

EAA Andrology Training

Barcelona Centre Report



2021



CENTRE REPORT

Full name and address of the Centre

Andrology Department

Fundació Puigvert

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History of Centre

The Puigvert Foundation (Barcelona) is a landmark centre for urology, nephrology and andrology in Spain.

The origins of the Centre were in the department of urology located in one of the wings of Sant Pau Hospital. The Foundation was constituted in 1961 and the construction of a new building began in 1963, becoming fully functional in 1966 and the most recent was opened in 2012.

In 1970 the Centre became independent of the hospital administration, receiving patients from the National Health Service in addition to private patients. Three main departments were created: urology, nephrology and andrology.

Since the beginning, the department of andrology is staffed by urologists, endocrinologists, gynecologists and psychologists providing multidisciplinary care to patients suffering from reproductive and sexual disorders.

The International Committee of Andrology (CIDA) was set up soon afterwards by Dr A. Puigvert (Barcelona) and Dr E. Mancini (Buenos Aires, Argentina). The CIDA became the current International Society of Andrology (ISA) in 1985.

In 1970, the American Society of Andrology (ASA) was formed and joined the CIDA in the same year. The Puigvert Foundation was instrumental in creating the Spanish Association of Andrology (ASESA) and, in 1980, Dr. Pomerol-Serra, the director of the andrology department, was elected its first president.

Dr. Eduard Ruiz-Castañé has been the director of the Centre since 2004.

The International Journal of Andrology (IJA) began to be published in 1978, becoming the official journal of the European Academy of Andrology (EAA) in 1992. The American Society of Andrology (ASA) launched the Journal of Andrology (JA) in 1980 and, in 2013, these two journals merged into actual journal, Andrology, which is published by Wiley. The funding of the IJA was initially provided by the Puigvert Foundation, which in 1989 passed on this responsibility to Prof. R Eliasson, who in turn donated it to the EAA.

The department of andrology has participated in multicentre trials under the auspices of the WHO and has played a prominent role in research in related areas. Research at present is focused on infertility, genetic abnormalities, diagnosis and treatment for sexual and erectile dysfunctions and sexually transmitted infections.

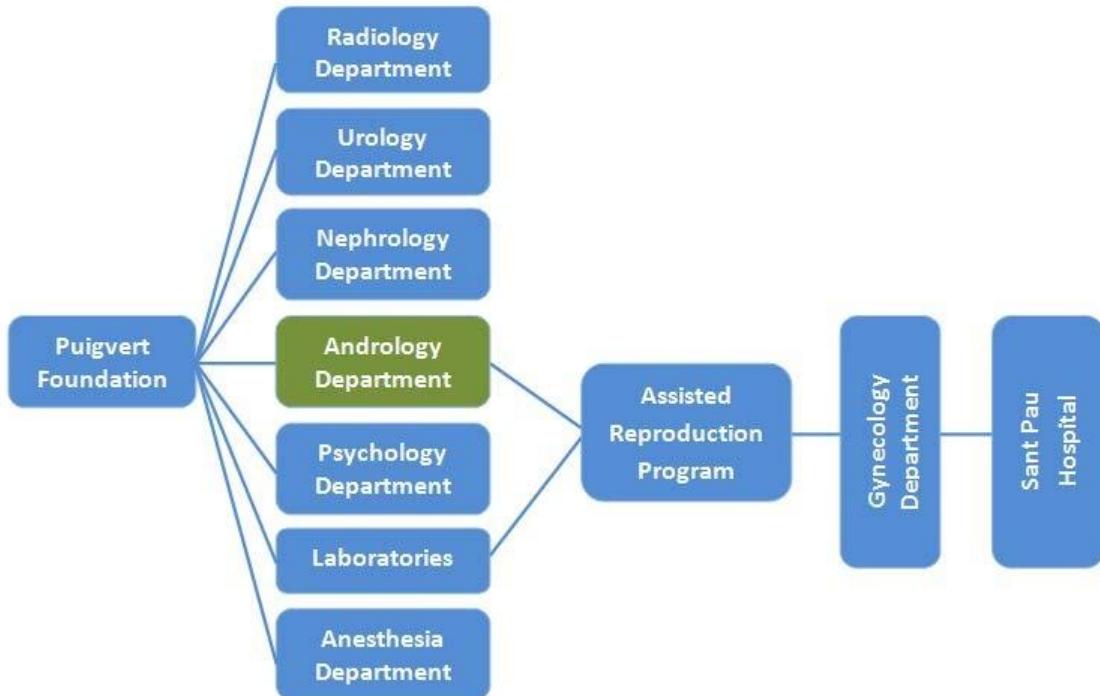
The Centre has provided postgraduate training since July 1967, the year in which it was incorporated into the School of Medicine of the Autonomous University of Barcelona (UAB). Since the department of andrology was set up, a variety of training programs have been available to postgraduate MDs and PhDs. The courses last between 3 and 36 months.

The Puigvert Foundation was officially recognized as a Clinical and Training Centre of Andrology by the European Academy of Andrology in 1998.

In 2014, Barcelona played host to the European Congress of Andrology. The local organizing Committee of this congress was presided over by Dr O Rajmil.

The department is a referral hospital which serves a catchment area for a population of approximately 7.5 million in Catalonia.

Organization of Centre



Educational activities

Medical Students

Lectures are given by staff members who form part of the “Teaching Unit of the Campus of Sant Pau Hospital”, School of Medicine of the Autonomous University of Barcelona (UAB).

Postgraduate activities

1. Training Programs for residents from urology and endocrinology.
2. Training Programs for embryologists and specialists in clinical biochemistry.
3. Short courses focused on specific topics.

Training programs in Clinical Andrology - former and current students-

List of students who completed the **three-year**, MD training program.

- 1986- Ferran García. Barcelona. Spain
- 1987 -Enrique Fabian. Portoalegre. Brasil
- 1988 - Anna Puigvert-Martinez Barcelona
- 1989- Joaquim Sarquella Geli. Girona. Spain*
- 1990- Xavier Ruiz Romero. Barcelona. Spain
- 1991 - Anna Segura Paños. Alicante. Spain*
- 1992 - Héctor Narvaez. Colombia
- 1995 -Fernando Ferreira. Brasil
- 1996 - Carlos H. Ferreira. Brasil
- 1997- Álvaro Vives. Barcelona. Spain
- 1997- Natalia Ribé. Barcelona. Spain
- 1998- Susana Egozcue. Barcelona. Spain
- 1999- Oscar Briceño. Caracas. Venezuela
- 2000- Erwin Amaya. Colombia
- 2002- Rossana Rodriguez. Palma de Mallorca. Spain
- 2004 - José Antonio Arrus Soldi. Lima. Perú

A two-year training program of **Fellows** is currently available in conformity with the latest EAA recommendations of the EAA/ESAU curriculum.

List of students who have already completed or are about to complete the **two years** MD training program (order: older to recent)

- 2004. César Rojas. Bogotá. Colombia *
- 2005. Marlín Fernández-Camilo. Santo Domingo
- 2005. Alejandro Carvajal-Obando. Cali. Colombia*
- 2006. Josvany Sánchez-Curbelo. Barcelona. Spain

- 2006. Mirna Echeverría México DF. México*
- 2008. Humberto Suárez Regardiz. Valencia. Venezuela*
- 2008. Andrés Vazquez. Buenos Aires. Argentina
- 2009. Ma. Fernanda Peraza-Godoy. Spain *
- 2009. Cristian Palma. Santiago de Chile
- 2010. Gerardo Ortiz. Monterrey. Mexico *
- 2011. Saulo Camarena. Guadalajara. Mexico*
- 2012. Marco Cosentino. Padova. Italia
- 2015. Daniel Moreno. Spain *
- 2015. José- Ignacio Vinay. Santiago. Chile
- 2017. Juan- Fernando Villegas-Osorio. Sevilla. Spain*
- 2017. Carles Gasanz. Barcelona. Spain
- 2020. Doron M. Vantman Luft. Chile
- 2020. Maurizio De Rocco Ponce. Italy

* Passed the European Academy examination

Master Program of Clinical Andrology

In 2012, a Master Program was launched jointly with the Autonomous University of Barcelona (UAB). The program is in line with the curriculum of the EAA/ESAU designed for Clinical Andrology training. It is based on 70 ETC credits (1 credit = 25 hours including theory and practice). Forty-three students have completed the program to date. The program was validated by the Educational sub-committee (EDUCOM) and the Executive committee of the EAA in 2014 and allows the candidates to take the examination for the EAA.

The Fifth Edition of the Master began in February 2020 within the auspices of the Central University of Catalonia- Uvic.

Courses: 2018-2020

Year 2018

- 10 April. Andrological Surgery for Urologists.
- 17 April. Update on sexually transmitted infections.
- 20 May. Lecture on erectile dysfunction (ED) in the 21st century:
Why do we talk about this pathology?
- 17-18 September. Master class in Andrological Surgery.
- 6 November. Lecture on premature ejaculation and its impact on female sexual dysfunction.
- 12-13. November. Master class in Andrological Surgery.

Year 2019

- 27 March. Management of premature ejaculation (PE). Fundació Puigvert,
- Barcelona.
- 17th. Andrology Course. Reproductive Sexual health. Men's health.
23-25th October 2019. Barcelona

Year 2020

- No courses (COVID19 pandemic)

Research activities

Genetics applied to male infertility.

Male fertility preservation in oncological patients

Optimisation of preimplantation genetics diagnosis and in vitro fertilization techniques.

New surgical procedures, drugs and medical devices applied to diagnosis, prevention and treatment of andrological diseases (male sexual dysfunction, hypogonadism, Peyronie disease, premature ejaculation, sexually transmitted diseases).

Sexually transmitted diseases and public health

Quality of life and integral sexual approach: gender and psychological aspects

Scientific challenges

Our multidisciplinary team of professionals develops translational and clinical research in the field of diagnosis and treatment of andrological disorders and female sexuality. To improve our knowledge and thereby improve healthcare for patients, we seek to continue active projects, develop new lines of investigation, increase the number of international publications, train professionals and enhance collaboration with hospital and university groups inside and outside the IIB Sant Pau.

To promote awareness and divulgate sexuality as health topic and as main aspect of global health and quality of life inclusive in chronic and ill patients to professionals who requires a broad and multidisciplinary approach to their patients.

Work up in the relationship with patients' associations and further incorporate them as work team to develop a research with relevant results with social impact.

Competitive Private Grants

- Krausz, C. Evaluation of the effect of cytostatic therapy on the genome and epigenome of the male gamete. Fundación Merck Salud: Ayudas Merck de Investigación 2017 en el área de Investigación Clínica en Fertilidad. Budget: 30.000€ (2017-2020).

PRIVATE CAPITAL PROJECTS

- Prospective, open-label, 12-week treatment study to determine the effect of tadalafil 5 mg on clitoral blood flow in menopausal and hypertensive women with interest and sexual arousal disorder (LITA-001 Study). EUDRACT 2016-001011-21. (2016-2019) PI: González, M. SPONSOR: Litapharm SL.
- Multicenter, randomized, double-blind, parallel-group, placebo-controlled clinical trial to investigate the efficacy of a dietary supplement in increasing libido and sexual function in postmenopausal women. (Estudio GYNFEEL) (2018-). PI: González, M. SPONSOR: Gynea Laboratorios S.L.U.
- Chronic testicular pain and alexithymia. (2013-ongoing) PI: Maestre, F. SPONSOR: Fundació Puigvert, Barcelona.
- Affective regulation of discomfort in sexual dysfunction: Loyalty, psychopathology, erectile dysfunction, and quality of the couple relationship. (2018-). PI: Maestre, F. SPONSOR: Fundació Puigvert, Barcelona
- Longitudinal, observational, retrospective study on the management of the treatment of patients diagnosed with erectile dysfunction and who do not respond to oral treatment with phosphodiesterase-5 inhibitors in routine clinical practice (MANDYS study). (Estudio MANDYS). (2019). PI: Ruiz-Castañé, E. SPONSOR: Casen Recordati S.L.
- A multi-centre, randomised, double-blind, placebo-controlled trial to

investigate the efficacy and safety of two concentrations of PKB171 against placebo in couples with asthenozoospermia who wish to conceive (PKB171-02). EUDRACT 2016-003993-42 (2016-2019). PI: Ruiz-Castañé, E. SPONSOR: Prokrea BCN S.L.

- Observational study for the validation of the La Peyronie's disease questionnaire in its Spanish version (PDQ Study). ol (Estudio PDQ). (2017-) PI: Ruiz-Castañé, E. SPONSOR: Asociación Española de Urología (AEU).
- Treatment of erectile dysfunction with linear, electromagnetic shock waves of low intensity. Randomized study with placebo. (2016-). (2016-). PI: Sánchez, J. SPONSOR: Fundació Puigvert, Barcelona.
- Study of temporal trends in the diagnosis of anogenital warts in a network of health professionals in Catalonia for the evaluation of the impact of Vaccination against Human Papillomavirus (iVacVPH-I Study). (2011-). PI: Vives, A. SPONSOR: Institut Català d'Oncologia (ICO).
- Phase IV, single-blind, prospective, randomized, controlled, multicenter study to compare the clinical results of the time-lapse system. PI: Martínez, O. SPONSOR: Merck KGaA.
- FIS project 2017 FIS/FEDER-PI17/01822: Genetic and genomic study in infertile patients and patients with testicular germ cell tumors: development of new tools for an early diagnosis. Amount of the grant: 104.000 €. Merck Salud (2017-2020):
 - Evaluation of the effect of cytostatic therapy on the genome and epigenome of the male gamete. Clinical study that began in 2015 with oncologic patients. Amount of the grant: 30.000 €.
 - Identification of new diagnostic and prognostic factors of Genitourinary pathologies based on microRNAs from seminal plasma. Financing Entity: FIS/FEDER, Instituto de Salud Carlos III. Project number: PI 15/00153. Amount of the grant: 98.615 €. Period: 2016-2018. P.I.: Larriba S. Investigators from Fundación Puigvert: L Bassas, A Mata
- Exosomal miRNA in semen as biomarkers of the origin of azoospermia and the presence of mature sperm in testicular tissue. Financing Entity: FIPSE. Project

number: 3178-17. Amount of the grant: 30.000 €. Period: 2018. P.I.: S Larriba.
Investigators from Fundación Puigvert: L Bassas, O López

FULL LIST OF PUBLICATIONS of staff members in the last 3 years

Year 2018

- Kumar K, Lewis S, Vinci S, **Riera-Escamilla A**, Fino MG, Tamburrino L, Muratori M, Larsen P, Krausz C. Evaluation of sperm DNA quality in men presenting with testicular cancer and lymphoma using alkaline and neutral Comet assays. *Andrology*. 2018 Jan; 6(1):230- 235.
- Barceló M, **Mata A, Bassas L**, Larriba S. Exosomal microRNAs in seminal plasma are markers of the origin of azoospermia and can predict the presence of sperm in testicular tissue. *Hum Reprod*. 2018. Jun 1;33(6):1087-1098. PubMed PMID: 29635626
- Krausz C, Cioppi F, **Riera-Escamilla A**. Testing for genetic contributions to infertility: potential clinical impact. *Expert Rev Mol Diagn*. 2018 Mar 22:1-16.
- Krausz C, **Riera-Escamilla A**, Chianese C, **Moreno-Mendoza D**, Ars E, **Rajmil O**, Pujol R, Bogliolo M, Blanco I, Rodríguez I, Badell I, **Ruiz-Castañé E**, Surrallés J. From exome analysis in idiopathic azoospermia to the identification of a high-risk subgroup for occult Fanconi anemia. *Genet Med*. 2019 Jan;21(1):189-194. doi: 10.1038/s41436-018-0037-1. Epub 2018 Jun 14. PMID: 29904161.
- Ruiz-Olvera SF, **Rajmil O, Sanchez-Curbelo JR, Vinay J**, Rodriguez-Espinosa J, Ruiz-Castañé E. Association of serum testosterone levels and testicular volume in adult patients. *Andrologia*. 2018 Apr;50(3). doi: 10.1111/and.12933. Epub 2017 Dec 12. PMID: 29235139.
- **Cosentino M, Peraza MF, Vives A, Sanchez J, Moreno D**, Perona J, Ortiz G, Alcoba M, **Ruiz E, Sarquella J**. Factors predicting success after microsurgical vasovasostomy. *Int Urol Nephrol*. 2018 Apr;50(4):625-632. doi: 10.1007/s11255-018-1810-4.
- Leyva-Moral JM, Feijoo-Cid M, Moriña D, Caylà JA, Arando M, Vall M, Barbera MJ, Armengol P, **Vives A**, Martin-Ezquerre G, Alsina M, García Olalla P. **Gay Circuit Parties in Barcelona and Their Impact on Gonorrhea Incidence**. *Arch Sex Behav*. 2018 Oct;47(7):2027-2034. doi: 10.1007/s10508-018-1220-9.

- Barceló M, Mata A, Bassas L, Larriba S. Exosomal microRNAs in seminal plasma are markers of the origin of azoospermia and can predict the presence of sperm in testicular tissue. *Hum Reprod.* 2018 Jun 1;33(6):1087-1098. doi: 10.1093/humrep/dey072.

Year 2019

- Krausz C, Riera-Escamilla A. Monogenic Forms of Male Infertility. *Exp Suppl.* 2019; 111:341-366. doi: 10.1007/978-3-030-25905-1_16.
- Riera-Escamilla, A Enguita-Marruedo, D Moreno-Mendoza, C Chianese, E Sleddens-Linkels, E Contini, M Benelli, A Natali, G M Colpi, Ruiz-Castañé, E, Maggi, M Baarends, W M Krausz, C. Sequencing of a ‘mouse azoospermia’ gene panel in azoospermic men: identification of *RNF212* and *STAG3* mutations as novel genetic causes of meiotic arrest. *Human Reproduction*, Volume 34, Issue 6, June 2019, Pages 978–988, <https://doi.org/10.1093/humrep/dez042>

Year 2020

- Barceló, M., Castells, M., Pérez-Riba, M., Bassas, Ll., Vigues, F., Larriba, S. Seminal plasma micrornas improve diagnosis/prognosis of prostate cancer in men with moderately altered prostate-specific antigen. *Am J Transl Res* 2020, 12(5): 2041-2051
- Boeri, L., Palmisano, F., Preto, M., Sibona, M., Capogrosso, P., Franceschelli, A., Ruiz-Castañé, E., Sarquella, J., Bassas, Ll., Scroppi, Fi., Sacca, A., Gentile, G., Falcone, M., Timpano, M., Ceruti, C., Gadda, F., Gontero, P., Montorsi, F., Sánchez, J., Salonia, A., Montari. Sperm retrieval rates in non-mosaic klinefelter patients undergoing testicular sperm extraction: what expectations do we have in the real-life setting? *Andrology* 2020, 8(3): 680-687
- Lotti, F., Frizza, F., Balercia, G., Barboneti, A., Behre, HM., Calogero, AE., Cremers, JF., Francavilla, F., Isidori, AM, Kliesch, S., Peraza, MF., Rajmil, O., Cipriani, S., Baldi, E. Degl’innocenti, S., Danza, G., Caldini, Al., Terreni, A., Boni, L., Krausz, C., Maggi, M. The European Academy of Andrology (EAA) ultrasound study on healthy, fertile men: clinical, seminal, and biochemical characteristics. *Andrology* 2020, 8(5): 1005-1020.
- Moreno, D., Casamonti, E., Riera, A., Pietroforte, S., Corona, G., Ruiz Castañé, E., Krausz, C. Short anogenital distance is associated with testicular germ cell tumor development. *Andrology* 2020, 8(6): 1770-1778.
- Pozzi, E., Boeri, L., Capogrosso, P., Palmisano, F., Preto, M., Sibona, M.,

Franceschelli, A. **Ruiz Castañé, E., Sarquella, J., Bassas, Ll.**, Scroppi, FI., Gentile, G., Falcone, M., Gadda, F. Colombo, F., Rolle, L., Gontero, P., Montorsi, F., **Sánchez, J.**, Montanari, E., Saloni. Rates of hypogonadism forms in klinefelter patients undergoing testicular sperm extraction: a multicenter cross-sectional study. Andrology 2020, 8(6): 1705-1711

- Fraile, A., Moncada, I., Chantada, V., Fernández-Pascual, E., Romero Otero, J., Alonso, M., Lledó, E., Egui-Rojo, A., García-Baquero, R., Torremadé, J., **Sarquella, J.**, Fes, E., Cruz, N., Martínez-Jabaloyas, JM., Lujan, S., García-Cruz, E. Martínez-Salamanca, J. Andrology and penile cancer. Recommendations during the covid-19 pandemic. Arch Esp Urol 2020, 73(5): 395-404.
- **Moreno-Mendoza D**, Casamonti E, Paoli D, Chianese C, **Riera-Escamilla A**, Giachini C, Fino MG, Cioppi F, Lotti F, Vinci S, Magini A, Ars E, **Sanchez-Curbelo J**, **Ruiz-Castane E**, Lenzi A, Lombardo F, Krausz. gr/gr deletion predisposes to testicular germ cell tumour independently from altered spermatogenesis: results from the largest European study. Eur J Hum Genet. 2020 Oct;28(10):1476. doi: 10.1038/s41431-020-0704-y.PMID: 32788662
- Cervan, M., Suazo, Mi., Rivera, R., Garrido, N., Lujan, S., Romeu, G., Santos, S., Castilla, J.A., Gonzalvo, MC., Clavero, A., **Sánchez, J.**, **López, O.**, **Peraza, MF.**, Barros, A., **Bassas, Ll.**, Seixas, S., Gonçalves, J., Larriba, S., Lopes, AM., Palomino, RJ., Carmona, FD. Intronic variation of the sohlh2 gene confers risk to male reproductive impairment. Fertil Steril 2020, 114(2): 398-406
- Krausz C, **Riera-Escamilla A**, **Moreno-Mendoza D**, Holleman K, Cioppi F, **Algaba F**, Pybus M, Friedrich C, Wyrwoll MJ, Casamonti E, Pietroforte S, Nagirnaja L, Lopes AM, Kliesch S, Pilatz A, Carrell DT, Conrad DF, Ars E, **Ruiz-Castañé E**, Aston KI, Baarends WM, Tüttelmann F. Genetic dissection of spermatogenic arrest through exome analysis: clinical implications for the management of azoospermic men. Genet Med. 2020 Dec;22(12):1956-1966. doi: 10.1038/s41436-020-0907-1. Sequencing of a 'mouse azoospermia' gene panel in azoospermic men: identification of RNF212 and STAG3 mutations as novel genetic causes of meiotic arrest.
- **Riera-Escamilla A**, Enguita-Marruedo A, **Moreno-Mendoza D**, Chianese C, Sleddens-Linkels E, Contini E, Benelli M, Natali A, Colpi GM, **Ruiz-Castañé E**, Maggi M, Baarends WM, Krausz C. Hum Reprod. 2020 Aug 1;35(8):1945-1946. doi: 10.1093/humrep/deaa179.PMID: 32715309
- **Vives A, Cosentino M, Palou J.** The role of human papilloma virus test in men: First exhaustive review of literature. Actas Urol Esp (Engl Ed). 2020 Mar;44(2):86-93. English, Spanish. doi: 10.1016/j.acuro.2019.08.010.
- Mercadal, M.; Herrero, C.; López-Rodrigo, O.; Castells, M.; de la Fuente, A.;

Vigués, F.; **Bassas, L.**; Larriba, S. Impact of Extracellular Vesicle Isolation Methods on Downstream miRNA Analysis in Semen: A Comparative Study. *Int. J. Mol. Sci.* 2020, 21, 5949. <https://doi.org/10.3390/ijms21175949>

- Ibarra FP, Mehrad M, Di Mauro M, **Godoy MFP**, Cruz EG, Nilforoushzadeh MA, Russo GI. Impact of the COVID-19 pandemic on the sexual behavior of the population. The vision of the east and the west. *Int Braz J Urol.* 2020 Jul;46(suppl.1):104-112. doi: 10.1590/S1677-5538.IBJU.2020.S116.
- R, Garrido N, Luján S, Romeu G, Santos-Ribeiro S, Ivirma Group, Lisbon Clinical Group, Castilla JA, Gonzalvo MC, Clavero A, Vicente FJ, Guzmán-Jiménez A, Costa C, Llinares-Burguet I, Khantham C, Burgos M, Barrionuevo FJ, Jiménez R, **Sánchez-Curbelo J, López-Rodrigo O, Peraza MF**, Pereira-Caetano I, Marques PI, Carvalho F, Barros A, **Bassas L**, Seixas S, Gonçalves J, Larriba S, Lopes AM, Palomino-Morales RJ, Carmona FD. Evaluation of Male Fertility-Associated Loci in a European Population of Patients with Severe Spermatogenic Impairment. *J Pers Med.* 2020 Dec 29;11(1):22. doi: 10.3390/jpm11010022.
- Fernández Pérez M, Fernández Agís I, La Calle Marcos P, Campos Caballero R, Molero Rodríguez F, **González Fernández M**, Rodríguez Torreblanca C. Validation of a Sagittal Section Technique for Measuring Clitoral Blood Flow. Volume Flow: A New Parameter in Clitoral Artery Doppler. *J Sex Med.* 2020 Jun;17(6):1109-1117. doi: 10.1016/j.jsxm.2020.01.031
- Fernández-Pascual E, Manfredi C, Torremadé J, Ibarra FP, **Sarquella-Geli JS**, Romero-Otero J, García-Baquero R, Poblador AF, Barbará MR, Campos-Juanatey F, Rojo AE, Iribarren IM, Rodríguez JC, Martínez-Salamanca JI. Multicenter Prospective Study of Grafting with Collagen Fleece TachoSil in Patients with Peyronie's Disease. *J Sex Med.* 2020 Nov;17(11):2279-2286. doi: 10.1016/j.jsxm.2020.07.079.
- José FG, González JGÁ, Molina JMC, **Arnaud LB**, Iribarren IM, Jabaloyas JMM, Rico FM, García-Baquero R, Gayá MR, García EL, López CL, Castro RP, Salamanca JIM. SARS-CoV-2 infection: implications for sexual and reproductive health. A position statement of the Asociación Española de Andrología, Medicina Sexual y Reproductiva (ASESA)]. *Rev Int Androl.* 2020 Jul-Sep;18(3):117-123. Spanish. doi: 10.1016/j.androl.
- De Toni L, Jawich K, **De Rocco Ponce M**, Di Nisio A, Foresta C. Osteocalcin: A Protein Hormone Connecting Metabolism, Bone and Testis Function. *Protein Pept Lett.* 2020;27(12):1268-1275. doi: 10.2174/0929866527666200505220459.
- **Cosentino M**, Bianco M, **Ruiz-Castañé E**, Iafrate M. Treatment of Penile Prosthesis Implant's Infection. *Urol Int.* 2020;104(7-8):542-545. doi: 10.1159/000508472.
- **Vinay J, Moreno D, Rajmil O, Ruiz-Castañé E, Sanchez-Curbelo J.** Penile low intensity shock wave treatment for PDE5I refractory erectile dysfunction: a randomized double-blind sham-controlled clinical trial. *World J Urol.* 2020 Jul 21. doi: 10.1007/s00345-020-03373-y

Clinical activities

Main areas of clinical activities

- 1. Infertility**
- 2. Hypogonadism including sequelae of cancer treatment.**
- 3. Erectile dysfunction (medical treatment and surgery).**
- 4. Fertility gamete preservation: male and female.**
- 5. TESE/TESA/PESE: sperm retrieval (NOA/OA).**
- 6. Assisted reproduction: IUI; IVF; ICSI including use of donor spermatozoa/oocytes**
- 7. Female sexual dysfunction including partners of males consulting for sexual**
- 8. dysfunction**

CENTRE CHARACTERISTICS

University Hospital	<input checked="" type="checkbox"/>
Hospital	<input type="checkbox"/>
Private Centre	<input checked="" type="checkbox"/>
Present staff	

1. Director

Name Eduard Ruiz Castañé. MD. **Urologist.**

Academician Affiliated Member Clinical Andrologist

2. Name Lluis Bassas. MD PhD. Clinical Head Andrology lab. Endocrinologist

Academician Clinical Andrologist

3. Name Joaquim Sarquella. MD. Clinical Andrologist Certified by the EAA. Academician x. Clinical Andrologist x

4. Name Alvaro Vives. MD. PhD Clinical Andrologist Specialist in Sexually Transmitted Infections

Academician Clinical Andrologist

5. Name Josvany René Sánchez-Curbelo. MD. Endocrinologist. MsC in Andrology. Autonomous University of Barcelona. Academician Affiliated Member Clinical Andrologist

6. Name Ma Fernanda Peraza Godoy. MD. MSc in Clinical Sexology. Urologist. Clinical Andrology. Certified by the EAA. MsC in Andrology by the Autonomous University of Barcelona. Academician Affiliated Member Clinical Andrologist x

7. Name Mónica Gonzalez. MD. Gynaecologist. MSc. Sexual Therapy.

8 . Name Daniel Moreno Mendoza. MD. Ph D. Urologist. Clinical Andrology Certified by the EAA. MsC in Andrology by the Autonomous University of Barcelona. EAA Affiliated Member

9. Name Osvaldo Rajmil MD PhD. Endocrinologist. Senior Consultant. t. Academician x Clinical Andrologist x. Ex Ass. Prof. of Endocrinology. Director and Prof of the Master of Clinical Andrology. Previously Autonomous University of Barcelona formerly Vic University (Uvic).

Scientific Advisor

Csilla Krauz MD PhD. Andrologist, Endocrinologist. EAA Academician.

Florence University

Nurses

- i. Name Victoria Paredes

Full time Part time If yes, n. of hours 7

Embriology laboratory:

Physicians:

- 1) Name Aurora Garcia, MD PhD. Semen and Embriology Lab

MD/Biologists

- 1) Name Olga Martinez Pasarell. Head of the Embriology Lab. Biologist. PhD. Semen and Embriology Lab. Fulltime Part time
- 2) Name Olga López. Biologist. PhD. Semen and Embriology Lab Full time
- 3) Name Noelia Moya. Biotechnologist. Assisted Human Reproduction. Lab Full time

Laboratory Technicians

- 1) Name Rosalia Gusta Clavell . Full time

Director of semen Laboratory: Lluis Bassas, M.D., Ph.D

Pathology Section

Director: Ferran Algaba, M.D., Ph.D. Assoc Prof of Pathology

Physicians: Yolanda Arce, M.D.

Molecular Biology Lab

- 1) Name Elisabet Ars Criach. Chemist. PhD. Full time
- 2) Name Antoni Riera Escamilla: Biologist MSc PhD.

Full time

- 3) Ruiz Del Prado, Patricia. Nurse

Psychology Department.

Director: Núria Camps, Clinical Psychologist. Psychotherapist.

Name Francesc J. Maestre, Clinical Psychologist.

Name Anna Mir, Psychologist. Clinical Psychologist

Director (if more Institutions in the Centre)

Director of the Gynecology Department. Sant Pau Hospital. Infertility Unit

Andrology Fellows

Maurizio De Rocco Ponce, Endocrinologist

Doron M. Vantman Luft, Urologist

Administrative Personnel

- 1) Name Dolors GuartPart time x
- 2) Name Jemima Matabacas..... Part time x
- 3) Name Begoña Toribio..... Part time x
- 4) Name Nuria Viñolas..... Part time x
- 5) Name Seila Ballerini..... Part time x
- 6) Name Lluïsa Ponsà..... Part time x

For each category, please specify changes (increased or decreased number) from

EAA site visit: Physicians: unchanged increased x decreased

Nurses: unchanged x. Laboratory Technicians: unchanged x Overall

Comment: the staff meets the requirements for Centre activities yes

4. Clinical Activity

A. Activity per year in the last 3 years

Department of Andrology: Frequency of Outpatients and Hospitalization			
Year	2018	2019	2020
Outpatient clinic number	9497	9730	8777
New patients	3292	3208	2363
Patient follow-up	6205	6522	6414
Hospitalization admissions	304	260	155
Nocturnal penile studies (Rigiscan©)	183	165	74

Activity of the Andrology Gabinet (Diagnosis and therapy)			
Year	2018	2019	2020
Testicular Ultrasound (US)	158	113	72
Diagnostic applications of vasoactive intra-cavernous drugs	203	463	236
Self injection training	227	210	137
Vacuum device, diagnosis test	133	160	105
Cryotherapy for HPV	320	377	256
Female sexual therapy techniques	238	257	291

Type of outpatient's consultation			
Year	2018	2019	2020
Male Infertility	440	391	251
Erectile dysfunction	1358	1386	1169
Hypogonadism	53	46	55
Female sexual dysfunction	83	226	195
Klinefelter	17	18	15
Varicocele	116	110	86
Cryptorchidism	1	2	1
Sexually transmitted infections	204	183	196
Testicular tumours-orchietomy.	107	96	76
Disorders of gender identity	1	1	0

Surgical activity

All the members are involved in this activity and microsurgery training is under supervision of Dr Sarquella. External teaching programs are also provided with all members participation.

Andrological Surgical procedures			
Year	2018	2019	2020
Vasectomy	420	280	188
Testicular biopsy	40	51	27
Circumcision	29	29	16
Varicocele surgery	42	29	41
Vaso Vasostomy	10	13	7
Penile prosthesis implant	43	43	26
Corporoplasty	33	33	27
Corporoplasty plus patch	2	5	6
Other ambulatory interventions	75	51	36
Total	694	534	374

Hormone Laboratory Activity

Hormone determinations			
Year	2018	2019	2020
FSH	861	988	602
LH	1115	1282	850
Testosterone	1894	1998	1562
Prolactin	530	470	373
17 β estradiol	280	264	299
Total	4680	5002	3686

Sperm Laboratory Activity			
	2018	2019	2020
Semen analyses	2300	2192	1404
Sperm Antibodies (semen)	411	393	214
Sperm Antibodies (serum)	-	-	-
Seminal markers (biochemistry)	28	12	5
Membrane integrity (HOS)	459	459	415
Sperm capacitation test	499	483	245
Cryosurvival tests	259	352	241

B. *Sperm banking donors* yes not

	2018	2019	2020
No. of samples frozen	321	253	175

Sperm banking cancer patients yes

Frozen semen samples for oncologic patients			
	2018	2019	2020
No. of samples frozen	136	163	116

C. *Histopathological evaluation of biopsies* yes not

D. *Reproductive hormone assays* yes

E. *Genetic testing*

Y chromosome microdeletions according to EAA/EMQN guidelines yes

Blood karyotyping yes

	2018	2019	2020
Karyotypes	231	244	163
Sperm Aneuploidy (FISH)	29	46	14
Mutation study of CFTR gene	37	31	11
Y chromosome microdeletions	75	105	72

Collaboration with other Clinical Units of the University/Hospital

IVF Unit yes

Gynaecology Department, Sant Pau

Hospital.

Gynaecology Staff of the Centre

Prof. Elisa Llurba Olivé, M.D., Ph.D. Head of the Gynecological and Obstetric Department of Sant Pau Hospital.

Anna Polo M.D. Ph.D. Coordinator in charge of the Joint Human Reproduction Program Fundació Puigvert/ Hospital de la Santa Cruz i Sant Pau.

Pere Parés M.D. Ph.D.

Susanna Peón M.D.

Maria J. Saiz, M.D.PhD

Carlos Dosouto, MD.PhD

Sofía Gaggiotti, MD.

Beatriz Alvaro MD

Infertility Work-Up

The Department of Gynaecology of Sant Pau Hospital and the Andrology Department, in collaboration with the Semen and Embryology Lab (SEL), work together in human reproduction. This collaboration established a standardized pattern for attending couples consulting for sterility or sub-fertility.

Assisted reproductive techniques (ARTs) are applied as a treatment for infertility. Decisions of ART are taken jointly. A specific surgical area close to the SEL, is designed for oocyte retrieval and embryo transfer with a post anaesthetic recovery zone for patients after ARTs is provided.

Type of treatment (cycles)	2018	2019	2020
Husband intrauterine Insemination	399	301	179
Donor Insemination (cervical)	56	0	0

Donor Insemination (intrauterine)	292	620	395
IVF/ICSI-ET	680	738	646
Embryo cryo- transfers	322	330	340
Preimplantation Genetic Diagnosis(cycles started)	82	87	57

Other collaborations

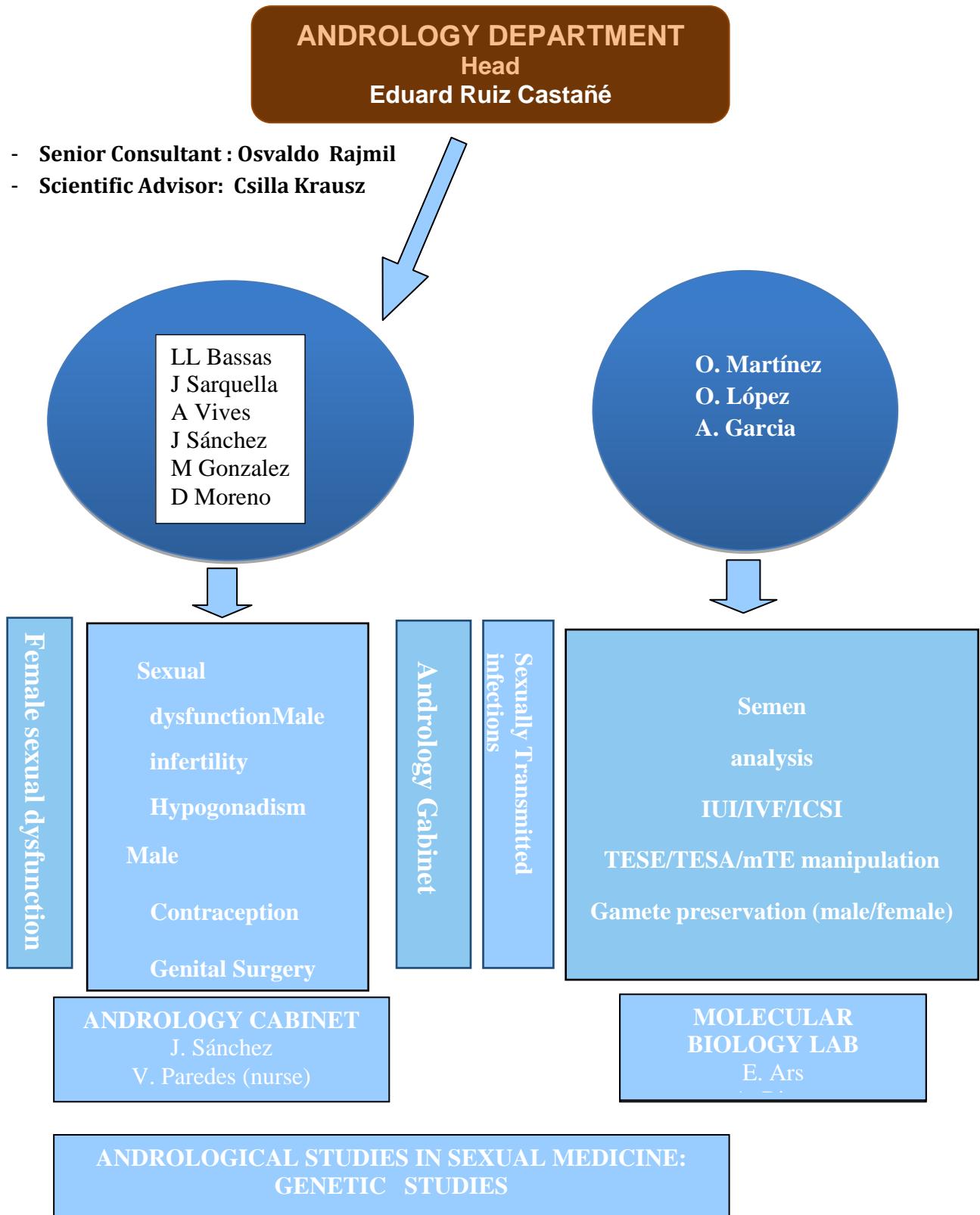
Urology Clinic yes ; Endocrine Clinic yes; Genetics Lab/Unit yes
 Pediatric Unit yes; Central Hospital Laboratory yes; Private Centres yes.

5. Clinical Teaching Activity: Duration of training (years): Two

	Number
a. Trainees in the last five years	6
b. Trainees who passed the EAA\examination for Clinical Andrologist in the last 5 years	5
c. Trainees working in the centre preparing to pass the EAA examination	2
d. Ph.D. Students	2
e. Medical Students	5

ORGANIZATION CHART

Department Structure



CENTRE PHOTO





STAFF OF THE ANDROLOGY DEPARTMENT





STAFF LAB OF SEMEN ANALYSIS AND EMBRIOLOGY

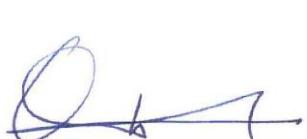


MEMBERS OF THE MOLECULAR- GENETIC LAB

SCIENTIFIC ADVISOR



Signed : Dr. O. Rajmil



Senior Consultant

Dr. E. Ruiz Castañé



Director of the Andrology Department