimizes the chance for the appearance of misinformation in the lay press. The policy also ensures that scientists have access to all relevant information at the same time as the public. These restrictions do not apply to the presentation of the work at scientific conferences or symposia that precede the actual publication date. Although news reporters may be present at such meetings or symposia, information, tables, or illustrations that in any way duplicate the content of a manuscript submitted for publication or in press should not be provided to reporters by the authors. In particular, press conferences should not be held before the embargo date. The official release of videotape presentations and electronic prepublication of articles on the Internet should adhere to the embargo policy. Violations of these policies are legitimate grounds for withdrawal of the manuscript from publication or other measures that *The JI* may choose to take.

**Conflict of Interest Disclosures:** Authors of submitted papers that contain information affecting actual or potential commercial products must declare any conflict of interest or financial interest in the product or in potentially competing products held by them, their spouses, or their minor children. Financial interests include consultancies, employment, service on Board of Directors, honoraria, royalties, research support, grants, or contracts, if any exceed \$5,000 per year in any of the preceding five years. They also include expert testimony, or patents received or pending, stock, and equity interests (diversified mutual funds or investment trusts do not constitute competing financial interests). The conflict should be stated briefly on the online manuscript submission screen, e.g., "J. B. Doe has received royalty payments from PQR Incorporated." It is the responsibility of the corresponding author to review this policy with all authors and to list collectively the relevant relationships. All disclosures will remain confidential during the review process, but papers accepted for publication will acknowledge conflict of interest and financial interests in a published disclaimer describing the nature of the interests. If authors declare no conflict of interest or financial interests, this also will be noted in a published disclaimer.

**Web Links in Submitted Manuscripts:** Links to websites are permitted only if the information contained on the website is not essential to the understanding and assessment of the manuscript or to the ability to repeat the experiments described in the paper.

#### PEER REVIEW INFORMATION

**The Process:** By submitting a manuscript to *The JI*, the authors agree to subject it to the confidential peer-review process. Editors and reviewers are informed that the manuscript must be considered confidential. After a manuscript is received, it is assigned by the Science Coordinator to a Deputy Editor and a Section Editor, whose expertise is considered to be appropriate. The Section Editor prepares a list of expert reviewers, which may include some suggested by the Science Coordinator. Authors can indicate specific individuals whom they would like to have excluded as reviewers as well as individuals thought to be particularly appropriate, although these suggestions may not always be accepted. Generally, requests to exclude certain potential reviewers will be honored except in fields with a limited number of experts.

All potential reviewers are contacted individually to determine availability. Manuscript files are sent to at least two expert reviewers. Reviewers are asked to complete the review of the manuscript within two weeks and to return a short review form. Based on the reviewers' comments, the Section Editor recommends a course of action and communicates the reviews and recommendations to the Deputy Editor for a final decision.

The Deputy Editor considers the comments made by the reviewers and the recommendation of the Section Editor, selects those comments to be shared with the authors, makes a final decision concerning the manuscript, and prepares the decision letter for signature by the Editor-in-Chief. If revisions of the manuscript are suggested, the Deputy Editor also recommends who should review the revised paper when resubmitted. Authors are informed of the decision by e-mail; appropriate comments from reviewers and editors are appended.

**Decisions:** There are four categories for initial decisions: accept, accept with minor revision, return for revision, and reject. Some manuscripts are accepted provisionally, pending relatively minor revisions. In this case, the Deputy Editor may conduct the re-review. For many manuscripts, authors are invited to resubmit if revision or additional experimentation can address major criticisms. Typically, one or more reviewers will then be asked to

consider the adequacy of the revisions. Cutting Edge papers are allowed only minor revisions because of time constraints. All revised manuscripts are carefully reexamined, and ultimate acceptability is not guaranteed. *The JI* does not provide for an advance determination of the acceptability of a particular manuscript for publication, nor does it promise expedited review of selected manuscripts.

**Communication with Authors:** To minimize the possibility of misinterpretation or errors in verbal communication, the Editorial Office will provide information, in writing, only to the corresponding author and will not provide extensive details (e.g., exact status of a review or a predicted time to final decision). Deputy Editors do not take calls from authors concerning decisions or other related matters. All such inquiries should be addressed in writing to the Editor-in-Chief, who will discuss concerns with the Deputy Editor. This policy has been established to provide for uniformity and fairness in addressing concerns about the review process.

**Rebuttals:** If the authors believe that a serious scientific error occurred during the review, a letter of rebuttal may be sent to the Editor-in-Chief, explaining the reasons why the decision should be reconsidered. When appropriate, the matter will be taken up with the initial Deputy Editor, Section Editor, or additional reviewers. Rebuttals that challenge rejections that were based on priority alone are rarely successful, since the assignment of priority is necessarily a matter of opinion. If the authors of a rejected manuscript are able to make new advances that go far beyond the original submission, they will often expedite consideration of their paper through the submission of a completely new manuscript.

#### The JI Reviewers

**Selection:** Selection of reviewers is the responsibility of the Section Editor, although the Science Coordinator makes recommendations to the Section Editor from a list of individuals who have reviewed manuscripts previously. This database includes self-identified areas of expertise as well as information about the perceived usefulness and timeliness of past reviews. Individuals who consistently have provided tardy or unhelpful reviews are removed from the database. Every effort is made to avoid both real and apparent conflicts of interest with respect to research activities or collaborative or personal interactions. Reviewers are asked to withdraw from considering any manuscript in which they identify a conflict that has escaped the attention of the Section Editor.

**Scientific Integrity:** Information contained in manuscripts is considered confidential and should not be shared or distributed. If necessary, a reviewer can consult with others for an adequate evaluation of the research findings if all individuals involved maintain confidentiality, objectivity, and avoid conflict of interest. AAI is not responsible for acts and conduct by reviewers that are not in accordance with accepted professional standards. Reviewers are asked to be objective in their evaluations and to judge primarily the novelty and soundness of the information presented.

**Anonymity:** Although reviews are anonymous, all comments should be capable of withstanding public scrutiny. Except in very unusual circumstances, the identity of the reviewers and Section and Deputy Editors involved in the review of any given manuscript is kept confidential.

**The JI Editorial Board:** The AAI Council, upon recommendation of the Publications Committee, appoints the Editor-in-Chief for a term of five years. Deputy Editors, Section Editors, and Associate Editors are nominated by the Editor-in-Chief and appointed by the Publications Committee. Deputy Editors are appointed for variable terms. Section Editors and Associate Editors are appointed for one renewable term of two years in most circumstances. The Editor-in-Chief, the Deputy Editors, and the Section

Editors constitute the Editorial Board and as such are required to be members of AAI. The Editor-in-Chief is responsible for the specific editorial conduct of *The JI*. The AAI Publications Committee is responsible for the management and evaluation of *The JI* and any other official publications of AAI, subject to the general supervision of the AAI Council.

**Manuscripts Submitted from the Institution of an Editor:** Manuscripts submitted from the institution of any Section or Deputy Editor or the Editor-in-Chief are reviewed by other editors from outside that institution. The Editorial Office ensures confidentiality and equity in reviewing all manuscripts.

### ONLINE SUBMISSION

Submit online at [ji.msubmit.net](http://ji.msubmit.net). Individual manuscript, figure, and table files must be uploaded to the system. The system then creates a single PDF for review purposes. Authors should save copies for themselves of all the files in their original formats. See the Figures section ([www.jimmunol.org/misc/authorfulllength.shtml#figures](http://www.jimmunol.org/misc/authorfulllength.shtml#figures)) for help with preparing digital art. The JI's online submission system requires browsers where Cookies and Javascript are enabled.

After the manuscript has been checked by journal staff, the Corresponding Author will receive an e-mail acknowledging receipt of the manuscript. The e-mail contains links to the Submission Form and Color Charges Form (if applicable). The Corresponding Author must download, sign, and fax these forms to 301-634-7831 to complete the submission. The manuscript **will not be sent for review** until *The JI* Editorial Office receives these forms signed by the Corresponding Author. Please contact [infoji@aai.org](mailto:infoji@aai.org) if you do not receive the acknowledgment e-mail. Please do NOT use the hard copy forms found in old copies of the printed journal.

### PUBLICATION FEES

**All publication fees are payable in U.S. dollars. Accepted manuscripts are published only upon commitment by the author(s) or institutional financial officer to pay these charges.**

**Submission Fee:** If the corresponding author is not an AAI\* member, a fee of \$50 per manuscript must be paid by credit card (American Express, MasterCard, or Visa) during the submission process. If payment by credit card is impossible, please contact [infoji@aai.org](mailto:infoji@aai.org) to arrange payment by check (drawn on a U.S. bank). We do not accept cash or purchase orders. \*There is no processing fee for regular, emeritus, or honorary AAI members in good standing.

#### Page Charges:

- \$60 per page for up to 8 printed pages in the article.
- \$150 for each additional page from 9 to 12 pages.
- \$210 for each additional page over 12 pages.

**Color Charges:** Color figures may include multiple color panels. Authors will be notified of the cost of color reproduction on the Reprint Form received with their electronic page proofs and must confirm acceptance of the charges in writing. Authors should expect that color figures in the accepted paper will be reproduced in color and will incur color charges. **Note that AAI members receive a significant discount on color charges.**

- **Non-AAI Members:** \$850 for each color page, and \$300 for each additional color figure on the same color page for corresponding authors who are not AAI members (i.e., first figure on first page: \$850; second figure on the first page: \$300; first figure on second page: \$850, etc.).
- **AAI Members:** \$650 for each color page and \$300 for each additional color figure on the same page for corresponding authors who are regular, emeritus, or honorary AAI members

on the date of manuscript acceptance (i.e., first figure on first page: \$650; second figure on the first page: \$300; first figure on the second page: \$650, etc.).

**Online Posting Fee:** \$150 per published article.

**Reprints:** Reprints must be ordered in advance of publication. A Reprint Form showing the cost of reprints, together with an order slip, is sent with the electronic page proofs. The invoice for reprints will also include page charges and color figure charges. Reprint orders from noncontributors must be directed to the Editorial Office. See [www.jimmunol.org/pdf/reprintsform07.pdf](http://www.jimmunol.org/pdf/reprintsform07.pdf) for the Reprint Order Form.

### MANUSCRIPT PREPARATION

**General Guidelines:** A 12-point serif font, preferably Times New Roman, is required. Do not use compressed type format. Double-space entire manuscript. The average length of full-length articles is eight printed pages. Instructions for estimating the printed length of a manuscript are included below. Each of the following components should begin on a separate page:

1. The **Title Page** must include the full title; a running title (not to exceed 60 characters); each author's full name (first name, middle initial, last name); the affiliations of all authors and their institutions, departments, or organizations (use the following symbols in this order: \*, †, ‡, §, ¶, ||, #, \*\*, ††, ‡‡, §§, ¶¶, || ||, ##); and three to five keywords, selected from the Keywords list that describe the topic of the manuscript. (Keywords are used in editor and reviewer assignments and are not published with the manuscript. Please note that the list of keywords does not represent an exhaustive view of what *The JI* considers important topics, but it has been found useful for reviewer assignment purposes.)

2. The **Abstract** must be 250 words or less for full-length manuscripts; 150 words or less for Cutting Edge. Reference citations should not be included in the *Abstract*. The species of animals or species of origin of cells used in the manuscript must be clearly stated in the *Abstract*.

3. The **Introduction, Materials and Methods, Results, and Discussion** sections should begin on separate pages. Do not combine the *Results* and *Discussion* sections for full-length papers.

4. If the manuscript contains human or animal studies, the *Materials and Methods* section must state that the studies have been reviewed and approved by an appropriate institutional review committee.

5. **Acknowledgments** appear immediately after the *Discussion* and before *References*.

6. **Grant support** must not be included in the *Acknowledgments* but should be cited as a footnote to the title.

7. **Disclosures** contain conflict of interest disclaimers. For more information, see the Editorial Policies Regarding Manuscript Submission.

8. **References** must be numbered as they appear in the text. All authors must be listed for each reference. If citations are included in tables or in figure legends, they must be numbered according to the position of citation of the table or figure in the text. Only published papers and papers in press may be included in the *References*. In press articles, i.e., papers not yet published, must be submitted as online attachments in PDF format at the time of article submission. NOTE: Do NOT submit as an attachment papers that are already published, e.g., manuscripts published ahead of print. Such papers must be incorporated into the *References* and cited with the DOI numbers and the publication dates. Citations of "manuscripts in preparation," "unpublished observations," and "personal communications" must appear parenthetically in the

text. Manuscripts “submitted for publication” (i.e., not yet accepted) also are mentioned parenthetically in the text. Written approval by the persons cited in personal communications must accompany the manuscript unless they are also authors of the manuscript submitted to *The JI*.

*Format for references:*

Periodicals: Wells, A. D., M. C. Walsh, D. Sankaran, and L. A. Turka. 2000. T cell effector function and anergy avoidance are quantitatively linked to cell division. *J. Immunol.* 165: 2432–2443.

Books: McIntyre, T. M., and W. Strober. 1999. Gut-associated lymphoid tissue: regulation of IgA B-cell development. In *Mucosal Immunology*, 2nd ed. P. L. Ogra, J. Mestecky, E. Lamm, W. Strober, J. Bienenstock, and J. R. McGhee, eds. Academic Press, San Diego, CA. 319–356.

9. **Footnotes** should be used to designate the source of support, new or special abbreviations used, correspondence address, current address, manuscripts submitted for publication, etc. Footnotes should be numbered consecutively and will appear on the title page, but for submission are grouped together and placed on a separate page between the *References* and the *Figure Legends*.

10. **Abbreviations** that may be used without definition are provided in the Standard Abbreviations list. Spell out nonstandard abbreviations used less than three times. Nonstandard abbreviations used three or more times must be defined in a footnote. Abbreviations and their definitions must be consistent throughout the text.

11. **Figure legends** must be numbered with Arabic numerals in order of appearance in the text and should include a short title after the figure number. Where possible, symbols and patterns used to distinguish data should be defined in a key placed within the graphic rather than in the figure legend.

12. **Tables** must be numbered with Roman numerals in order of appearance in the text. Table legends are prepared as footnotes to the table and are included with the table. Tables must be in DOC file format. Each table should be submitted as a separate file.

13. **Figures** At initial submission, please submit low-resolution files of the smallest possible size that will convey the needed information. Smaller files can be downloaded more quickly by reviewers and will hasten the review process.

At submission of a revised manuscript, high-resolution figures that meet the following specifications must be submitted. For more information see the TIPS page on the online manuscript submission home page (ji.msubmit.net).

- **File Sizes:** Figures should not exceed 10 MB (average size is about 2 MB).
- **Image Sizes:** Figures should be submitted in final size (printed 1:1). Figures may be printed in one of two formats: single column (width from 3.37 to 8.23 cm or 20 picas) or double column (width from 12.65 to 17.1 cm or 42 picas). The single-column format is preferred. Unless the file is too large, multi-piece figures should be submitted as a single file.
- **Text and Lines:** Text in figures must be 6–8 points in size, except for single letter markers, which may be 12 points. Helvetica should be used for all figure text (except for the use of symbols). If Helvetica is not available, Times Roman may be used. Line widths must be greater than one point thick or they will not appear on the PDF version of the article.
- **Numbering:** Figures must be numbered as they appear in the text.
- **File Format:** Figures should be in **TIFF** (better for halftone art, e.g., blots, photographs) or **EPS** (better for line art or monochrome art, i.e., anything that involves sharply delineated lines) format. PowerPoint files are not suitable quality, as their resolution is too low for print.

- **Guidelines:** For general guidelines for creating digital art, go to the Cadmus Digital Art website (art.cadmus.com/da/guidelines.jsp) or the Cadmus FAQ page (art.cadmus.com/da/faq.jsp). Topics included are:
  - Resolution (dots per inch)
  - Color requirements
  - Cropping and sizing
  - Font usage
  - Scanned images
  - Supported applications
- **Graphic Art Preflight:** To avoid production delays due to unacceptable digital art formats, authors of revised papers must check in advance whether figures meet the standards required for final print and online production. It is mandatory to use Rapid Inspector (rapidinspector.cadmus.com/RapidInspector/zim/index.jsp), a tool that walks authors through the process to make needed corrections.

14. **Cover art** changes with each issue of *The JI*. Authors are encouraged to submit color figures with their manuscripts for possible use as cover illustrations.

15. **Estimation for printed pages:** One printed page in *The JI* contains approximately 8,000 characters, including spaces. Thus, an 8-page, full-length article would contain approximately 64,000 characters. Each line in a table occupies about 60 characters for a single-column table, and 120 characters for a double-column table. Figures occupy about 180 characters per centimeter height for single-column figures, and 360 characters for double-column figures. Determine the total character count for the text of your manuscript and add the character-equivalents for the tables and figures. This will provide a reasonable estimate for the printed length of a manuscript.

## CUTTING EDGE MANUSCRIPT PREPARATION

Submit online at ji.msubmit.net. Individual manuscript, figure, and table files must be uploaded to the system. The system then creates a single PDF for review purposes. Authors should save copies for themselves of all the files in their original formats. See the Figures section for help with preparing digital art. Manuscripts submitted to the Cutting Edge section should conform to the Information for Authors for full-length manuscripts presented above as well as the additional guidelines below:

1. **Cutting Edge articles, including figures and references, must fit within four journal pages. Authors should estimate the size of figures and tables and limit the text accordingly. One printed page in *The JI* contains approximately 8,000 characters, including spaces. Thus, a 4-page Cutting Edge article would contain approximately 32,000 characters. The formula for estimating the number of pages is provided in Manuscript Preparation.**
  2. List the phone number, fax number, and e-mail address of the corresponding author on the title page.
  3. The *Abstract* is limited to 150 words.
  4. The *Materials and Methods* section may be sharply limited but should be sufficient to allow the evaluation of results and conclusions.
  5. Authors may combine the *Results* and *Discussion* sections.

## PREPARATION OF THE REVISED MANUSCRIPT

Submit the revised manuscript online at ji.msubmit.net.

Follow *The JI* Editorial Office instructions contained in the previous decision letter carefully and thoroughly. A revised manuscript not returned within nine months of the date of the decision

letter will be considered a new manuscript and subject to a new, complete review.

Individual manuscript files, files for each figure and table (even if they are unchanged from the previous submission), and a point-by-point reply to all referee comments must be uploaded to the system. The revised manuscript text must be marked to show changes, using highlighting or a colored font (Microsoft Word files preferred). High-resolution figure files should be submitted. Figures must be in **TIFF** or **EPS** format. Instructions for figures are available at the Cadmus Digital Art website ([art.cadmus.com/da/index.jsp](http://art.cadmus.com/da/index.jsp)). Authors should retain for themselves copies of all the files in their original formats.

After the manuscript has been checked by journal staff, the Corresponding Author will receive an e-mail acknowledging receipt of the revised manuscript. The e-mail contains links to the Submission Form and Color Charges Form (if applicable). The Corresponding Author must download, sign, and fax these forms to 301-634-7831 to complete the submission of the revised manuscript. Your manuscript **will not be sent for review** until *The JI* Editorial Office receives these forms signed by the Corresponding Author. Please contact [infoji@aai.org](mailto:infoji@aai.org) if you do not receive the acknowledgment e-mail. Please do NOT use the hard copy forms found in old copies of the printed journal.

#### SUPPLEMENTAL DATA AND DEPOSITION OF MATERIALS

**Supplemental Data:** All supplemental material accompanying an article must be submitted with the original paper for peer review. When submitting online, upload the file when requested. Supplemental material should be limited to short videos (must be no longer than 30 seconds and under 10 MB, with no sound or voice-over) or large tables, large sequence alignments, or large data sets such as those obtained with microarray hybridization experiments. Such supplemental data must be larger than two printed journal pages; smaller pieces of data should be incorporated into the manuscript as regular figures/tables.

Videos must be 320 x 480 pixels or smaller for best viewing within a browser. Submit videos in MPG or QuickTime. Change QuickTime file extensions to ".mov" so that Web browsers will recognize the file type and play the movie. Compress videos as much as possible to help control file size. Name videos by order of citation appearance (e.g., video1.mov). Authors will be notified if problems exist with videos as submitted and will be asked to take responsibility for modifications. No editing will be done to videos at the Editorial Office. Legends or short explanations of the material must accompany all supplemental material. Links to the material will appear in two places in the online journal, in the Table of Contents and in the information box associated with the first page of the full-text article. There will not be any links in the body of the article. In the printed paper, supplemental material will be footnoted the first time mentioned: "The online version of this article contains supplemental material."

#### *Distribution and depositing of materials:*

**Unique materials:** It is required that unique materials described in manuscripts published in *The JI* will be made available, within reason, to qualified investigators for their own noncommercial use. A reasonable amount may be charged by authors to cover preparation and shipping of the requested material. An agreement to this effect is included in the Manuscript Submission Form.

**High-resolution structural data:** Any paper submitted to *The JI* that contains new high-resolution structural data requires an accession number from the Protein Data Bank ([www.rcsb.org/pdb/Welcome.do](http://www.rcsb.org/pdb/Welcome.do)) and assurance that unrestricted release will occur at

or before the time of publication. The accession number should be accompanied by the website address of the databank.

**Nucleotide sequences:** Sequences of nucleotides or amino acids longer than 50 bases/residues should not be presented in the text or in table form, but rather should be submitted as a publication quality figure. Original nucleotide sequences, and determined nucleotide sequences encoding reported amino acid sequences, described in the manuscript must be submitted to GenBank or EMBL DataLibrary at the time of manuscript submission; an accession number and sequence availability are required at the time of publication. The accession number should be accompanied by the website address of the databank. Instructions on submission of data may be obtained directly from GenBank (Mail Stop K710, Los Alamos National Laboratory, Los Alamos, NM 87545) or from the European Molecular Biology Library, Nucleotide Sequence Library (Postfach 10.2209, Meyerhofstrasse 1, 6900 Heidelberg, Germany) or see NCBI's GenBank site ([www.ncbi.nlm.nih.gov/Genbank/index.html](http://www.ncbi.nlm.nih.gov/Genbank/index.html)).

**Microarray data:** *The JI* will not publish descriptive manuscripts that report microarray data, unless such information can be considered of unusual immunological significance and/or include functional experiments that provide novel insight into mechanism. As with other scientific approaches, current experimental, quantitation, verification, and statistical analyses are expected. Microarray experiments should be Minimum Information About a Microarray Experiment (MIAME) compliant (for guidelines see [www.mged.org](http://www.mged.org)). Whereas limited online space may be available for supplemental tables associated with the manuscript, complete microarray data must be deposited in the appropriate public database; e.g., GEO ([www.ncbi.nlm.nih.gov/geo/](http://www.ncbi.nlm.nih.gov/geo/)), ArrayExpress ([www.ebi.ac.uk/arrayexpress/](http://www.ebi.ac.uk/arrayexpress/)), or CIBEX ([cibex.nig.ac.jp/index.jsp](http://cibex.nig.ac.jp/index.jsp)), and must be accessible without restriction from the date of publication. An entry name or accession number must be included in the paper before publication. The accession number should be accompanied by the website address of the databank.

#### STYLE GUIDE

**General style conventions:** In general, *The JI* follows *Scientific Style and Format, The CSE Style Manual for Authors, Editors, and Publishers*, seventh edition, published by the Council of Science Editors, Inc., in instances where journal style issues are not directly addressed.

**Abbreviations for references:** *Biosis* is the primary source for journal name abbreviations; *Index Medicus* is the secondary source.

**Nomenclature:** The most current links for nomenclature guidelines are posted online ([www.jimmunol.org/misc/authorfulllength.shtml#style](http://www.jimmunol.org/misc/authorfulllength.shtml#style)).

**Allergen nomenclature:** Nomenclature for allergens should be assigned in cooperation with the IUIS Allergen Sub-Committee. Authors of accepted manuscripts that describe novel allergens will be requested to complete a brief standard form available at IUIS Allergen Nomenclature ([www.allergen.org/](http://www.allergen.org/)).

**CD nomenclature:** For the purpose of consistency, *The JI* will follow CD nomenclature. For murine molecules, *The JI* will follow the nomenclature previously published in *J. Immunol.* 160: 3861–3868, 1998. For human molecules, standard CD nomenclature will be followed as updated in *J. Immunol.* 168: 2083–2086, 2002.

**Chemical names:** *The JI* uses *The Merck Index* ([library.dialog.com/bluesheets/html/bl0304.html](http://library.dialog.com/bluesheets/html/bl0304.html)) and the *IUPAC-IUB Commission on Biochemical Nomenclature-Chemical Abstracts* ([www.chem.qmul.ac.uk/iupac/bibliog/white.html](http://www.chem.qmul.ac.uk/iupac/bibliog/white.html)) as the primary references for proper spelling and style of chemical names.

**Chemokine/chemokine receptor nomenclature:** The systematic name for chemokines and chemokine receptors should be used. The original name may be given in parenthesis if desired. See *Cytokine* 21:48–49, 2003.

**Enzyme Nomenclature:** ([www.chem.qmul.ac.uk/iubmb/enzyme/](http://www.chem.qmul.ac.uk/iubmb/enzyme/)), is *The JI* source for style and spelling of enzyme names.

**Gene nomenclature:** The HUGO guidelines for gene nomenclature ([www.genenames.org](http://www.genenames.org)) may be used for naming human genes. Mouse Genome Informatics ([www.informatics.jax.org/](http://www.informatics.jax.org/)) is a reference source for naming mouse genes.

**Genetic nomenclature for mice:** *The JI* uses the revisions for standardized genetic nomenclature for mice published periodically in *Mouse Genome*. A current listing of inbred strains of mice and rats is available at Mouse Genome Informatics. Authors are encouraged to deposit their mapping data with the Mouse Genome Database (MGD) before publication and to include the assigned MGD accession numbers in their manuscripts ([www.informatics.jax.org](http://www.informatics.jax.org)). Data may be submitted electronically by e-mail. Information about electronic submission of data sets can be obtained at the MGD home page. Gene symbols should be reserved with MGD in advance of publication. An electronic nomenclature submission form is available from the MGD website.

**HLA nomenclature:** HLA nomenclature is updated periodically by the WHO Nomenclature Committee for Factors of the HLA System. A recent reference is *Hum. Immunol.* 64: 919–920, 2003. Annual comprehensive revisions are published in *Human Immunology*, usually in the spring.

#### STANDARD ABBREVIATIONS

The abbreviations listed here are used without definition in articles published in *The JI*. The form may be used for both singular and plural, or made plural with “s” at the author’s option. The list of standard abbreviations is published in the first issue of each volume.

Å, angstrom  
 aa, amino acid (only with numbers)  
 Ab, antibody  
 ABTS, 2,2’-azino-bis(3-ethylbenzthiazoline-6-sulfonic acid)  
 Ag, antigen  
 AIDS, acquired immunodeficiency syndrome  
 ANOVA, analysis of variance  
 AP-1, activator protein 1  
 APC, Ag-presenting cell  
 ATP, adenosine triphosphate (also ADP, AMP, CMP, CTP, GDP, GMP, GTP, ITP, NTP, TMP, UDP, and UTP)  
 AZT, 3’-azido-3-deoxythymidine  
 BALT, bronchus-associated lymphoid tissue  
 BAPTA-AM, 1,2-bis(2-aminophenoxy)ethane-*N,N,N',N'*-tetraacetic acid acetoxymethyl ester  
 BCR, B cell receptor  
 bp, base pair (only with numbers)  
 BrdU, 5-bromo-2’-deoxyuridine  
 BSA, bovine serum albumin  
 C, complement  
 C region, constant region of Ig  
 cAMP, cyclic AMP  
 CCL, CC chemokine ligand  
 CCR, CC chemokine receptor  
 CD40L, CD40 ligand  
 cDNA, complementary DNA  
 CDR, complementarity determining region  
 C/EBP, CCAAT/enhancer-binding protein  
 CFA, complete Freund’s adjuvant  
 CFSE, 5-(and 6)-carboxyfluorescein diacetate succinimidyl ester

CFU, colony-forming unit  
 cGMP, guanosine 3’,5’-cyclic monophosphate  
 CHAPS, 3-[(3-cholamidopropyl)dimethylammonio]-1-propane-sulfonate  
 Ci, curie  
 CIITA, class II transactivator  
 CLIP, class II-associated invariant-chain peptide  
 CMV, cytomegalovirus  
 CNS, central nervous system  
 CoA, coenzyme A  
 Con A, concanavalin A  
 CpG, cytosine guanine dinucleotide  
 cpm, counts per minute  
 CREB, cAMP response binding protein  
 cRNA, complementary RNA  
 CSF, colony-stimulating factor  
 CTL, cytotoxic T lymphocyte  
 CTLA, cytolytic T lymphocyte-associated Ag  
 CXCL, CXC chemokine ligand  
 CXCR, CXC chemokine receptor  
 d, deoxy; distilled (as in dH<sub>2</sub>O)  
 D region, diversity region of Ig or T cell receptor for Ag  
 Da, dalton (only with numbers)  
 dATP, 2’-deoxyadenosine triphosphate  
 DEAE, diethylaminoethyl  
 df, degrees of freedom  
 DMEM, Dulbecco’s modified Eagle’s medium  
 DMSO, dimethylsulfoxide  
 DNA, deoxyribonucleic acid  
 DNase, deoxyribonuclease  
 DNP, dinitrophenyl  
 dNTP, 2’-deoxynucleoside 5’-triphosphate  
 dpm, disintegrations per minute  
 ds, double-stranded (as dsDNA)  
 DTT, dithiothreitol  
 E, erythrocyte  
 EBV, Epstein-Barr virus  
 EC<sub>50</sub>, 50% effective concentration  
 ECL, enhanced chemiluminescence  
 ED<sub>50</sub>, 50% effective dose  
 EDTA, ethylenediaminetetraacetic acid  
 EGTA, ethylene glycol-bis(β-aminoethyl ester)-*N,N,N',N'*-tetraacetic acid  
 ELISA, enzyme-linked immunosorbent assay  
 ELISPOT, enzyme-linked immunospot  
 EMSA, electrophoretic mobility shift assay  
 ERK, extracellular signal-regulated kinase  
 E:T ratio, effector to target ratio  
 Fab, Ag-binding fragment  
 F-actin, filamentous actin  
 FACS, fluorescence-activated cell sorter  
 FAM, 6-carboxyfluorescein  
 FBS, fetal bovine serum  
 FcR, Fc receptors (e.g., FcγRI)  
 FCS, fetal calf serum  
 FITC, fluorescein isothiocyanate  
 FLICE, Fas-associated death domain-like IL-1β-converting enzyme  
 FLIP, FLICE inhibitory protein  
 fMLP or FMLP, formyl-methionyl-leucyl-phenylalanine  
 Fura 2-AM, fura 2-acetoxymethyl ester  
 g, gram (only with numbers)  
 GALT, gut-associated lymphoid tissue  
 GAPDH or G3PDH, glyceraldehyde-3-phosphate dehydrogenase  
 G-CSF, granulocyte CSF

- GFP, green fluorescent protein  
 GM-CSF, granulocyte-macrophage CSF  
 gp, glycoprotein (e.g., gp100)  
 GPI, glycosylphosphatidylinositol  
 GST, glutathione *S*-transferase  
 h, hour (only with numbers)  
 H chain, heavy chain  
 H&E, hematoxylin and eosin  
 HBSS, Hanks' balanced salt solution  
 HEPES, *N*-2-hydroxyethylpiperazine-*N'*-2-ethanesulfonic acid  
 HIV, human immunodeficiency virus  
 HLA, human histocompatibility leukocyte Ag  
 HPLC, high performance liquid chromatography  
 HRP, horseradish peroxidase  
 HSV, herpes simplex virus  
 HUVEC, human umbilical vein endothelial cells  
 IC<sub>50</sub>, 50% inhibition/inhibitory concentration  
 ICAM, intercellular adhesion molecule  
 ICOS, inducible costimulator  
 Id, idiotype; idiotypic determinant  
 ID<sub>50</sub>, 50% infective dose or 50% inhibiting dose  
 IDO, indoleamine 2,3-dioxygenase  
 IFA, incomplete Freund's adjuvant  
 IFN, interferon (e.g., IFN- $\gamma$ )  
 Ig, immunoglobulin  
 IgH, Ig heavy chain  
 I $\kappa$ B, inhibitory NF- $\kappa$ B  
 IL, interleukin (e.g., IL-2)  
 i.m., intramuscular  
 IMDM, Iscove's modified Dulbecco's medium  
 IMEM, Iscove's minimal essential medium  
 i.p., intraperitoneal  
 ITAM, immunoreceptor tyrosine-based activation motif  
 ITIM, immunoreceptor tyrosine-based inhibitory motif  
 IU, international unit  
 i.v., intravenous  
 J region, joining region of Ig or T cell receptor for Ag  
 JAK or Jak, Janus kinase  
 JNK, c-Jun N-terminal kinase  
 kb, kilobase (only with numbers)  
 kbp, kilobase pair (only with numbers)  
 $K_a$ , association constant  
 $K_d$ , distribution coefficient; dissociation constant  
 $K_D$ , affinity constant  
 kDa, kilodalton (only with numbers)  
 L chain, light chain  
 LD<sub>50</sub>, 50% lethal dose  
 LFA, leukocyte (lymphocyte) function-associated Ag  
 LIF, leukemia inhibitory factor  
 LPS, lipopolysaccharide  
 LU, lytic unit  
 mAb, monoclonal Ab  
 MACS, magnetic-activated cell sorting  
 MALDI, matrix-assisted laser desorption ionization  
 MALDI-TOF, matrix-assisted laser desorption ionization-time of flight  
 MALT, mucosa-associated lymphoid tissue  
 MAPK, mitogen-activated protein kinase  
 MCP-1, monocyte chemoattractant protein-1  
 M-CSF, macrophage CSF  
 2-ME, 2-mercaptoethanol  
 MEK, mitogen-activated protein kinase kinase  
 MEM, minimum essential medium  
 MES, 2-(*N*-morpholino)ethanesulfonic acid  
 mg, milligram (only with numbers)  
 MHC, major histocompatibility complex  
 min, minute (only with numbers)  
 MIP, macrophage-inflammatory protein  
 ml, milliliter (only with numbers)  
 MLC, mixed lymphocyte culture  
 MLR, mixed leukocyte reaction  
 mo, month(s) (only with numbers)  
 MOPS, 4-morpholinepropanesulfonic acid  
 $M_r$ , relative molecular mass  
 mRNA, messenger RNA  
 MTT, 3-(4,5-dimethylthiazol-2-yl)-2,5-dimethyltetrazolium bromide  
 $\mu$ g, microgram (only with numbers)  
 $\mu$ l, microliter (only with numbers)  
 m.w., molecular weight  
 MyD88, myeloid differentiating factor 88  
*n*, number in study or group  
 NAD, nicotinamide adenine dinucleotide  
 NADH, reduced NAD  
 NaDodSO<sub>4</sub>, sodium dodecyl sulfate  
 NADP, NAD phosphate  
 NADPH, reduced NAD phosphate  
 NBT, nitroblue tetrazolium  
 ND, not determined  
 NDP, nucleoside 5'-diphosphate  
 NF, nuclear factor  
 NFAT or NF-AT, nuclear factor of activated T cells  
 NF- $\kappa$ B, nuclear factor  $\kappa$ B  
 Ni-NTA, nickel-nitrilotriacetic acid  
 NK cell, natural killer cell  
 NMP, nucleoside 5'-monophosphate  
 NO, nitric oxide  
 NOD, nonobese diabetic  
 NS, not significant  
 nt, nucleotide (only with numbers)  
 OCT, octamer-binding factor  
 OD, optical density  
 OVA, ovalbumin  
*p*, probability  
 PAGE, polyacrylamide gel electrophoresis  
 PBL, peripheral blood lymphocyte  
 PBMC, peripheral blood mononuclear cell  
 PBS, phosphate-buffered saline  
 PCR, polymerase chain reaction  
 PE, phycoerythrin  
 PECAM-1, platelet endothelial cell adhesion molecule-1  
 PerCP, peridinin chlorophyll protein  
 PFU, plaque-forming unit  
 PG, prostaglandin  
 PHA, phytohemagglutinin  
 PI3K, phosphatidylinositol 3-kinase  
 PIPES, piperazine-*N,N'*-bis(2-ethane sulfonic acid)  
 PMA, phorbol myristate acetate  
 PMSF, phenylmethylsulfonyl fluoride  
 PWM, pokeweed mitogen  
 r, recombinant (e.g., rIFN- $\gamma$ )  
 R, receptor (e.g., IL-2R)  
 RACE, rapid amplification of cDNA end  
 RAG, recombination-activating gene  
 RANTES, regulated upon activation, normal T cell expressed and secreted  
 RBC, red blood cell  
 RFLP, restriction fragment length polymorphism  
 RIA, radioimmunoassay  
 RNA, ribonucleic acid  
 RNase, ribonuclease  
 rpm, revolutions per minute  
 rRNA, ribosomal RNA  
 RT-PCR, reverse transcriptase polymerase chain reaction  
 s, second (use only with numbers)  
 s.c., subcutaneous  
 SCID, severe combined immunodeficiency  
 SD, standard deviation  
 SDS, sodium dodecyl sulfate  
 SE, standard error

SEM, standard error of the mean  
 SHIP, src homology 2-containing inositol 5'-phosphatase  
 SIV, simian immunodeficiency virus  
 sp. act., specific activity  
 SRBC, sheep red blood cells  
 ss, single-stranded (e.g., ssDNA)  
 SSC, standard saline citrate  
 STAT, signal transducer and activator of transcription  
 SV40, simian virus 40  
 $t_{1/2}$ , half-life, half-time  
 TAMRA, 5-(and 6)-carboxytetramethylrhodamine  
 TAP, transporter associated with Ag processing  
 Tat, terminal deoxynucleotidyltransferase  
 TBS, Tris-buffered saline  
 TBST, TBS with Tween 20  
 TCA, trichloroacetic acid  
 TCR, T cell receptor for Ag  
 TdR, thymidine deoxyribose (also UdR, AdR)  
 TdT, terminal deoxynucleotidyltransferase  
 TGF, transforming growth factor  
 Th cell, T helper cell  
 TLC, thin layer chromatography  
 TLR, Toll-like receptor  
 TNF, tumor necrosis factor  
 TNP, trinitrophenyl  
 TRAIL, TNF-related apoptosis-inducing ligand  
 Tris, tris(hydroxymethyl)aminomethane  
 tRNA, transfer RNA  
 TUNEL, Tdt-mediated dUTP nick end labeling  
 U, unit (only with numbers)  
 UV, ultraviolet  
 v/v, volume to volume ratio (%)  
 V region, variable region of Ig  
 VCAM, vascular cell adhesion molecule  
 V(D)J, variable diversity joining  
 VLA, very late activation Ag  
 W, watt (only with numbers)  
 wk, week (only with numbers)  
 xid, X-linked immunodeficiency  
 Zap70,  $\zeta$ -associated protein 70 (or  $\zeta$ -chain-associated protein 70)

---

## Keywords

**Animals**

Human  
 Rodent  
 Other Animals

**Cells**

B Cells  
 Dendritic Cells  
 Endothelial Cells  
 Eosinophils  
 Mast Cells/Basophils  
 Monocytes/Macrophages  
 Natural Killer Cells  
 Neutrophils  
 Stem Cells  
 Stromal Cells  
 T Cells  
 T Cells, Cytotoxic  
 Th1/Th2 Cells

**Diseases**

Autoimmunity  
 Diabetes  
 EAE/MS

Endotoxin Shock  
 Graft Versus Host Disease  
 Immunodeficiency Diseases  
 Rheumatoid Arthritis  
 Systemic Lupus Erythematosus

**Infections**

AIDS  
 Bacterial  
 Fungal  
 Parasitic-Helminth  
 Parasitic-Protozoan  
 Viral

**Molecules**

AcutePhase Reactants  
 Adhesion Molecules  
 Antibodies  
 Antigens/Peptides/Epitopes  
 Autoantibodies  
 Cell Surface Molecules  
 Chemokines  
 Complement  
 Cytokine Receptors

Cytokines  
 Fc Receptors  
 Lipid Mediators  
 Lipopolysaccharide  
 MHC  
 Nitric Oxide  
 Protein Kinases/Phosphatases  
 Superantigens  
 T Cell Receptors  
 Transcription Factors

**Processes**

Allergy  
 Antigen Presentation/Processing  
 Apoptosis  
 Cell Activation  
 Cell Differentiation  
 Cell Proliferation  
 Cell Trafficking  
 Chemotaxis  
 Comparative Immunology/Evolution  
 Costimulation  
 Cytotoxicity  
 Gene Rearrangement

Gene Regulation  
 Hematopoiesis  
 Inflammation  
 Memory  
 Neuroimmunology  
 Phagocytosis  
 Repertoire Development  
 Reproductive Immunology  
 Signal Transduction  
 Tolerance/Suppression/Anergy  
 Transplantation  
 Tumor Immunity  
 Vaccination

**Techniques**

Gene Therapy  
 Molecular Biology  
 Transgenic/Knockout Mice

**Tissues**

Lung  
 Mucosa  
 Skin  
 Spleen & Lymph Nodes  
 Thymus

# The American Association of Immunologists

## *Working for You!*

*The mission of The American Association of Immunologists (AAI) is to advance the knowledge of immunology and related disciplines, foster interchange of ideas and information among scientists, and promote understanding of the field of immunology.*

### REGULAR MEMBERSHIP BENEFITS

- Membership in the largest and most prestigious professional association of immunologists in the world
- Effective representation! Your views and concerns on research funding and science policy are brought to Congress and federal agencies by professional staff and member-driven committees who work together to advance immunology research and address issues that affect member careers.
- Voting privileges in AAI elections and actions
- Eligibility for prestigious AAI career awards and AAI travel awards
- Eligibility to serve on AAI committees; help determine the direction of AAI and serve the larger scientific community
- Reduced registration and abstract submission fees to the AAI annual meetings
- Privilege of leading major sessions at the AAI annual meetings
- Reduced registration fees to the AAI Introductory and Advanced Immunology Courses
- A subscription to *The Journal of Immunology* (print and/or online) and access to the full digital archive
- No submission fee for manuscripts submitted to *The Journal of Immunology*
- Significantly reduced color figure charges for manuscripts published in *The Journal of Immunology*
- Eligibility to serve on the Editorial Board of *The Journal of Immunology*
- Reduced subscription rates to other immunology journals and reviews
- Personal copies of the AAI Newsletter
- Membership in the Federation of American Societies for Experimental Biology (FASEB) and in the International Union of Immunological Societies (IUIS)
- Inclusion in, and online access to, the FASEB Directory of Members



*To obtain additional information, please contact:*

#### **AAI Membership Office**

9650 Rockville Pike, Bethesda, MD 20814-3994  
Phone: 301-634-7195 • Fax: 301-634-7733  
members@aai.org • [www.aai.org](http://www.aai.org)

# THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS

9650 ROCKVILLE PIKE ■ BETHESDA, MD 20814-3994

TELEPHONE: 301-634-7195 ■ FAX: 301-634-7733

FEDERAL TAX ID NO: 52-2317193

E-mail Address: members@aai.org ■ Website Address: http://www.aai.org



## QUALIFICATIONS AND APPLICATION FOR REGULAR MEMBERSHIP 2008 MEMBERSHIP YEAR

The American Association of Immunologists (AAI) is a professional organization whose members have a strong interest in, and have made substantial contributions to, the field of immunology. AAI owns and publishes *The Journal of Immunology*. AAI is a member of the Federation of American Societies for Experimental Biology (FASEB) and the International Union of Immunological Societies (IUIS). To be eligible for election to membership in the AAI, a candidate must meet **one** of the following criteria:

1. Possess a Ph.D., (or equivalent graduate degree, *e.g.*, D.Sc.) in immunology or related disciplines, or an M.D. (or equivalent medical degree, *e.g.*, D.D.S.),\* and
2. Be an author on **one** publication on an immunological topic in a reputable, English language, peer-reviewed journal. Manuscripts "in press" are acceptable when accompanied by a letter from the publisher or Editor-in-Chief of the journal affirming its acceptance and imminent publication. Abstracts and unpublished papers ***will not*** be considered in evaluating whether a candidate meets the publication requirement for membership.

*\* These requirements may be waived under exceptional circumstances if a candidate shows evidence of other appropriate training and/or substantial research accomplishment.*

### **THIS APPLICATION PACKAGE MUST INCLUDE:**

1. Your *curriculum vitae* including bibliography.
2. A copy of the title page of the publication on which you are listed as an author.
3. The name and signature of an active AAI Regular Member as your sponsor.

Are you currently an AAI Trainee Member?  Yes  No

Have you been an AAI Regular Member in the past?  Yes  No

NAME: \_\_\_\_\_

DEGREE (YEAR) & INSTITUTION: \_\_\_\_\_

PUBLICATION: \_\_\_\_\_

CURRENT TITLE/POSITION: \_\_\_\_\_

RESEARCH SPECIALTY: \_\_\_\_\_

DATE OF BIRTH (month/day/year): \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_ COUNTRY: \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

TELEPHONE NO: \_\_\_\_\_ FAX NO: \_\_\_\_\_

### **SPONSOR:**

NAME OF AAI MEMBER (*please print clearly*): \_\_\_\_\_

SIGNATURE OF AAI MEMBER: \_\_\_\_\_

Applications should be mailed to the AAI office and marked to the attention of the AAI Membership Department. Please **DO NOT** send payment with your application. You will be invoiced upon approval.

### **APPLICATION REVIEW DEADLINES**

Applications are to be received in the AAI office by the first day of each month.

**2008 Dues Rates: January 1 - December 31: U.S. - \$260.00 Canadian - \$267.50 (GST included) International - \$260.00**

(Canadian and international print subscriptions will have an additional \$100 shipping charge.)

# THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS



9650 ROCKVILLE PIKE ▪ BETHESDA, MD 20814-3994  
TELEPHONE: 301-634-7195 ▪ FAX: 301-634-7733  
FEDERAL TAX ID NO: 52-2317193  
E-mail Address: members@aai.org ▪ Website Address: http://www.aai.org

## 2008 TRAINEE MEMBERSHIP APPLICATION FORM

Name: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Qualified applicants must complete the information below and return this form with the required payment. Trainee Members will receive a subscription to *The Journal of Immunology* and the *AAI Newsletter*. Trainee Members will also have the privilege of attending and participating (without vote) in the AAI Annual Business Meeting. In addition, they will receive all AAI announcements and correspondence. Make checks payable to AAI. For international members paying by check, the check must be drawn on a U.S. bank. International money orders also are accepted.

Individuals may remain Trainee Members for a maximum of eight (8) years. Certification **must** be renewed annually.

Have you been an AAI Trainee Member in the past?  Yes  No

### SECTION 1 – APPLICANT INFORMATION

I am a **Pre**-doctoral Trainee – I expect to receive the \_\_\_\_\_ (advanced degree) in \_\_\_\_\_ (month/year)

I am a **Post**-doctoral Trainee – I hold the following advanced degree(s) (please indicate all advanced degrees held and the month and year conferred): \_\_\_\_\_

### SECTION 2 – CERTIFICATION OF APPLICANT'S TRAINEE STATUS

(to be completed by current AAI Member)

As a current member of the AAI, I hereby certify that the applicant identified above is either a regularly matriculated pre-doctoral student or a post-doctoral trainee and, as such, is eligible to remain a Trainee Member of the AAI.

Current AAI Member's Name (First, MI, Last): \_\_\_\_\_

Signature: \_\_\_\_\_

Title (Dean, Dept. Chair, or Professor in Charge): \_\_\_\_\_

AAI Member Number: \_\_\_\_\_ Date: \_\_\_\_\_

### SECTION 3 – APPLICANT PLEDGE AND PAYMENT

I, \_\_\_\_\_, pledge that a subscription to *The Journal of Immunology* purchased by me at the special Trainee Member rate is for my personal use. I agree that my print or online subscription will not be shared, placed in a library or on a server for general use, sold, or used to replace a subscription currently purchased by an institution.

JANUARY 1-DECEMBER 31, 2008

#### U.S. Member

\$64.00

Please select:  Online  Print and Online

CHECK ENCLOSED

CARD NUMBER: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

#### Canadian Member

\$65.86 (online subscription; GST included)

\$165.86 (print, online, GST, & airmail included)

VISA

MASTERCARD

#### International Member

\$64.00 (online subscription)

\$164.00 (print, online, & airmail included)

AMERICAN EXPRESS

# EXPERIMENTAL BIOLOGY 2008

TODAY'S RESEARCH: TOMORROW'S HEALTH



April 5–April 9  
San Diego Convention Center, San Diego, California



## PARTICIPATING SOCIETIES

**AAA**

American Association of Anatomists

**AAI**

The American Association of Immunologists

**APS**

The American Physiological Society

**ASBMB**

American Society for Biochemistry and Molecular Biology

**ASIP**

American Society for Investigative Pathology

**ASN**

American Society for Nutrition

**ASPET**

American Society for Pharmacology  
and Experimental Therapeutics

Experimental  
Biology

2008<sup>®</sup>

For further information contact  
[eb@feseb.org](mailto:eb@feseb.org) or visit [www.eb2008.org](http://www.eb2008.org)  
EB Management Office  
9650 Rockville Pike, Bethesda, MD 20814-3998  
Tel: 301-634-7010 • Fax: 301-634-7014