



## Curriculum Vitae

### Personal information Christian Mazel

#### Work experience

HOSPITAL ACTIVITIES RETIRED February 2022 CHAIRMAN : HEAD OF DEPARTEMENT ORTHOPAEDIC AND SPINE SURGERY : Institut Mutualiste Montsouris (IMM), 42 Bd Jourdan 75014 - PARIS September 1999 to 2022- Merge between C.M.C. de la Porte de Choisy and H.I.U.P becoming IMM n 1999. November 1992 to October 1993 Orthopaedic department Pr. E. LETOURNEL, "Centre M&eacute;dico-Chirurgical de la Porte de Choisy" 6, Place de Port-au-Prince - 75013 PARIS Assistant Professor : </strong><strong> </strong>October 1992 □ to September 1999 Centre Medico-Chirurgical de la Porte de Choisy: 6, Place de Port-au-Prince-75013 PARIS Assistant Professor Fellow :October1984 to October 1992 Orthopaedic department Pr ROY-CAMILLE "Groupe Hospitalier Pitié Salpêtrière PARIS 13 Resident in Orthopaedic surgery (Gold Medal)1982 – 1983 October 1982 to October 1983: Orthopaedic department Pr ROY-CAMILLE "Groupe Hospitalier Pitié Salpêtrière"- PARIS (75013)

UNIVERSITY ACTIVITIES RETIRED February 2022 FULL PROFESSOR OF ORTHOPAEDIC SURGERY. PARIS 13 University - November 2003 November 2003: Second Class professor of Orthopaedic surgery November 2012: First class professor of Orthopaedic surgery September 2017: Exceptional class professor of Orthopaedic surgery PARIS UNIVERSITY DIPLOME d'HABILITATION A DIRIGER DES RECHERCHES (HDR) December 1990: University Pierre et Marie CURIE - PARIS VI

#### Education and training

UNIVERSITY: Full professor grade : Concours de PUPH - Sous section du CNU Chirurgie Orthopedic and trauma March 2003 Ability to lead researches : Habilitation a la Direction de Recherche en decembre 1990. University; Pierre et Marie Curie - PARIS VI. PHD : Attestation d'Etudes Approfondies en génie biologique et médical, option biomécanique, en juin 1986Paris University. Qualification in Orthopaedic surgery 1986. Qualification in general surgery 1985. Recipient of "Gold medal" of Paris residency program 1983 Medical doctor qualification MD 1983 Paris University. MILITARY SERVICE : Civil service in french west Indies (V.A.T.) "Centre Hospitalier General de la Trinite; (Martinique)" December 1979 to April 1981. Recipient in Paris surgery residency program 1978 Qualification second part medical school (D.C.E.M.) June 1978 Paris University. Qualification first part Medical school(P.C.E.M.) June 1974 Paris University. Qualification in human biology first grade (C.P.E.B.H.) June1973. Beginning of medical studies 1972; University; Rene; DESCARTES - Paris 5, U.E.R. PARIS-OUEST

#### Additional information

##### Publications

[PUBICATIONS 2016-2022 RAPID IMPROVEMENTS IN PAIN AND QUALITY OF LIVE ARE SUSTAINED AFTER SURGERY FOR SPINAL METASTES IN A LARGE PROSPECTIVE </strong>COHORT D. CHOI, Z. FOX, T. ALBERT, C. BUNGER, M. FEHLING, J. HARROPS, N. KAWAHARA, A. MARTIN, E.M. MASSICOTTE, Ch. MAZEL, F.C. ONER, W. PEUL, K. TOMITA, M. WANG, A. CROCKARD British journal of Neurosurgery 02, 2016 Impact Factor: 0.96 86 CHARACTERISTICS OF PATIENTS WHO SURVIVED LESS THAN THREEMONHTHS OR MORE THAN TWO YEARS AFTER SURGERY FOR SPINAL METASTASES: CAN WE AVOID INAPPROPRIATE PATIENT SELECTION. JI VERLAAN, D. CHOI, AL. VERSTEEG, T. ALBERT, M. ATRS, L. BLABAUD, JM. BUCHOWSKI, CK CHUNG, MH COPPES, A. CROCKARD, B. DEPEIRTERE, M. FEHLING, J. HARROPS, N. KAWAHARA, E. KIM, C. LEE, Y. LEUNG, ZI LIU, A. MARTIN, E.M. MASSICOTTE, Ch. MAZEL, B. MEYER, W. PEUL, Y. TOKUASHI, K. TOMITA, C. ULBRICHT, M. WANG, F.C. ONER Journal of clinical oncology Juillet 2016 Impact Factor: 3.18 87 LOSS OF LOCAL TUMOR CONTROL AFTER INDEX SURGERY FOR SPINAL METASTASES: A PROSPECTIVE COHORT STUDY.</strong> DEPREITERE, B., RICCIARDI, F., ARTS, M., BALABAUD, L., BUCHOWSKI, J. M., BUNGER, C. MAZEL, C. CHOI, D. \(2018\). World Neurosurgery. doi:10.1016/2018.04.170 Impact Factor: 1, 77 88 - METASTATIC SPINE TUMOR EPIDEMIOLOGY: COMPARISON OF TRENDS IN SURGERY ACROSS TWO DECADES AND THREE CONTINENTS. WRIGHT, E., RICCIARDI, F., ARTS, M., BUCHOWSKI, J. M., CHUNG, C. K., COPPES, M., ... CHOI, D. \(2018\). World neurosurgery. doi:10.1016/j.wneu.2018.03.091 Impact Factor: 1, 77 8 CHARACTERISTICS OF PATIENTS WHO SURVIVED LESS THAN THREEMONHTHS OR MORE THAN TWO YEARS AFTER SURGERY FOR SPINAL METASTASES: CAN WE AVOID INAPPROPRIATE PATIENT SELECTION? JI VERLAAN, D. CHOI, AL. VERSTEEG, T. ALBERT, M. ATRS, L. BLABAUD, JM. BUCHOWSKI, CK CHUNG, MH COPPES, A. CROCKARD, B. DEPEIRTERE, M. FEHLING, J. HARROPS, N. KAWAHARA, E. KIM, C. LEE, Y. LEUNG, ZI LIU, A. MARTIN, E.M. MASSICOTTE, Ch. MAZEL, B. MEYER, W. PEUL, Y. TOKUASHI, K. TOMITA, C. ULBRICHT, M. WANG, F.C. ONER Journal of clinical oncology Juillet 2016 34 \(25\), 3054- Impact Factor: 1, 77 90 RAPID IMPROVEMENTS IN PAIN AND QUALITY OF LIVE ARE SUSTAINED AFTER SURGERY FOR SPINAL METASTES IN A LARGE PROSPECTIVE COHORT D. CHOI, Z. FOX, T. ALBERT, C. BUNGER, M. FEHLING, J. HARROPS, N. KAWAHARA, A. MARTIN, E.M. MASSICOTTE, Ch. MAZEL, F.C. ONER, W. PEUL, K. TOMITA, M. WANG, A. CROCKARD British journal of Neurosurgery 02, 2016 Impact Factor: 0.96 91 EVALUATION ECONOMIQUE EN CHIRURGIE ORTHOPEDIQUE EST ELLE UN FREIN A l'rsquo;INNOVATION ? EXEMPLE D LATARJET. CONSO, C., DE-THOMASSON, E., GUINGAND, O., A. MAZEL, C. \(2016\). Revue de chirurgie orthopedique et Traumatologique Impact Factor: 0.33 92 PREDICTION ACCURACY OF COMMON PROGNOSTIC SCORING SYSTEMS FOR METASTATIC SPINE DISEASE: RESULTS OF A PROSPECTIVE INTERNATIONAL MULTICENTRE STUDY OF 1469 PATIENTS Choi, D., Ricciardi, F., Arts, M., Buchowski, J. M., Bunger, C., Chung, C. K., Mazel, C., Crockard, A. \(2018\). Spine. doi:10.1097/BRS.0000000000002576 Impact Factor: 1, 77 93 THE INTERVERTEBRAL DISC: PHYSIOLOGY AND PATHOLOGY OF A BRITTLE JOINT</strong> A. AMELOT, Ch MAZEL World neurosurgery 120 : 265-273, December 2018 Impact Factor: 1, 924 94 <A NOVEL RISK CALCULATOR TO PREDICT OUTCOME AFTER SURGERY FOR SYMPTOMATIC SPINAL METASTASES: USE OF A LARGE PROSPECTIVE PATIENT DATABASE TO PERSONALISE SURGICAL MANAGEMENT CHOI, D., PAVLOU, M., OMAR, R., ARTS, M., BALABAUD, L., BUCHOWSKI, J. M., ...](#)

[CROCKARD, H. A. MAZEL, C. \(2019\). European journal of cancer, 107, 28-36. Impact Factor: 7,191 94 SCREW RELATED COMPLICATIONS AFTER INSTRUMENTATION IN THE OSTEOPOROTIC SPINE:A SYSEMATIC LITERATURE REVIEW WITH META ANALYSIS.</strong> ROMETSCH, E., SPRUIT M., ZIGLER J., MAZEL C., KANDZIORA, F.,\(2019\) Global spine journal 1-20 DOI: 10:1177/21925618818164 Impact Factor: UENCE DES PARAMETRES BIOLOGIQUES SUR LA SURVENUE DE COMPLICATIONS POST OPERATOIRES DES PATIENTS METASTATIQUES. ETUDE MULTICENTRIQUE SURVIVAL AND CLINICAL OUTCOMES AFTER SURGICAL TREATMENT FOR SPINAL METASTASES: RESULTS OF A PROSPECTIVE STUD</strong>Y. BOUTHORS C., PROST S., SAILHAN F., CHARLES Y.P., BLONDEL B. C. MAZEL, BONNEVIALLE P., COURT C., MAJOR ARTICLES IN THE FIELD OF BIOMECHANICS AND DEVICE DEVELOPMENT Internal fixation of the lumbar spine with pedicle screw plating.</strong> R Roy-Camille, G Saillant, C Mazel Clinical orthopaedics and related research 203, 7-17 Citations: 1200 ; Year: 1986 Plating of thoracic, thoracolumbar, and lumbar injuries with pedicle screw plates.</strong> R Roy-Camille, G Saillant, CH Mazel The Orthopedic clinics of North America 17 \(1\), 147-159 Citations: 361 &ndash; Year: 1986 Three-dimensional geometrical and mechanical modeling of the lumbar spine</strong> F Lavaste, W Skalli, S Robin, R Roy-Camille, C Mazel Journal of biomechanics 25 \(10\), 1153-1164 202 Citations: 252 &ndash; Year: 1986 Posterior cervicothoracic instrumentation in spine tumors </strong>C Mazel, E Hoffmann, P Antonietti, D Grunenwald, M Henry, J Williams Spine 29 \(11\), 1246-1253 Citations: 1109&ndash; Year:2006 Validation of new clinical quantitative analysis software applicable in spine orthopaedic studies S Champain, K Benchikh, A Nogier, C Mazel, JD Guise, W Skalli European Spine Journal 15 \(6\), 982-991 Citations: 164Publications 2016-2022 Rapid improvements in pain and quality of live are sustained after surgery for spinal metastases in a large prospective </strong>cohort d. Choi, z. Fox, t. Albert, c. Bunger, m. Fehling, j. Harrops, n. Kawahara, a. Martin, e.m. massicotte, ch. Mazel, f.c. oner, w. Peul, k. Tomita, m. Wang, a. Crockard british journal of neurosurgery 02, 2016 impact factor: 0,96 86 Characteristics of patients who survived less than three months or more than two years after surgery for spinal metastases: can we avoid inappropriate patient selection? Jj verlaan, d. Choi, al. Versteeg, t. Albert, m. Atrs, l. Blabaud, jm. Buchowski, ck chung, mh coppes, a. Crockard, b. Depeirtere, m. Fehling, j. Harrops, n. Kawahara, e. Kim, c. Lee, v. Leung, zi liu, a. Martin, e.m. massicotte, ch. Mazel, b. Meyer, , w. Peul, y. Tokuyoshi, k. Tomita, c. Ulbricht, m. Wang, f.c. oner journal of clinical oncology juillet 2016 impact factor: 3,18 87 Loss of local tumor control after index surgery for spinal metastases: a prospective cohort study.</strong> depreitere, b., ricciardi, f., arts, m., balabaud, l., buchowski, j. M., bunger, c., mazel, c.choi, d. \(2018\). World neurosurgery. Doi:10.1016/2018.04.170 impact factor: 1, 77 88 - metastatic spine tumor epidemiology: comparison of trends in surgery across two decades and three continents. Wright, e., ricciardi, f., arts, m., buchowski, j. M., chung, c. K., coppes, m., . . . Choi, d. \(2018\). World neurosurgery. Doi:10.1016/j.wneu.2018.03.091 impact factor: 1, 77 8 Characteristics of patients who survived less than three months or more than two years after surgery for spinal metastases: can we avoid inappropriate patient selection? Jj verlaan, d. Choi, al. Versteeg, t. Albert, m. Atrs, l. Blabaud, jm. Buchowski, ck chung, mh coppes, a. Crockard, b. Depeirtere, m. Fehling, j. Harrops, n. Kawahara, e. Kim, c. Lee, v. Leung, zi liu, a. Martin, e.m. massicotte, ch. Mazel, b. Meyer, , w. Peul, y. Tokuyoshi, k. Tomita, c. Ulbricht, m. Wang, f.c. oner journal of clinical oncology juillet 2016 34 \(25\), 3054- impact factor: 1, 77 90 Rapid improvements in pain and quality of live are sustained after surgery for spinal metastases in a large prospective cohort d. Choi, z. Fox, t. Albert, c. Bunger, m. Fehling, j. Harrops, n. Kawahara, a. Martin, e.m. massicotte, ch. Mazel, f.c. oner, w. Peul, k. Tomita, m. Wang, a. Crockard british journal of neurosurgery 02, 2016 impact factor: 0,96 91 Evaluation economique en chirurgie orthopedique est elle un frein a l'innovation ? Exemple d'atarjet. Conso.c., de-thomasson, e., quingand, o., a. Mazel, c. \(2016\). Revue de chirurgie orthopedique et traumatologique impact factor: 0,33 92 Prediction accuracy of common prognostic scoring systems for metastatic spine disease: results of a prospective international multicentre study of 1469 patients choi, d., ricciardi, f., arts, m., buchowski, j. M., bunger, c., chung, c. K., mazel, c., crockard, a. \(2018\). Spine. Doi:10.1097/brs.0000000000002576 impact factor: 1, 77 93 The intervertebral disc: physiology and pathology of a brittle joint</strong> a. Amelot, ch mazel world neurosurgery 120 : 265-273, december 2018 impact factor: 1, 924 94 <a novel risk calculator to predict outcome after surgery for symptomatic spinal metastases: use of a large prospective patient database to personalise surgical management choi, d., pavlou, m., omar, r., arts, m., balabaud, l., buchowski, j. M., . . . Crockard, h. A. Mazel, c. \(2019\). European journal of cancer, 107, 28-36. Impact factor: 7,191 94 Screw related complications after instrumentation in the osteoporotic spine:a sysematic literature review with meta analysis.</strong> rometsch, e., spruit m., zigler j., mazel c., kandziora, f.,\(2019\) global spine journal 1-20 doi: 10:1177/21925618818164 impact factor: Uence des parametres biologiques sur la survenue de complications post operatoires des patients metastatiques. Etude multicentrique Survival and clinical outcomes after surgical treatment for spinal metastases: results of a prospective stud</strong>y. Bouthors c., prost s., sailhan f., charles y.p., blondel, b. c. Mazel, bonnevialle p., court c., Major articles in the field of biomechanics and device development Internal fixation of the lumbar spine with pedicle screw plating.</strong> r roy-camille, g saillant, c mazel clinical orthopaedics and related research 203, 7-17 citations: 1200 ; year: 1986 Plating of thoracic, thoracolumbar, and lumbar injuries with pedicle screw plates.</strong> r roy-camille, g saillant, ch mazel the orthopedic clinics of north america 17 \(1\), 147-159 citations: 361 &ndash; year: 1986 Three-dimensional geometrical and mechanical modeling of the lumbar spine</strong> f lavaste, w skalli, s robin, r roy-camille, c mazel journal of biomechanics 25 \(10\), 1153-1164 202 citations: 252 &ndash; year: 1986 Posterior cervicothoracic instrumentation in spine tumors </strong>c mazel, e hoffmann, p antonietti, d grunenwald, m henry, i williams spine 29 \(11\), 1246-1253 citations: 1109&ndash; year:2006 Validation of new clinical quantitative analysis software applicable in spine orthopaedic studies s champain, k benchikh, a nogier, c mazel, jd guise, w skalli european spine journal 15 \(6\), 982-991 citations: 164](#)

## Projects

**EXPERTISE** Expertise performed for AGENCE NATIONALE ACCREDITATION ET EVALUATION DE LA SANTE A.N.A.E.S Radiological evaluation in neck pain Indications for surgery in lumbar pain and for Total disc replacement. Complementary investigations in lumbar Expertise performed for; AGENCE NATIONALE POUR LA VALORISATION ET AIDE A LA RECHERCHE (ANVAR) Pedicle screw for internal spine fixator SOFAMOR. 1989 Anterior spine instrumentation -Centre National de Equipement Hospitalier (C.N.E.H.). 1990 PERFORMED FORAGENCE FRANCAISE DE SECURITE SANITAIRE DES PRODUITS DE SANTE NOVABONE, Bone substitut (2001).OSTEOPHASE, hydroxyapatite and tricalcique &beta; phosphate ceramic (2001) Cervical Total disc a novel concept (2004) BARRICAID a new device to avoid disc recurrence PERSONAL PATENTS Year 1992 Spinal osteosynthesis device US Patent 5,704,936 Citations:384 Year: 1998 Intervertebral implant with two shapes US Patent 7,862,615 Citations: 1200 Year: 1986 Nuclear implant US Patent: 12,419,173 - EP 2288313 B1 2009 Connector for vertebral anchoring system US Patent App. 10/496,688 Citations: 141 Year: 2011 Cannulated bone screw and methods of use thereof Ch Mazel US Patent and European: Filled July 2016

## Memberships

[Gold medal of Paris Medicine Residency Programme 1983](#) Recipient of French Academy of Surgery award 1983 Recipient of French Academy of Medicine award 1983 PhD Biomechanics 1987 Ability to lead scientific research (HDR) 1990 Full Professor Orthopaedic Surgery at Paris XIII University of Medicine 2003: (Exceptional class 1 level 3) director and founder (2004) of the spine surgaey French diploma Research and innovation ministry Patented Expert (since 2012) Associate member of the French Academy of Surgery (since 2015) Founding member of the French Spine Society (SFCR) Full Member of French Society of Orthopaedic Surgery and Traumatology Founding President of Argospine, 1995 -2016 Past President of the cervical spine research society 2000-2003 (European Section) Trustee of GSTSG / AOSPINE - ARGOSPINE

## Other Relevant Information