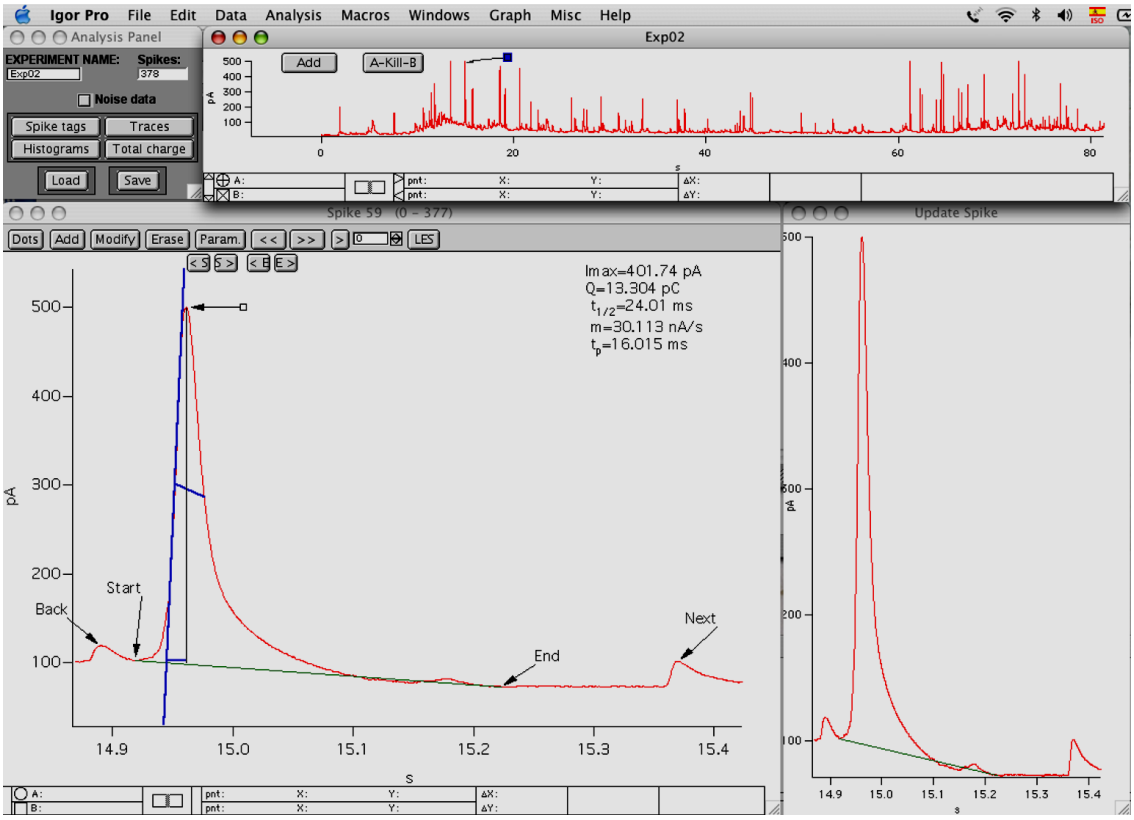
# Spike.

A worldwide freely distributed software written in IGOR-Pro to analyse amperometric recordings.

Spike (currently version 50.1) consists in three macros that permits:

- The automatic processing of infinite amperometric files. Peak identification, noise reduction and the extraction of kinetic parameters. The program permits modify spike and recalculations and add or remove spikes. Also, it calculates the cumulative secretion.

- The program contains routines for statistic processing.




**Several papers have been published from our group using Spike software:**


*Sánchez et al (1999) Med Inf Eur '99. 400-405*

*Segura et al* (2000) *J. Neurosci. Meth.* **103,** 151-156

*Gómez et al* (2002) *Ann. NY Acad. Sci*. **971,** 647-654

*Machado et al* (2002) *J. Pharmacol. Exp. Ther*. **301,** 631-637

*Borges et al (2002) Ann. NY Acad. Sci*. **971,** 184-192

*Machado et al* (2002) *Ann. NY Acad. Sci*. **971,** 284-286.

*Machado et al* (2002) *Cir. Res*. **91,** 830-836

*Camacho et al* (2003) *Rev. Neurol.* **36,** 355-360

*Borges et al* (2004) *Curr. Med. Chem.* **4,** 187-193

*Borges et al* (2005) *Pflügers. Arc*. **450,** 280-282

*Camacho et al* (2006) *J. Neurochem.* **96,** 324-334

*Ardiles et al* (2006) *J. Neurochem.* **99,** 29-41

*Machado et al* (2008) *Methods Mol. Biol.* **440,** 297-313

*Borges et al* (2008) *Acta Physiol.* **192,** 145-163

*Camacho et al (2008) J. Biol. Chem.* **283,** 22383-22389
*Camacho et al* (2008) *Commun. & Integrat. Biol.* **2,** 71-73
*Montesinos et al* (2008) *J. Neurosci.* **28,** 3350-3358
*Díaz-Vera et al* (2010) *J. Neurosci.* **30,** 950-957
*Borges et al* (2010) *J. Neurochem.* **114,** 335–343
*Machado et al* (2010) *Cell Mol Neurobiol.* **30,** 1181-1187
*Montesinos et al (2010) Br. J. Pharmacol.* **159,** 1548-1556
*Borges et al* (2010) *Cell Mol Neurobiol.* **30,** 1159-1164
*Beltran et al* (2011) *Pharmaceutical*s **4,** 713-725
*Milla et al* (2011) *Cell Calcium* **50,** 332-342
*Borges et al* (2012) *Cell Calcium* **51,** 338–341
*Díaz-Vera et al* (2012) *FASEB J.* **26,** 430-438
*Borges et al* (2013) *Adv. Pharmacol.* **68,** 93-113
*Domínguez et al* (2012) *J. Mol Neurosci.* **48,** 317–322.
*Borges et al* (2013) *Adv. Pharmacol.* **68,** 93-113.
*Estevez-Herrera et al* (2013) *BioMol. Concepts* **4,** 605-609.
*Domínguez et al* (2014) *FASEB J.* **28**, 4657-4667.
*Estevez-Herrera et al* (2016) *Proc. Natl. Acad. Sci. USA* **113,** E4098-4106.
*Wightman et al* (2018) *Pflugers Arch*. **470,** 135-141
*Taleat et al* (2018) *Anal. Chem.* **90,** 1601-1607
*Baraibar et al* (2018) *Pflugers Arch*. **470,** 1459-1471
*González-Santana et al* (2020) *J. Neurochem.* **152,** 299-314.