

# JOINT BONE SPINE

## EDITORS

**Editor:** Marie-Christophe Boissier (Paris, France)

**Associate Editors:** Françoise Debiais (Poitiers, France), Laure Gossec (Paris, France) Marcel-Francis Kahn (Paris, France), Frédéric Lioté (Paris, France), Charles Masson (Angers, France), Bertrand Naveau (Paris, France), Daniel Wendling (Besançon, France)

## EDITORIAL OFFICE

Sophie Galibert - Correspondence: Joint Bone Spine

Elsevier Masson SAS, 65, rue Camille-Desmoulins, 92442 Issy-les-Moulineaux cedex - Tel.: (33) 01 71 16 54 17 -

Fax: (33) 01 71 16 51 84 - E-mail: joint-bone-spine@elsevier.fr

“Editors’ disclosures of interest are available upon request from the editorial office.”

## EDITORIAL BOARD

A. Abhishek, Nottingham (United Kingdom), G. Alarcon, Birmingham (USA), Y. Allanore, Paris (France), J.-M. Anaya, Bogota (Colombia), D. Baeten, Amsterdam (the Netherlands), B. Bannwarth, Bordeaux (France), R. Baron, Cambridge (USA), F. Berenbaum, Paris (France), J.-M. Berthelot, Nantes (France), V. Bousson, Paris (France), J. Branco, Lisboa (Portugal), M. Bréban, Boulogne (France), V. Breuil, Nice (France), D. Buskila, Beer Sheva (Israël), N. Busso, Lausanne (Switzerland), A. Cantagrel, Toulouse (France), R. Cervera, Barcelona (Spain), G. Chalès, Rennes (France), R. Chapurlat, Lyon (France), X. Chevalier, Créteil (France), P. Claudepierre, Créteil, (France), M. Cohen-Solal, Paris (France), B. Combe, Montpellier (France), B. Cortet, Lille (France), J.-M. Dayer, Geneva (Switzerland), V. Devauchelle-Pensec, Brest (France), M. Dougados, Paris (France), A. Drosos, Ionnanina (Greece), C.-H. Flouzat-Lachaniette, Paris (France), P. Durez, Brussels (Belgium), H.-K. Ea, Paris (France), B. Fautrel, Paris (France), S. Ferrari, Geneva (Switzerland), A. Feydy, Paris (France), A. Finckh, Geneva (Switzerland), C. Gabay, Geneva (Switzerland), O. Gabay, Silver spring (USA), P. Gaudin, Grenoble (France), N. Hajjaj-Hassouni, Rabat-Sale (Marocco), C. Job-Deslandre, Paris (France), C. Jorgensen, Montpellier (France), G. Karsenty, New York (USA), M. Kauppi, Heinola (Finland), I. Koné-Paut, le Kremlin-Bicêtre (France), I. Kushner, Cleveland (USA), A. Ladjouze-Rezig, Algiers (Algeria), P. Lafforgue, Marseille (France), E. Legrand, Angers (France), T. Lequerré, Rouen (France), R. Lories, Leuven (Belgium), C. Marcelli, Caen (France), X. Mariette, Le Kremlin-Bicêtre (France), H. Marotte, Saint-Etienne (France), C. Miceli-Richard, Paris (France), L. Michou, Québec (Québec, Canada), N. Miyasaka, Tokyo (Japan), C. Montecucco, Pavia (Italy), J. Morel, Montpellier (France), U. Mueller-Ladner, Regensburg (Allemagne), W. Ollier, Oxford (UK), E. Pascual, Alicante (Spain), S. Pay, Ankara (Turkey), A. Perdriger, Rennes (France), F. Perez-Ruiz, Vizcaya (Spain), S. Perrot, Paris (France), E. Pertuiset, Pontoise (France), T. Pham, Marseille (France), F. Ponchel, Leeds (United Kingdom), C. Prati, Besançon (France), X. Puéchal, Paris (France), L. Punzi, Padova (Italy), P. Quartier, Paris (France), F. Rannou, Paris (France), A.-C. Rat, Caen (France), C. Richez, Bordeaux (France), E. Roddy, (United Kingdom), C. Roux, Paris (France), C.-H. Roux, Nice (France), S. Roux, Fleurimont (Quebec, Canada), M. Rudwaleit, Berlin, (Germany), A. Ruysen-Witrand, Toulouse (France), A. Saraux, Brest (France), G. Schett, Erlangen (Germany), C. Selmi, Milan (Italy), J. Sibilila, Strasbourg (France), M. Soubrier, Clermont-Ferrand (France), Z. Szekanecz, Debrecen (Hungary), T. Thomas, Saint-Etienne (France), F. Tubach, Paris (France), J.-M. Vital, Bordeaux (France), F. Wollheim, Lund (Sweden), M. Wybier, Paris (France), Y. Yazici, New York (USA), H.K. Zeidler, Hanover (Germany)

---

*Joint Bone Spine* (ISSN 1297-319X) 2019 (volume 86) One year, 6 issues. E-only journal. See Subscription rates on <http://www.elsevier-masson.fr/joint-bone-spine.html>

**Journal Manager** - Myriam Jolivet. Tél. : (33) 01 71 16 50 54. E-mail : [jbs@elsevier.com](mailto:jbs@elsevier.com)

**Advertising** - Benoît Sibaud (supplements & reprints sales). Tel. : (33) 01 71 16 51 37 ; e-mail: [b.sibaud@elsevier.com](mailto:b.sibaud@elsevier.com). Nicolas Zarjevski (advertising sales). Tel : (33) 01 71 16 51 38, e-mail : [n.zarjevski@elsevier.com](mailto:n.zarjevski@elsevier.com)

**Subscriptions** - Tel.: (33) 01 71 16 55 99. Fax: (33) 01 71 16 55 77. <http://www.elsevier-masson.fr/joint-bone-spine.html>

**Publisher** - Pascal Léger

**Director of publication** - Daniel Rodriguez

Subscription conditions, instructions to authors, the contents of each issue as well as the abstracts of the articles published in *Joint Bone Spine* are available on the website of Elsevier France: <http://www.elsevier-masson.fr/>

---

**E-only journal**