OBITUARY: JEAN-FRANÇOIS SALIÈGE (1943–2012)

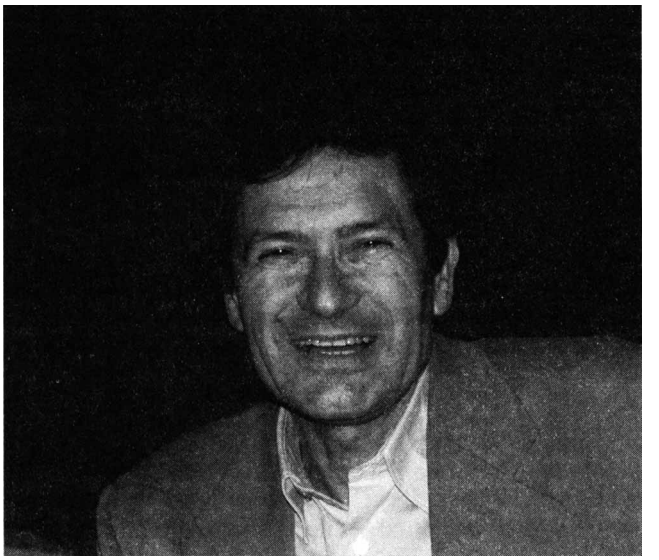

Photo courtesy A M Lézine

Jean-François Saliège passed away on Friday, 1 June 2012, following a heart attack at age 68. Jean-François was born in Chartres and spent his entire career in Paris, a city that he particularly enjoyed. He was hired in 1965 as a junior technician at the Laboratoire de Géologie Dynamique de la Faculté des Sciences de Paris at La Sorbonne University (Director Louis Glangeaud), where he participated in the creation of the radiocarbon and mass spectrometry laboratory under supervision of René Létolle, Jean-Charles Fontes, and Colette Vergnaud-Grazzini. In 1975, he moved to the University of Paris VI and worked more specifically with J-C Fontes in the ^{14}C laboratory as an engineer. In 1981, he helped J-C Fontes to create the Hydrology and Isotope Geochemistry lab at Orsay University. The following year, he returned to the University of Paris VI and joined the team led by Colette Vergnaud-Grazzini at the Laboratoire de Géologie Dynamique, where Jean-François set up the new stable isotope and radiocarbon lab. Between 1990 and 2008, he continued to work at the University of Paris VI at the LODYC lab (Dir. Lilianne Merlivat), then at the LOCEAN lab (Dir. Laurence Eymard) on Catherine Pierre's team.

One of Jean-François's first publications was on the fractionation of ^{14}C and ^{13}C isotopes, a paper that recently inspired a reinvestigation of these effects by John Southon. His collaboration with the hydrologist J-C Fontes allowed him to discover Africa, where he participated in several missions. Jean-François developed an intense fascination for the African continent and its prehistory. During a trip to Mali with his friend and colleague Alain Person, he realized that ^{14}C dating was a natural bridge between these two passions. In 1980, he started collaborating with François Paris, another Africanist at ORSTOM (now IRD). Jean-François quickly discovered that it was impossible to date the bones that his colleague was sending to him because they lacked collagen. In 1984, after several years of trial and error, he found that in arid environments, the mineral fraction of bone could provide reliable ^{14}C ages. He also discovered that the organic temper of African pottery could be dated. These discoveries were controversial at the time and were criticized. This is part of the reason why they remained unpublished until the mid-1990s (the other being probably Jean-François's discrete

https://doi.org/10.1017/S0033822200047068 Published online by Cambridge University Press

nature). He nevertheless started several collaborations with open-minded French archaeologists (including François Paris, Alain Person, Serge Cleuziou, and Robert Vernet). This allowed him to visit and date many archaeological sites in Sub-Saharan Africa and in the Arabian Peninsula. During the last decade, his reputation had finally crossed the Atlantic and he had ongoing collaborations with several North American archaeologists and even some paleontologists. His work with Paul Sereno allowed him to date Gobero, one of the oldest known cemeteries in Africa. In addition to archaeology, Jean-François was involved in several projects looking at the impact of climate change on the history of human societies in Africa, the Arabian Peninsula, and South America. Together with Anne Marie Lézine and Luc Ortlieb, he participated in several fieldtrips in Yemen, Oman, Egypt, and Chile.

Jean-François was also a very active member of the ^{14}C community. As an expert on missions for the IAEA, he helped build several labs and educated many technicians abroad in Vietnam, Niger, Senegal, Morocco, and Greece. He also participated in discussions that preceded the creation of the Artemis lab in Saclay.

I had the chance to personally meet Jean-François when I was finishing my PhD, in 2001. He was working next door and opened his lab to me, when I had nowhere else to go. We shared a common interest in bioapatites and I vividly remember our endless discussions about bone diagenesis in particular, and life in general. Although our friendship started immediately, our true scientific collaboration on bioapatite dating did not truly begin until several years later when I came back from various post-docs to take a CNRS position in Paris. Jean-François retired in 2008 but remained very active as an honorary member of the Muséum National d'Histoire Naturelle in Paris, where he helped me build a radiocarbon laboratory. We had several ongoing projects together and he had just put the final touch to a paper on the chronology of the classical site of Petra when his heart failed (the last entry in the bibliography below). He was very much hoping to participate in the Radiocarbon conference in Paris and his untimely passing came as a shock to all of us who knew and loved him. Apart from his scientific contributions, Jean-François will be remembered for his generosity of spirit, his wise counsel, and his delicate sense of humor.

Antoine Zazzo

SELECTED BIBLIOGRAPHY

Saliège J-F, Person A, Barry I, Pontes P. 1980. Premières datations de tumulus préislamiques au Mali: site mégalithique de Tondidarou. *Comptes rendus de l'Académie des Sciences* 291:65–8.

Saliège JF, Fontes JC. 1984. Essai de détermination expérimentale du fractionnement des isotopes ^{13}C et ^{14}C du carbone au cours de processus naturels. *International Journal of Applied Radiation and Isotopes* 35(1):55–62.

Saliège J-F, Person A. 1991. Matière organique des céramiques archéologiques et datation par la méthode du radiocarbone. In: Raimbault M, Sanogo K, editors. *Recherches archéologiques au Mali*. Paris: Karthala. p 414–48.

Saliège J-F, Person A. 1994. Sur la datation des céramiques archéologiques de l'Afrique de l'Ouest par la méthode du carbone 14, influence des paléotechnologies. In: *L'objet archéologique africain et son devenir*. Paris: Colloque CNRS-UNESCO. p 155–79.

Saliège J-F, Person A, Paris F. 1995. Preservation of $^{13}C/^{12}C$ original ratio and ^{14}C dating of the mineral fraction of human bones from Saharan tombs, Niger. *Journal of Archaeological Science* 22(2):301–12.

Person A, Bocherens H, Saliège J-F, Paris F, Zeitoun V, Gérard M. 1995. Early diagenetic evolution of bone phosphate: an X-ray diffractometry analysis. *Journal of Archaeological Science* 22(2):211–21.

Lézine AM, Saliège J-F, Robert C, Wertz F, Inizan ML. 1998. Holocene lakes from Ramlat As-Sab'atayn (Yemen) illustrate the impact of monsoon activity in Southern Arabia. *Quaternary Research* 50(3):290–9.

Durand A, Paris F, Saliège J-F. 1999. Peuplements et en-

vironnements holocènes du bassin oriental de l'Azawagh (Níger). In: París F, Bernus E, Cressier P, editors. *Vallée de l'Azawagh (Sahara du Niger)*. Saint-Maur: Sépia. p 13–184.

Balter V, Saliège J-F, Bocherens H, Person A. 2002. Evidence of physico-chemical and isotopic modifications in archaeological bones during controlled acid etching. *Archaeometry* 44(3):329–36.

Lézine AM, Saliège J-F, Mathieu R, Tagliatela TL, Méry S, Charpentier V, Cleuziou S. 2002. Mangroves of Oman during the late Holocene: climatic implications and impact on human settlements. *Journal of Vegetation History and Archaeobotany* 11(3):221–32.

Person A, Ibrahim T, Jousse H, Finck A, Albaret C, Garenne-Marot L, Zeitoun V, Saliège J-F, Ould Meimam S. 2004. Environnement et marqueurs culturels en Mauritanie sud-orientale: le site de Boû Khzâmâ (DN4), premiers résultats et approche biogéochimique. In: Bazzana A, Bocoum A, editors. *Du nord au sud du Sahara: cinquante ans darchéologie française en Afrique de louest et au Maghreb, bilan et perspectives*. Paris: Sépia. p 195–213.

Vernet R, Gallin J, Saliège J-F, Tous P. 2004. Chronologie isotopique humaine sur le rivage du maximum nouakchottien (Mauritanie atlantique) Al wasit. *Revue de l'Institut Mauritanien de recherche scientifique* 8: 15–35.

Saliège J-F, Lezine AM, Cleuziou S. 2005. Estimation de l'effet réservoir ^{14}C marin en mer d'Arabie. *Paléorient* 31(1):35–43.

Desse J, Desse-Berset N, Saliège J-F. 2005. Datation de la bioapatite de restes osseux d'origine marine: application à des sites du Makran (Pakistan). *Paléorient* 31(1):70–3.

Barusseau J-P, Saliège J-F, Descamps C, Vernet R. 2007. Late Holocene sedimentary forcing and human settlements in the Jerf el Oustani-Ras el Sass region (Banc d'Arguin, Mauritania). *Geomorphologie* 7:7–18.

Lézine AM, Tiercelin J-J, Robert C, Saliège J-F, Cleuziou S, Inizan ML, Braemer F. 2007. Centennial to millennial-scale variability of the Indian monsoon during the early Holocene from a sediment, pollen and isotope record from the desert of Yemen. *Palaeogeography, Palaeoclimatology, Palaeoecology* 243(3–4): 235–49.

Steimer-Herbet T, Saliège J-F. 2007. Rites et pratiques funéraires à Rawk au 4e millénaire avant notre ère (Wadi'idim, Yémen). *Proceedings of Seminar for Arabian Studies* 37(1):281–94.

Sereno P, Garcea E, Jousse H, Stojanowski CM, Saliège J-F, Maga A, Ide OA, Knudson KJ, Mercuri AM, Stafford Jr TW, Kaye TG, Giraudi C, N'siala IM, Cocca E, Moots HM, Dutheil DB, Stivers JP. 2008. Lakeside cemeteries in the Sahara: 5000 years of Holocene population and environmental change. *PLoS ONE* 3(8): e2995, doi:10.1371/journal.pone.0002995.

Zazzo A, Saliège J-F, Person A, Boucher H. 2009. Radiocarbon dating of cremated bones: Where does the carbon come from? *Radiocarbon* 51(2):601–11.

Hatté C, Saliège J-F, Senasson D, Bocoum H. 2010. Cultural and trade practices in Sincu Bara (Senegal): a multi-proxy investigation. *Journal of Archaeological Science* 37(3):561–8.

Lézine A-M, Robert C, Cleuziou S, Inizan M-L, Braemer F, Saliège J-F, Sylvestre F, Tiercelin J-J, Crassard R, Méry S, Charpentier V, Steimer-Herbet T. 2010. Climate evolution and human occupation in the Southern Arabian lowlands during the last deglaciation and the Holocene. *Global and Planetary Change* 72(4):412–28.

Ortlieb L, Vargas G, Saliège J-F. 2011. Marine radiocarbon reservoir effect along the northern Chile-southern Peru coast (14-24° S) throughout the Holocene. *Quaternary Research* 75(1):91–103.

Zazzo A, Saliège J-F. 2011. Radiocarbon dating of biological apatites: a review. *Palaeogeography, Palaeoclimatology, Palaeoecology* 310(1–2):52–61.

Zazzo A, Saliège J-F, Lebon M, Lepetz S, Moreau C. 2012. Radiocarbon dating of calcined bones: insights from combustion experiments under natural conditions. *Radiocarbon*, this issue.

Zazzo A, Munoz O, Saliège J-F, Moreau C. 2012. Variability in the marine radiocarbon reservoir effect in Muscat (Sultanate of Oman) during the 4th millennium BC: reflection of taphonomy or environment? *Journal of Archaeological Science* 39(7):2559–67.

Saliège J-F, Zazzo A, Hatté C, Gauthier C. 2012. Radiocarbon dating in Petra: limitations and potential in semi-arid environments. In: Mouton M, Schmid SF, editors. *Early Petra*. Berlin: Logos Verlag. In press.